

# ***CRD V and CRR II*** Finalising Basel III and setting the stage for Basel IV

Regulatory challenges for  
2017 and beyond



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# *Preface*

***With the publication of drafts for amendments to the CRD and CRR in November of 2016, the EU took the final steps to complete its implementation of the Basel III framework that entered into force on 1. of January 2014. However, at the same time as Basel III is finalised, the drafts already contain provisions for what is now widely called Basel IV. Thus, they do not only mark the finalisation of one set of rules but at the same time the transition to a completely new framework of regulatory rules.***

When Basel III was implemented in the EU in 2014, it marked a huge leap in banking regulation as for the first time, a single rule book was established, creating unified rules for all EU banks. Hence, the CRR impacted the banking sector on the one hand side by implementing **Basel III** – creating new rules on own funds and introducing for the first time internationally comparable liquidity ratios and a reporting requirement for a leverage ratio. On the other hand, CRR also unified all other existing rules in the EU's pillar I framework, putting to an end the diverging implementation of 26 different nation states.

However, following the Basel III provisions, the CRR contained transitional provisions for the introduction of binding minimum requirements for the Leverage Ratio and the Net Stable Funding Ratio (NSFR) which were supposed to enter into force on 1st January 2018. The draft CRR now published contains the to be finalised set of rules for these ratios, along with some other implementation issues that were either pending or subject to review some years after CRR entered into force.

However, the Basel Committee used the time after the publication of the final Basel III framework to investigate a number of issues with regard to the calculation of risk weighted assets. The changes proposed are so many and so fundamental in their nature, that the industry has come to call them **Basel IV**. While some Basel IV proposals are still heavily discussed at the time these lines are written, some others were already finalised by the Basel Committee and have now been included in the draft CRR. Among them are new rules on the trading book, counterparty risk and large exposure guidelines that will impact the banking industry at least to the same extent as Basel III.

This brochure provides you with an overview of all the proposals of CRD V and CRR II. We hope you enjoy reading it!

Kind regards,



Martin Neisen  
Global Basel IV Leader



Abdellah M'barki  
Deputy Basel IV Leader





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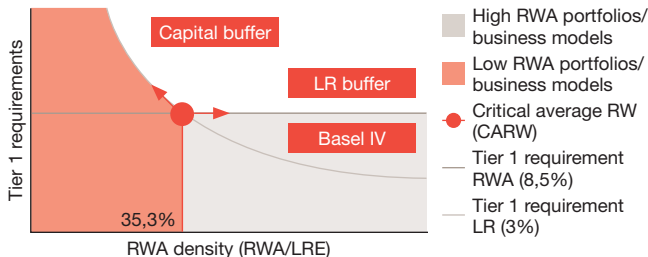
# *Finalising Basel III*

## Leverage Ratio

### Legal changes

- CRR II introduces a binding LR requirement of 3% for all institutions, that has to be met with Tier 1
- Business models and portfolios with relatively low RWA compared to their volume are affected most severely
- Assuming a RWA based Tier 1 requirement of 8,5% (minimum requirements + capital conservation buffer), the critical average RW (RWA/LR exposure) is 35,3%. That means that portfolios with a lower RWA density will attract a higher LR than RWA Tier 1 requirement. Note: The critical EAD based average RW can be even higher than 35,3%.
- Capital buffers lead to lower CARW, LR buffers for G-SIIs to higher ones. Basel IV will affect RWA density (increased RW and EADs, floors).

**Fig. 1 Relationship between Tier 1 requirements and RWA density**



### Consequences

- Integration of LR in capital planning process and financial controlling
- Impact analysis of business models and portfolios
- Analysis of the interaction with Basel IV effects
- Integration of LR requirements in the New Product Process

