BANK CAPITAL: A UNIFIED FRAMEWORK

THE REGULATORY PROCESS

- Definition of global standards
 - aimed to prevent financial crisis and their transmission
 - aimed to ensure a level playing field
 - not binding
- Transposition of global standards in **domestic regulations**
 - adjustments to peculiar local situation is possible
 - · regulations are binding
- Monitoring the implementation of the standards
 - Release of implementation reports
 - Development of Guidelines
 - Detecting Sound Practices
 - Further development or refinement of global standards

GLOBAL STANDARDS ON BANKING SUPERVISION

- There are **international fora** where national regulators can:
 - exchange information to identify risks for financial systems
 - share supervisory issues and techniques to promote cross-border cooperation
 - address regulatory and supervisory gaps that pose risks to financial stability
- <u>Unanimity</u> is a pre-condition for all participating countries to be committed to transpose the global standards into their own legislation
- The main fora for the banking sector are:
 - Financial Stability Board

(FSB)

- Supervisory authorities and Ministry of Treasury of 24 countries
- Supranational entities: IMF, WB, BIS, OECD, IOSCO, IAIS, ECB, EC, IASB
- Three Standing Committees:
 - On Assessment of Vulnerabilities,
 - On Supervisory and Regulatory Cooperation;
 - On Standards Implementation
- Basel Committee on Banking Supervision (BCBS)

BASEL COMMITTEE ON BANKING SUPERVISION (BCBS)

Group of
Governors and
Heads of Supervision

Basel Committee on Banking Supervision

27 countries 2 seats for the EU (ECB +SSM) COM, EBA observers

Secretariat

(Bank for International Settlements)

The Basel Committee, currently chaired by Stefan Ingves, the governor of the central bank of Sweden relies on a number of working groups. It reports for critical decisions to an oversight body, the Group of Governors and Heads of Supervision (GHOS). The GHOS is currently chaired by Mario Draghi, the President of the ECB.

TRANSPOSING GLOBAL STANDARDS IN BINDING EU REGULATIONS

- Impact Assessments Studies of policy options
 - prepared by the EU Commission
 - it may ask EU agencies for technical advice
 - consultation with interested parties and national governments
- <u>Legislative proposals</u>
 - Prepared by the EU Commission to the EU Parliament and Council
 - Approved Regulation
 - Directives
 - Legislative act that sets out goals that all member states must achieve but it is up to them to devise their own norms to achieve these goals
 - Regulations (often a EU Commission Delegated Regulation)
 - legislative Act which is immediately binding across the EU
 - Binding EBA Technical Standards
 - RTS (Regulatory) vs. ITS (Implementing)
- Active monitoring of members' commitment to implement the rules

