

Economia e Gestione degli Intermediari Finanziari

Set 7

Capital Requirements

LIUC – Università Cattaneo

A.A. 2014-2015

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I temi della lezione

- Risk weighted asset
- Capital requirements
- Phase in vs. fully loaded.
- Liquidity requirements
- Leverage
- CET1, AT1, T2



Riferimenti bibliografici

Ruozzi – cap. 6

Risk-Weighted Assets (“RWA”)

Bank Balance
Sheet: Asset Side

Risk Assessment

“Weighing” of Assets by
Risk Weight (Illustrative)

Cash and Cash Equivalents	<ul style="list-style-type: none"> ■ Generally no risk 	x 0%
Interbank Lending	<ul style="list-style-type: none"> ■ Low risk 	x 20%
Customer Loans	<ul style="list-style-type: none"> ■ “Normal” risk, dependent on <ul style="list-style-type: none"> — Type of loan and collateral (mortgage, credit card receivables, ...) — Type of customer (corporate, private, public sector, ...) 	x 50-150%
Securities	<ul style="list-style-type: none"> ■ “Normal” risk, dependent on type of securities (ABS, corporate bonds, ...) 	x 50-150%
Other	<ul style="list-style-type: none"> ■ Depends on type of asset 	TBD

Computing Capital Ratios

- Once the Amount of Risk-Weighted-Assets has been calculated, the following regulatory capital indicators can be computed

$$\text{—Common Equity Tier1 Ratio} = \frac{\text{Common Equity Tier 1}}{\text{RWA}}$$

