NOVA SCHOOL OF
BUSINESS & ECONOMICS

Banking Regulation

2206 - Banking | 2025S2 | Session 11 | Carla Rebelo

NOVA SCHOOL OF BUSINESS & ECONOMICS

Barclays 2008

Questions & Group distribution

Questions	Group
1. How did Barclays do during the 2008 crisis? Is the bank under financial distress? What major problems was it facing?	**Group 10**
2. Why does Barclays need to raise capital in late October 2008? How much? What could be the pros and cons of raising more equity in 2008? Is this a Barclays Bank specific problem? Are there other major issues at stake?	**Group 10**
3. Was the capital increase that took place in June 2008 a good idea? Who were the winners and losers on that transaction?	**Group 10**
4. Why the options on the table are not just pure equity?	**Group 14**
5. Describe the possible terms of the Government's offer to recapitalize the bank. What are the advantages and disadvantages of accepting such offer?	**Group 14**
6. Describe the possible terms of the "Middle Eastern" offer to recapitalize the bank. What are the advantages and disadvantages of accepting such offer?	**Group 14**
8. As a Board Member, what recommendation would you make for the coming AGM? Express your main arguments to convince shareholders (a note: in AGMs, the Board only presents one option, the best one in their views, as the Board is bound by fiduciary duty to defend the interests of all shareholders).	**Groups 10 / 14**
9. As a shareholder, how would you vote and why in the coming AGM?	**Groups 10 / 14**

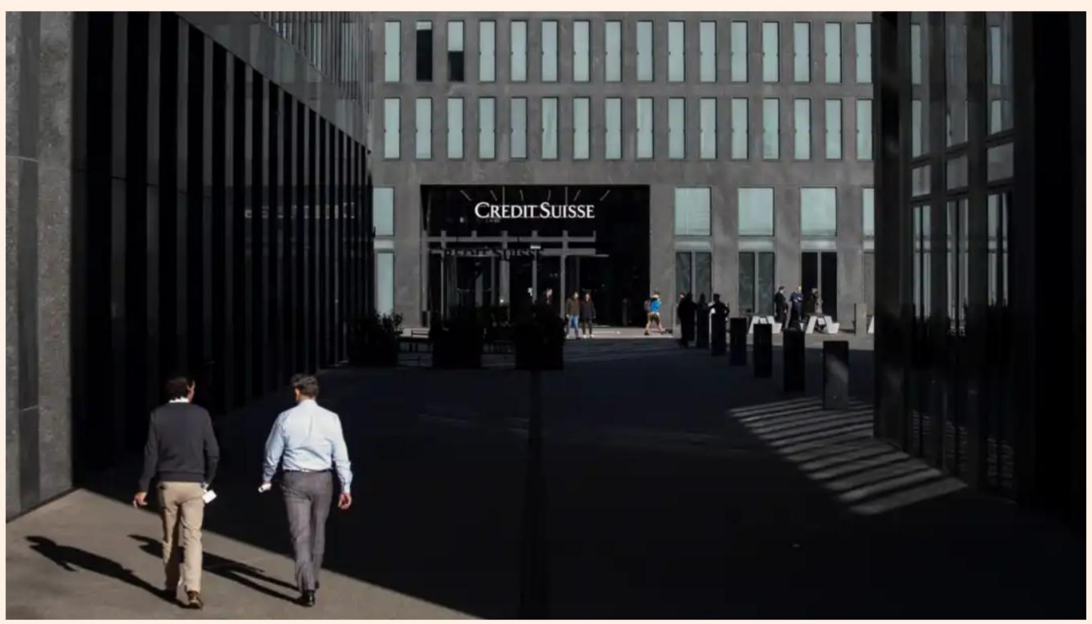
Barclays 2008

What about Credit Suisse?

Exam suggestion:
Explain in your own words what happened with CS and why this is problematic.

Credit Suisse investors sue Swiss regulator over bond wipeout

Complaint accuses Finma of failing to behave 'proportionately' and 'in good faith'



Credit Suisse was rescued by rival UBS in March © Francesca Volpi/Bloomberg

Sam Jones in Zurich APRIL 21 2023

144

European Banks - AT1 Loss-Absorption Mechanism

Issuer	AT1 Trigger	Loss absorption	Write-up
Barclays	7%	Equity conversion	n/m
BBVA	5.125%	Equity conversion	n/m
BNP	5.125%	Temporary writedown	Yes
CaixaBank	5.125%	Equity conversion	n/m
Commerzbank	5.125%	Temporary writedown	Yes
CredAg Group	5.125%	Temporary writedown	Yes
Credit Suisse	7%	Permanent writedown	No
Danske Bank	7%	Equity conversion	n/m
Deutsche Bank	5.125%	Temporary writedown	Yes
HSBC	7%	Equity conversion	n/m
ING Group	7%	Equity conversion	n/m
Intesa	5.125%	Temporary writedown	Yes
Lloyds	7%	Equity conversion	n/m
NatWest Group	7%	Equity conversion	n/m
Rabobank	5.125%	Temporary writedown	Yes
Sabadell	5.125%	Equity conversion	n/m
Santander	5.125%	Equity conversion	n/m
SocGen	5.125%	Temporary writedown	Yes
StanChart	7%	Equity conversion	n/m
UBS	7%	Permanent writedown	No
UniCredit	5.125%	Temporary writedown	Yes