**Fig. 2 Exposure-specific LR requirements**

		Impact
General exemptions	<p><b>The following positions are excluded from the LR exposure:</b></p> <ul style="list-style-type: none"> <li>• <b>Public lending</b> by public development banks</li> <li>• <b>Pass-through loans</b></li> <li>• <b>Officially guaranteed export credits</b></li> <li>• <b>Securitised assets</b>, where risk transfer is achieved</li> <li>• <b>General credit risk adjustments:</b> may reduce exposure values</li> </ul>	<ul style="list-style-type: none"> <li>—</li> <li>—</li> <li>—</li> <li>+</li> <li>+</li> </ul>
On-balance sheet exposures	<ul style="list-style-type: none"> <li>• <b>Cash pooling:</b> Regularly settled debit and credit accounts for one customer's group companies may be considered on a net basis subject to specific conditions.</li> <li>• <b>Regular way purchases and sales:</b> application of trade date accounting or inclusion of the respective payment obligation until settlement date. Off set limited to cash receivables and payables on a delivery-versus-payment-basis.</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>—</li> </ul>
Derivatives	<p><b>A modified version of the SA-CCR is introduced to the LR:</b></p> <ul style="list-style-type: none"> <li>• <b>Exposure reduction from collateral received</b> limited to only VM</li> <li>• The <b>SA-CCR multiplier is set to 1</b> to eliminate the (positive) effects from negative market values and overcollateralization</li> </ul>	<ul style="list-style-type: none"> <li>—</li> </ul>
Credit derivatives	<ul style="list-style-type: none"> <li>• <b>Definition of written credit derivatives:</b> Any financial instrument through which credit protection is effectively provided (CDS, TRS and options obliging the institution to provide credit protection)</li> <li>• <b>Purchased credit derivatives:</b> Net treatment if written/purchased credit derivatives are subject to the same/more conservative material terms</li> </ul>	<ul style="list-style-type: none"> <li>+</li> <li>—</li> </ul>
Off-balance	Off-balance sheet exposures that are treated as <b>derivatives for accounting purposes</b> are treated as derivatives for LR purposes as well	+
SFT	Regarding SFT, CRR II states that cash netting is only allowed for trades with an explicit maturity. Open repos are thus not allowed for cash netting.	+

## Net Stable Funding Ratio (NSFR)

Fig. 3 CRR II provisions for the Net Stable Funding Ratio

CRR II introduces a binding NSFR requirement for institutions set at 100%. The implementation follows in most aspects the requirements as described by the Basel Committee (BCBS 295 and 375).

$$\text{NSFR} = \frac{\text{Available Stable Funding (ASF)}}{\text{Required Stable Funding (RSF)}} \geq 100\%$$

### General provisions:

- To ease the burden of implementation, definitions are aligned to the respective definitions used for the purposes of LCR reporting. However, this approach is not applied consistently, for example with regard to exceptions from the definition of encumbrance
- CRR II introduces not only a binding minimum requirement but also spells out consequences in case of a breach. These are mostly aligned to the respective requirements for the LCR. It is made clear that supervisors shall take appropriate measures in case of a breach of the requirement
- Some specific rules are introduced to take account of EU-specificities, such as promotional loans, covered bonds, derivatives client clearing, cooperative networks and institutional protection schemes
- A preferential treatment for intragroup exposures is introduced

## NSFR – deviations from the Basel Committee

Fig. 4 Overview of changes to NSFR requirements due to CRR II and EU-specificities

The draft CRR II contains a number of changes as compared to the Basel Committee's NSFR proposals to take account of EU-specificities.

Level 1 assets as defined in the LCR, excluding extremely high quality covered bonds

RSF factor = 0%

Financial customers assets with a residual maturity < 6 month and secured by Level 1 assets, excluding covered bonds

RSF factor = 5%

Financial customers' assets as described by the 5% RSF factor; if they are unsecured or secured by other assets

RSF factor = 10%

Derivative transactions, if derivatives assets (adjusted by variation margins received in form of cash and Level 1 assets, excluding covered bonds) are greater than derivatives liabilities (adjusted by all posted variation margins)

RSF factor = 100%

For unmarginated derivatives transactions the RSF factor applies to the gross derivatives liabilities

RSF factor = 10%

For margined derivatives transactions the EU Commission offers an opinion on whether to use an RSF factor to gross derivatives liabilities or to use the potential future exposure as calculated under the SA-CCR

