RISK CAPITAL

MAIN TOOLS OF PRUDENTIAL SUPERVISION

Capital Requirement and Capital Buffer

Total Loss Absorbing Capacity - MREL

Leverage Requirement

Liquidity Requirement

Maturity Transformation Requirement

THREE PILLARS OF PRUDENTIAL SUPERVISION

Pillar One	Pillar Two	Pillar Three

Pillar One

Requirements set by the law to be applicable to all banks **on equal terms**

A. Loss Absorbing Resource Requirements (LARRs)

- ❖ capital requirements
- ❖ capital buffers
- ❖ eligible resources (TLAC: only for G-SIB)

- LARRs are defined as a function of risk weighted exposures (RWE)

B. Leverage Requirement

- defined as a % of leverage exposure (LE)

C. Liquidity Requirements

- ❖ Short Horizon (LCR)
- ❖ Long Horizon (NSFR)

Pillar Two

Authorities set requirements for each bank based on a discretionary assessment of each supervised institution

A. Loss Absorbing Resource Requirements (LARRs)

- ❖ capital requirement set by the SSM
- ❖ eligible liabilities (MREL) for all banks set by the Resolution Authority

B. Liquidity requirement

- ❖ set by the SSM

C. Pillar2 Guidance

- Not legally binding

Pillar Three

Aimed to foster market discipline imposing disclosure about…

- ➢ .. risks:
  - ❑ risk type
  - ❑ risk level
  - ❑ risk measurement
  - ❑ risk processes
  - ❑ risk management Organization
- ➢ … own funds and liabilities
  - ❑ type
  - ❑ level
  - ❑ connections with balance sheet capital

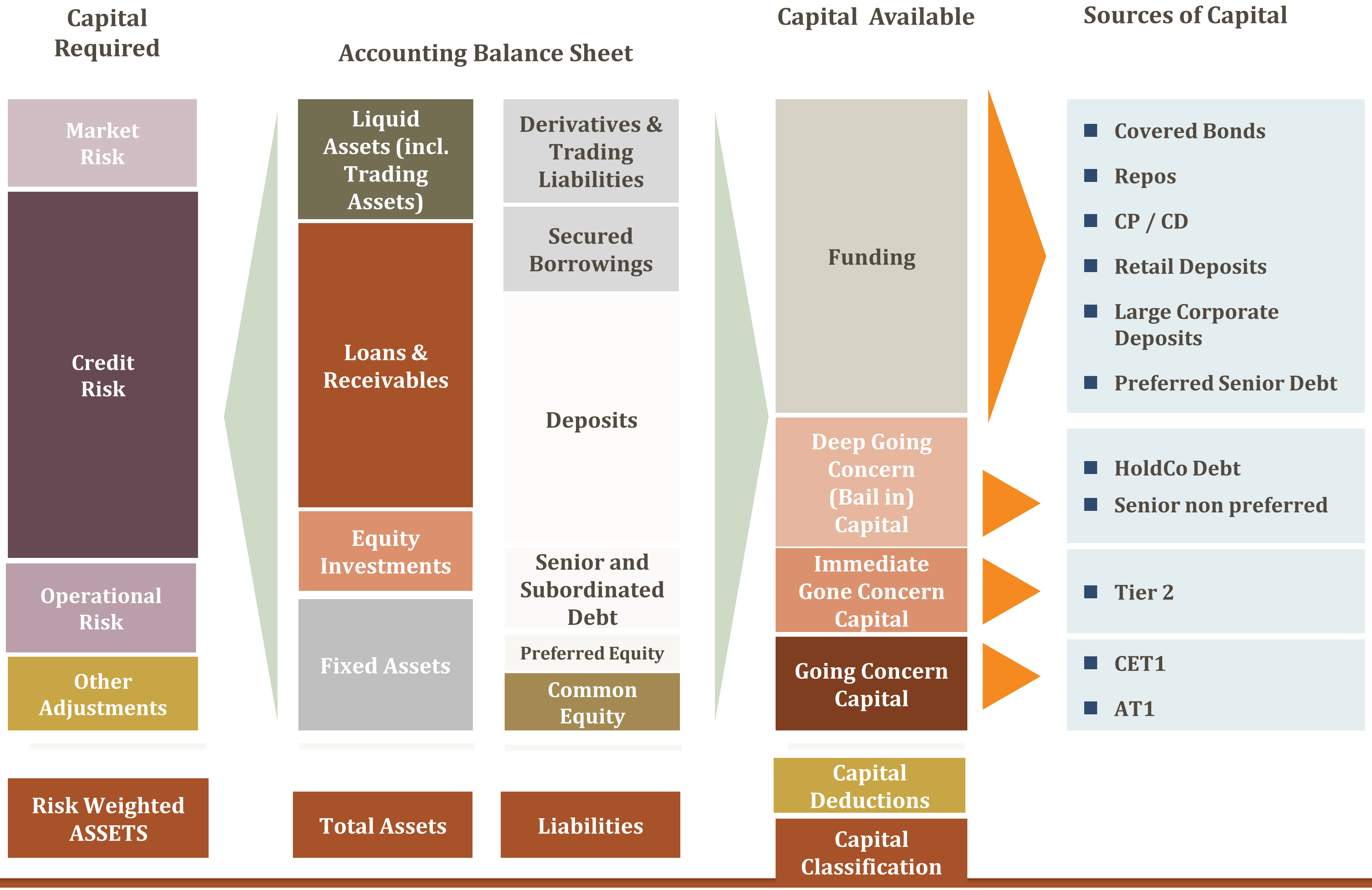
CAPITAL REQUIREMENTS

Pillar One	Pillar Two
Minimum capital requirements	**Supervisory review process**

- P1 capital requirements are set to absorb losses due to four types of risk exposures:
  - Credit Risk
  - Counterparty Risk
  - Operational Risk
  - Market Risk (on the trading book)
    - interest rate risk
    - equity risk
    - currency risk
    - commodity risk
- Capital requirement are obtained from:
  - either a standardized approach;
  - or a customized (internal) model approach developed by the bank and validated by the Authority

- The Authority sets the P2 capital requirement in a way to:
  - <u>cover in full the Pillar 1 risks</u>
  - <u>absorb losses caused by any other risks deemed to be “relevant” for the bank (Pillar 2 risks)</u>
    - Interest rate risk on the banking book
    - Real estate risk
    - Strategic risk
    - ………
- P2R decided considering:
  - the bank’s Internal Capital Adequacy Assessment Process (ICAAP)
  - the outcome of the Supervisory Review and Evaluation Process (SREP)

CAPITAL DEMAND AND SUPPLY



PILLAR 1: MINIMUM CAPITAL REQUIREMENTS

- The required regulatory (loss absorption) capital is defined as a specified percentage *«x»* of banks' total Risk Weighted Exposures (RWE), i.e.

Required Regulatory Capital = x% * Total RWE

where Total RWE = $\sum RWE_i = \sum E_i * w_i$

(TCR) <u>Total Capital Requirement</u> (going + gone concern) x = *8%*

(T1CR) <u>Tier1 Capital Requirement</u> (going concern only) x = 6% (75% * TCR)

(CET1CR) <u>CET1 Capital Requirement</u> (highest quality) *x = 4.5% (75% ** T1CR*)*

- RWE since:
  - some exposures, i.e. risk of a loss, do not arise from asset holdings
  - even when they do arise from asset holdings, the implementation of validated internal model provides a direct quantification of the euro capital requirement,

$$RWE_i = E_i * w_i = \text{Total Capital Requirement for Asset}_i *$$

LOSS ABSORBING RESOURCES

- **«Going Concern» Capital**
  - capital that a bank can use to cover losses while it remains a going concern
    - prevents the bank from entering in a resolution / liquidation process
    - ensures banks keep operating <u>and</u> maintain their credit supply to the economy

- **«Gone Concern» Capital (“immediate” + “deep”)**
  - can absorb losses in a «gone concern», but not if banks remains a going concern
    - <u>immediate</u> if it is “used” at the point of non viability or close to it as a prevention measure
  - in case of resolution / liquidation process these resources cover losses:
    - to allow for an orderly restructuring / wind down of the bank
    - to minimize the damage to the economy
    - to spare taxpayers from having to bail out the bank

- **Going vs. gone concern capital: different purpose, but closely connected**
  - The greater the confidence that a bank can be bailed in (i.e., the greater the gone concern resources), the less going concern capital is needed to protect taxpayers
  - Different levels of going concern capital change the incentives to banks and their investors reducing both risks and the consequent need of gone concern capital

- **Bank Capital = “Going Concern” + “Immediate Gone Concern”**

GOING CONCERN CAPITAL

- Known as **Tier 1 Capital**
  - Loss absorbing capital while the bank is alive
    - either automatically written down in case of recorded losses
    - or automatically converted in such type of resources if the bank gets close to the point of non viability (PONV)*

- Characteristics
  - permanently available to the bank (no redemption date)
  - callable at issuer option after 5+ years, conditional to competent supervisory authority approval
  - provides no incentive to redemption (no coupon or dividend step up
  - provide fully discretionary distributions to their holders (no coupon kicker allowed),
  - no accrual of missing payments, if any (non cumulative)

** PONV = point at which the Authority determines that the institutions meets the condition for resolution or…cease to be viable if the additional capital instruments were not written down or converted by the Authority*

TYPES OF TIER 1 CAPITAL

- **Common Equity Tier 1 Capital (CET1)**
  - Shareholders equity plus/minus unrealized gains/losses, with deduction of:
    - Intangible Assets (in full);
    - Interest (in part);
    - Tax Deferred Assets (in part)
    - Investments in Insurance Companies and Financial Institutions (according to certain threshold)

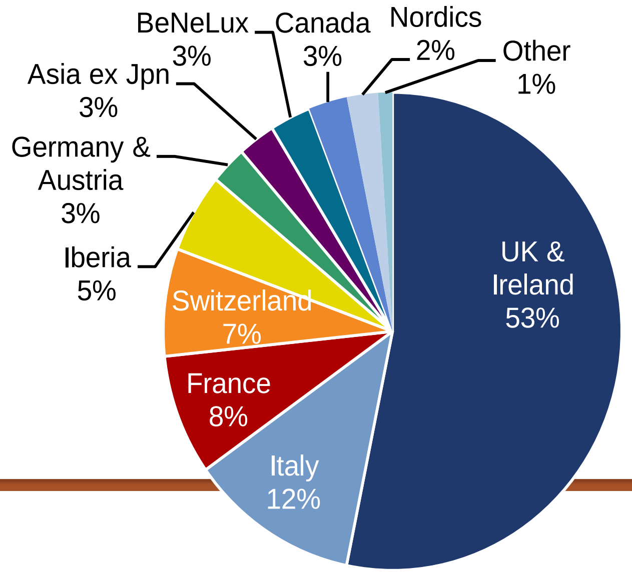
- **Alternative Tier 1 Capital (AT1)**
  - preferred shares + perpetual subordinated debt (no step up; no cumulative)
  - must automatically convert in common shares if CET1 ratio drops below a certain level
  - it can count for no more than 25% of the minimum T1 capital requirement
  - Minimum trigger point for mandatory conversion is a CET1 capital ratio of 5.125%, but it is usually set at an higher level