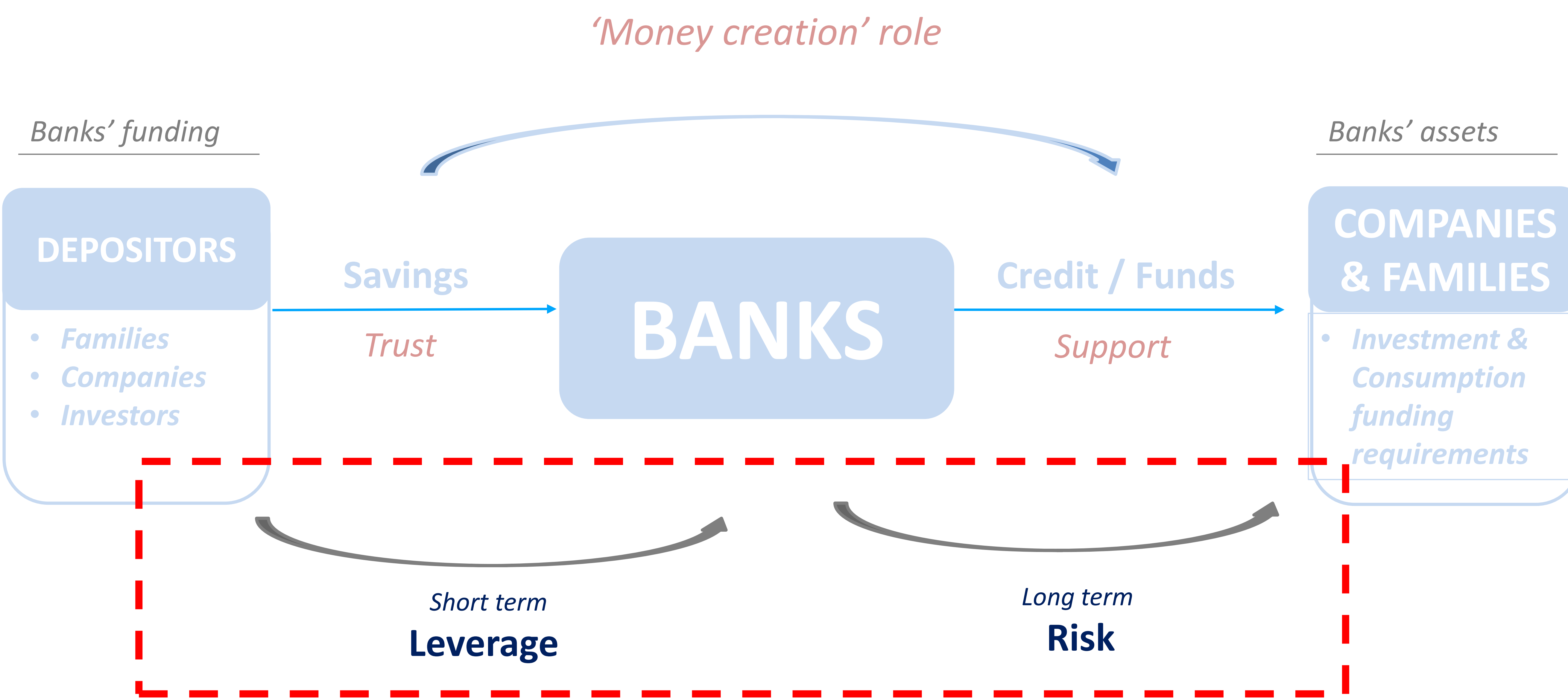
Bloomberg

Source: Company Filings, Bloomberg Intelligence 11:40

Source: Bloomberg, 21 March 2023.

Banking
Money creation role

REMINDER



Maturity transformation process

A bank makes money by incurring risks.

Success requires superior risk management.

NOVA SCHOOL OF BUSINESS & ECONOMICS

REMINDER Session 5

Why regulate?

Because there are market failures (I)

Herd behaviour

When investors prefer to simply follow wider market trends instead of carrying an adequate risk assessment

- An investor buying stock just because everybody else is buying.

Adverse selection

When there is asymmetric information between buyers and sellers (most of the times) allowing one of the parties to be better off at the expense of the other.

- A person with a risky profession getting a life insurance without fully disclosing his/her situation.

Moral hazard

Aggressive risk taking driven by the knowledge that others rather than oneself will bear the potential cost of one's actions.

- An entrepreneur with a significant leveraged business tends to invest in riskier projects.

Why regulate?

Because incentives are not always aligned (II)

'REAL ECONOMY'

- Depositors
- Companies & families

'OWNERS/MANAGERS OF CAPITAL'

Shareholders — Willingness to increase capital?

Management — Accountable for capital allocation efficiency

Trade off between organic capital generation & asset growth

REGULATION

Because…

- **Banking lives on a level of leverage which would be unacceptable in any other industry;**
- **Banking tends to rely on varied types of leverage as a key tool to improve returns**

Why regulate?

Because incentives are not always aligned (III)

- Bank failures have important social costs that Governments try to avoid. As such, **capital should be enough to absorb losses** without triggering bankruptcy.
- Banks may prefer to run with **less capital than socially optimum**.
- Shareholders of highly levered firms have **perverse incentives**: asset substitution and gambling behaviour.
- **Debt overhang** is another problem: when debt is already impaired, shareholders do not provide capital as most value accrues to existing debt holders.
- Due to perverse incentives and debt overhang, capital should be **equity** and not just loss absorbing.

Why regulate?

Because incentives are not always aligned (IV)

NOVA SCHOOL OF BUSINESS & ECONOMICS

REMINDER Session 7

Banks' Incentives and Inconsistent Risk Mod

Matthew C Plosser, João A C Santos

The Review of Financial Studies, Volume 31, Issue 6, 1 June 2018, Pages 2080–
https://doi.org/10.1093/rfs/hhy028
Published: 10 May 2018

Abstract

This paper investigates banks' incentive to bias the risk estimates they report to regulators. Within loan syndicates, we find that banks with less capital report lower risk estimates. Consistent with an effort to mitigate capital requirements, the sensitivity to capital is robust to bank fixed effects and greater for large, risky, and opaque credits. Also, low-capital banks' risk estimates have less explanatory power than those of high-capital banks with regard to loan prices, indicating that their estimates incorporate less information. Our results suggest banks underreport risk in response to capital constraints and highlight the perils of regulation premised on self-reporting.

Received September 21, 2016; editorial decision September 18, 2017 by Editor Philip Strahan. Authors have furnished an Internet Appendix, which is available on the Oxford University Press Web Site next to the link to the final published paper online.

JEL: G21 - Banks; Depository Institutions; Micro Finance Institutions; Mortgages, G28 - Government Policy and Regulation