RSF factor = 20%  
or use SA-CCR

The EU Commission is authorized to adopt a delegated act to review these adjustments; if no decision is taken by end of 2022, these RSF factors will be raised to 10% and 15%

The EU Commission is authorized to adopt a delegated act to review these treatments; if no decision is taken by the end of 2022, these RSF factors will be raised to 10% and 15%

## Other changes – SME Factor

Fig. 5 CRR II treatment of SME exposures

### Status Quo

- The SME factor of 76,19% is only part of the current CRR (Article 501) and not of Basel III and leads to a reduction of capital requirements for exposures to SME under both the standardized and the IRB approach
- It was implemented to eliminate the effect of the capital conservation buffers on capital requirements for SME exposures (capital requirement of 8% instead of 10,5% incl. capital conservation buffer) and therefore to avoid detrimental effects on the capital requirements for loans to SME.
- The SME supporting factor is applicable to exposures not exceeding 1.5m EUR per SME on an aggregated level
- The SME supporting factor is applied by multiplying the base risk weight of an SME exposure by 76,19%
- A SME is defined as a corporation with an annual turnover less or equal to 50m EUR

### CRR II treatment of SME exposures

- The privileged treatment of SME exposures is expanded. Total exposures up to 1.5m EUR receive a supporting factor of 76,12%, the amount exceeding RWA of 1.5m EUR receives a supporting factor of 0.85%

Share of exposure  $\leq 1,5m$  EUR

**SME supporting factor 0,7612**

Exposures to SME

Split up into

Share of exposure  $> RWA 1,5m$  EUR

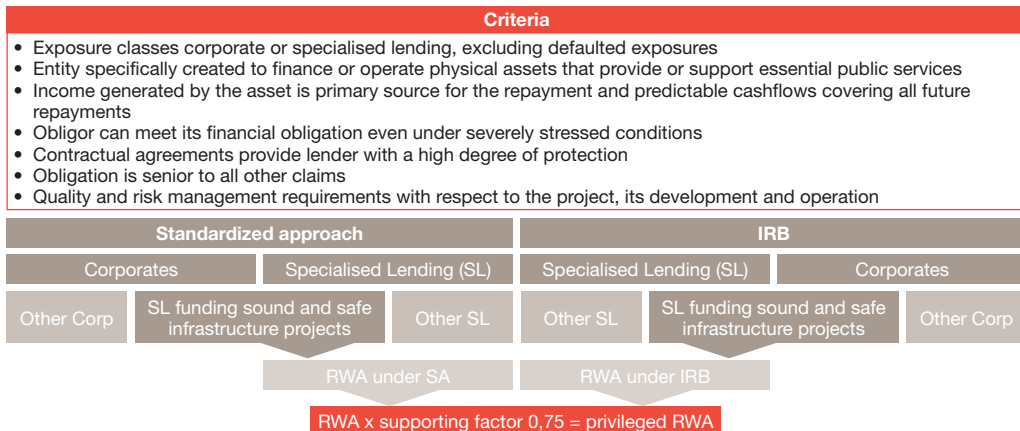
**SME supporting factor 0,85**

- The SME definition (annual turnover  $\leq 50m$  EUR) remains unchanged
- Economically the SME supporting factor corresponds to the preferential risk weight for SME in the revised standardized approach of Basel. The Basel proposals do not contain any corresponding factor in the IRB approach
- It can be expected that the preferential risk weight for SME under Basel's proposed standardized approach will not be implemented in the CRR II as this would lead to a double consideration of the same effect.