$$\text{—Tier1 Ratio} = \frac{\text{Tier1 Capital}}{\text{RWA}}$$

$$\text{—Total Capital Ratio} = \frac{\text{Total Capital}}{\text{RWA}}$$

Basel III Proposal Summary

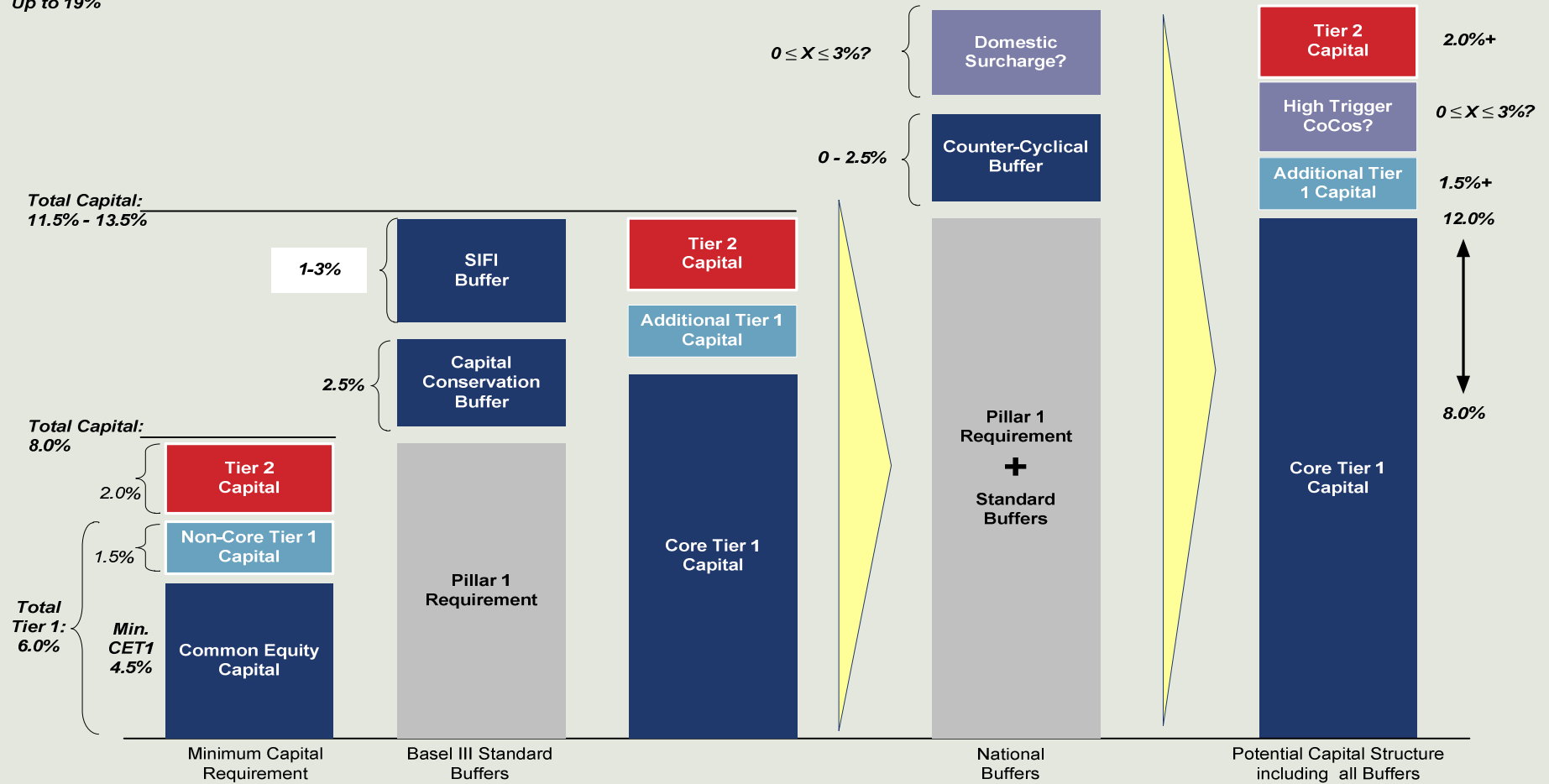
Basel III Proposal

Definition of Capital	<ul style="list-style-type: none">■ Surplus capital from minority interests from banking subsidiaries are deducted from Core Tier 1 (CT1), minority interests from non-banking subsidiaries entirely deducted + Add-back of negative AFS reserves eliminated■ Deduction of some exposures to the extent they individually exceed 10% of Core Tier 1 (or 15% in aggregate; amounts within 10%/15% thresholds to be risk-weighted at 250%)<ul style="list-style-type: none">— Investments in common equity of financial institutions which are unconsolidated for regulatory purposes, e.g. insurance subsidiaries— “Temporary” deferred tax assets (partially net-able against corresponding deferred tax liabilities) & Mortgage servicing rights■ All goodwill and other intangibles removed entirely from CT1, including those arising from unconsolidated investments such as insurance subsidiaries■ Full deduction of shortfall of provisions and of gains resulting from securitisation transactions■ Any other deductions currently taken 50%/50% from CT1/Tier 1 and Total Capital (such as junior securitisation exposures) to be risk-weighted at 1250%■ Transitional arrangements: Regulatory deductions and prudential filters will be fully deducted from common equity starting 01 January 2018. Regulatory adjustments will be phased in starting 01 January 2014 with annual increments by 20%
Minimum Capital Requirements	<ul style="list-style-type: none">■ Minimum Core Tier 1 requirement of 4.5% + 2.5% Capital Conservation Buffer (“CB”) = 7.0% total minimum Core Tier 1■ Minimum Tier 1 capital requirement of 6% (+2.5% CB = 8.5%)■ Minimum Total capital requirement of 8% (+2.5% CB = 10.5%)■ Introduction of Capital Conservation Buffer (2.5%) and Countercyclical Buffer (0%-2.5%) in the form of Core Tier 1 capital■ Innovative hybrid capital instruments with incentive to redeem will be phased out from the Tier 1 capital base■ Tier 2 capital instruments to be harmonised and Tier 3 capital eliminated■ Minimum requirements gradually phased from 01-Jan-2013 to 01-Jan-2019
Leverage Ratio	<ul style="list-style-type: none">■ Implementation of a globally consistent leverage ratio as a non-risk based ‘backstop’ measure based on gross exposure■ Exposure measure considers off-balance sheet items (also unconditionally cancellable commitments) with 100% Credit Conversion Factor■ “Basel II” (partial) netting allowed for derivative positions, repurchase agreements and securities finance transactions■ Leverage ratios to be calculated by banks and monitored by regulators from 2011-2017. Public disclosure only from 2015. Full implementation as Pillar I requirement after final recalibration in 2017 to start in Jan-2018
Net Stable Funding Ratio	<ul style="list-style-type: none">■ “Net Stable Funding Ratio” (NSFR) measures the extent to which assets with maturities of 1y+ are refinanced with liabilities with maturities of 1 year or above■ The NSFR will be implemented with a binding minimum ratio in Jan-2018. The Committee will reassess the NSFR to avoid unintended consequences■ Unfavourable treatment of assets backing e.g. covered bonds compared to unencumbered residential mortgages■ Quantitative impact study suggests €1.8trn long-term funding shortfall for European banks
Liquidity Coverage Ratio	<ul style="list-style-type: none">■ LCR to measure a bank’s ability to withstand a 1-month stress test by comparing its liquid assets to the expected 30 day net cash outflow under stress assumptions■ “Liquid assets” primarily consist of cash and government bonds. Up to 40% may also consist of covered bonds and other highly rated assets■ The Committee also considers options to deal with banks in countries with insufficient government bonds in circulation to fulfilled requirements■ Revisions to the LCR will be made by mid-2013, and the LCR will be introduced as a requirement on 01-Jan-2015. A regulatory observation period begins 01-Jan-2011