Issue Section: Articles

EU financial regulation + Add to myFT

ECB lays out bad loan deadlines for eurozone banks

Targets for cleaning balance sheets unsettle investors in Italian lenders

Claire Jones in Frankfurt and **Rachel Sanderson** in Milan JANUARY 15, 2019 6

Listen to this article 00:00 03:13

Experimental feature Report a mispronounced word

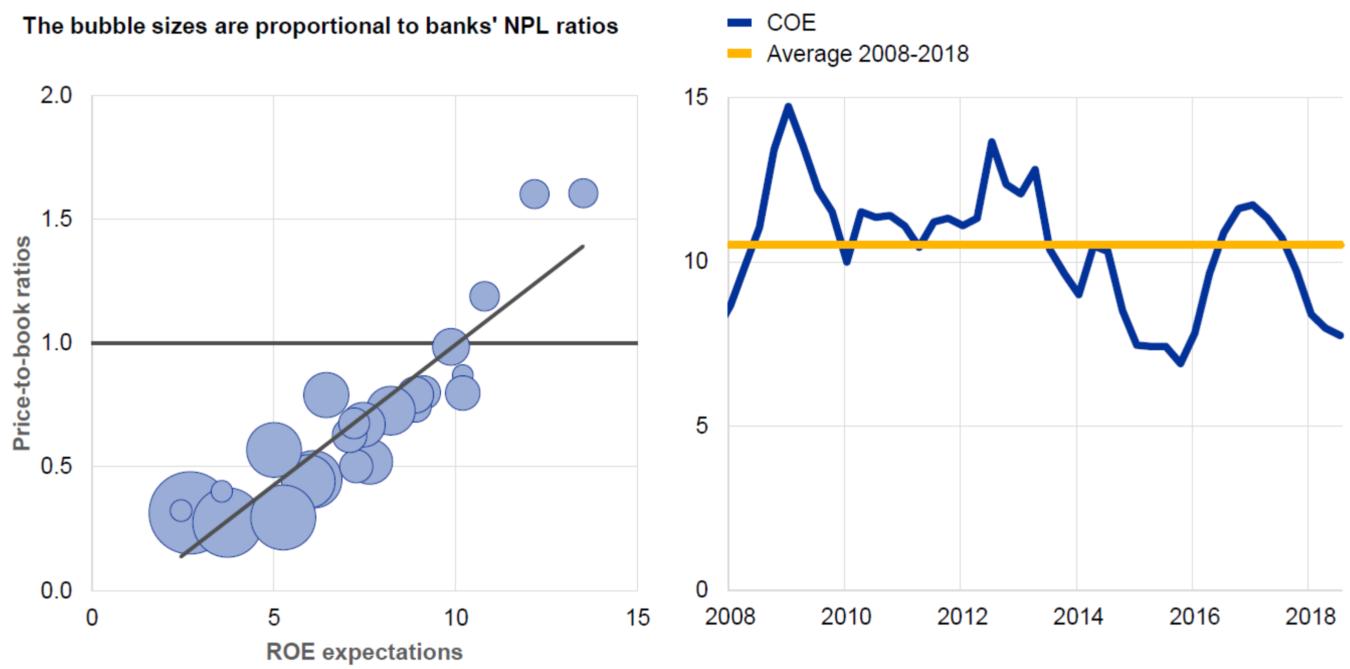
The European Central Bank has warned banks that it expects them to hit stringent targets for cleaning their balance sheets of bad loans.

Chart A.1

A large share of euro area banks are not delivering the returns required by investors

Price-to-book ratios, one-year-ahead ROE expectations and NPL ratios (left panel); euro area listed banks' COE (right panel)

(left panel: ROE expectations (Sep. 2018), NPL ratios (Q2 2018), annual percentages and ratios; right panel: Q1 2008-Q3 2018, annual percentages)



Sources: Bloomberg, Thomson Reuters Datastream, ECB and ECB calculations.
Note: In the right panel, the cost of equity is the expected return on the EURO STOXX Banks index estimated using the capital asset pricing model.

Source: Financial Stability Review, ECB, November 2018.

The 2008/9 financial crisis
'First' lessons

Interconnectedness

This financial crisis has exposed how important the interconnections are among the banking system, capital markets, and payment and settlement systems. First, supervision must not just be vertical—firm by firm, or region by region, but also horizontal—looking broadly across banks, securities firms, markets and geographies. Second, this means that supervisory practices need to be revamped. They need to be coordinated and multi-disciplinary.

System dynamics

By system dynamics, I mean how the different parts of the system interact. **Do they interact in a way that dampens a shock or in a way that intensifies it?** To the extent that the system has important reinforcing rather than dampening mechanisms, then it may need to be modified.

Incentives

Incentives may be very important in determining whether we have a system that is dampening rather than amplifying. I think bad outcomes are not just about bad luck, they are also about bad incentives. The problem with incentives may be due to **faulty compensation schemes, poor risk management or the fact that participants do not bear the full costs of their actions.**

Transparency

There were many areas where a lack of transparency contributed to a loss of confidence, which intensified the crisis. One particular area was the case of over-the-counter securities such as ABS, CMBS, RMBS and CDOs and their associated derivatives. **There was a lack of transparency in a number of different dimensions (valuation; pricing; concentration of risk**).

Source: William C. Dudley, CEO Federal Reserve of N, 2009 (https://www.newyorkfed.org/newsevents/speeches/2009/dud090702.html)

Basel Accords

Basel I: The beginning

- The first Accord, signed in 1988, aimed at levelling the international playing field in banking business
  - *Japanese banks were run with lower capital levels than competition, which was seen as unfair.*
- However, the Basel Committee focus soon evolved into the creation of a safe and sound international banking system.
- The accord was to be complied by banks with international operations, with a recommendation to adoption even by countries not represented by BIS.
- In 1989, the European Union was the first to impose Basel rules to all its banks, with or without international operations.

NOVA SCHOOL OF BUSINESS & ECONOMICS

Basel Accords

Basel II (2003): The three pillars

Financial stability

Pillar 1 Minimum capital requirements	Pillar 2 Supervisory Review Process	Pillar 3 Market Discipline
Credit Risk Risk of loss arising from borrower default **Market Risk** Risk of loss arising from a decline in the value of a financial asset due to market price fluctuations **Operational risk** Risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events	**Regulatory framework for Banks** - Internal Capital Adequacy Assessment Process (ICAAP) - Risk management **Supervisory framework** - Evaluation of internal systems of Banks - Assessment of Risk Profile - Review of compliance - Supervisory measures	**Public disclosure of risk management policies, capital resources and capital requirements** **Transparency and comparability**
MEASURING	MONITORING AND PREVENTION	DISCLOSURE

Basel accords

The impact of the 2008/9 crisis

The financial crisis has unveiled a number of shortcomings of Basel II and required unprecedented levels of public support in order to restore confidence and stability in the financial system.

Drawbacks of the existing framework

- Capital that was actually not absorbing
- Failing liquidity management
- Inadequate group wide risk management
- Insufficient governance

New standards (Basel III)

- Improve the quantity and quality of capital in the Banking system
- Introduce a supplementary non-risk based measure to contain the build-up of leverage
- Develop a framework for stronger liquidity buffers
- Implement the recommendations of the Financial Stability Board (FSB) to mitigate pro-cyclicality

NOVA SCHOOL OF BUSINESS & ECONOMICS

Basel Accords

Basel II & III framework combined

Financial stability

Pillar 1
Minimum capital requirements

Credit Risk
Risk of loss arising from borrower default

Market Risk
Risk of loss arising from a decline in the value of a financial asset due to market price fluctuations

Operational risk
Risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events

Pillar 2
Supervisory Review Process

Regulatory framework for Banks
- Internal Capital Adequacy Assessment Process (ICAAP)
- Risk management

Supervisory framework
- Evaluation of internal systems of Banks
- Assessment of Risk Profile
- Review of compliance
- Supervisory measures

Pillar 3
Market Discipline

Public disclosure of risk management policies, capital resources and capital requirements

Transparency and comparability

Basel III

Liquidity sufficiency

Liquidity coverage ratio (LCR)

Net stable funding ratio (NSFR)

Leverage ratio

Basel III

Enhanced minimum capital requirements

Enhanced supervisory review process for firm-wide risk management and capital planning

Enhanced risk disclosure and market discipline

BRRD

Enhanced capital and liability requirements to increase loss absorption capacity (MREL)

Basel III
Main fronts

Capital	Liquidity	Systemic Risk
More capital	Short term Liquidity (LCR ratio)	Clearinghouses for derivatives
Better capital	Long term liquidity (NSFR ratio)	More capital for systemic derivatives
More risks covered		More capital for interbank exposures
Control leverage		Contingent capital
“Buffers”		SIFI