UNICREDIT €1.25BN PNC6 AT1

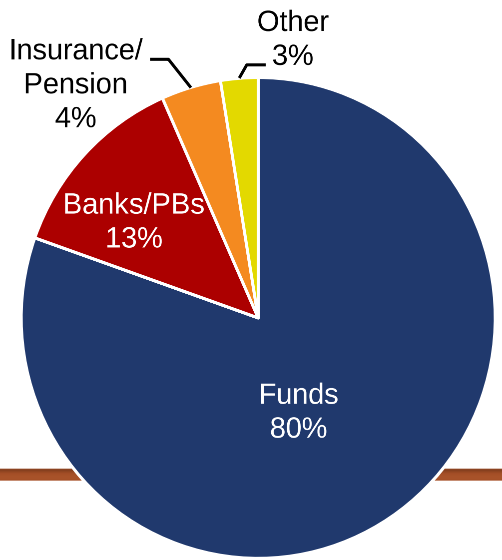
Unicredit Prices the Largest Notional at the Lowest Coupon among its CRD IV Compliant AT1s

- On 15.05.2017, UniCredit S.p.A successfully priced a €1.25bn PNC6 AT1 bond at a coupon of 6.625%
  - Expected issue rating: B+ by Fitch
  - Re-offer price: 100%
  - The PNC6 is the largest among its AT1s with the lowest coupon ever achieved by UC given its 6.75% €1bn PNC-2021, 9.25% €500m PNC-2022 and 8.0% \$1.25bn PNC-2024 CRD IV compliant AT1s outstanding
  - Competitive pricing with no new issue premium. UC's outstanding PNC-2021, with a call date ~2yr shorter, was trading at a spread of ~633bps (annual basis) at announcement and the new issuance priced at a margin of 638.7bps.

Allocation by Region



Allocation by Investor Type



Issue Size and Format:	€1.25bn - **Non-Cumulative** Temporary **Write-Down** **Deeply Subordinated**
Maturity Date:	**Perpetual** (corporate duration of UniCredit S.p.A.)
Interest:	Fixed at 6.625% p.y. until the First Call Date, then reset every 5 years to the aggregate of the Margin **(no step-up)** plus the then 5-Year Mid-Swap Rate. **Non-cumulative** - Payable semi-annually
Redemption:	(i) On any Optional Redemption Date (***Call***); (ii) Upon reduction of interest deductibility or obligation to pay additional amounts; (iii) Upon loss of recognition as AT1 in whole/part Always subject ***to prior regulatory approval*** and in (ii) and (iii) in compliance with the relevant provisions of the CRR
General Redemption Option:	3 June 2023 (First Call Date) and on any interest payment date thereafter. Redemption price will be equal to the Prevailing Principal Amount, plus any accrued interest and any additional amounts due;
Optional Cancellation of Interest:	The Issuer may decide in its **sole discretion**, to cancel any payment of interest on any interest payment date on a non-cumulative basis. **No dividend pusher / no dividend stopper**
Mandatory Cancellation of Interest:	Mandatory Cancellation upon (i) insufficient Available Distributable Items; (ii) distributions in excess of Maximum Distributable Amount or (iii) the occurrence of a Contingency Event
Loss Absorption Event:	If CET1 Ratio of the Group or Issuer has fallen below **5.125 per cent** or the then minimum trigger specified in the relevant regulation to Additional Tier 1 instruments ("Contingency Event") *then the Issuer shall* cancel any interest accrued and reduce the principal by the amount required to remedy the trigger breach taking into consideration other instruments with similar write down triggers (and prior loss absorbing instruments) where possible
Margin:	638.7bps
Denominations:	€200k+1k thereafter

"IMMEDIATE" GONE CONCERN CAPITAL

- It consists of some special form of debt, the <u>Tier 2 Capital</u> (instruments?)

- **Tier 2 capital (T2)**
  - deep subordination (junior only to going concern capital)
  - no permanent funds, but debt with long term maturity (at least 5 years)
  - subject to a straight line regulatory amortization in the last 5 years (20% each)
  - may pay cumulative, non discretionary coupons
  - buybacks and early redemptions need regulatory approval
  - statutory non viability loss absorption
  - Converted in common equity or written down by the Competent Authority at the point of non viability

- T2 capital can counts for no more than 25% of the minimum total capital required

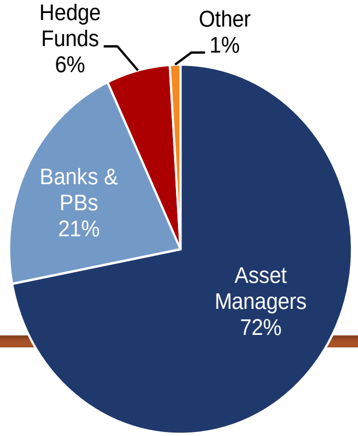
- In special cases (i.e. pre-emptive capitalization), T2 capital may turn in "going concern" capital

BPER €500M 10NC5 TIER 2

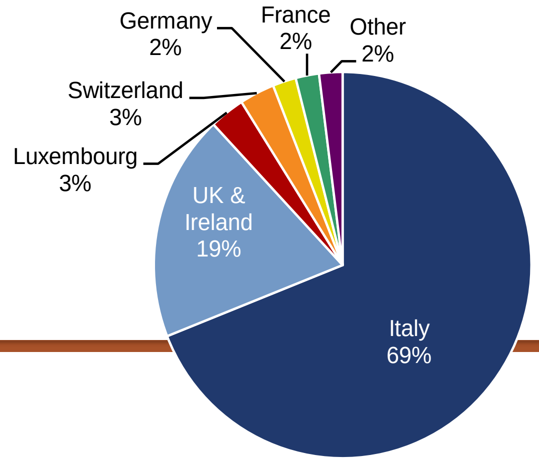
Lowest Coupon for a Benchmark T2 from a Sub-IG Italian Bank

- On 23rd May 2017, BPER Banca S.p.A. successfully priced €500m RegS 10NC5 Tier 2 subordinated notes with a 5.125% annual coupon
- First institutional subordinated issuance by the Bank since 2007 and the first access to the unsecured institutional market since 2011
- The 5.125% coupon is the tightest ever for a benchmark subordinated transaction by a sub-IG rated Italian bank
- On 15 May 2017 BPER communicated to the market a € 10NC5 Tier 2.
- On Tuesday 23 May, the order book was opened for the Tier 2 deal with interest of Mid 5's% area
- In the early afternoon the Issuer set the final yield/coupon at 5.125%

Allocation by Investor Type



Allocation by Region



Security:	**Dated** Callable Subordinated, Tier 2
Issuer Ratings:	Ba2 (Moody's) / BB (Fitch)
Exp. Issue Ratings:	B1 (Moody's) / BB- (Fitch)
Size and Format:	€500m - Reg S, bearer form
Coupon:	**5.125%,** Annual, Act/Act (ICMA), **reset after year 5 to prevailing 5yr MS + 491 bps margin**
Margin:	491.0bps
Reoffer Price/Yield:	100% / 5.125%
Maturity:	**31st May 2027**
Issuer's Call:	**31st May 2022** at par, **subject to prior regulatory authorisation**
Regulatory Call:	At any time at par, upon full (or partial) exclusion from the Tier 2 Capital of the Issuer, subject to prior regulatory authorisation
Tax call:	At any time at par, as a result of required additional amounts (withholding tax), subject to prior regulatory authorisation
Non-Viability:	**Statutory (with contractual recognition of such powers)**
Denoms:	€100k + €1k
Governing Law:	English, but for Subordination governed by Italian law

PILLAR I: COMBINED CAPITAL BUFFER (CCB) REQUIREMENT

- On the top of the minimum capital requirement, banks must also comply with the CCB requirement, where the CCB is the sum of:
  - **Capital Conservation Buffer**
    - applies to all banks, as set by the CRD IV (currently in its *phase in* period)
    - fully loaded in 2019 at 2.5% of the RWA (in 2018 it is 1,875%)
  - **Countercyclical Capital Buffer**
  - **Systemic Risk Capital Buffer**

  and, exclusively for systemically important institution (SII),
  - **either "Global – SII Capital Buffer"**
  - **or "Other - SII Capital Buffer"**
- Some buffer are global in scope at the EU level
- Some buffer are set at the domestic level by the NCAs
- CCB requirements are to be met exclusively through CET 1 capital

BREACH OF THE CCB REQUIREMENT

- In the case of such a breach, the banks:
  - remain compliant with the minimum capital requirements
  - are constrained in terms of the discretionary distributions that they can pay out (Maximum Distributable Amount – **MDA**), i.e.

$$MDA = \text{distributable profit} * K,$$

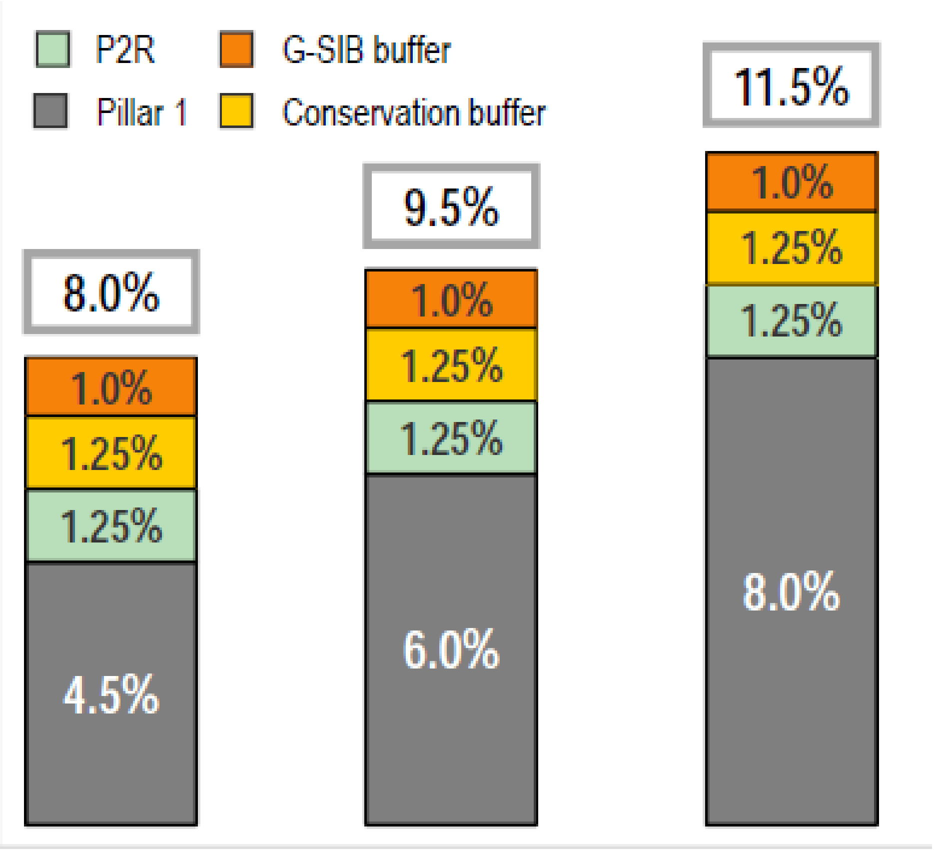
  - K varies from 0 to 0.6 according to the CCB shortfall
    - no breach → k= 100%
    - if breach for less than 25% of the CCB → k = 75%
    - if breach for an amount between 25% and 50% of CCB → k = 50%
    - if breach for an amount between 50% and 75% of CCB → k = 25%
    - if breach for more than 75% of the CCB → k = 0%
  - must submit for approval a Capital Conservation Plan to the Competent Supervisory Authority