MAIN TOOLS OF PRUDENTIAL SUPERVISION

Capital Requirement and Capital Buffer

Recovery Plan

Total Loss Absorbing Capacity - MREL

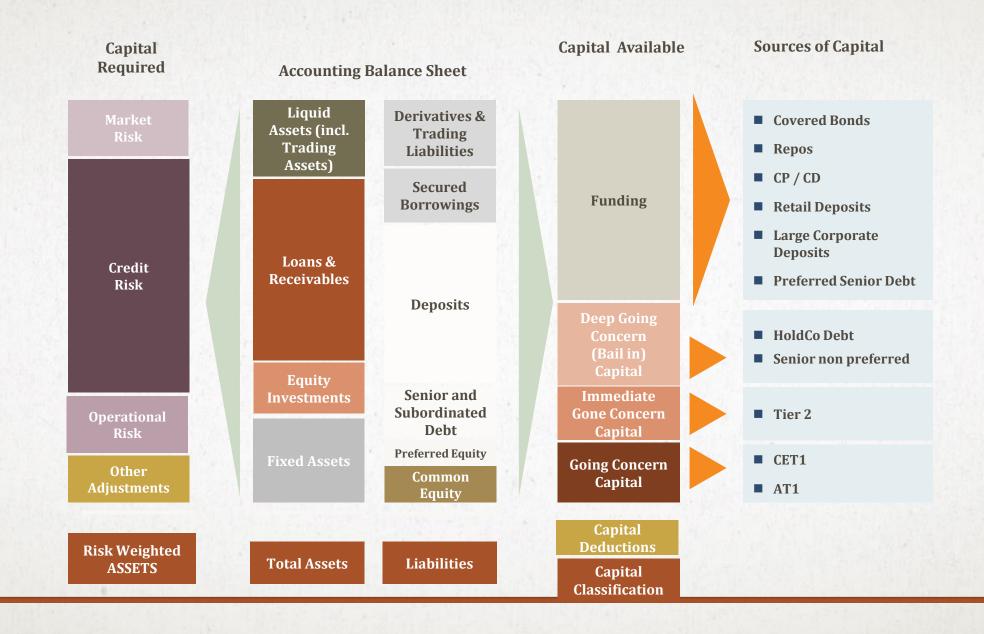
THREE PILLARS OF PRUDENTIAL SUPERVISION

Pillar One	Pillar Two	Pillar Three
Requirements set by the law to be applicable to all banks on equal terms	Authorities set requirements for each bank based on a discretionary assessment of each supervised institution	Aimed to foster market discipline imposing disclosure about
A. Loss Absorbing Resource Requirements (LARRs) capital requirements	A. Loss Absorbing Resource Requirements (LARRs)	☐ risk type ☐ risk level ☐ risk measurement
 capital buffers eligible resources (TLAC: only for G-SIB) LARRs are defined as a 	 capital requirement set by the SSM eligible liabilities 	risk processesrisk managementOrganization
function of risk weighted exposures (RWE)	(MREL) for all banks set by the Resolution Authority	 own funds and liabilities
B. Leverage Requirementdefined as a % of leverage exposure (LE)	B. Liquidity requirement ❖ set by the SSM	□ type□ level□ connections with
C. Liquidity Requirements ❖ Short Horizon (LCR) ❖ Long Horizon (NSFR)	C. Pillar2 GuidanceNot legally binding	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 	 The Authority sets the P2 capital requirement in a way to: cover in full the Pillar 1 risks absorb losses caused by any other risks deemed to be "relevant" for the bank (Pillar 2 risks) Interest rate risk on the banking book Real estate risk Strategic risk mathematical Strategic risk P2R decided considering:
➤ Capital requirement are obtained from:	 □ the bank's Internal Capital Adequacy
☐ either a standardized approach;	Assessment Process (ICAAP)
 or a customized (internal) model approach developed by the bank and validated by the Authority 	□ 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

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

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(TCR) Total Capital Requirement (going + gone concern) x = 8\%

(T1CR) Tier1 Capital Requirement (going concern only) x = 6\% (75% * TCR)

(CET1CR) CET1 Capital Requirement (highest quality) x = 4.5\% (75% * T1CR)
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- 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,

$$RWE_i = E_i^* w_i = Total \ Capital \ Requirement \ for \ Asset_i^*$$

PILLAR I: COMBINED CAPITAL BUFFER (CCB) REQUIREMENT

- Defined by the sum of the following capital buffers:
 - Capital Conservation Buffer
 - Countercyclical Capital Buffer
 - Systemic Risk Capital Buffer

and, exclusively for systemically important institution (SII),

- either "Global SII Capital Buffer"
- or "Other SII Capital Buffer"
- To be met exclusively using CET 1 capital
- In case of a breach of the combined buffer requirement the banks:
 - remains compliant with the minimum capital requirements
 - is constrained in terms of the discretionary distributions that can pay out (Maximum Distributable Amount [MDA] = distributable profit * K, where K varies from 0 to 0.6 according to the CCB shortfall
 - must submit for approval a Capital Conservation Plan to the Competent Supervisory Authority

PILLAR I: CAPITAL BUFFERS FOR ALL BANKS

Capital Conservation Buffer (CCoB)

- 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

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)
- meant to help banks in recognizing losses as soon as they arise w/o limiting lending (mitigating credit growth and risk build up in good times is secondary)
- set quarterly by each NCA as a % of RWEs related to its own jurisdiction (but applicable only to banks with significant credit exposures in that jurisdiction)
- 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 when 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

PILLAR1: CB FOR SYSTEMICALLY IMPORTANT INSTITUTIONS (SII)

Global SIIs Capital Buffer (G-SII Buffer)

- G-SIIs (Global-SII) have systemic relevance for the global economy
- A G-SII qualification is given by the NCA according to a methodology which allocates the G-SII in 5 bands with the buffer from 1% to 3.5% from Jan. 2019
- In Italy, only Unicredit is a G-SII (lowest band), with a 2017 buffer of 0.5

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 among 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

G-SII and O-SII buffers cannot be applied:

- concurrently
- with the Systemic Risk Buffer, unless the latter only covers domestic assets
 - only a couple of Nordic countries in the EU apply the systemic risk buffer

ITALIAN O-SIIS

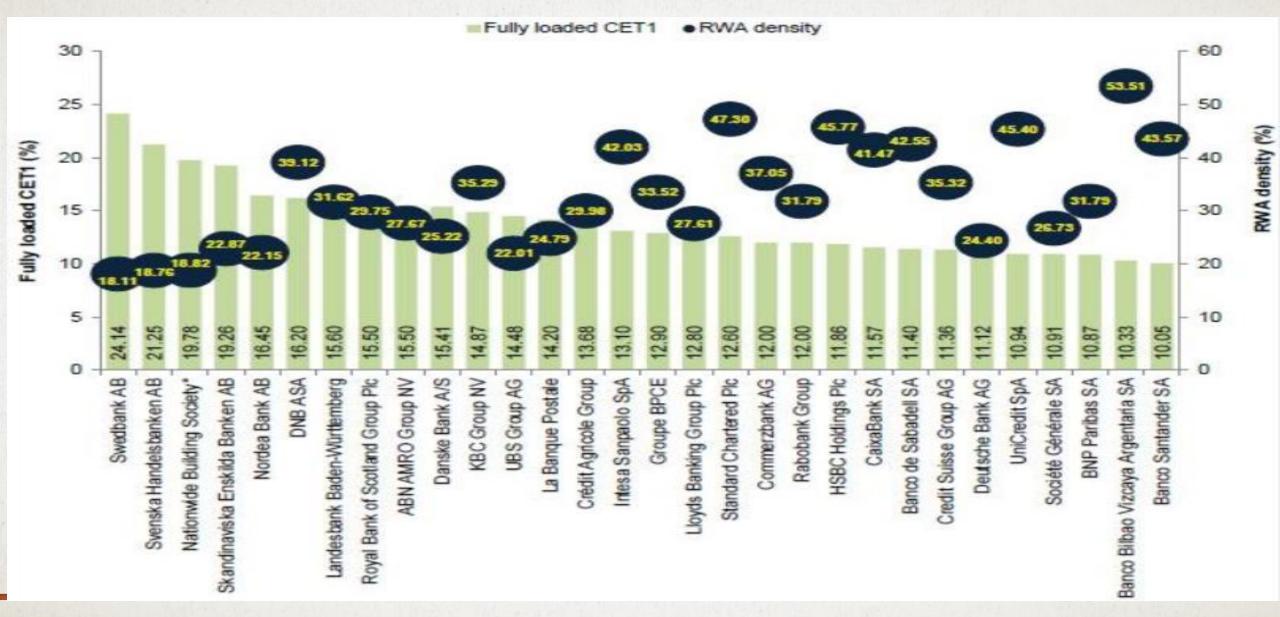
Banking group	Overall score	Size	Importance	Complexity	Intercon- nectedness
UniCredit Group SpA	3,844	2,753	2,465	6,146	4,011
Gruppo Intesa Sanpaolo	2,215	2,173	2,385	1,895	2,405
Gruppo Monte dei Paschi di Siena	512	539	557	263	689