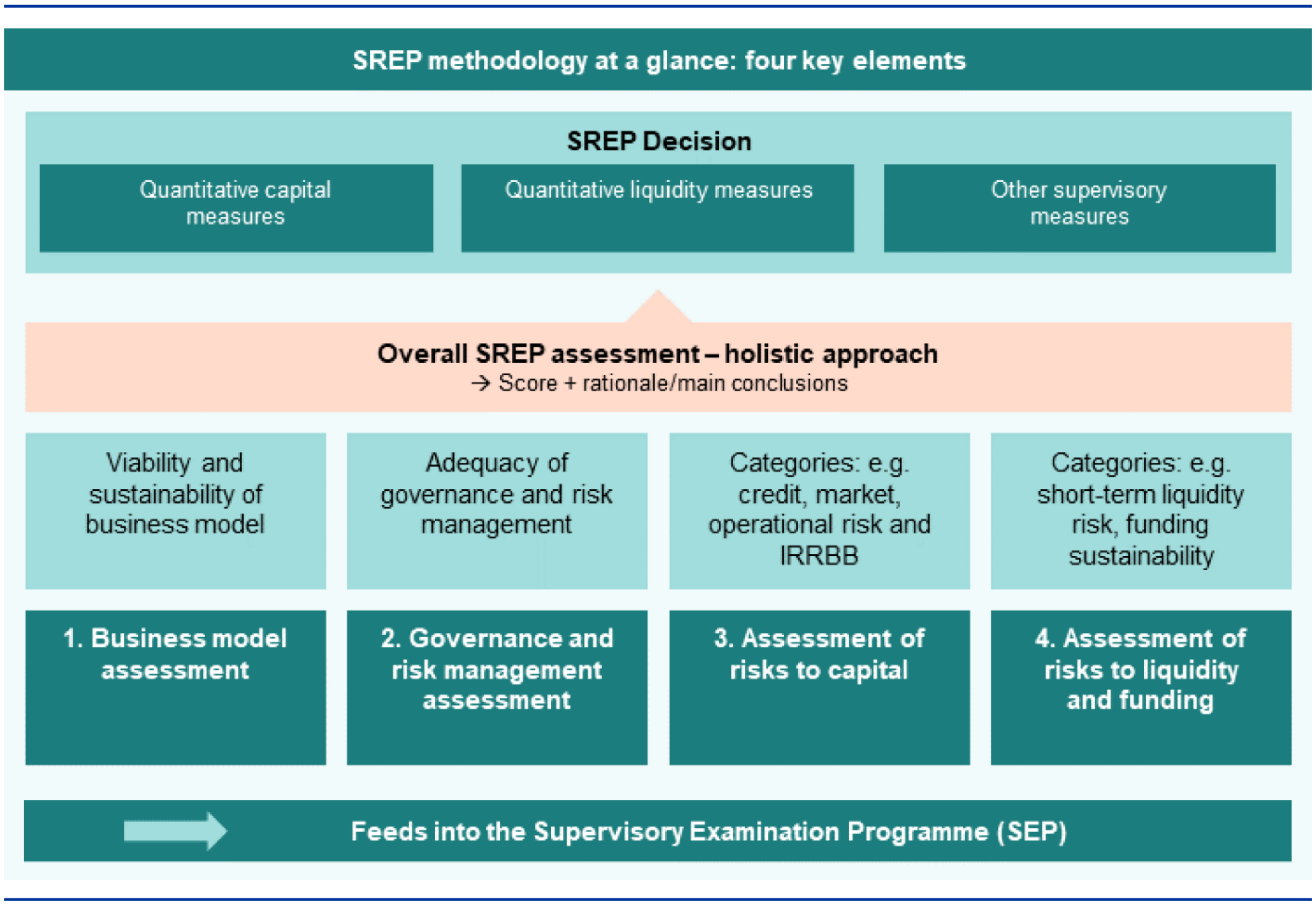
REMINDER from session 6

Basel III: SREP & ICAAP

Sleeping with the regulator?

Figure 1

The SREP methodology



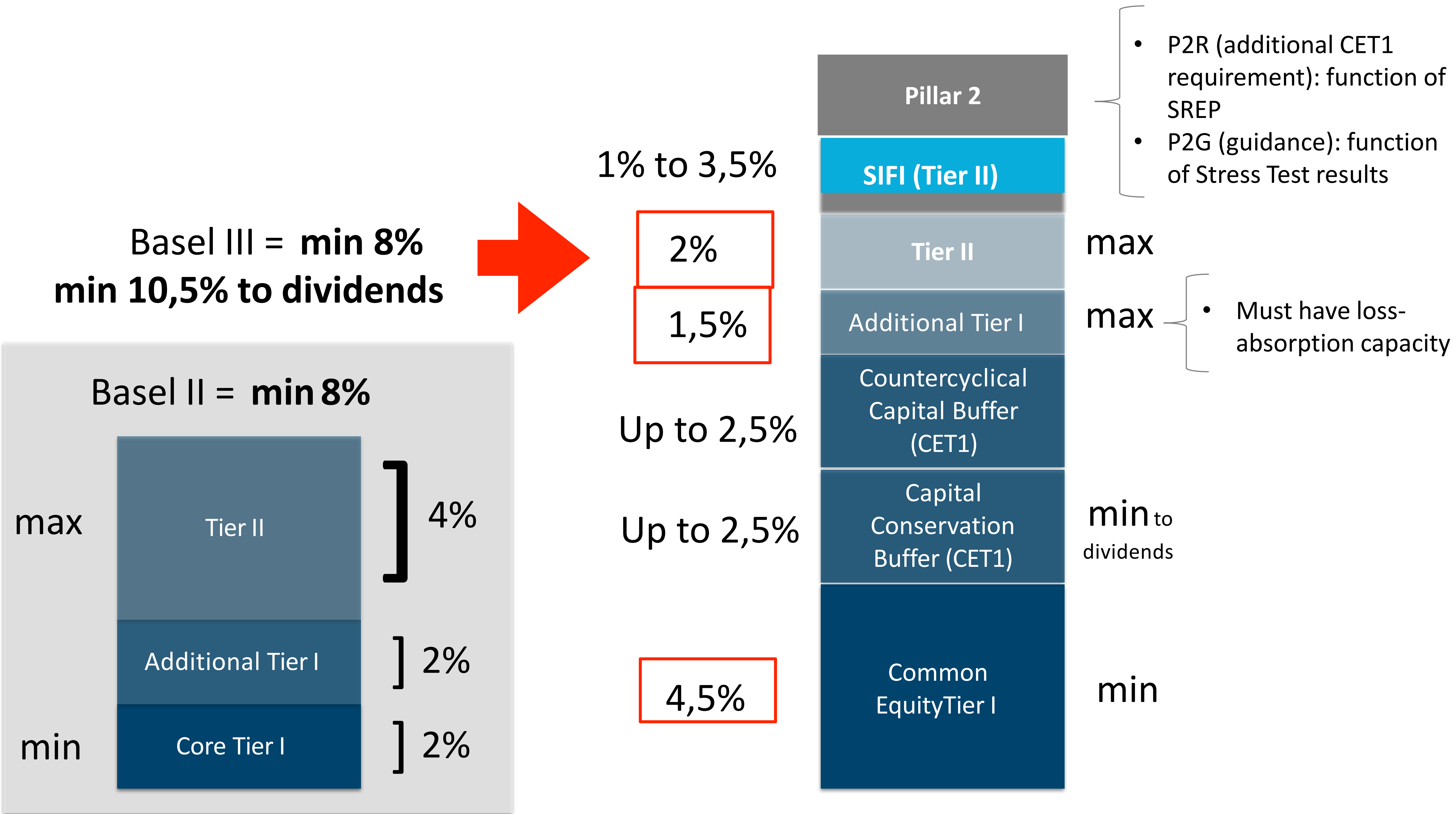
Source: EBA – SREP methodology.