## Other changes – Infrastructure Finance

Fig. 6 CRR II treatment of infrastructure finance

Exposures to entities that operate or finance physical assets that provide or support essential public services

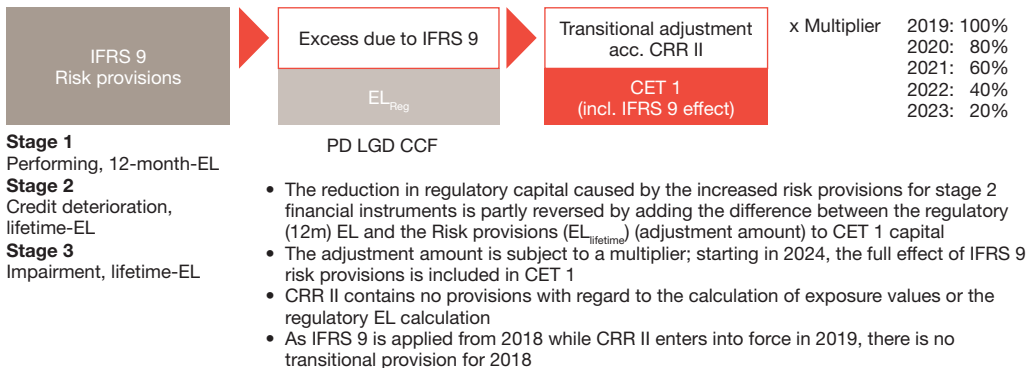


Separate reporting of total amount of privileged exposures required to the competent authority

## Other changes – IFRS 9

With the endorsement of IFRS 9 into EU law, institutions are expected to face severely higher risk provisions for financial instruments, resulting from the calculation of lifetime expected losses for financial instruments categorised as stage 2 under IFRS 9. As a transitional provision, the inclusion of these increased risk provisions into CET 1 capital is phased in over a five year horizon:

**Fig. 7 Effects of IFRS 9 on capital and proposed transitional arrangements under CRR II**





## Other changes – Reporting

Fig. 8 CRR II reporting requirements to smaller institutions

The draft CRR takes account of proportionality by providing reporting relief to smaller institutions and excluding some national development banks from the scope of CRD/CRR

1

### Reporting relief

- Reporting relief for small institutions (< 1.5 Bill. EUR total assets, 4y average)
- Only annual reporting of FINREP, Asset Encumbrance, Mortgage Loans, Large Exposure and Leverage Ratio

2

### Exclusion of development banks

- Development banks established by a member state, regional government or public sector entity
- Total assets < 30 Bill. EUR and less than 20% of member state's GDP
- Institutions must not have significant relevance for the domestic economy of the member state

3

### EBA report on financial impact of reporting

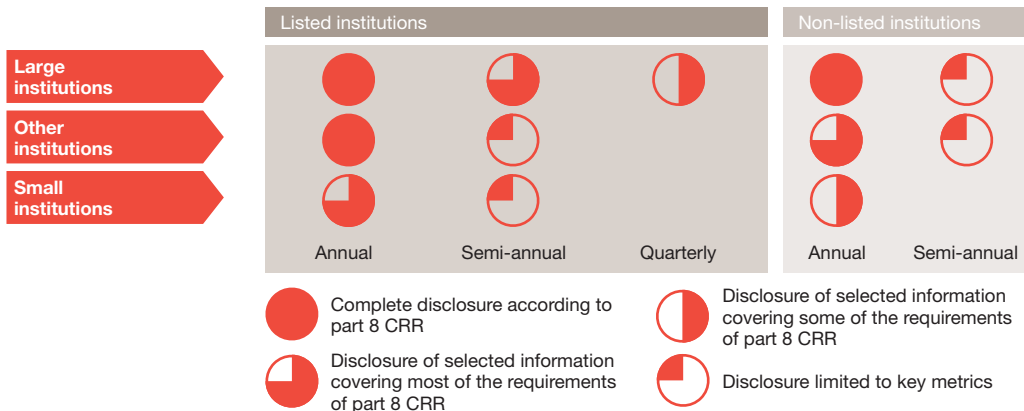
- Mandate for EBA to deliver a report concerning the financial impact of the implementation of Regulation (EU) No 680/2014 ("ITS on Reporting")
- Report due on December 31st 2019

## Other changes – Disclosure

Given multiple drivers at the global, European and national levels, the CRR II proposals in the areas of disclosure and regulatory reporting are significant – albeit somewhat beneficial for smaller firms.