Danking group	From	From	From	From	From
Banking group	1 Jan. 2017	1 Jan. 2018	1 Jan. 2019	1 Jan. 2020	1 Jan. 2021
UniCredit Group SpA	0.00	0.25	0.50	0.75	1.00
Gruppo Intesa Sanpaolo	0.00	0.19	0.38	0.56	0.75
Gruppo Monte dei Paschi di Siena	0.00	0.06	0.13	0.19	0.25

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: BIS

INTERNAL MODELS AND THE RWA DENSITY



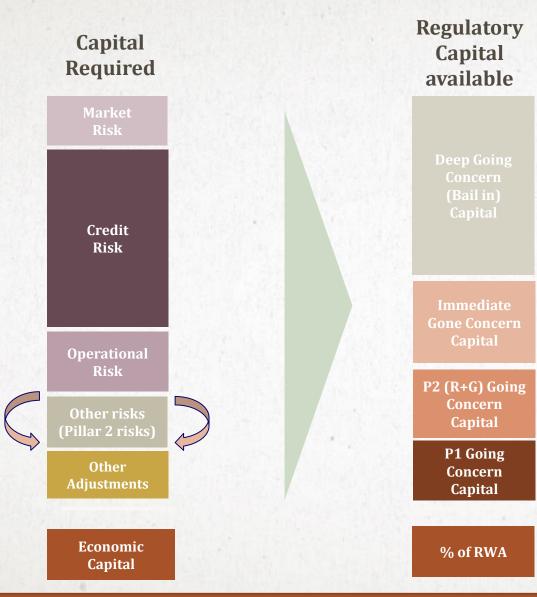
WHY BASEL IV?

- 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 <u>Tier 1 Capital compared to "leverage exposures"</u>
- The measurement of Leverage Exposure (LE):
 - based on accounting standards
 - different from RWE (<u>no risk weighted</u> and <u>no recognition of credit mitigation</u>)
- 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

■ 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 Assessment

ICAAP

- **■** Business Model Analysis
- Assessment of internal governance and institution-wide controls
- Review of <u>ICAAP</u>, stress testing carried out by the institution
- Assessment of risks to <u>capital</u> (liquidity, funding) and related <u>controls</u>
- 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

SREP Decision

Quantitative capital measures

Quantitative liquidity measures

Other supervisory measures

Overall SREP assessment – holistic approach

→ Score + rationale/main conclusions

Viability and sustainability of business model

Adequacy of governance and risk management

Categories: e.g. credit, market, operational risk and IRRBB

Categories: e.g. shortterm liquidity risk, funding sustainability

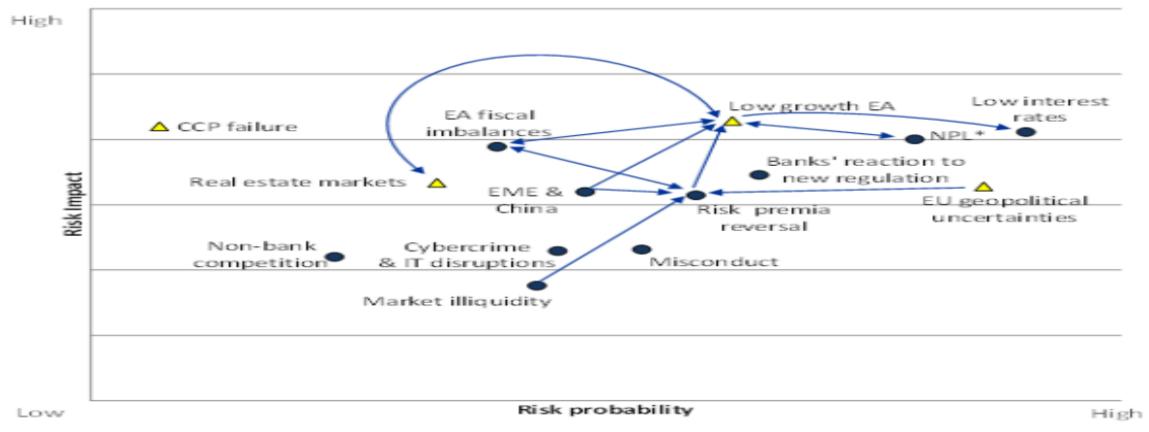
- 1. Business model assessment
- 2. Governance and risk management assessment
- 3. Assessment of risks to capital
- 4. Assessment of risks to liquidity and funding



Feeds into the Supervisory Examination Programme (SEP)

Source: EBA

Key risks for SSM banks



Source: ECB calculations, NCAs submissions.