MDA

- "Pillar 2 Requirement " (public), applicable to CET1, Tier 1 and Total Capital ratios
- "Pillar 2 Guidance" (non public), non applicable for distributable amount restrictions (MDA - Maximum Distributable Amount*)

- 2017 Capital requirements:
  - CET1: 8.0%
  - Tier 1: 9.5%
  - Total Capital: 11.5%

- Distance as at 01.01.17 to Maximum Distributable Amount* restrictions equal to the lowest of the 3 calculated amounts: €19.1bn



	CET1	TIER 1	TOTAL CAPITAL
Phased in ratios of BNP Paribas as at	11.6%	12.9%	14.5%
Distance** as at 01. Maximum Distributable Amount* restrictions	3.6% €23.0bn	3.4% €21.5bn	3.0% €19.1bn

COUNTERCYCLICAL CAPITAL BUFFER (CCYB)

- Meant to ensure that the domestic banking system can withstand a stress without restricting essential services to the real economy (supply of credit)
- It helps in recognizing losses as soon as they arise w/o limiting lending
  - mitigating credit growth and risk build up in good times is less important
- Set quarterly by each NCA as a **% of RWEs in its own jurisdiction**
  - applicable only to banks with significant credit exposures in that jurisdiction)
  - for international banks, the CCyB is then firm specific in terms of total RWE
- Raised and lowered with a broadly symmetric process, to match the risk of banks' **forward losses** on domestic exposures
- Subject to gradual changes to let banks met it through retained earnings, rather than through asset disposal or capital raising transactions
- Standard range is 0 - 2.5%, but expected to be above zero if the economy is in a neutral phase (currently set at zero almost everywhere in the EU)
- CCyB for an international bank is an average of different national CCyBs

SYSTEMIC RISK CAPITAL BUFFER (SRB)

- It addresses systemic risks of a long-term, non-cyclical nature that are not covered by the Capital Requirements Regulation
  - Correlation: correlated exposures, liquidity, leverage cycle, tail risk
  - Contagion: balance sheet, clearing & settlement
  - Clustering: same market; interconnections
- First applied in the 2014 Comprehensive Assessment (1% * RWE)
- It is now set by the each NCAs separately
- No maximum, but it is required either a notification to (if in typical range [1%-3%]), or authorization from (if higher requirements) the EU Comm.
- There are accumulation rules for combining the SRB with the buffer required for Systemically important Institutions (SII) in order to avoid unnecessary duplication of regulatory burden
- Some Northern EU member states (Denmark, The Netherlands, Sweden), plus Austria and Eastern Countries currently have it

CB FOR SYSTEMICALLY IMPORTANT INSTITUTIONS (SII)

- SII Qualification is decided by the National Competent Authority (NCA), according to the technical standards and guidelines drafted by the EBA

- **Global SIIs Capital Buffer (G-SII Buffer)**
  - G-SIIs (Global-SII) have systemic relevance for the global economy
  - G-SIIs allocated in 5 bands, with buffer going from 1% to 3.5% from Jan. '19
  - In Italy, only Unicredit is a G-SII (lowest band), with a 2018 buffer of 0.75%

- **Other SIIs Capital Buffer (O-SII Buffer)**
  - O-SIIs are banks of systemic relevance for the domestic economy
  - NCAs assign the status of O-SIIs to its domestic banks, having considered:
    - the bank's size,
    - the bank's complexity and cross border activities and
    - the bank's relevance for the EU and/or for its domestic economy,
    - the bank's interconnections with the overall financial system
  - NCAs enjoy discretionary power in setting this buffer

- **G-SII and O-SII buffers cannot be applied concurrently**

ITALIAN O-SIIS

Overall and category scores

Banking group	Overall score	Size	Importance	Complexity	Intercon-nectedness
UniCredit Group SpA	3,454	2,700	2,121	5,199	3,794
Gruppo Intesa Sanpaolo	2,518	2,277	2,514	2,769	2,513
Gruppo Banco BPM	397	528	536	194	329
Gruppo Monte dei Paschi di Siena	375	482	406	409	204

Transitional period applicable to the O-SII buffers
(per cent)

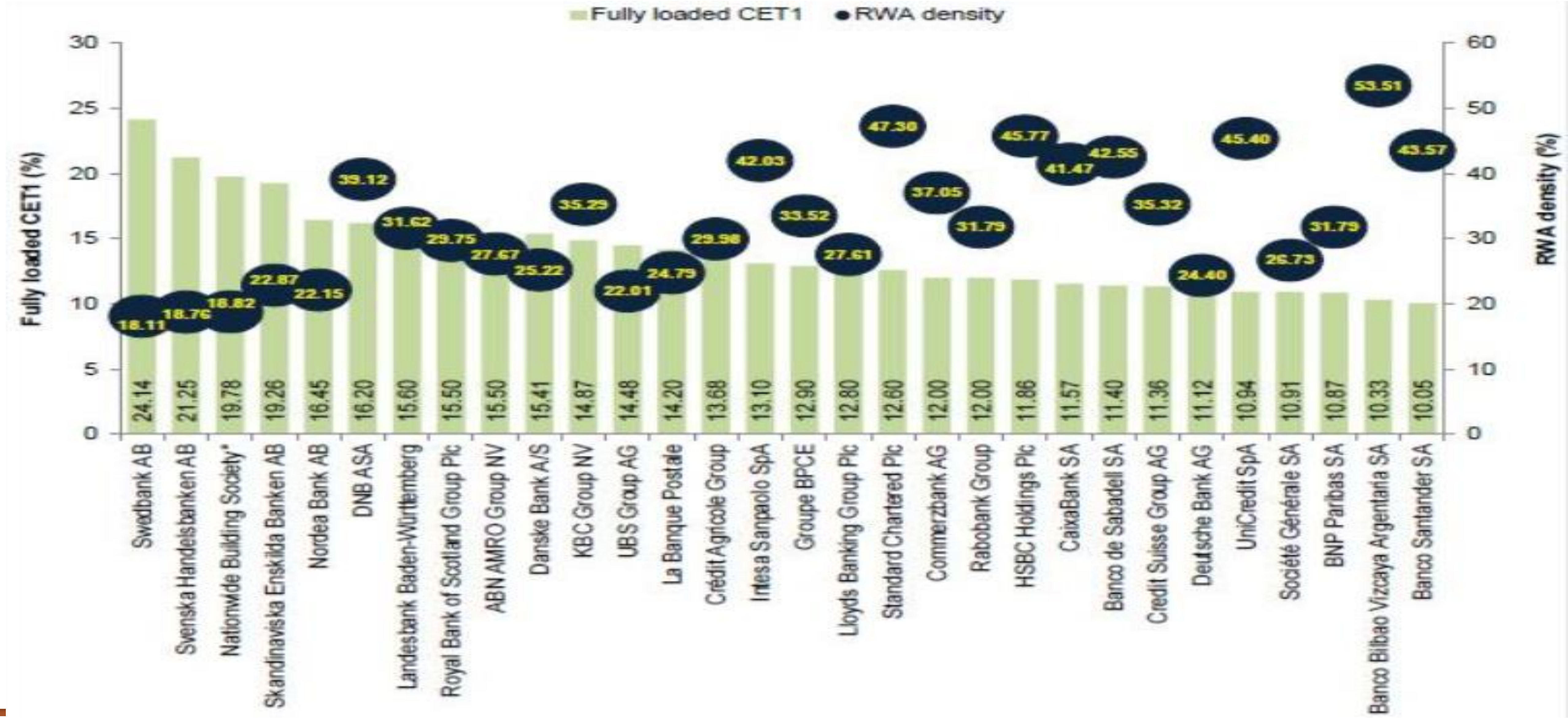
Banking group	From 1 Jan. 2018	From 1 Jan. 2019	From 1 Jan. 2020	From 1 Jan. 2021	From 1 Jan. 2022
UniCredit Group SpA	0.25	0.50	0.75	1.00	1.00
Gruppo Intesa Sanpaolo	0.19	0.38	0.56	0.75	0.75
Gruppo Banco BPM	0.00	0.06	0.13	0.19	0.25
Gruppo Monte dei Paschi di Siena	0.06	0.13	0.19	0.25	0.25

Categories of systemic importance

Bucket	O-SII score interval	O-SII buffer
6	4,000 and up	1.25%
5	[3,000-3,999]	1.00%
4	[2,000-2,999]	0.75%
3	[1,000-1,999]	0.50%
2	[350-999]	0.25%
1	[0-349]	0.00%