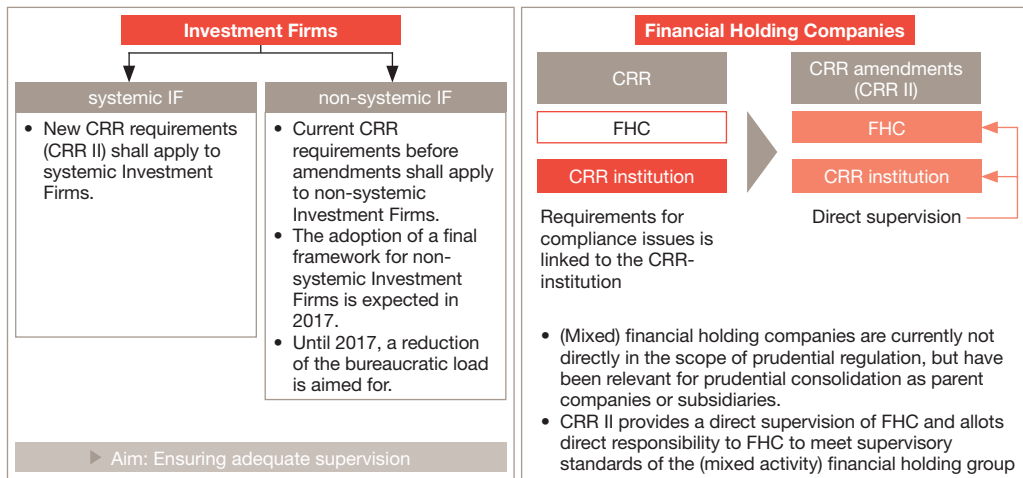
**Fig. 9 Extent of disclosure requirements for different institutions**

The draft CRR contains a classification of institutions. Disclosure requirements will apply to each category of institutions on a sliding scale basis with a differentiation in the substance and frequency of disclosures



## Other changes – Investment Firms (IF) and Financial Holding Companies (FHC)

Fig. 10 CRR II requirements for investment firms and financial holding companies





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# *Recovery and Resolution*

## *TLAC becomes a Pillar 1 requirement for G-SIIs*

The TLAC requirement is set only for G-SII only and will reach a general level of 18% of the risk weighted assets (RWA) and 6.75% of the leverage ratio exposure in 2021 following a two-year transitional period. Holdings of TLAC instruments of other G-SIIs have to be deducted from own TLAC. Material subsidiaries of non-EU-G-SIIs need to comply with an individual minimum requirement corresponding to 90% of the EU-G-SII level.

The MREL rules basically remain in the BRRD, but are modified significantly. The measurement is aligned with TLAC, using the RWA and the LR exposure as a denominator, instead of total liabilities. In contrast to TLAC, MREL will be set individually for each bank: it consists of a loss absorption amount for all banks, and a recapitalisation amount for those banks that, according to the resolution plan, are not to be wound up in a normal insolvency proceedings.

**Fig. 11 TLAC and MREL in EU legislation**

The new legal set-up		
CRR	BRRD	CRD
<ul style="list-style-type: none"><li>• TLAC requirement for G-SIIs in the EU</li><li>• Eligibility criteria for TLAC and MREL</li><li>• Deduction rules for investments in TLAC instruments for G-SIIs</li><li>• TLAC reporting and disclosure</li></ul>	<ul style="list-style-type: none"><li>• MREL requirement for all resolution entities and subsidiaries</li><li>• Institution specific TLAC adjustments</li><li>• Additional guidance (add-on) for MREL and TLAC</li><li>• MREL reporting and disclosure</li></ul>	<ul style="list-style-type: none"><li>• Buffer requirements</li><li>• MREL and TLAC are relevant for the determination of the maximum distributable amount (MDA)</li></ul>

## ***BRRD is modified to allow for a harmonized implementation of TLAC and MREL***

**Fig. 12 Overview of TLAC implementation requirements**

### Level of application

**In the resolution plan the Resolution Authority defines the resolution entities that have to comply with the minimum requirement.** The requirement has to be fulfilled at the resolution group level. Subsidiaries that are institutions are, EU subsidiaries that are financial institutions or holding companies may be subject to an individual requirement. The individual requirement can be waived.