SREP goals

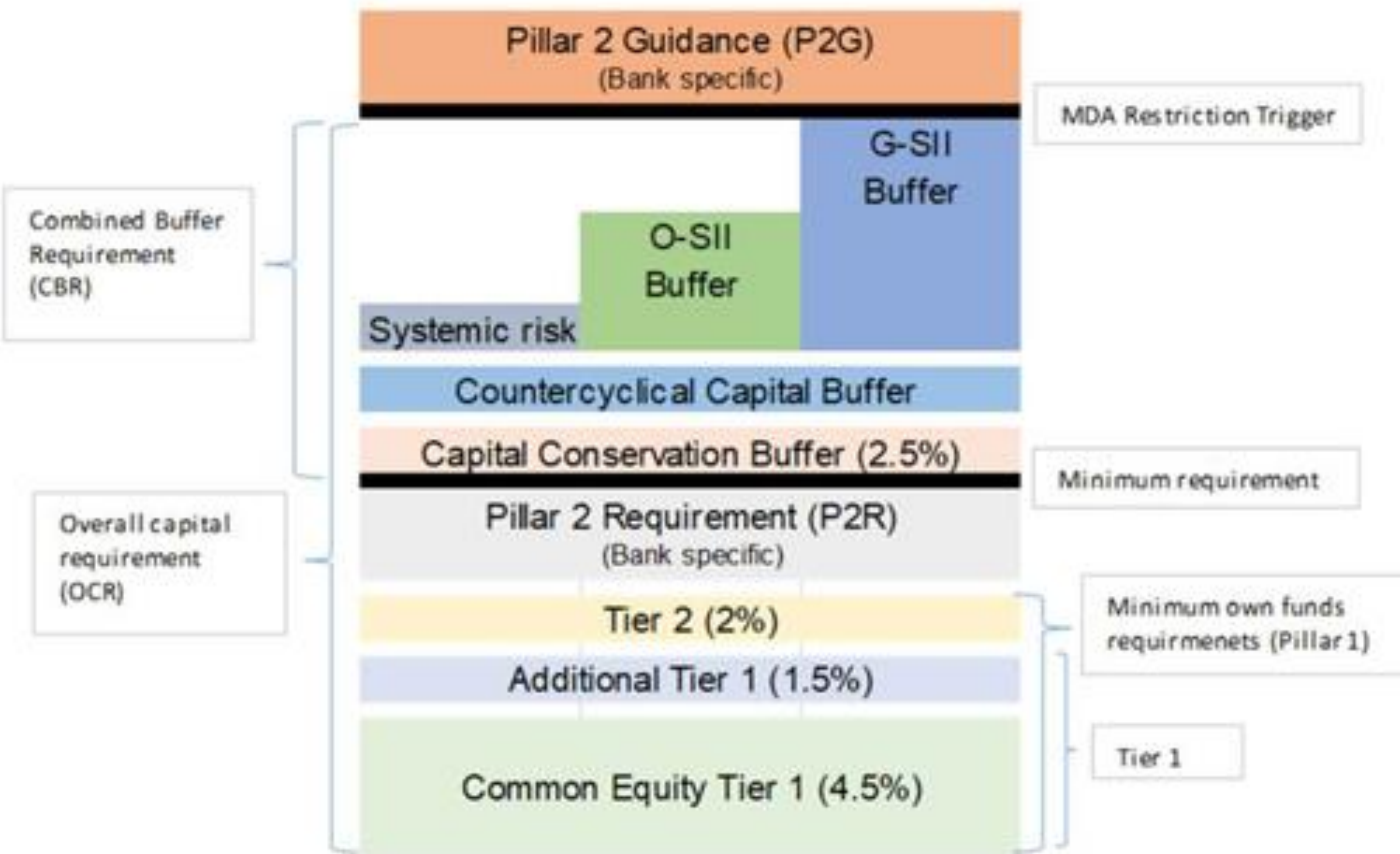
- Guide harmonization of banking supervision at an European level
- Increasing the consistency and quality of supervision across the Banking Union.

Basel III
New capital requirements (I)

Exam suggestion:
Write a short summary on the rationale and purpose behind each capital buffer