* Only applicable to banks with high NPL ratios

- 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

P2R is legally binding.
Breaches can have direct legal consequences for banks.

Pillar 2 Guidance

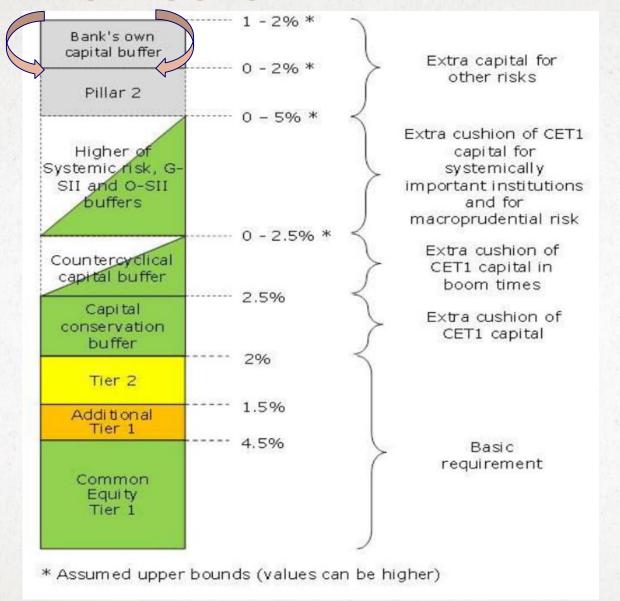
P2G is not binding since it is merely the supervisory expectation about capital appropriate to cope with remote situations

A failure to meet Pillar 2 guidance **does not** automatically trigger regulatory actions.

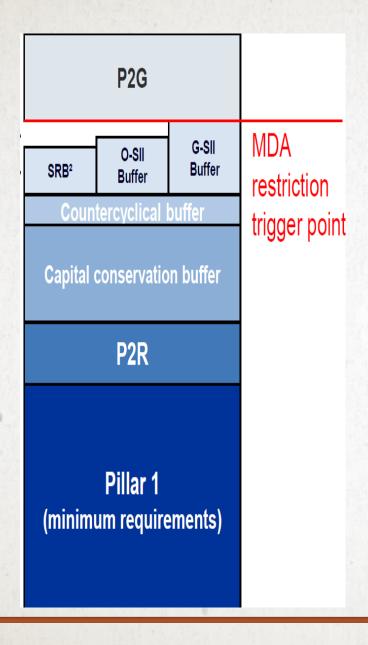
Nonetheless, the ECB expects banks to meet Pillar 2 guidance.

- Pillar 2 capital add-ons are institution-specific measures that should be used to address <u>risks</u>, or <u>elements of risk</u>, 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. I
- Under the stacking order, banks facing losses will <u>first fail to fulfil their Pillar 2 guidance</u>.
 - no predefined consequence from its breach
 - supervisors consider reasons & circumstances and define fine-tuned supervisory measures
- In case of further losses, they would <u>breach the combined buffer</u> 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 <u>breach of Pillar 2</u> requirements, resulting in a wide set of additional supervisory actions
 - balance sheet repair, capital increase, managerial/organizational changes

CAPITAL DECISIONS 2016 FOR ITALIAN BANKS

	CET1	P2R	TSCR	OCR	
• Credem	6,75%	1,00%	9,00%	10,25%	
Intesa San Paolo	7,25%	1,50%	9,50%	10,75%	
• BPER	7,25%	1,50%	9,50%	10,75%	
BP di Sondrio	7,25%	1,50%	9,50%	10.75%	
• UBI	7,50%	1,75%	9,75%	11,00%	
Credito Valtellinese	7,75%	2,00%	10,00%	11,25%	
Banco BPM	8,15%	2,40%	10,40%	11,65%	
Unicredit	8,75%	2,50%	10,50%	12,25%	
Veneto Banca	8,75%	3,00%	11.00%	12,25%	
BP di Vicenza	8,75%	3,00%	11,00%	12,25%	
Banca Carige	9,00%	3,25%	11,25%	12,50%	
- P2G	2,50%				
TSCR = Total SREP Capital Requirement =			OCR = Ove	erall Capital Requirement =	
(CET1 = Total Required CET1 Resources) =					

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 and 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)

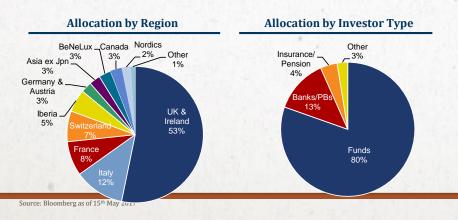
Alternative Tier 1 Capital (AT1)

- 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.