### Requirement

**TLAC is a standard requirement for all EU-G-SIIs:** 18% RWA or 6,75% Leverage Ratio Exposure (90% for subsidiaries of non-G-SIIs) with the option to define institution specific adjustments + guidance (loss absorption/market confidence)

**MREL is an institution-specific requirement for all institutions** limited to a maximum of 2x (Minimum Own Funds Requirement + SREP buffer (P2R)) + guidance (loss absorption/market confidence)

### Eligibility criteria

**Liabilities need to mit several criteria in order to be eligible for TLAC & MREL,** defined within the new CRR. Instruments fully paid-up; not purchased or financed by group member, purchase not financed by the institution; subordinated (only for TLAC), not guaranteed or secured by group member; no netting rights; no incentives for early redemption; no early redemption clause for investor; call option only for issuer and subject to supervisory approval, repayment cannot be accelerated; interest independent from credit standing; PONV clause

### TLAC

loss absorption  
guidance

market  
confidence  
buffer

individual  
add-on

18%



**Fig. 13 Overview of MREL implementation requirements**

MREL	Excluded instruments
loss absorption guidance 	<p><b>Certain instruments are excluded from a bail-in and cannot count for TLAC &amp; MREL. A list of excluded instruments is defined in the CRR:</b></p> <p>Covered deposits; deposits with original maturity &lt; 1 year; deposits eligible for deposit guarantee; secured liabilities; client liabilities; fiduciary liabilities; institution liabilities with original maturity &lt; 7 days; system operator liabilities with remaining maturity &lt; 7 days; tax liabilities; employee liabilities; critical service liabilities; liabilities to the Deposit Guarantee Scheme; liabilities from derivatives; structured liabilities (eligible for MREL to a limited extent)</p>
market confidence buffer 	<p><b>TLAC holdings</b></p> <p><b>Interconnectedness within the banking sector is disincentivized.</b> G-SIIs need to deduct investment in TLAC instruments of other G-SIIs from their own TLAC if certain materiality thresholds are exceeded. Additional 5% threshold for trading positions (gross basis) maturity &lt; 30 days is introduced; if exceeded: Inclusion of non-significant holdings on net basis in 10% CET1 threshold for non-significant investments in Financial Sector Entities</p>
P2R	<p><b>Disclosure &amp; Reporting</b></p> <p><b>Eligible liabilities need to be reported and disclosed</b></p> <p>For TLAC, a semi-annual reporting and the disclosure of main features analogously to existing own funds; ranking in creditor hierarchy, amount of eligible and excluded liabilities is required. For MREL, at least annual reporting of eligible liabilities incl. composition of maturity profile and insolvency ranking and disclosure is required.</p>
8%	
P2R	
8%	

## ***Excursus: interconnections between TLAC & MREL, capital buffers, SREP and MDA***

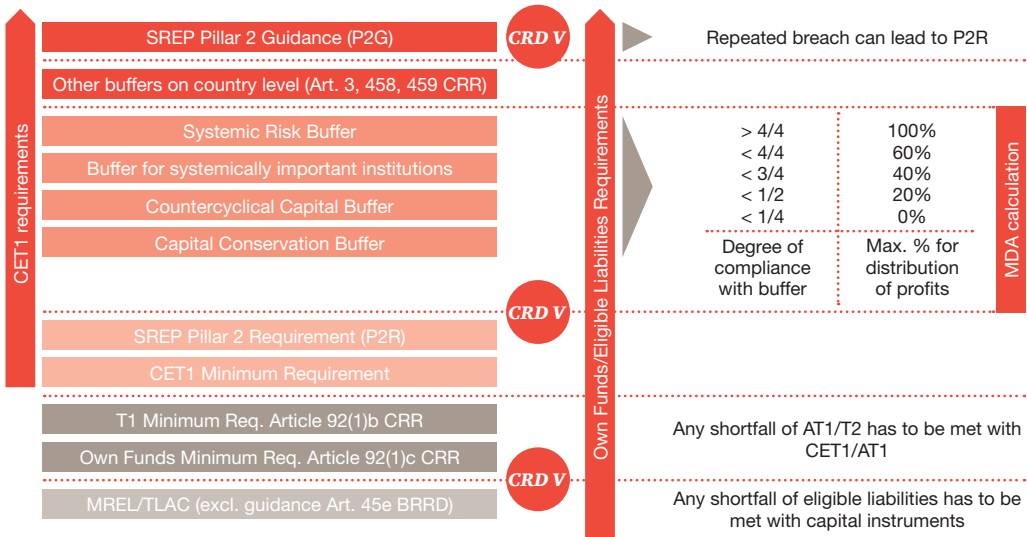
In line with the recent supervisory practice, the additional requirements resulting from SREP are subject to a distinction and split into an additional requirement that has to be met at all times (Pillar 2 Requirement, P2R) and a guidance that serves as a buffer for stress situations and economic downturns (Pillar 2 Guidance, P2G).