Source: Banca d'Italia

INTERNAL MODELS AND THE RWA DENSITY



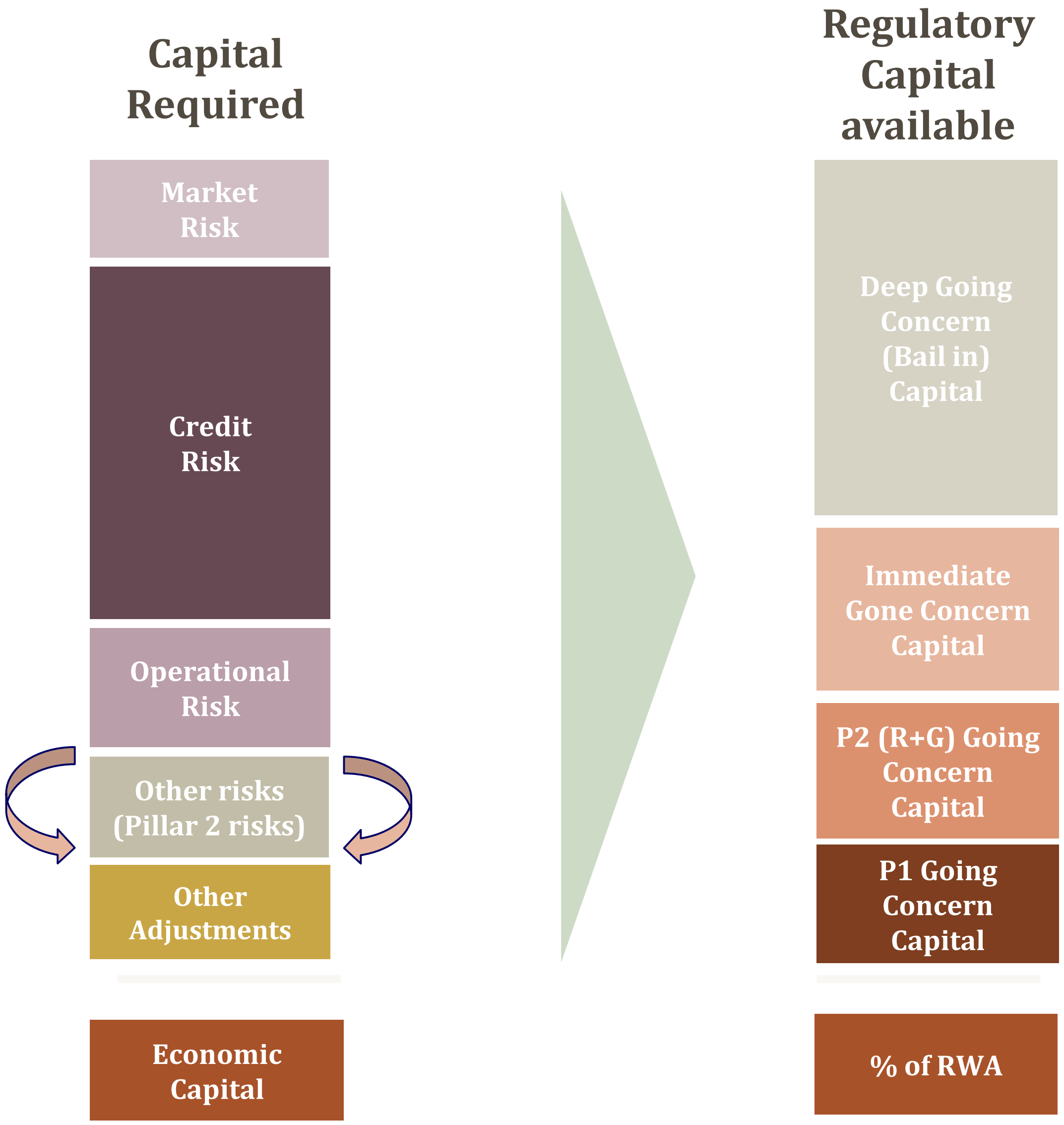
WHY BASEL IV?

- BCBS findings about global bank capital allocation
  - 75% toward credit risk
  - 15% toward operational risk
  - 5% toward market risk
  - 2% toward credit valuation adjustment
- Two big questions
  - is capital backing up operational risk and market risk sufficient?
  - is credit risk accounted properly in all institutions?
- Restore confidence in the link between banks' risk and banks' capital
  - limits to the use of internal models
  - introduction of capital floors
  - increase the robustness of internal models
  - better fine tuning of internal model
- Trade off between the reliability of the estimated capital need and the risk sensitivity of the regulatory framework
  - achieve a right balance and make all market constituencies buy it

LEVERAGE RATIO (LR) REQUIREMENT

- It is a minimum capital ratio «*non risk based*»
  - aims to prevent excessive leverage due to the use of internal models
  - due to the LR requirement, a bank can be exposed up to 33.3x T1 capital (in the past some banks went 80x T1 capital)
  - it is defined in terms of Tier 1 Capital compared to "leverage exposures"
- The measurement of Leverage Exposure (LE):
  - based on accounting standards
  - different from RWE (no risk weighted and no recognition of credit mitigation)
- It is a Pillar 1 requirement: 3% level for all banks from January 2018
  - CRR2 has exemptions for exposures to some specialized business
  - no *add on* imposed on all SIIs, neither at Pillar 1, nor at Pillar 2 level
  - no P2 or higher P1 requirement for G-SIIs at EU level
  - the CRR II envisages the introduction of a LR buffer for G-SIBs in the future
- About one third of banks found the LR requirement more demanding than the Tier1 minimum ratio requirement but now it is not so stringent due to growing relevance of capital buffers and to capital P2R

ONCE MORE ON CAPITAL NEEDS



SUPERVISION AND PILLAR 2 REQUIREMENTS

- In the EU the key elements to identify Pillar 2 requirements are:
  - Internal Capital (Liquidity) Adequacy Assessment Process (ICAAP, ILAAP)
    - banks are responsible for their own internal adequacy assessment process
  - Supervisory Review and Evaluation Process (SREP)
    - SREP is conducted by the competent supervisory authority

- In the case of direct ECB oversight (significant banks), a Joint Supervisory Team (JST) is assigned to each bank
  - JSTs consists of staff from both the ECB and national supervisors
  - JSTs run yearly a Supervisory Review and Evaluation Process (SREP) to assess the extent to which banks have:
    - adequate capital to sustain its financial, business and operational risks
    - sound organizational structure and managerial processes
    - reliable and effective internal control systems;
    - viable business models that ensure profitable operations
  - JST Head submit proposals for decision to the Single Supervisory Board

PILLAR 2 CAPITAL REQUIREMENTS

ICAAP

- Identification and assessment of all material risks posed by the business models and the strategy pursued
- Evaluation of internal controls available to mitigate the risks
- Stress test risks and controls
- Identify the amount and quality of internal capital needed

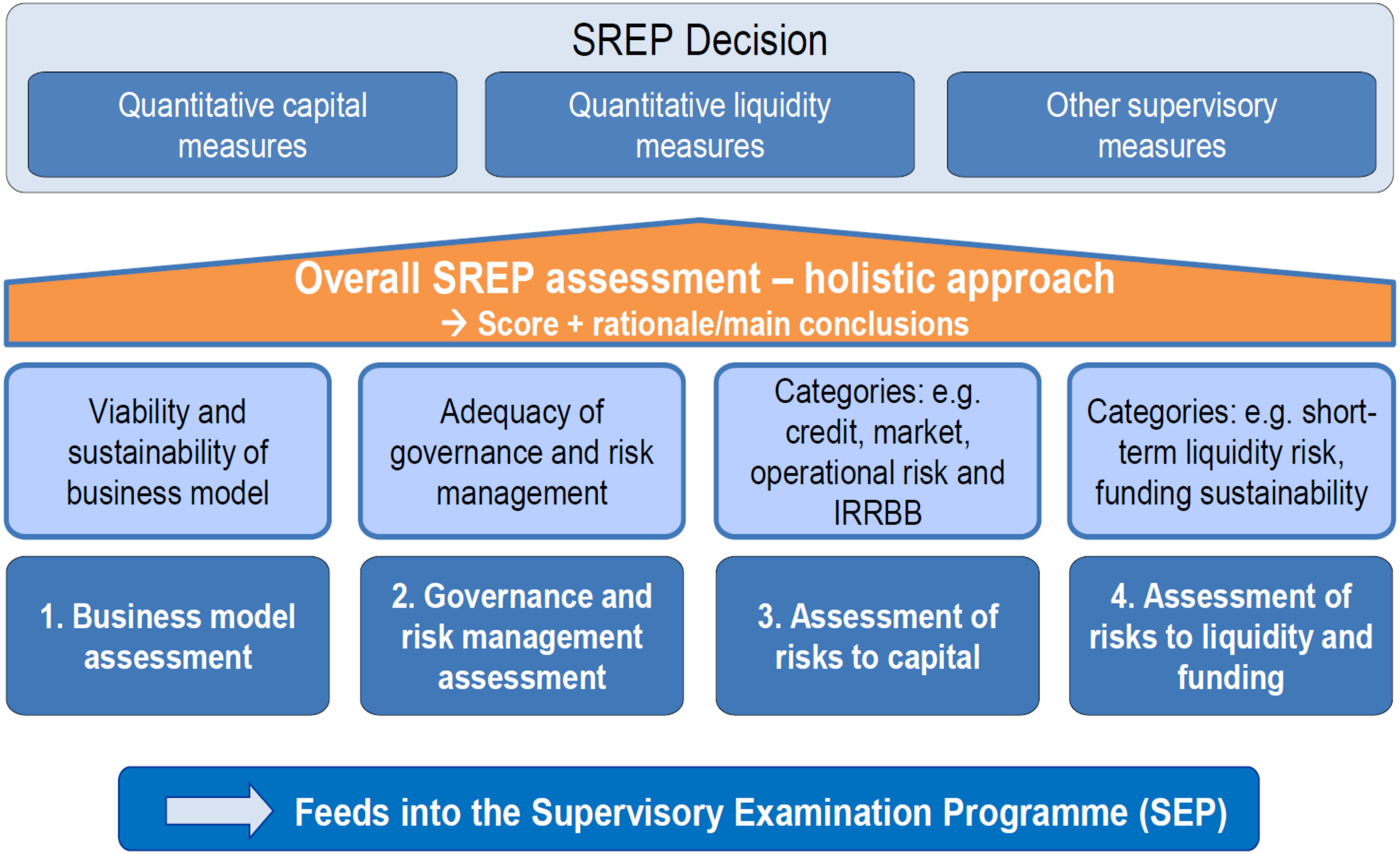
SREP Assess-ment

- Business Model Analysis
- Assessment of internal governance and institution-wide controls
- Review of ICAAP, stress testing carried out by the institution
- Assessment of risks to capital (liquidity, funding) and related controls
- Overall SREP assessment

Additional Own Fund Requirement (Pillar 2 Requirement)

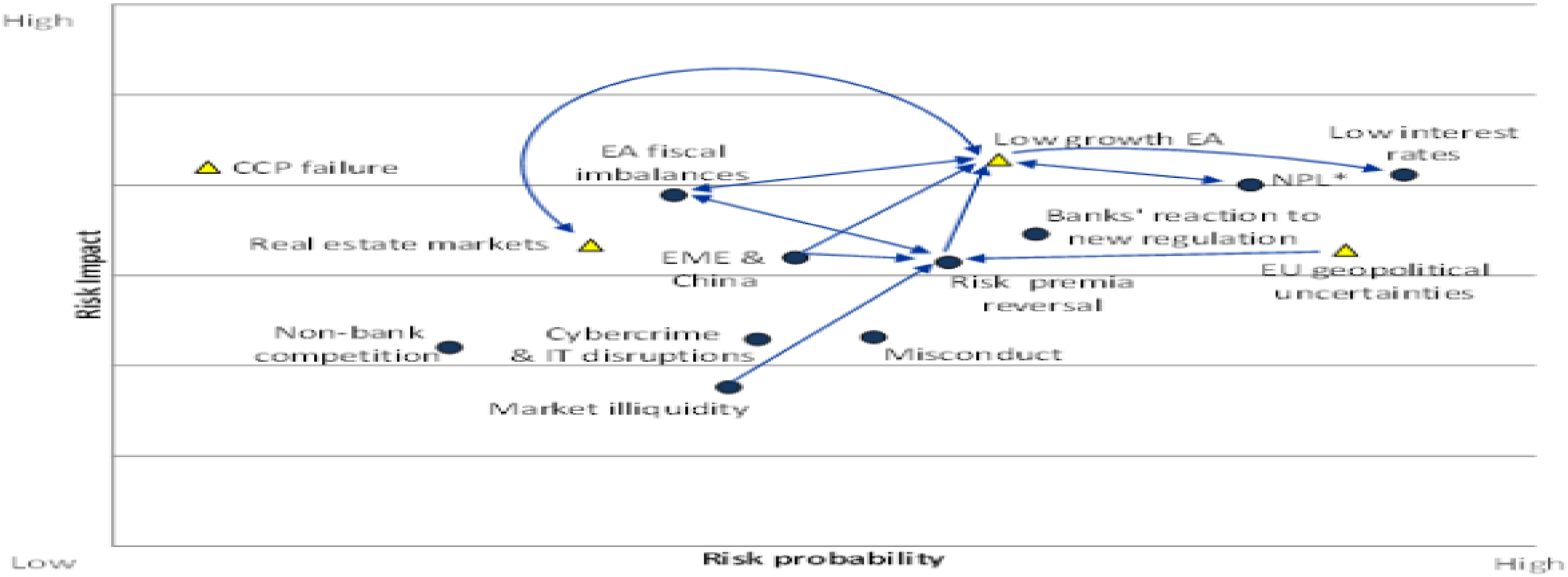
- Risk of both unexpected and expected losses insufficiently covered by provisions, over a 12-month period (all material risks)
- Risk of underestimation of risk due to model deficiencies (model risk)
- Risk from deficiencies in internal governance, including internal control and arrangements