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 (<i>Call</i>); (ii) Upon reduction of interest deductibility or obligation to pay additional amounts; (iii) Upon loss of recognition as AT1 in whole/part 					
	Always subject <i>to prior regulatory approval</i> 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					
	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")					
Loss Absorption	then the Issuer shall					
Event:	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					

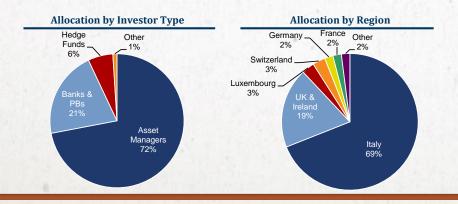
"IMMEDIATE" GONE CONCERN CAPITAL

- 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%



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			

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DISTRESS

- To deal with distressed, but not yet failing banks, the BRRD introduces:
 - new early intervention powers for supervisors
 - an obligation for banks to draw up a recovery plan defining what they would do in case of distress to restore
 economic and financial soundness
- Supervisory authority shall approve the resolution plan on the basis of its:
 - Completeness
 - full coverage, with updated information and limited outside reference
 - explanation of assumptions/choices,
 - identification of obstacles to implementation,
 - testing of the recovery plan against a range of scenarios
 - Quality
 - integration with governance and risk management framework
 - adequacy of distressed scenarios and testing process
 - internal consistency, with a reliable framework of indicators triggering actions
 - identification of a sufficient range of recovery options that can restore viability
 - Overall credibility
 - Realistic and plausible assumption and evalution (considering stress)

RECOVERY PLAN: KEY ELEMENTS

- Governance
 - a disciplined approach to develop, maintain and decide is essential to the RP feasibility, credibility and effectiveness
- Core Business Lines and Critical Functions
 - strategic analysis required (business model, operating system, market structure)
- Indicators framework
 - must both mirror bank's risk and provide a lead for the decision making process
 - must be complete, but manageable and responding to proportionality principle
- Stressed scenarios
 - Systemic-wide scenarios vs. idiosyncratic scenarios
 - Combination of both systemic-wide and idiosyncratic scenario
 - Fast moving vs. Slow Moving distressed scenarios
 - In between regular stress test scenario and default stress test scenarios
- Recovery Options
 - Credible and feasible conditional to the stress test scenario to which they apply

GOVERNANCE

- Ownership and awareness of the RP
 - · who develops, approves, maintain, update the plan
 - who decide to initiate the recovery actions and execute the RP
 - · who executes the RP and who assesses its effectiveness for the turn around
 - clarity of roles and responsibility to avoid confusion and delays
- Decision making and escalation procedures
 - what it has to be done under pre-specified circumstances
 - when the plan should be activated (no automatism; no absence of timelines either)
 - · early warning signals, RP indicators, implementations of options
- Integration and consistency with the bank's risk management framework, culture, strategy and infrastructures
 - people conduct, process design, organization setting,
 - information system management
- Internal and external communication plan
 - prompt engagement of regulatory authorities
 - address the issue of confidentiality, content, timing
 - keywords: "understand", "challenge", "approve", "support", "all relevant parties"

CORE BUSINESS LINES AND CRITICAL FUNCTIONS

- Their identification needed to draw up a RP that provides continuity of critical functions and deals with core business lines to restore full viability
- Critical function
 - involves the provision of services to third parties that is of systemic importance to either the financial stability or the real economy
 - Size: market share, number of transactions, number of customers
 - Substitutability: # of competitors, mkt concentration, entry barriers, replacement speed
 - Impact: interbank exposures, derivatives holdings, loss of market confidence
 - Most common CFs are:

 Retail deposits 	Retail lending	Payments
-------------------------------------	----------------	----------

- Corporate lending Corporate deposits Clearing and Settlement
- Derivatives
- Core Business Lines
 - set by revenue contribution, strategic/operational relevance, franchise value
 - often overlaps with segment used for financial reporting

INDICATORS FRAMEWORK

- It must provide the identification and measurement of the key risks
 - must have both a qualitative and quantitative part and allow for a regular and easy monitoring
 - indicators should be part of the overall risk management / early warning system of the bank
- It must trigger management action when appropriate
 - Identification of the thresholds at which the management must take decisions
 - at an adequate margin above Pillar 2 requirements
 - precautionary levels if recovery options are time consuming or market dependent
 - must be integrated in the governance system (e.g. capital raising exercise)
 - forward looking indicators needed, mainly in SII (stressed and prospective data)
- Drawn up by the bank, but agreed upon with the competent authorities
- It must be function of the bank risk level, size and complexity
 - coeteris paribus, the greater the number of indicators, the better
 - the more probable the breach of threshold, the better (action is discretionary)
- Minimum list of qualitative and quantitative RP indicators
 - compulsory: capital, liquidity, profitability, asset quality
 - Rebuttable: market based: macroeconomic indicators (but compulsory for SII)

	Minimum	list of recover	y plan indicators
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(each indicator is subject to the possibility for an institution to justify that it is not relevant for it, however in such a case it should be substituted with another indicator which is more relevant for this institution)

1. Capital indicators

- a) Common Equity Tier 1 ratio
- b) Total Capital ratio
- c) Leverage ratio

2. Liquidity indicators

- a) Liquidity Coverage Ratio
- b) Net Stable Funding Ratio
- c) Cost of wholesale funding