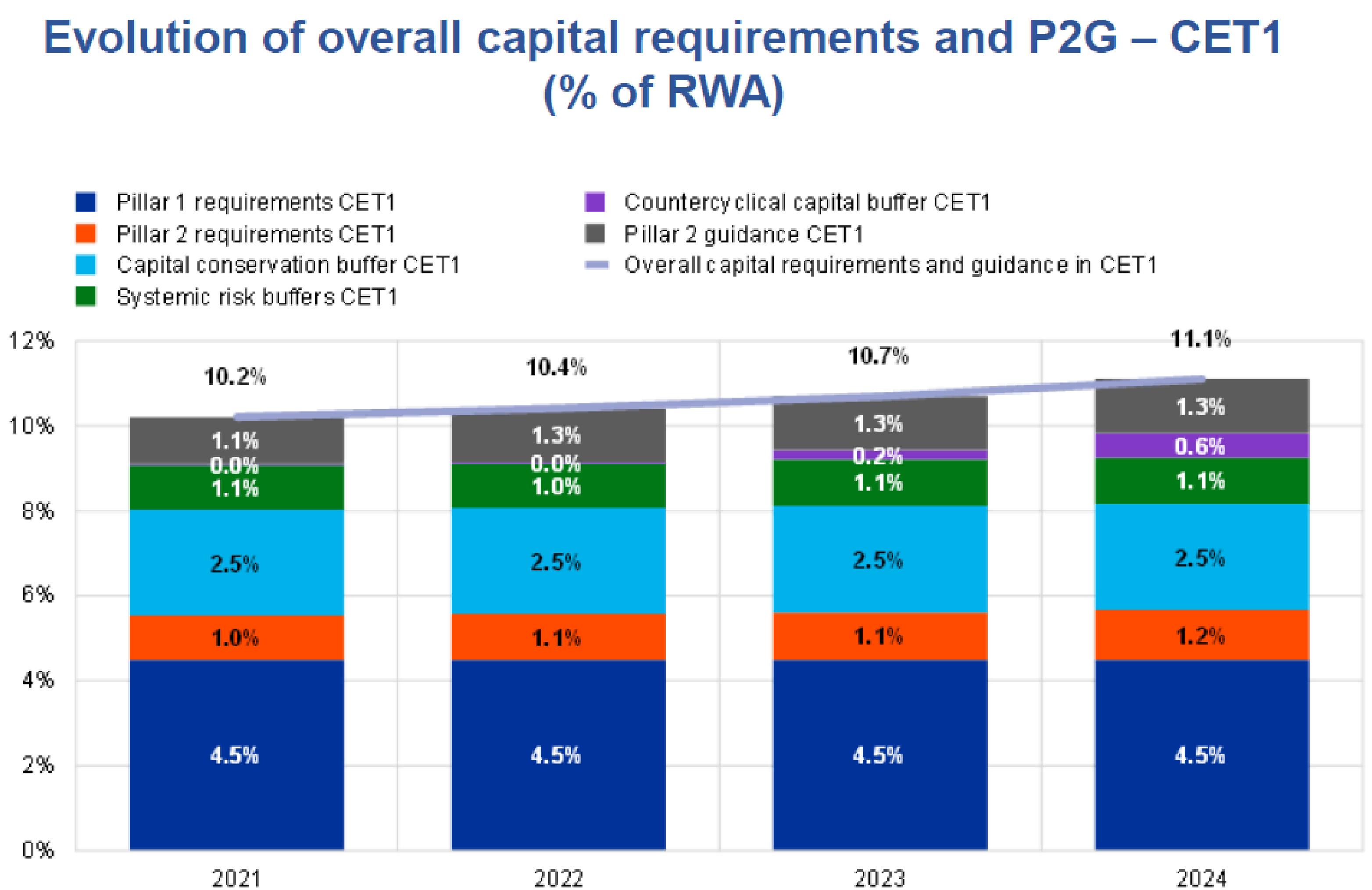


Basel III
New capital requirements (re-arranged)



3 Main results from the SREP decisions in 2023

Overall capital requirements have increased for the system (1/2)
Due to Countercyclical Capital Buffer and, to a lesser extent, P2R



Source: Conceição Macedo, Head of Supervision, ECB – Presentation to the Banking course 2024.

SREP
The implications (I)

REMINDER
Session 6

Main events in 2022

In 2022, in the current demanding and challenging context, the Bank kept its focus on supporting households and companies.

Following the geopolitical crisis with the invasion of Ukraine, the Bank acted in accordance with the guidelines of the European Union and implemented a set of mechanisms to monitor measures to support the Ukrainian people.

In the scope of the Supervisory Review and Evaluation Process (SREP), BCP has been notified of the decision of the European Central Bank (ECB) regarding minimum prudential requirements to be fulfilled on a consolidated basis from March 1, 2022: CET1 9.16%, T1 11.13% and Total 13.75%.

Source: Millennium BCP, Annual Report 2022

As of end December 2023, the total phased-in capital ratio (applying the IFRS 9 transitional arrangements) stood at 16.4% and the phased-in CET1 ratio at 12.3%. We comfortably meet the levels required by the European Central Bank on a consolidated basis (estimated 13.5% for the total capital ratio and 9.3% for the CET1 ratio)[2]. This results in a distance to the maximum distributable amount (MDA) of 269 bps and a CET1 management buffer of 304 bps.

2. According to a recent resolution from Banco de España, our D-SIB buffer will increase from 1% to 1.25% from January 2024 following a change in methodology. Institutions must hold capital at the consolidated level for the higher of the G-SIB and D-SIB requirements. As at year end 2023 Santander applies a 1% CET1 surcharge, globally (G-SIB) and locally (D-SIB), as they are both set at 1%. Additionally, the ECB revised Banco Santander, S.A.'s P2R requirement establishing a minimum of 1.74% applicable from 1 January 2024.

Source: Santander, 2024

NOTIFICATION BY THE ACPR OF THE DESIGNATION OF BNP PARIBAS ON THE LIST OF G-SIBs

BNP Paribas has received the notification by the "Autorité de Contrôle Prudentiel et de Résolution" (ACPR), dated 27 November 2023, that the Group has been designated on the 2023 list of Global Systemically Important Banks (G-SIBs) in the bucket 2 corresponding to its score based on end-2022 data.

Consequently, the requirement of the G-SIB buffer applicable for the group remains at 1.5% of the total risk-weighted assets beginning 1st January 2024, unchanged compared to the level currently applicable.

The Group is well above the regulatory requirements with, as at 30 September 2023, a CET1 ratio at 13.4%[1], a Tier 1 ratio at 15.5%[1] and a Total Capital ratio at 17.8%[1].

Source: BNP Paribas website

Source: BNP Paribas website, Press release

SREP
The implications (II)

ECB warns of tougher fines for banks that 'drag their feet' on fixing flaws

Top official points out need to supervise climate and systemic risks

The ECB has become increasingly frustrated with banks' reluctance to tackle climate change risks © AP

The turmoil in banking markets this year, which led to the collapse of several US banks and the forced rescue of Credit Suisse in March, "was a clear reminder of what can happen if issues are detected but not acted upon", Elderson said. "This episode confirms that intrusive and effective supervision is needed more than ever."

Martin Arnold in Frankfurt DECEMBER 7 2023

2

Supervision in Europe

Banking Union overview

- Fragmentation of the single market in lending and funding, caused by uncoordinated national responses, is very damaging within the euro area, where monetary policy transmission is impaired and the ring-fencing of funding obstructs efficient lending to the real economy and thus growth.

- As such progress towards a Banking Union, including single centralised mechanisms for the supervision and restructuring of banks, is deemed indispensable.

Banking Union

SSM

Single supervisory mechanism

- ensures the safety and soundness of the European banking system
- increases financial integration and stability
- ensures consistent supervision

SRM

Single resolution mechanism

- ensures an orderly resolution of failing banks with minimal costs for taxpayers and to the real economy
- establishes the framework for the resolution of banks in EU countries participating in the banking union

Supervision in Europe
Main entities

1 The Single Supervisory Mechanism

Banking Regulation and Banking Supervision…
… what is the difference ?