SREP methodology at a glance: four key elements



Source: EBA

Key risks for SSM banks



Source: ECB calculations, NCAs submissions.
* Only applicable to banks with high NPL ratios

2016 New risk driver compared to 2015

represents the potential transmission channel from one risk driver to another (only main first order effects represented)

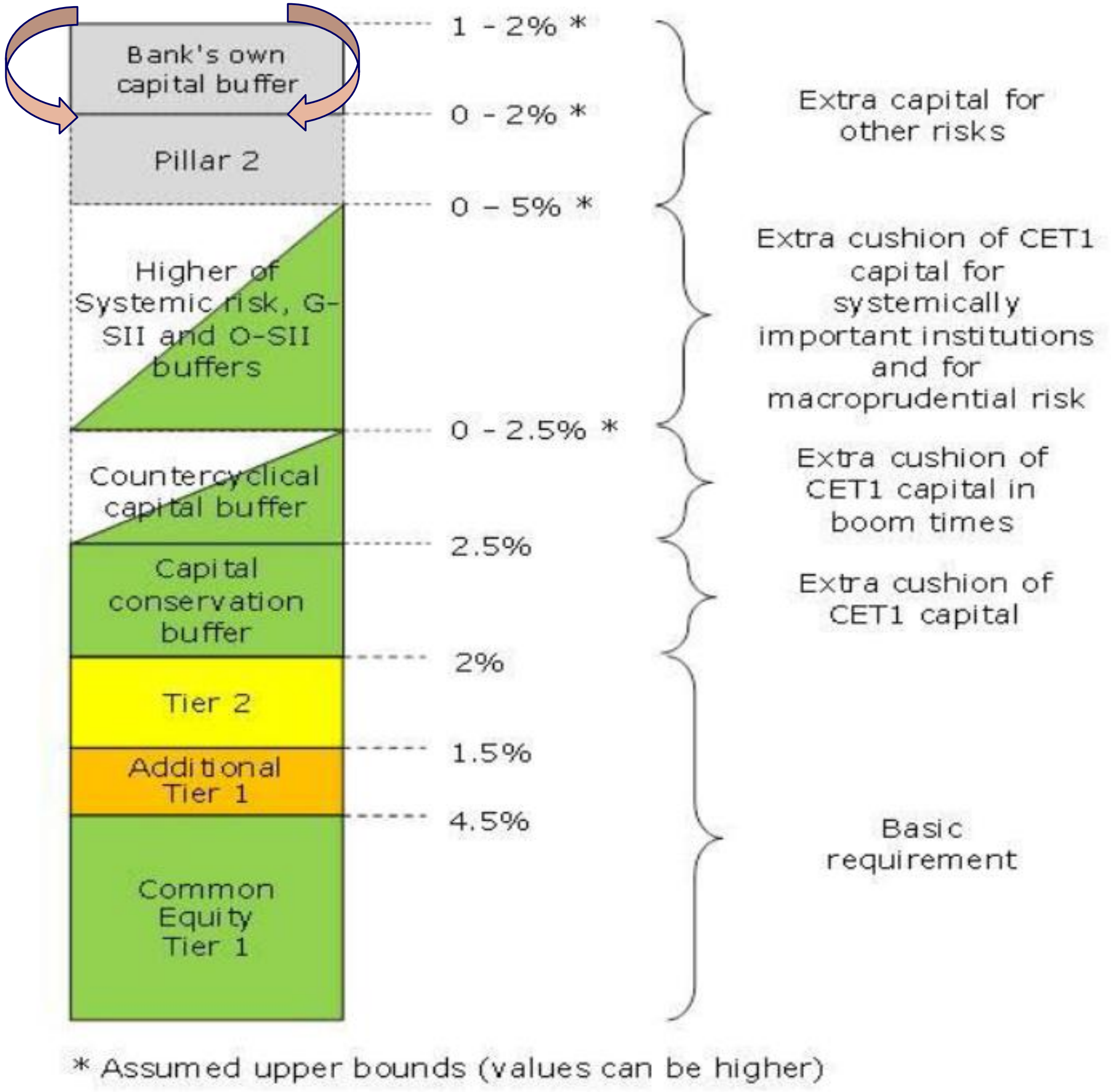
Pillar 2: Capital Decision

SREP Bank X
Final Evaluation

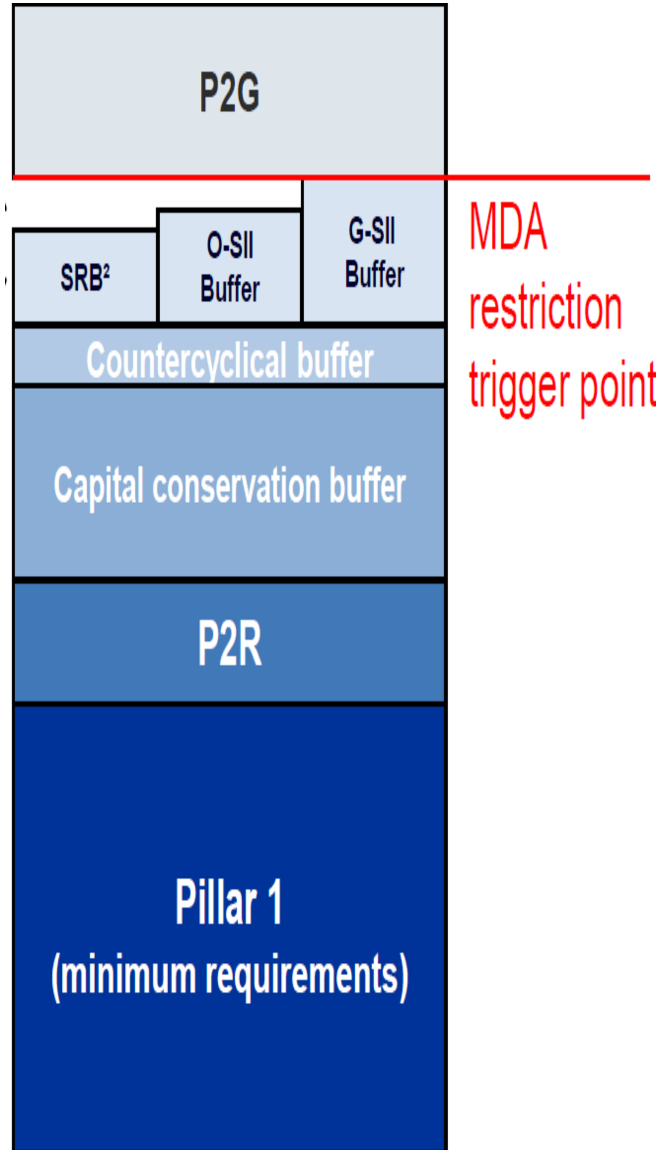
Pillar 2 Requirement	Pillar 2 Guidance
P2R is legally binding. Breaches can have direct legal consequences for banks.	P2G is not binding since it is merely the supervisory expectation about capital appropriate to cope with remote situations A failure to meet Pillar 2 guidance **does not** automatically trigger regulatory actions. ***Nonetheless, the ECB expects banks to meet Pillar 2 guidance.***

- Pillar 2 capital add-ons are institution-specific measures that should be used to address risks, or elements of risk, to which an institution is exposed.
- Hence, they cannot be used as macro-prudential instruments or to address the systemic risk posed by an institution.

BANK'S CAPITAL STRUCTURE



GOING CONCERN CAPITAL: THE LOSS ABSORPTION WATERFALL



- Own funds allocated in a sequential order:
  - first to P1R; next to P2R; then to CBR. l
- Under the stacking order, banks facing losses will first fail to fulfil their Pillar 2 guidance.
  - no predefined consequence from its breach
  - supervisors consider reasons & circumstances and define fine-tuned supervisory measures
- In case of further losses, they would breach the combined buffer requirement triggering:
  - restrictions on the maximum distributable amount (restriction on discretionary payments)
  - drafting a capital conservation plan to be approved by the supervisory Authority
- Further depletion of own funds would lead to a breach of Pillar 2 requirements, resulting in a wide set of additional supervisory actions
  - balance sheet repair, capital increase, managerial/organizational changes

Capital Decisions for 2018

	CET1	P2R[CET1]	TSCR	OCR	
• Credem	7,375%	1,00%	9,00%	10,875%	
• Intesa San Paolo	8,145%	1,50%	9,50%	11,645%	[O-SII = .19; CyCB = .08]
• BPER	8,125%	1,75%	9,75%	11,625%	
• BP di Sondrio	8,375%	2,00%	10,00%	11.875%	
• UBI	8,625%	2,25%	10,25%	12,125%	
• Credito Valtellinese	7,075%	0,70%	10,00%	11,25%	[P2R=.7%+.238+..312 =1.25%
• Banco BPM	8,875%	2,50%	10,50%	12,375%	[O-SII: 0%-0.25%; 2018-2022]
• Unicredit	9,200%	2,00%	10,00%	12,70%	[G-SII= .75%; CyCB= .0075%]
• Banca Carige	9,625%	3,25%	11,25%	13,125%	
- P2G	1,55%				