Capital Requirements & Buffers

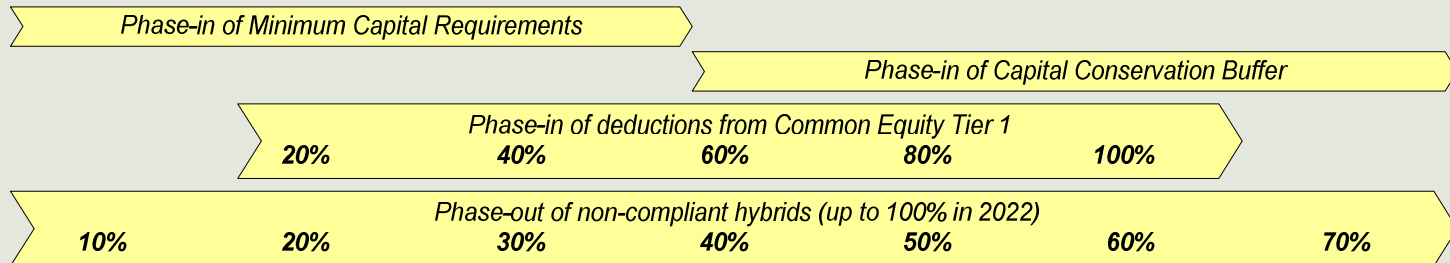
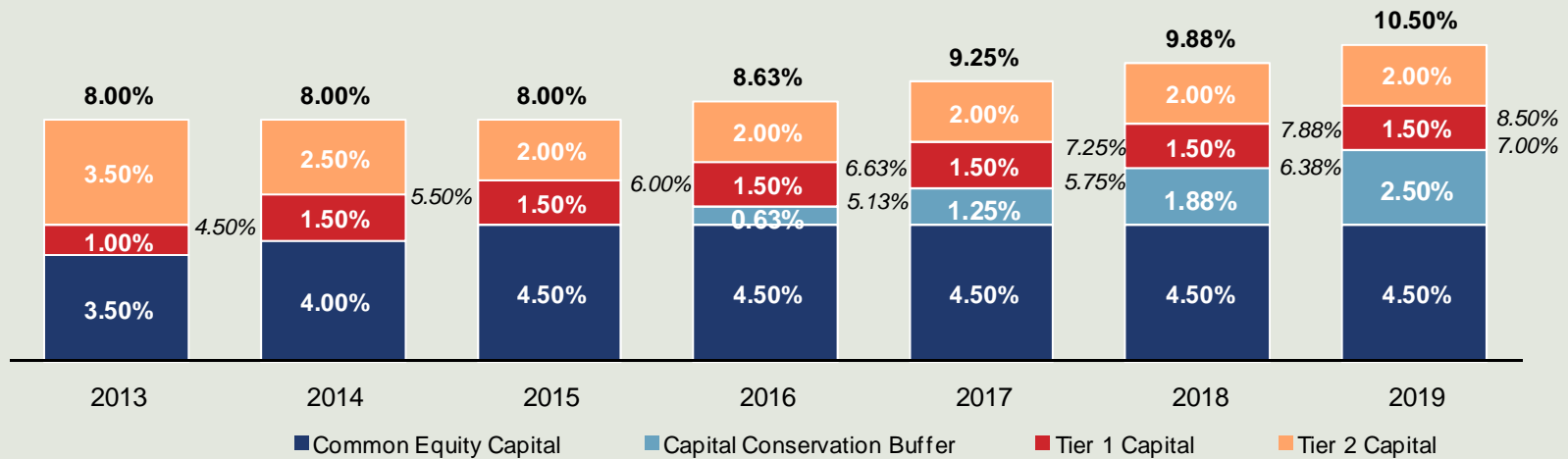
Higher Minimum Capital Standards and Additional Buffers