3. Profitability indicators

- a) (Return on Assets) or (Return on Equity)
- b) Significant operational losses

4. Asset quality indicators

- a) Growth rate of gross non-performing loans
- b) Coverage ratio [Provisions / (Total gross impaired and past due loans)]

Indicators in categories 5 and 6 to be included in the list unless an institution justifies that market based and macroeconomic categories of indicators are not relevant for it

5. Market based indicators

- a) Rating under negative review or rating downgrade
- b) CDS spread
- c) Stock price variation

6. Macroeconomic indicators

- a) GDP variations
- b) CDS of sovereigns

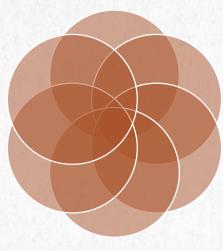
Rebuttable: all indicators on the minimum list are required

RECOVERY OPTIONS

Capital raising exercise (CRE)

Access to wholesale funding

Access to central bank facilities



Cost saving, commercial measures and earning retention Liability
Management
(LME)

Asset
Disposals &
RWA
Reductions



Assessment

- *Cost (tax, HR, ...)*
- Rating
- RAF
- Operational
- Business Model
- Time to execution

Credibility

Assessment

- Past Experiences
- Separability Issue
- Impediments
 - shared operating assets,SLA, preparatory work,...
- Systemic issue

SCENARIO ASSESSMENT

• Reverse stress testing • Relevance/plausibility for calibration for the bank and its risk • Identify macro-drivers • Breach of at least one causing low indicators indicator (only early • Scenario used in capital warning not enough) planning or new one • Severity (near default scenario as test for Adequacy of Scenarios effectiveness of the description scenario recovery) Application Assessment of overall of the recovery recovery capacity options • Impact, timelines and • Options sufficient to feasibility in each case escape distress • How to overcome • Threshold calibration barriers and hurdles allows prevention of • Implementation regulatory breaches order

SCENARIO RELEVANCE AND SEVERITY

- Scenario relevance defined according to up to date information about:
 - core business lines and critical functions
 - business and funding model, activities, structure, Interconnectedness
 - bank's weakness and vulnerabilities as suggested by a strategic analysis
- Scenario based on systemic events
 - decrease in the interbank market liquidity
 - increase country risk with capital outflow
 - Adverse movement in asset prices
 - Macroeconomic downturn
- Scenario based on systemic events
 - Failure of significant counterparties
 - Reputation damage
 - Severe outflow of liquidity
 - Adverse movements in asset prices to which the bank is exposed
 - Severe credit or operational

RESOLVABILITY

- A bank is "resolvable" if the Resolution Authority can feasibly and credibly:
 - either <u>liquidate it</u> under normal insolvency proceedings
 - or <u>resolve it</u> by applying its different resolution tools and powers ...

...while avoiding/minimizing significant <u>adverse effects on the financial system</u> of the Member State in which the bank is established, or other Member States...

...and ensuring the continuity of critical functions carried out by the institution.

- The resolution authority's assessment of resolvability **should not assume**:
 - extraordinary <u>public financial support</u>;
 - central bank liquidity aid non standard in terms of collateral, tenor, rate, emergency
- Pre-requisites for resolution
 - bank is failed or is likely to fail
 - no reasonable prospect for other measures (conversion, precautionary recap, institutional protection scheme)
 - a resolution action is necessary in the public interest (resolution objectives)
- NCWO (no creditor worse off principle): protection of client funds/assets

"DEEP" GONE CONCERN RESOURCES REQUIREMENT

- There must be <u>sufficient</u> <u>loss-absorbing</u> and <u>recapitalization capacity</u> available in a resolution to implement an <u>orderly resolution</u> that:
 - minimize any impact on financial stability
 - ensures the continuity of "critical functions"
 - avoids exposing taxpayers to loss with a high degree of confidence
- What does "sufficient" mean? (calibration exercise)
 - · all loss driving to the point of non viability and all potential losses from an orderly post-resolution reorganization
 - resolution reveals losses that had not previously been realized
 - resolution may be followed by additional losses
 - overly-optimistic risk weightings may need to be revised upward
 - the resolved bank, or its successor institution, has to meet minimum conditions for authorization in order that supervisors may allow it to continue performing authorized activities, in particular critical functions
 - the reorganization, or the solvent wind-down necessary following resolution, may require a capitalization above supervisors' requirements so that counterparties continue to trade with the resolved firm and provide funding to it

RESOLUTION PLAN AND "DEEP GONE" CONCERN CAPITAL

- The Resolution Authority, consulting with the Supervisory Authority must:
 - draw up the resolution plan (RP) that defines the measures to undertake in case a resolution procedure should be started
 - provide in the RP the scenario analysis needed to check effectiveness of resolution measures
 - plan in the RP both single and multiple points of entry resolution strategies (SPE vs. MPE) in the case of large groups
 - ensure the removal of any impediments to an orderly resolution
- Three broad resolution strategies
 - modified insolvency process
 - asset transfer (usually partial)
 - sale of business
 - bridge bank
 - Asset separation (good bad bank)
 - bail-in
- Calibration exercise of the gone concern capital needed is a function of the resolution strategy

CHARACTERISTICS OF "DEEP GONE CONCERN CAPITAL"

- To be "eligible", liabilities must <u>absorb losses</u> and <u>contribute to recap needs</u> (orderly resolution), they must ensure that resolution authorities:
 - have power to expose their holders to loss with no material risk of legal dispute or compensation costs under NCWO
 - are confident that their holders absorb losses in time of stress without forcing processes that may cause disruption to critical functions or to financial stability

Eligible liabilities shall:

- be **stable**, **long-term claims**, not repayable on demand or at short notice
 - maturity restrictions ensure that, if situation deteriorates, the capacity to absorb losses in future resolutions is not diminished by a sudden withdrawal of funds
- **not** include:
 - operational liabilities
 - tax and social security liabilities
 - covered deposits

Transparent creditors hierarchy

 Investors, creditors, counterparties, customers and depositors should have clarity about the order in which they will absorb losses in resolution.