TSCR = Total (SREP) Capital Requirement = OC rall Capital Requirement =

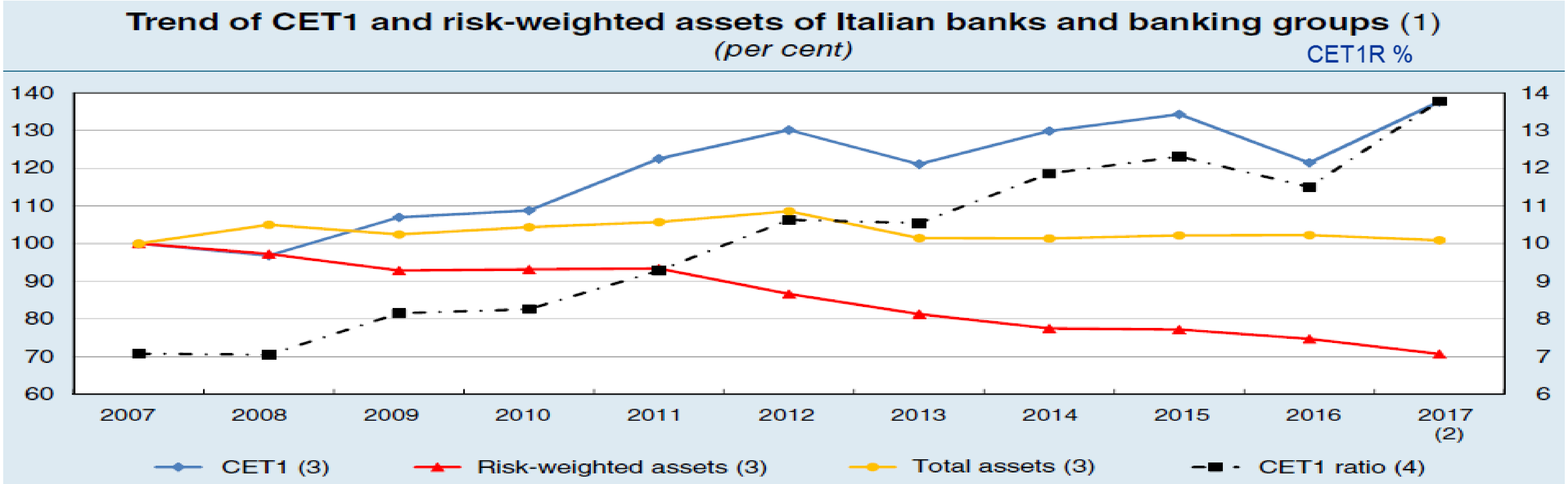
(CET1 = Total Required CET1 Resources) =

REGULATORY CAPITAL: THE ITALIAN BANKS CASE

Banks and banking groups: regulatory capital and capital requirements (1)
(end-of-period data; millions of euros)

	Common equity tier 1 capital (CET1)	Tier 1 capital	Total own funds	CET1 ratio (%)	Tier 1 ratio (%)	Total capital ratio (%)	Capital shortfalls (2)		Distribution of capital requirements (%)			
							Number of banks with shortfalls	Amount of shortfalls	Credit and counterparty risk	Market risk	Operational risk	Other require-ments
						Banks and groups headed by PLCs						
2015	160,401	167,493	200,154	11.9	12.4	14.9	1	86	86.8	3.4	9.0	0.8
2016	142,745	150,502	181,202	11.0	11.5	13.9	6	409	87.1	3.4	8.8	0.6
2017	166,491	178,642	207,492	13.5	14.5	16.9	1	20	87.5	3.3	8.7	0.5
						Banks and groups headed by *popolari* banks						
2015	7,457	7,458	8,617	13.5	13.5	15.6	1	1	88.9	1.7	9.3	0.1
2016	7,537	7,544	8,488	13.6	13.6	15.3	–	–	89.8	1.2	8.9	0.1
2017	7,582	7,589	8,342	13.8	13.8	15.2	–	–	90.0	1.2	8.7	0.1
						Cooperative credit banks						
2015	19,360	19,362	19,887	16.5	16.5	17.0	3	16	90.7	0.1	9.1	0.1
2016	18,694	18,750	19,168	16.7	16.7	17.1	4	12	90.5	0.1	9.3	0.1
2017	17,634	17,750	18,139	16.4	16.5	16.9	1	1	90.4	0.1	9.5	0.1
						Banking system						
2015	187,219	194,314	228,658	12.3	12.8	15.0	5	103	87.2	3.1	9.0	0.7
2016	168,977	176,797	208,857	11.5	12.0	14.2	10	421	87.5	3.1	8.9	0.6
2017	191,708	203,981	233,973	13.8	14.7	16.8	2	21	87.8	3.0	8.7	0.5

BANKS' CAPITAL RATIO PROFILE IN ITALY & EUROZONE



EUROZONE BANKS

Indicator	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017
CET1 ratio	13.69%	13.77%	13.74%	13.88%	14.32%
Tier 1 ratio	14.57%	14.71%	14.75%	14.88%	15.32%
Total capital ratio	17.18%	17.29%	17.44%	17.56%	17.98%

Risk Appetite Framework (RAF)

- The **RAF** is a **strategic** tool through which the Board, upon proposal of the top management, sets..
  … how much risk, and which type of risk, the bank is willing to undertake
  ... to pursue its strategic objectives, given its business model.

- It consists of the following parts:

1. Risk Governance
   - assigning role and responsibilities in the process
2. Risk Policies & Processes
   - how the carry out the definition, implementation and monitoring of the RAF
3. Risk Identification
   - material risks to be faced in current & forward-looking (normal & stressed) conditions
4. Risk Indicators
   - to summarise the risk profile
5. Risk Methodologies
   - to calculate the risk profile
6. Risk Thresholds & Limits, i.e. the risk appetite of the bank (when approved)

RAF INDICATORS

- Fully understood and used by the Risk Takers
- Early approved to address the strategic processes of the bank;
- Continuously monitored to support the decision process

	Meaning	Characteristic	Escalation
STRATEGIC INDICATORS	*Set of metrics & thresholds* selected *to address the strategic choices of the Group*	• Limited set of indicators (often under the regulator's eye), covering the main risks to which the Group is exposed and geared to supporting and addressing strategic choices. For them, the risk thresholds are: – **Risk Target** – **Risk Trigger** – **Risk Tolerance** – **Risk Capacity**	*Board of Directors*
MANAGERIAL INDICATORS	*Set of metrics that integrate & anticipate the dynamics of strategic indicators*	• Additional indicators which enable to: – Supplement or detail the «strategic» indicators – Anticipate their trends through more frequent monitoring of the risk profile • Only the Trigger point is provided	*Chief Executive Officer*

OPERATIONAL LIMITS To complement RAF (and made consistent with RAF)

Thresholds System

- It **defines the boundaries in which the Group must operate consistently with the bank's Business Model** to prevent undesired (excessive) risk taking.
- Thresholds must be set **consistently,** also across Legal Entities.

Type of thresholds	Limits set-up	Escalation
TARGET desired risk level in order to achieve strategic goals	The "risk" side of the targets set by the Budget / Business Plan	If outside the tolerance area (no breach of the trigger), no action is needed
TRIGGER[1] Threshold activating the escalation processes set in RAF	Derived from stress testing the Budget	
TOLERANCE maximum deviation from targets that preserve margins to operate, within maximum acceptable risk	Aligned to the regulatory limits. Derived from quantitative analyses of historical data, market best practices, stress tests, expert judgment	Upon Entry in Tolerance area (breach of Trigger), the Board/CEO must assess potential actions to restore normal risks. Entry in Capacity area implies involvement with regulators
CAPACITY maximum risk consistent with regulatory requirements or other constraints set by the Regulators		

RISK APPETITE

amount and type of risks that the Group is willing to take in order to meet its short term objectives (Budget)

[1] Unique threshold defined for managerial indicators

RAF Strategic Indicators

ST Target Area	No Actions
Tolerance Area	Contingency Actions
Capacity Area	Recovery Actions

Capital Adequacy - Pillar 1

CET 1 Ratio Phase in				
Tier 1 ratio Phase in				
TCR ratio Phase in				
Leverage ratio				
Financial Assets/Total Assets				

Capital Adequacy - Pillar 2

Capital Reserve	2800	1400	0

Managerial Indicators	Business as usual area no actions	Trigger	Stress area contingency actios
Capital Adequacy Pillar 1			
(Financial Assets - Shareholding)/Total Assets			
Risk Weighted Assets (RWA)			
RWA Credit & Counterparty			
RWA Operational			
RWA Market			
Own Funds			
Capital Adequacy Pillar 2			
Available Financial Resources (AFR)			
Economic Capital (ECAP)			

DISTRESS

- To deal with distressed, but not yet failing banks, the BRRD introduces:
  - an obligation for banks to draw up a **<u>Recovery Plan</u>** defining what they would do in case of distress to restore economic and financial soundness
    - It must be approved by the Supervisory Authority, once verified its:
      - <u>Completeness</u>
        - comprehensive, updated, with assumptions/choices explained
        - identification of obstacles to implementation,
        - testing of the recovery plan against an adequate range of distressed scenarios
      - <u>Quality</u>
        - integration with governance and risk management framework
        - internal consistency, with a framework of indicators triggering actions
        - sufficient range of recovery options that can restore viability
      - <u>Credibility</u>
        - realistic and plausible assumption and valutions
  - **<u>early intervention powers</u>** for supervisors
  - the Resolution Authority responsibility to write a **<u>Resolution Plan</u>**

RESOLUTION PLAN AND “RESOLUTION STRATEGIES”

- The Resolution Authority, consulting with the Supervisory Authority:
    - draws up the **resolution plan (RP)** that defines the measures to undertake in the case the bank has to go through a resolution procedure
    - provides in the RP the scenario analysis needed to check effectiveness of the proposed resolution strategy
    - in the case of large groups, designs the RP considering both a single and multiple points of entry resolution strategies (SPE vs. MPE)
    - ensures the removal of any impediments to an orderly resolution

- <u>Resolution strategies</u>
    - modified insolvency process
    - asset transfer, usually a partial one (sale of business, bridge bank)
    - asset separation (good bank - bad bank)
    - bail-in

"GOING" VS. *"GONE"* CONCERN RESOURCES

- Different purpose, but close substitute
  - The greater the confidence that a bank can be bailed in (i.e., the greater the gone concern resources),

    → … *the less going concern capital is needed to protect taxpayers*

  - Greater levels of going concern capital change the incentives to banks' (managers and investors), making them more reluctant to undertake risks with consequent …

    → *less need of gone concern capital*

- Bank Regulatory Capital
  - "Going Concern" Capital [CET1+AT1]

    \+ "Immediate Gone Concern" resources [T2]
- Eligible *(to be part of the total loss absorbing capacity)* Resources
  - Gone Concern resources that are not part of the bank capital
- Total Loss Absorbing Capacity
  - <u>Bank Capital + Eligible Resources</u>

TOTAL LOSS ABSORBING CAPACITY REQUIREMENT

- There must be sufficient <u>loss-absorbing and recapitalization capacity</u> available in a resolution to implement an orderly process able to:
  - preserve financial stability and ensures the continuity of "critical functions"
  - avoid exposing taxpayers to loss with a high degree of confidence

- What does "sufficient" mean? ["<u>gone concern resources" calibration</u>]
  - absorb all existing losses that drove to the PONV
  - absorb all potential losses deriving from an orderly resolution
  - the resolved bank, or its successor institution, has to meet the requirements for authorization to continue performing its activity (mainly, its critical functions)
  - the reorganization, or the solvent wind-down following resolution, may require a capitalization above supervisors' requirements to ensure business continuity