Total Capital:
Up to 19%

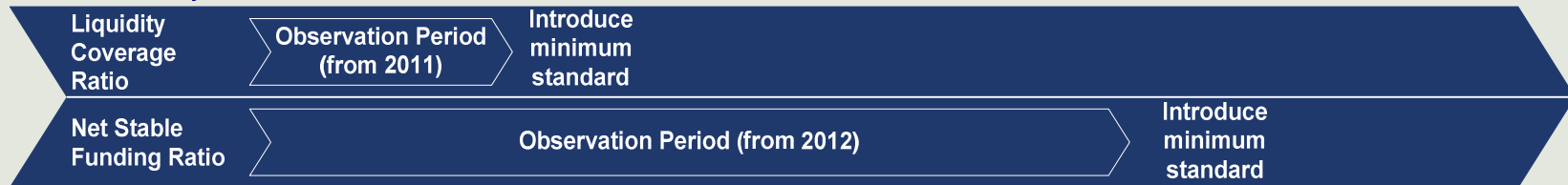


Minimum Capital Requirements

Phase-in Arrangement – Overview



As of 1st January



CRD IV Scope: start date, Jan. 1st, 2014

Capital

- CRD IV largely implements Basel 3, but there are some notable divergences:
 - **Treatment of minority interests:** allows a more favourable capital treatment of significant investments in unconsolidated financial entities, including insurance entities, than Basel 3
 - **Non-common equity “core Tier 1”:** allows more types of “core Tier 1” – such as “silent participations” – than Basel 3
 - **CVA:** End-user exemptions from CVA charge for pension funds (3 years only), corporates (EU corporates only), sovereigns and intra-group transactions
- **Write-down / conversion of Additional Tier 1 equity:** point of non-viability will be determined by the banking supervisor (irrespective of the terms and conditions of the instrument, i.e. “statutory” cram-down of these creditors)

Liquidity & Funding

- **LCR:** CRD IV has a slightly accelerated phase-in (2015: 60%, 2016: 75%, 2017: 85% and 2018: 100%), unless altered by subsequent rule-making
- **Reporting:** before either the LCR or NSFR come into effect as binding constraints, banks must report key elements of both to their supervisors

Leverage Ratio

- Calculation of LR diverges from Basel 3 in a number of respects (e.g. treatment of trade finance)
- Ahead of such legislation the EU Commission to evaluate the possibility of a differentiated leverage ratio based on business models (c.f. Basel 3)

Flexibility to Impose Tougher Requirements

- Extra “systemic risk [capital] buffer” may be applied to national banking sectors (or specified parts thereof); if buffer exceeds 3%, then Member State (MS) must notify EBA and EU Commission
 - Other prudential requirements (e.g. risk weights and large exposure limits) may be adjusted to address national macro-economic and financial stability risks (subject to 2 year limit)
- EU Council has limited right to veto these national measures