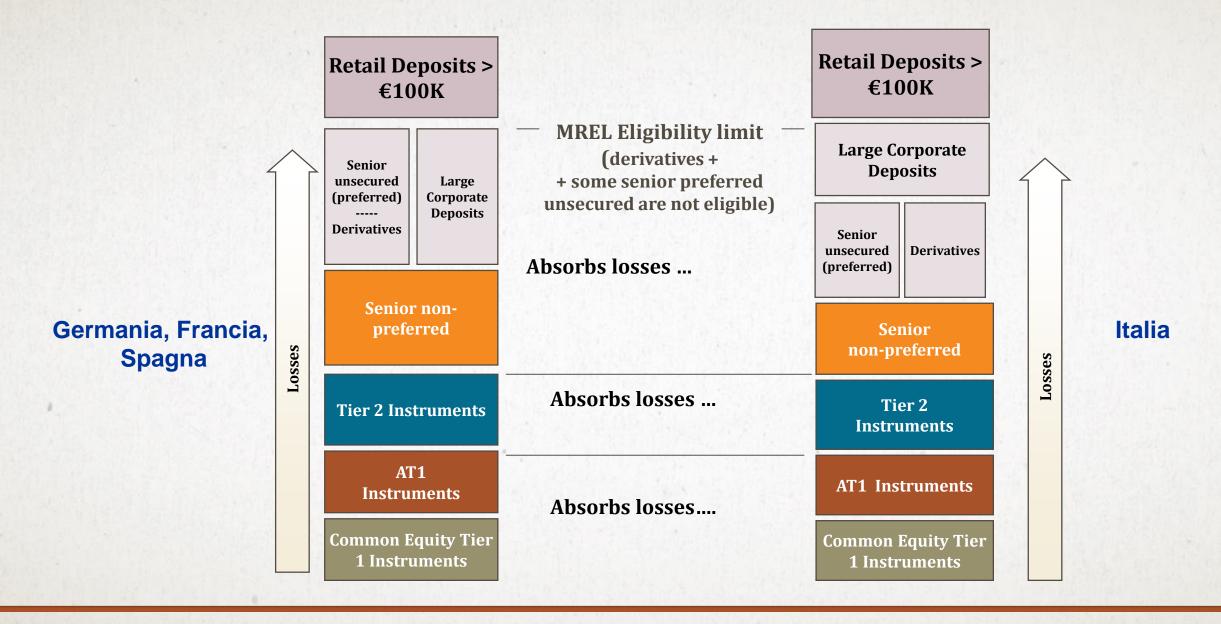
ELIGIBILITY CRITERIA FOR "DEEP GONE CONCERN CAPITAL"

- Issued & maintained directly by the resolution entities (REs) and fully paid up
- Not funded, directly/indirectly, by (and not owed to) the REs or related parties
- If issued outside the EU, the indenture must make it bail-inable under EU law
 - exceptions are possible
- At least one year minimum remaining at the earliest date of repayment that the holder can enforce
- No holder's right to accelerate the service of the debt outside insolvency or liquidation of the bank
- Not arising form derivatives
- Neither secured nor subject to guarantees enhancing its seniority given by the RE, its parent undertaking, its subsidiaries or anyone closely linked
- No set off netting rights
- Interest or dividend payments cannot be amended on the basis of the credit standing of the resolution entity or of its parent undertaking
- No contractual provisions that provides incentives for the principal to be called, redeemed, repurchased, repaid prior to maturity