- The sufficient amount of these loss-absorbing and recapitalization resources ("total loss absorbing capacity") <u>is a function of the chosen resolution strategy</u>

CROSSING THE PONV

- Intervento dell'Autorità volto a preservare:
  - la stabilita del sistema finanziario da implicazioni dirette e indirette del dissesto
  - le funzioni critiche della banca in dissesto
- Intervento si concretizza in un processo di «Risoluzione»
  - speciali procedure di liquidazione fallimentare
  - trasferimento degli asset, in genere parziale (*sale of business*, *bridge bank*)
  - separazione degli asset (good bank - bad bank)
  - bail in
- Come usare il capitale di debito per porre in essere in modo ordinato il processo di risoluzione prescelto?
  - coprire le perdite residue una volta esaurito il Tier 1 e, se del caso, ricostituire il *going concern capital* necessario alla prosecuzione delle attività critiche
- Il capitale di debito utile a ciò è detto **Gone Concern Capital**, da usarsi:
  - senza far conto su forme di sostegno pubblico (*taxpayer money, liquidità BCE*)
  - In base al principio «*No Creditor Worse Off* (NCWO)» (rispetto al fallimento)
    - rispetto della gerarchia dei creditori secondo la loro priorità di rimborso
    - se gerarchia violata, occorre provvedere ad adeguata compensazione

RISOLUZIONE

- Pre-requisiti per la risoluzione
  - banca "*is failed or is likely to fail*", come dichiarato da Autorità di Supervisione
  - nessuna prospettiva di altre misure di recupero (i.e. *precautionary recap*)
  - la risoluzione è necessaria per l'interesse pubblico (*resolution objectives*)

- Per arrivare preparati a una risoluzione, l'Autorità di Risoluzione, in consultazione con quella di Supervisione:
  - elabora un piano di risoluzione (PR) che dettaglia la strategia ritenuta essere la migliore, supportandola con analisi di scenario a verifica della sua efficacia
  - può prevedere nel RP sia Single che *Multiple Points of Entry* per le strategie di risoluzione (SPE vs. MPE)
  - provvede a far rimuovere ogni impedimento a un'ordinata risoluzione

- Per facilitare i processi di risoluzione il legislatore è intervenuto per:
  - meglio definire la gerarchia dei creditori minimizzando rischi di violare il principio del NCWO e di cause giudiziarie che ostacolino la risoluzione
  - Imporre requisiti di *gone concern* capital che assicurino che la banca disponga di sufficiente <u>*Loss-Absorbing (& Recapitalization) Capacity, ossia di* ***gone concern capital,*** per porre in essere un ordinate processo di risoluzione</u>

GONE CONCERN CAPITAL

- **Eligibility** (adeguatezza qualitativa)
  - Per essere *eligible* per la LA(&R) Capacity, le passività devono garantire alla Autorità di Risoluzione:
    - Il potere di esporre i loro detentori a perdite senza *material risk* di incorrere in dispute legali o in oneri compensative da riconoscere in base al principio di NCWO
    - la sicurezza che i loro detentori assorbire perdite durante stress senza dar corso a processi che pregiudichino *le critical functions* della banca o la stabilità finanziaria

- **Sufficienza** (adeguatezza quantitativa) *gone concern resource calibration*
  - Eligible Liabilities devono essere presenti in misura tale da garantire, unitamente al *going concern capital*:
    - di assorbire tutte le perdite in essere conducenti al PONV;
    - di assorbire tutte le perdite potenziali connesse a una risoluzione ordinate
    - alla banca risolta, o alla sua *successor institution*, di soddisfare i requisiti per operare post risoluzione, almeno in relazione alle sue *critical functions,* anche facendo fronte a possibili peggioramenti dei *risk weights*
    - capitalizzazione (anche sopra il minimo regolamentare) necessaria per *business continuity* e tenuta finanziaria

➢ La sufficiente disponibilità di queste loss-absorbing and recapitalization resources (“*total loss absorbing capacity*”) è funzione della *resolution strategy*

GONE CONCERN CAPITAL (ACCEZIONE ESTESA)

- ***Passività qualificantesi per il bail in* sono tutte tranne:**
  - Passività garantite
  - Depositi garantiti
  - Passività insorgenti in relazione alla detenzione di asset della clientela, anche per conto di *collective investment undertaking*
  - Passività con scadenza originaria < 7 gg. vs. banche o *investment firms*
  - Passività con scadenza < 7 gg. per partecipazione a sistemi regolamento
  - Passività verso dipendenti presenti e passati e verso schemi pensionistici eccetto quelle connesse a premi/bonus non rientranti in contratti collettivi
  - Passività commerciali per fornitura di beni/servizi essenziali per la banca
  - Passività di origine non contrattuale, come le passività di sistema (garanzia depositi), gli oneri fiscali e previdenziali
  - *Qualsiasi altra passività (quindi eligible) che l'Autorità decida di escludere dal bail in conseguenza di circostanze eccezionali*

ESCLUSIONI AD HOC DAL CONCORRERE AL BAIL IN

- Motivazioni
  - impossibile includerle in un bail in con tempi ragionevoli;
  - necessità di preservare critical functions e core business lines;
  - necessità di evitare contagi e crisi sistemiche
  - convenienza economica per i creditori comunque soggetti a bail in

- Per il *NCWO principle*, l'Autorità di Risoluzione **non** può optare nel *bail in* per una *loss absorption waterfall* diversa da quella prescritta dalle norme generali sulle procedure concorsuali
  - tutto il debito *senior unsecured* dovrebbe essere trattato pari passo
  - ne consegue per l'Autorità un *trade off* tra il rischio di crisi sistemica e quello di contenziosi/danni
  - Con il connesso rischio che l'ipotesi di *bail in* non sia ritenuta realistica

GONE CONCERN CAPITAL: ACCEZIONE RISTRETTA

- **Passività definenti la *total loss absorption & recapitalization capacity (TLAC o MREL eligible)***

- Sono quelle tra le passività «*bail-inable*» che danno pure la ragionevole prospettiva di assorbire perdite e ricreare *going concern capital*:
  - offrendo certezza del valore delle risorse su cui far conto i fini predetti
  - senza compromettere il principio del NCWO
  - senza generare impedimenti di ogni natura, anche politica, alla risoluzione
  - senza comportare rischi di cause legali e di pagamenti compensativi

- L'insieme delle passività *bail-inable* di tale elevata qualità, definisce le cd. ***eligible liabilities (EL)*** perché utilizzabili in pratica, con relativa facilità, in caso di processi di risoluzione
  - Eligible ai fini del requisito MREL e/o del requisito TLAC (lievi diversità)

- Una corretta individuazione delle EL richiede una chiara e trasparente gerarchia dei creditori
  - Investitori, creditori, controparti, clienti e depositanti devono avere chiaro l'ordine con cui le perdite saranno coperte

ELIGIBLE LIABILITIES: CAUSE DI ESCLUSIONE

- <u>Incertezza sul Quantum</u> (valore disponibile a copertura perdite in caso di risoluzione)
  - presenza di garanzie da parte della RE (sussidiarie / controllante / "*closely linked*" *parties*) che ne promuovano la *seniority*
  - originata da contratti derivati
  - componenti derivative nelle note strutturate (o note strutturate tout court)
  - interessi e dividendi non modificabili per effetto del *credit standing* della RE o della sua controllante
  - oggetto di applicazione di *set off – netting rights*

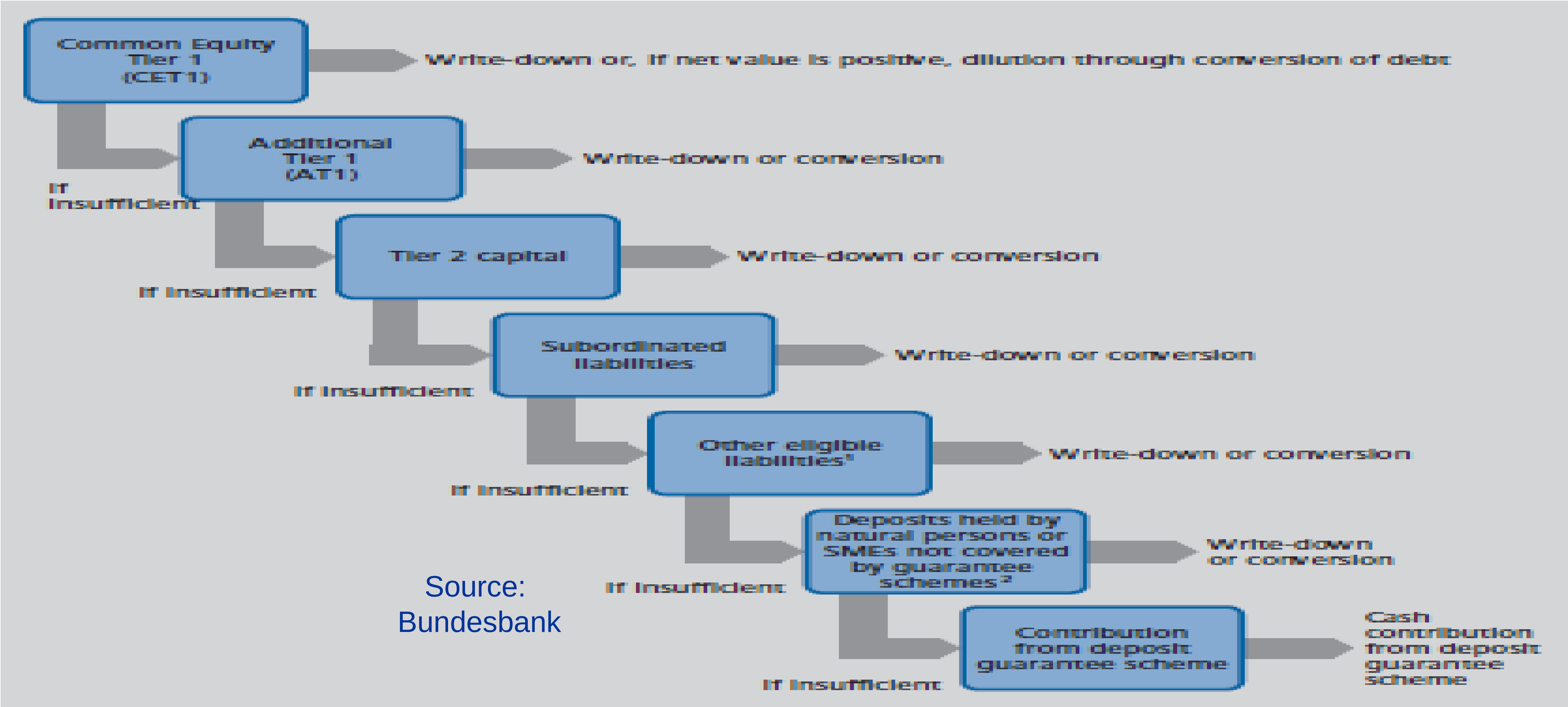
- <u>Incertezza sul timing della disponibilità di risorse quando prossimi a una situazione di risoluzione</u>
  - < 1 anno a scadenza
    - a prima data di rimborso che il creditore può imporre
    - o a prima data in cui scatta un incentivo al rimborso anticipato / riacquisto
  - presenza di diritti contrattuali del creditore ad accelerare il servizio del debito ulteriori rispetto a quelli di legge in caso di insolvenza o liquidazione