SIFI Charges

- Extra “O-SII” surcharges for systemic EU institutions that are not already “G-SIIs” (i.e. G-SIFIs) – applying from 1 January 2016 and capped at 2% (but no overall cap on all buffers / surcharges)
- If a “systemic risk buffer” is set by the MS to cover exposures located in that MS, then any O-SII/G-SII surcharge is additive (otherwise, as a general rule, only the higher of the surcharge and the buffer applies)
- Phase-in for G-SII buffer (2016: 25%, 2017: 50%, 2018: 75% and 2019: 100%)

“Country-by-Country” disclosure

- “European G-SIIs and O-SIIs” must disclose – on a country-by-country basis – several statistics, notably profits made in, taxes paid to and subsidies received from each “government” (exact scope is unclear)
- Banks report these data first to EU Commission (beginning 1 January 2014) – except the number of employees and the turnover in each jurisdiction concerned: these must be publicly reported annually from 1 January 2014
- Public disclosure of other data is required from 1 January 2015, unless EU Commission modifies the application of these disclosure requirements after assessing (in conjunction with European Supervisory Authorities, like EBA) the impact on financial stability, competitiveness, investment impact and “credit availability”

CRD IV: CET1

CRD IV allows some discretionality for national supervisors to determine the applicable treatment for banks within their jurisdiction. Most of the flexibility relates to the fact that national supervisors can require quicker implementation of the rules

Phasing-in under CRD IV	<ul style="list-style-type: none">■ National supervisors have discretion to apply the CRD IV phasing-in schedule faster than stated in the CRD IV regulations. As such, national regulators can decide to apply the fully phased rules already from Dec-2014. This treatment is applicable to:<ul style="list-style-type: none">— Deductions from Common Equity Tier 1 (with the default phasing-in schedule being 20% of deductions phased in as at 31-Dec-2014, 40% as at 31-Dec-2015 etc.)— The inclusion of negative and positive AfS reserves in CET1. Negative AfS reserves that are currently added back to regulatory capital will be deducted 20% as at 31-Dec-2014, 40% as at 31-Dec-2015 etc. Positive AfS reserves that are currently deducted from capital will be included 40% as at 31-Dec-2015, 60% as at 31-Dec-2016 etc.— The disallowance of minority interests that are currently included in capital (20% disallowed as at 31-Dec-2014, 40% as at 31-Dec-2015 etc.)
Insurance Subsidiary	<ul style="list-style-type: none">■ Under specific circumstances, CRD IV allows banks to apply a risk weighting to the insurance subsidiaries, rather than requiring a deduction from CET1<ul style="list-style-type: none">— Banks are only allowed to apply the risk weighting they are if they are classified as Financial Conglomerates and fulfil all requirements and have received permission for their national supervisor
Government AfS Reserve	<ul style="list-style-type: none">■ In cases where the national authorities currently allow banks not to deduct negative AfS reserves in CET1, the authorities can allow banks to continue this treatment for exposures to central governments<ul style="list-style-type: none">— This treatment may be allowed until IAS 39 on the accounting of financial instruments is replaced by the applicable IFRS standard
Mortgage Risk Weights	<ul style="list-style-type: none">■ For banks under the standardised approach, the risk weight applied to residential mortgages is 35% and minimum 50% for commercial real estate<ul style="list-style-type: none">— The national supervisor may apply higher risk weights based on default experience and expected market— The maximum risk weight for both residential real estate and commercial real estate is 150%■ For IRB banks, the national supervisor may set a minimum LGD floor for both residential and commercial mortgages■ Regulators in Sweden and Norway have recently been discussing minimum risk weights on mortgage portfolios (Denmark on corporate loans)
Basel I floor	<ul style="list-style-type: none">■ Until 31-Dec-2017, CRD IV requires banks to fulfil the minimum capital requirements under CRD IV as well as 80% of the total capital requirement under Basel I■ If the institution is currently under the IRB approach, the national regulator may instead require the bank to fulfil 80% of the total capital requirement on under the Basel II Standardised Approach
Other Areas of Discretion	<ul style="list-style-type: none">■ Minimum ratios: National supervisors may increase the minimum level requirements for Common Equity Tier 1 for banks in their jurisdiction■ Large Exposures: With respect to the treatment of large exposures, the national supervisor may determine whether the institution shall apply a 1,250% risk weight to the exposures above the limit, or whether the institution is not permitted to hold the exposure at all. However, the national regulator may move certain assets types out of the scope of the large exposure requirement, for example covered bonds and exposures to governments and other public bodies■ Equity Positions: Until 31-Dec-2017, the national supervisor may exempt certain equity positions from IRB treatment. The supervisor is to publish this list of eligible equity exposures■ Default definition: National supervisors may alter the definition of default of residential or SME commercial real estate and exposures to public sector entities to 180 days past due on any obligation. The rest of the regulatory framework applies a 90 days overdue default definition