Regulation	Supervision
Set of rules (hard and soft law, standards, best practices) which set boundaries to the way banks manage and mitigate their risks	Processes that ensure that the banks comply with defined set of rules, preventing them from taking excessive risks

Regulation

- BIS: **Basel Committees** set International standards (e.g. Core Principles)
- EU: **EU bodies** issue regulations and Directives (e.g. CRR and CRD)
- eba European Banking Authority: **EBA** sets Reporting & Implementing Standards (e.g. FINREP and COREP)
- EU flags: **Countries** transpose EU Directives into national law. Other specific national law may also apply to banks (e.g. CRD transposition)

Supervision

ECB is responsible for supervision at system level of the Euro area banks
- **Direct supervision** of most relevant banks, i.e. **Significant Institutions (SI)**
- **Oversight of National Competent Authorities** (NCAs) – national supervisors

NCAs support the ECB in its supervisory functions
- Participation in the **Joint Supervisory Teams (JSTs)** which supervise SIs
- **Direct supervision** of remaining banks, i.e. **Less Significant Institutions (SI)** under ECB oversight
- Common procedures (licensing, Fit & Proper, etc)

Regulators and Supervisors work together to ensure that taxpayers and depositors' money is kept safe

Source: Conceição Macedo, Head of Supervision, ECB – Presentation to the Banking course 2024.

Supervision in Europe

The role of the ECB

https://www.youtube.com/watch?v=xC_2N0Y20qQ

REMINDER
Session 10

Banking Recovery/Resolution

A change in paradygm

Moving from a BAIL-OUT to a BAIL-IN approach

1988

- Disclosure of Basel I accord
- Definition of minimum capital requirements

Basel I accord **1996**

2003

- Disclosure of New Basel Accord (Basel II)

- Disclosure by the EU of the proposal for Capital requirements directive (CRD)

2005

2007

- Implementation of the new Basel accord: Basel II

- Developments over Basel II accord
- First proposals for Basel III

2009

CRD IV / CRR – European Capital Requirements Directive and Regulation

Basel III **2013**

2014

- **BRRD (Bank recovery and resolution directive)**
- **"Guidelines on common procedures and methodologies for SREP" published by EBA**

- **CRD V / CRR II proposals**

2016

2017

- **"Final" agreement on Basel III**

Banking Recovery/Resolution

Latest developments

CRR3
From January 2025 onwards

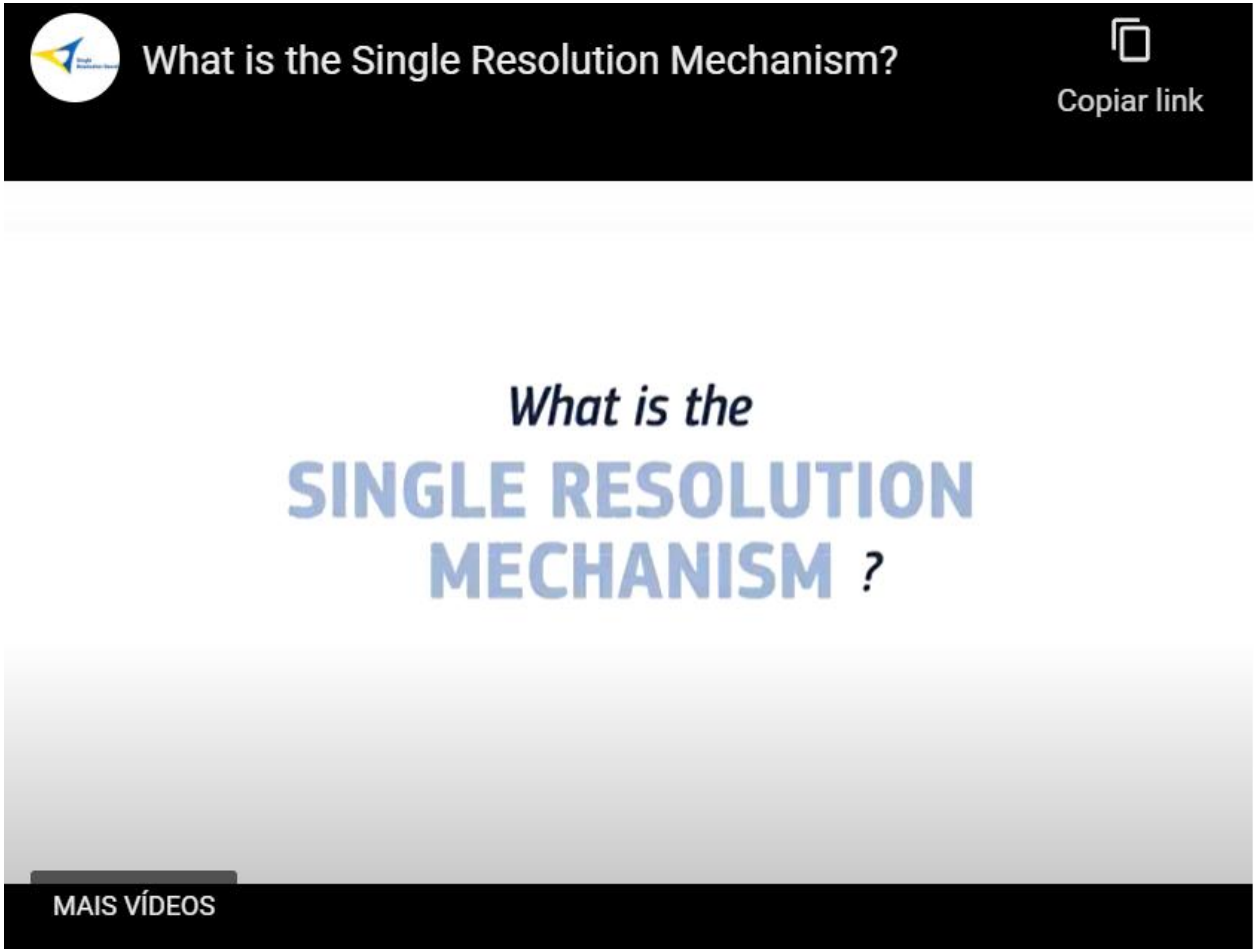
- **Introduction of the Output Floor**: Establishes a minimum threshold for risk-weighted assets (RWAs) calculated using internal models, set at **72.5%** of RWAs computed via standardized approaches
- **Revisions to Credit Risk Framework**: Limits the use of advanced internal ratings-based (IRB) approaches for certain exposures to reduce complexity and improve comparability
- **Overhaul of Operational Risk Approach:** Replaces existing models with a single standardized approach for all banks, simplifying the calculation of capital requirements for operational risk
- **Updates to Credit Valuation Adjustment (CVA) Risk**: Introduces three new approaches—simplified, basic, and standardized—for calculating own funds requirements for CVA risk, aligning with international standards
- **Incorporation of ESG Risks**: Mandates the integration of ESG factors into risk management processes, requiring banks to identify, disclose, and manage sustainability risks systematically

CRD6
From January 2027 onwards

- **Harmonization of Third-Country Branch Supervision:** Establishes uniform minimum requirements for the authorization and supervision of branches of banks headquartered outside the EU
- **Strengthening of Fit and Proper Assessments:** Enhances the framework for assessing the suitability of key function holders, including board members and senior management
- **Integration of ESG Considerations:** Requires banks to incorporate ESG risks into their governance and risk management frameworks, aligning with the EU's sustainability objectives
- **Enhanced Supervisory Powers:** Provides supervisors with stronger enforcement tools and harmonized powers to oversee banks effectively