ELIGIBLE LIABILITIES: CAUSE DI ESCLUSIONE

- Incertezza sull'applicabilità legale del *bail in* alle passività in questione
  - Passività regolate da giurisdizioni extra UE, a meno che non vi sia certezza che siano assoggettabili al *bail-in* secondo la normativa comunitaria
  - Passività emesse da società del gruppo non individuate come point of entry per la risoluzione
    - gli strumenti di own funds emessi da controllate rilevanti per il capitale consolidato contano, in linea generale, a fini MREL, ma se non CET1, cesseranno di contare a fini TLAC da gennaio 2022
  - Passività emesse e presenti nei libri della *resolution entity* (RE) ma il cui ammontare non sia ancora stato versato o sia garantito o finanziato da soggetti del gruppo in risoluzione

- Incertezza su fattibilità <u>politica</u> e <u>commerciale</u> di convertire o *write off* secondo legge le passività in caso di risoluzione, con messa a rischio della risoluzione e/o delle funzioni critiche della banca
  - depositi non garantiti detenuti da persone fisiche e piccole-medie imprese
  - *eligible liabilities* emesse da G-SII e sottoscritte da altre G-SII

CAPITAL HIERARCHY (NEL COPRIRE LE PERDITE)

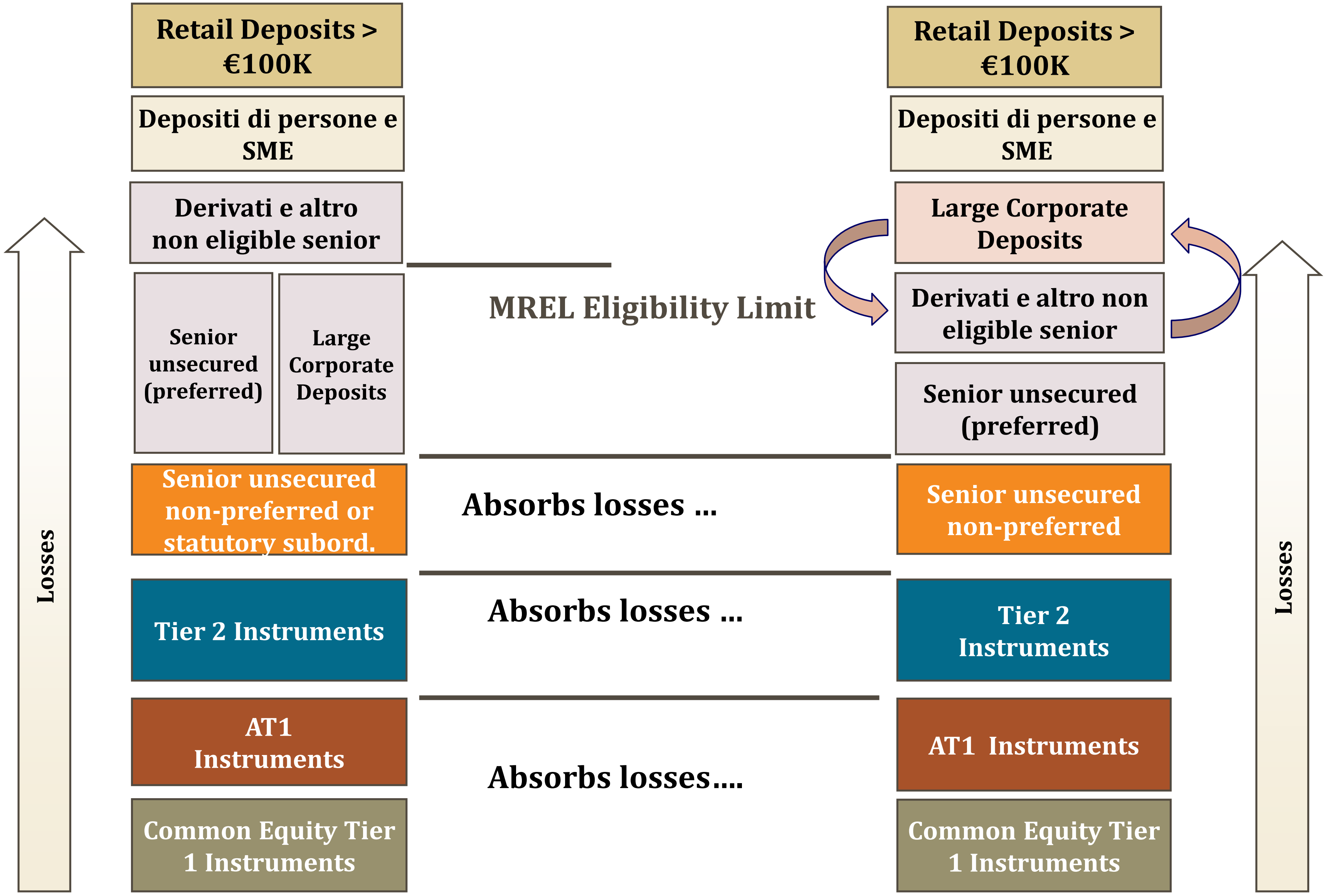


Source: Bundesbank

SENIOR NON PREFERRED (SNP)

- SNP introdotti per le procedure di insolvenza di banche, investment firms e financial holding companies (e loro sussidiarie finanziarie)
- SNP hanno priorità nella cascata dell'assorbimento delle perdite rispetto agli altri crediti senior
- Caratteristiche qualificanti delle SNP
  - *unsecured claims arising out of debt instruments* (bonds o simili)
  - loro ranking nella cascata suddetta deve essere esplicitato nella documentazione contrattuale
  - scadenza all'emissione di almeno un anno
  - non possono essere derivati o contenere derivati impliciti, con l'eccezione di FRNs ancorati a riconosciuti *reference rate* o di bond in valuta
  - Non sono né riservati a investitori professionali, né intesi come titoli complessi se non nelle guidelines di ESMA in quanto oggetto di bail in
- Impatti
  - Rende più facile il *bail in* proteggendo da tale rischio le passività critiche
- Grandfathering: Germania vs. Francia, Italia e Spagna
  - Italia: debito chirografario di II° livello (taglio minimo: € 250.000)

CASCATA DELLA LOSS ABSORPTION



Germania, Francia, Spagna

Italia (da 01/2019)

REQUISITI DI DEEP GONE CONCERN RESOURCE NELL'UE

- **MREL (M**inimum **R**equirement for own funds and **E**ligible **L**iabilities**)**
  - requisito generale per tutte le banche
  - è di II° Pilastro (la Resolution Authority lo definisce per singola banca)
  - origina dalla Bank Recovery & Resolution Directive (BRRD) del 2014
  - Commissione EU emanò regolamento delegato su MREL (05/2016)
  - ora oggetto di modifiche (BRRD II) per allinearlo al TLAC

- **TLAC** (**T**otal **L**oss **A**bsorbing **C**apacity)
  - Requisito per le sole G-SII
  - è di I° Pilastro (definito dalla normativa)
  - possibile sia componenti di II° Pilastro che buffe di I° Pilastro
  - standard mondiale prodotto Financial Stability Board
  - sarà recepito nell'UE dalla CRR II

- L'UE sta omogeneizzando i meccanismi di applicazione dei due requisiti anche se dovrebbero, almeno all'inizio, permanere diversità specie in relazione ai <u>requisiti di subordinazione</u>

PILLAR 1: REQUISITO TLAC – SOLO G-SIIS

- Calibrato sia sulle RWE che sulle Leverage Exposure (LE)
  - dal 2019: P1: minimo 16% * RWE oppure 6.00% * LE
  - dal 2022: P1: minimo 22% * RWE oppure 6.75% * LE
  - Requisiti aggiuntivi di Pillar 2 possono essere imposti dalle Autorità di Risoluzione

- *Eligibility* status ai fini TLAC è, in generale, soggetto a un requisito di subordinazione della passività rispetto alle *excluded liabilities* al fine di evitare di violare il principio di NCWO

- Resta però *TLAC eligible* il debito *senior unsecured* che è pari passu o junior rispetto a delle *excluded liabilities* nei limiti del 2.5% nel 2019 e del 3.5% nel 2022 delle RWE

- Due condizioni più severe nel TLAC rispetto all'MREL riguardano:
  - l'esclusione dall'*eligibility* di tutti gli strumenti di debito strutturati
  - la deduzione nel calcolo delle *TLAC eligible liabilities* dei titoli TLAC eligible emessi da altre G-.SIIB detenuti in portafoglio

MREL POLICY

- Primi target vincolanti a livello consolidato per le banche maggiori
- Requisiti di subordinazione delle *eligible liabilities*
  - *per G-SII: 13.5% * RWE + Combined Capital Buffer*
  - *per O-SII: 12.0% * RWE + Combined Capital Buffer*
  - *per le altre (specie soggette a possibile bail in): decisione caso per caso*
  - *in ogni caso «in attesa di ulteriori valutazioni sul NCWO risk», iniziando dall'analisi sulla possibile esclusione di oltre il 10% per classe di creditori*
- MREL Target per banche soggette a *bail in è* definito da somma di:
  - Loss Absorption Amount: LAA = max (P1CR + P2CR + CBR; B1 Floor; *LR*)
    - Analisi degli impedimenti al rispetto del NCWO può portare a revisioni
  - Recapitalization Amount:
    - RCA = max (P1CR +P2CR; B1F; *LR*) + Default Market Confidence Charge (DMCC)
    - ove DMCC = CBR – 125 bps , ma RCA=0 se strategia di risoluzione è la liquidazione
    - In generale RCA = RWA post resolution * [requisiti minimi p.r. + needs for MC] con aggiustamenti possibili a ciascuna voce
  - Floor per MREL = 8% * TLOF [Total Liabilities and Own Funds]

GOING FORWARD

- Criteri di determinazione del requisito MREL (di II° Pilastro)
  - Loss Absorption Amount: LAA = P1CR + P2CR
    - Ma il CET1 allocato ai capital buffer non è utilizzabile
  - Recapitalization Amount: RA = P1CR +P2CR + (CmCB – CyCB)
    - Starting point, può essere aumentato o diminuito in relazione alla *resolution strategy* prevista nell'apposito Resolution Plan
- MREL Guidance corrispondente alla P2 Guidance
  - Requisito di Sufficienza per ovviare a rischio di esclusione di alcune EL
  - Considerazione di fattori idiosincratici a ogni singola banca
    - Dimensione, business e funding model, profilo di rischio (anche sistemico)
    - Esempio: titoli subordinati o senior detenuti da clientela retail o SME
  - Contribuzione del Deposit Guarantee Scheme alla risoluzione
- Trattamento delle TLOF emesse da società del gruppo che non sono individuate come *resolution* entity