CRD IV: A-Tier 1 Structural Requirements

Additional Tier 1 Structural Features

Maturity	<ul style="list-style-type: none"> ■ Perpetual ■ No incentive to early redeem (see “Step-up” below)
Call	<ul style="list-style-type: none"> ■ Callable on year 5 at issuer’s discretion subject to regulatory approval
Coupon Step-up / Increase in Credit Spread	<ul style="list-style-type: none"> ■ Not allowed ■ Coupon would reset every 5 years (starting with the first call date) based on the original credit spread and the prevailing benchmark (e.g. mid swaps)
Distributions	<ul style="list-style-type: none"> ■ Fully discretionary and non-cumulative ■ Payment must be made out of distributable items ■ Maximum amount which an issuer can distribute is subject to Maximum Distributable Amount (a function of an Issuer’s capital position and profits/distributable items) ■ Distributions can be cancelled / reduced if the Issuer has insufficient distributable items ■ Distributions can be cancelled at the regulator’s discretion ■ No dividend pusher and no dividend stopper
Subordination	<ul style="list-style-type: none"> ■ Subordinated to Tier 2 and senior only to equity
Trigger Based Loss Absorption	<ul style="list-style-type: none"> ■ Write-down or equity conversion upon breach of 5.125% Common Equity Tier 1 Ratio ■ Write-down can be permanent or temporary ■ In the case of a temporary write-down structure, the write-up/reinstatement is discretionary and subject to the Maximum Distributable Amount (see “Distributions” above)
Non-Viability Loss Absorption	<ul style="list-style-type: none"> ■ Upon non-viability, instrument must convert into equity or be permanently written down ■ Statutory implementation via Recovery & Resolution Directive (RRD) (impending European legislation) (contractual Non-Viability not required)
Upside Participation	<ul style="list-style-type: none"> ■ Potential to include warrants or conversion terms allowing the holder to convert into equity at a predetermined conversion price

CRD IV: Tier 2 Structural Requirements

Tier 2 Structural Features

Maturity	<ul style="list-style-type: none"> ■ Minimum of 5 years ■ Typically 10 years+ to ensure capital efficiency (see Amortisation of Regulatory Treatment) ■ No incentive to early redeem (see “Step-up” below)
Call	<ul style="list-style-type: none"> ■ Bullet format: no call option ■ Callable format: callable on year 5 at issuer’s discretion subject to regulatory approval
Coupon Step-up / Increase in Credit Spread	<ul style="list-style-type: none"> ■ Bullet format: not relevant ■ Not allowed if linked with an early call option. In callable format coupon can reset on year 5 (i.e. on the first call date) based on the original credit spread and the prevailing benchmark (e.g. mid swaps)
Distributions	<ul style="list-style-type: none"> ■ Must pay distributions ■ No coupon deferability
Subordination	<ul style="list-style-type: none"> ■ Subordinated to all senior unsecured obligations ■ Senior to Tier 1 and equity
Trigger Based Loss Absorption	<ul style="list-style-type: none"> ■ None
Non-Viability Loss Absorption	<ul style="list-style-type: none"> ■ Upon non-viability, instrument must convert into equity or be permanently written down ■ Statutory implementation via Recovery & Resolution Directive (RRD) (impending European legislation) (contractual Non-Viability not required)
Amortisation of Regulatory Treatment	<ul style="list-style-type: none"> ■ Tier 2 qualification reduces by 20% per annum in final 5 years
Upside Participation	<ul style="list-style-type: none"> ■ Potential to include warrants or conversion terms allowing the holder to convert into equity at a predetermined conversion price