Supervision in Europe

The role of the SRM



https://youtu.be/cZ3jwpfQqDU

Comparison among FOLTF cases

	ABLV	Banco Popular	Vicenza/Veneto
Reason for FOLTF	Liquidity	Liquidity	Solvency
Crisis evolution	Very fast	Fast	Slow
Moratorium	Applied	Not available under national law	Not relevant
SRB decision	No public interest	Public interest	No public interest
Burden sharing	Possible under self-liquidation	CET1, AT1, T2	CET1, AT1, T2 *
Further proceedings	LV: request for self-liquidation; LU: suspension of payments regime/ administrators	Resolution action (application of sale of business tool and write down)	National insolvency including liquidation state aid
DGS involvement	Pay-outs in LV and LU	None (deposits transferred)	None (deposits transferred)

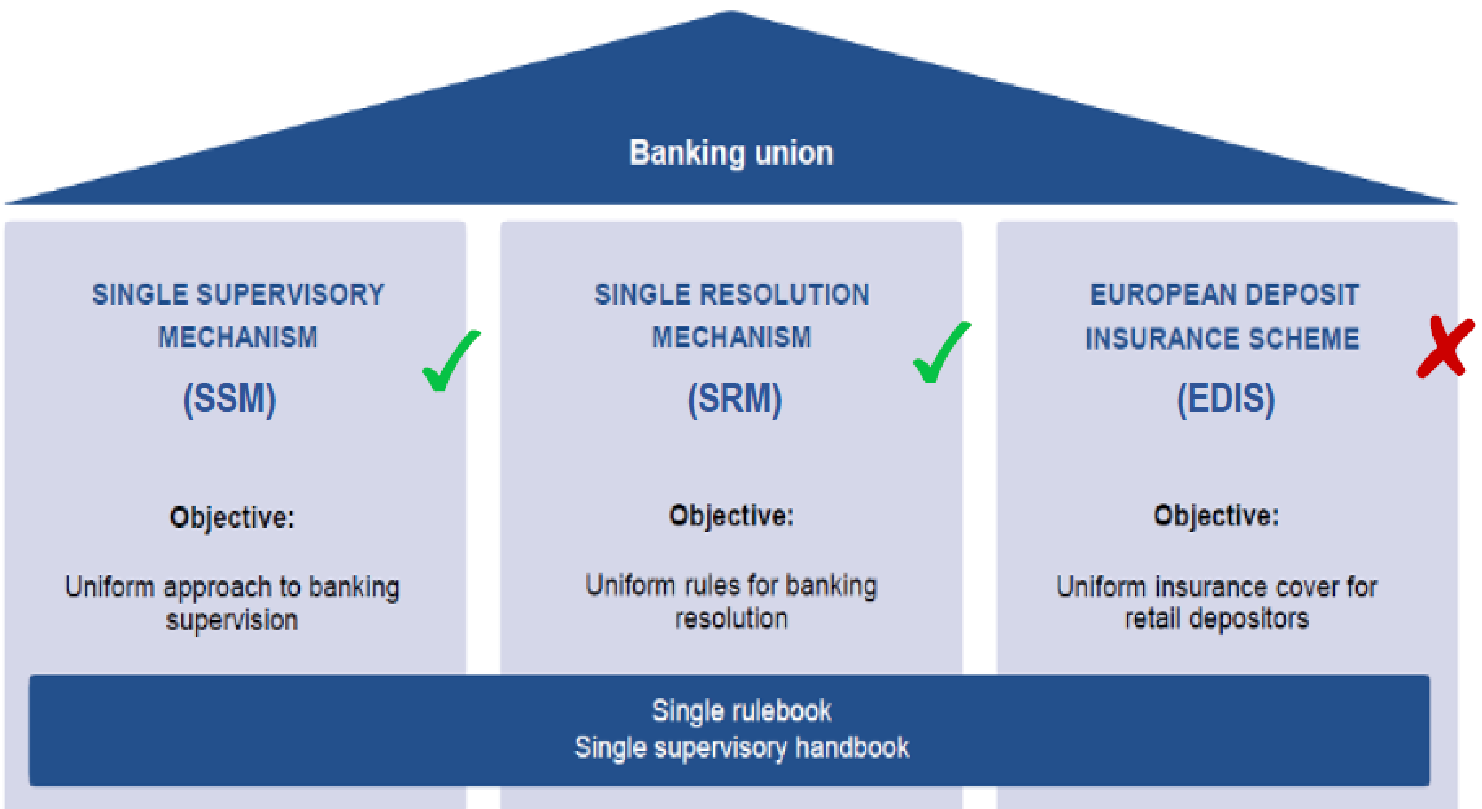
* Retail subordinated bond-holders subject to mis-selling were entitled to restoration measures

12

www.bankingsupervision.europa.eu ©

Main source: ECB, May 2019.

Banking Union – Why? What for? What is missing?



- The financial crisis that hit Europe in 2008 and the subsequent sovereign debt crisis in the euro area demonstrated the need for **better regulation and supervision of the EU financial sector**, particularly in the euro area..
- The **creation of the Banking Union** in 2014 was a powerful response to the financial crisis, with significant progress on an EU common rulebook and the establishment of a new European architecture for a supervision and resolution.
- The **Banking Union** ensures that:
  - **banks are robust** and able to withstand any future financial crises
  - **non-viable banks are resolved without recourse to taxpayers' money** and with minimal impact on the real economy
  - **market fragmentation is reduced** by harmonised financial sector rules

The banking Union objectives will only be attained once the third pillar is complete

Source: Conceição Macedo, Head of Supervision, ECB – Presentation to the Banking course 2024.

Supervision in Europe
2025-2027 priorities

Figure 1

Supervisory priorities for 2025-27, addressing identified vulnerabilities in banks

Priority 1: Banks should strengthen their ability to withstand immediate macro-financial threats and severe geopolitical shocks

Address deficiencies in **credit risk management frameworks**	Credit risk
Address deficiencies in **operational resilience frameworks as regards IT outsourcing and IT security/cyber risks**	Operational risk
Special focus: Incorporating the management of geopolitical risks in supervisory priorities	Multiple risk categories

Priority 2: Banks should remedy persistent material shortcomings in an effective and timely manner

Address deficiencies in business strategies and risk management as regards **climate-related and environmental risks**	Climate-related and environmental risks
Address deficiencies in **risk data aggregation and reporting**	Governance

Priority 3: Banks should strengthen their digitalisation strategies and tackle emerging challenges stemming from the use of new technologies

Address deficiencies in **digital transformation strategies**	Business model

Source: ECB.
Notes: This figure shows the three supervisory priorities for the period 2025-27 and the corresponding vulnerabilities that banks are expected to address over the next three years. ECB Banking Supervision will carry out targeted activities assessing, monitoring and following up on the vulnerabilities identified. The section on the right-hand side of the figure shows the overarching risk category that is associated with each vulnerability.

NOVA SCHOOL OF BUSINESS & ECONOMICS

Banking Regulation