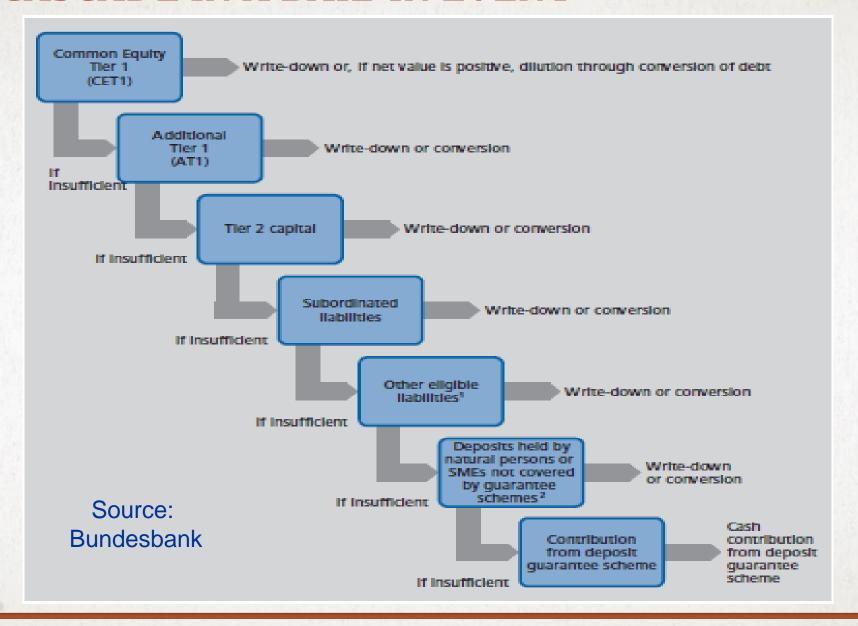
LIST OF NON ELIGIBLE LIABILITIES

- All liabilities excluded from bail in or whose conversion in equity / write down can be disputed / cause compensation claims under NCWO principle
 - all liabilities with maturity of less than one year
 - all insured deposits
 - the non covered part of deposits held by natural persons and SMEs
 - liabilities arising by virtue of the holding of client assets or client money, even on behalf of a collective investment undertaking
 - secured liabilities
 - liabilities arising from derivatives, including any derivative component of structured notes (stricter for G-SII)
 - liabilities arising other than through a contract (e.g. tax liabilities, DGS,..)
 - liability toward employees related to fixed compensation and even variable compensation if set by collective bargaining agreement
 - liabilities toward commercial creditors arising from provision of goods and services necessary to the institution functioning
 - AT1 and Tier 2 issued by group SPEs as of January 2022
 - also liabilities that qualifies as "own funds" in form of CET1, AT1 o T2 capital

LOSS ABSORPTION MECHANISM



LIABILITIES CASCADE IN A BAIL-IN EVENT



DEEP GONE CONCERN RESOURCE REQUIREMENT IN THE EU

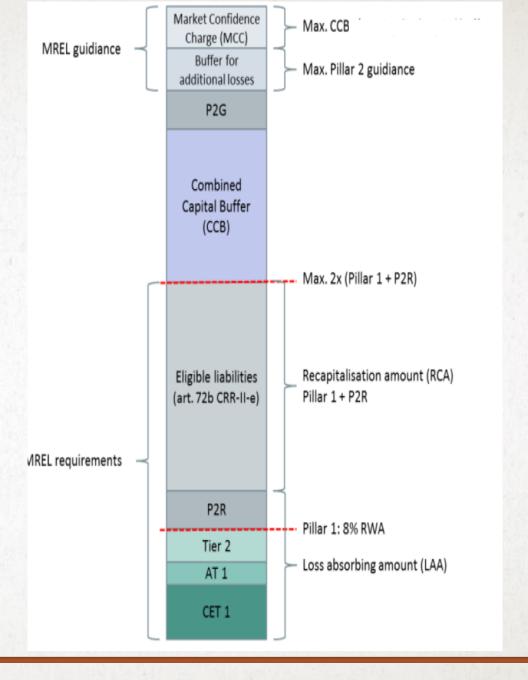
- The framework for such type of requirement in the EU is provided by MREL (Minimum Requirement for own funds & Eligible Liabilities) regulation
 - its roots are in the 2014 Bank Recovery and Resolution Directive (BRRD), now under amendment by the BRRD II due to the need of integration with TLAC
 - in May 2016, the EU Commission issued the delegated regulation on MREL
 - in November 2016, to combine TLAC and MREL, the EU Commission included in its release of the Banking Package (CRD V CRR II) proposal also some amendment of the BRRD jointly addressing:
 - the transposition of minimum TLAC for G-SIIs inside the CRR II
 - MREL framework adjustment (including Pillar II add-on for G-SII) in the BRRD

MREL Characteristics

- ☐ MREL is a general requirements for all banks
- ☐ MREL is a Pillar 2 requirement set by the resolution authority
- ☐ MREL has also a P2 guidance component (market confidence charge)
- ☐ MREL does not have an explicit subordination requirement for liabilities to gain "eligibility status"

MREL REQUIREMENT

- MREL requirement
 - ☐ Legal Maximum
 - ✓ 2 * (P1R+P2R)
 - ✓ 2 * LR
 - ☐ must be less n case of liquidation
- MREL SRB's desire:
 - 8% of total asset
- The MREL requirement must be set in terms of RWE (or LE) according to the BBRD proposed amendments
- MREL guidance set at no more than the P2R + CCB
- They will depend on the content of each bank resolution plan



PILLAR 1 TLAC REQUIREMENT - G-SIIS ONLY

- It is defined in terms of both RWE and leverage exposure
- At least 18% of the RWE and 6.75% of the leverage exposure (LE)
 - No transition period in the current proposal
- Subordination requirement for eligible instruments vs. excluded ones
 - to avoid the risk of breaching the principle of NCWO
 - under certain restrictive conditions, excluded liabilities may rank pari passu or junior to eligible liabilities for an amount up to 5% of the required TLAC
- Authorities can:
 - set the TLAC P1 1 requirement above the minimum (not the case in the EU)
 - set TLAC Pillar 1 buffers in addition to the TLAC LRE Minimum (not now)
 - add a firm specific Pillar 2 TLAC requirement (implicitly yes)
 - G-SIIs are subject to MREL as well in terms of requirement and eligibility