The Minimum Own Funds Requirements including P2R have to be met at all times, as well as the TLAC/MREL requirements for loss absorption and recapitalization.

Own Funds and eligible liabilities that are needed to meet the above mentioned requirements cannot be used to meet the combined buffer requirements and P2G.

Non-compliance with the buffer requirements leads to restrictions on the maximum distributable amount (MDA) for dividend and bonus payments. A repeated breach of P2G can lead to a Pillar 2 Requirement.

**Fig. 14 Interaction between TLAC, MREL, capital buffers, SREP and MDA**





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*Setting the stage  
for Basel IV*

## Fundamental Review of the Trading Book (FRTB) Thresholds and applicable approaches

Fig. 15 FRTB application and thresholds

	On- and off-balance sheet trading book business		
<b>Small Trading Book</b>	≤ 5%	≤ 50m EUR	Application of market risk approaches for FX, commodity risk. Position risk subject to credit risk capital charge
<b>Medium Trading Book</b>	≤ 10%	≤ 300m EUR	Permanent use of existing market risk standardised approach possible
<b>Large Trading Book</b>	> 10%	> 300m EUR	FRTB approaches to be applied, multiplier of 65% during first 3 years after application date

CRR II allows institutions to use combinations of the three approaches (current SA, FRTB-SA, FRTB-IMA) subject to some restrictions:

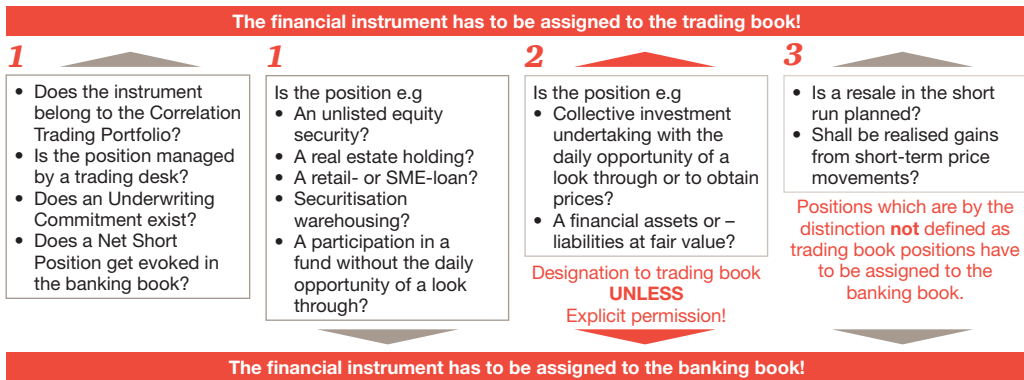
- In case the FRTB-IMA is used, it has to account for > 10% of all market risk capital requirements
- No combination between current SA and FRTB approaches allowed
- However, the current IMA may still be used as part of the CVA framework, even by FRTB banks

## FRTB: banking book/trading book boundary

CRR II basically copies the Basel Committee's proposals for the banking book/trading book boundary. However, in some instances the EU requires more instruments to be assigned to the trading book than BCBS 352:

- All financial assets and liabilities measured at fair value
- Collective investment undertakings if a daily look-through is possible or prices can be obtained on a daily basis

Fig. 16 CRR II banking book/trading book boundary



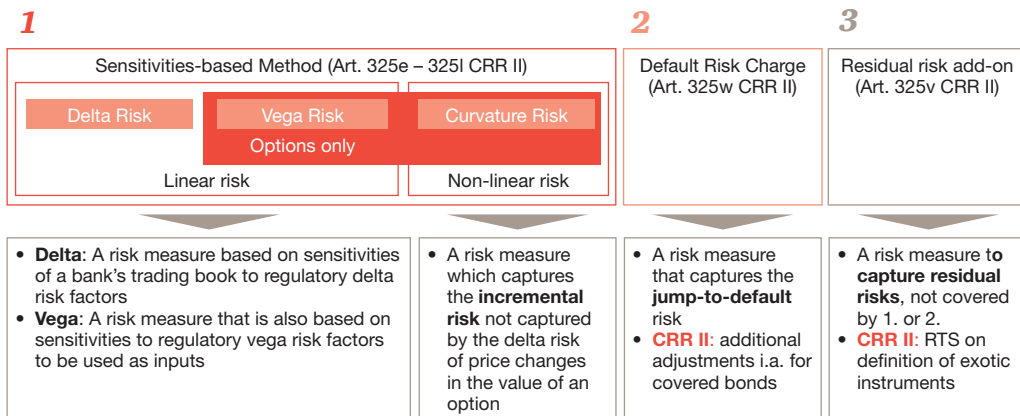
## ***FRTB: Revised standardized approach***

The draft CRR contains the revised standardized approach for market risk as described by the Basel Committee in BCBS 352. Changes as compared to the Basel text include:

- Preferential treatment for EU sovereigns and covered bonds when computing the Default Risk Charge
- Changes to the treatment of derivatives in the Default Risk Charge



**Fig. 17 Elements of the standardized approach**

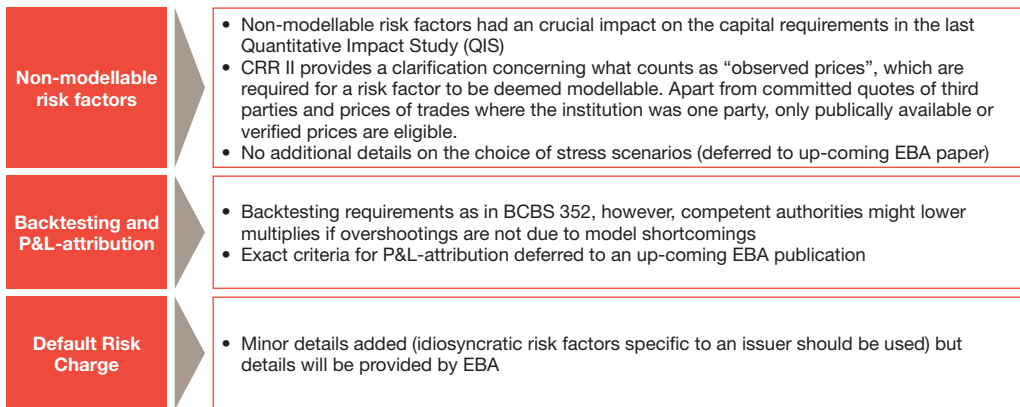


## ***FRTB: Revised internal model approach***

**Fig. 18 Main revisions to internal model approach**

<b>New risk measure</b>	<ul style="list-style-type: none"> <li>• Value at risk replaced by expected shortfall as primary risk measure</li> <li>• 97,5% instead of 99% quantile</li> </ul>	<b>Minor changes compared to Basel</b>
<b>Calibration to stress market condition</b>	<ul style="list-style-type: none"> <li>• Single quantity calibrated to worst period since 2005 instead of VaR and SVaR</li> </ul>	
<b>Different liquidity horizons</b>	<ul style="list-style-type: none"> <li>• Individual holding periods for different risk factors instead of 10 days for all</li> </ul>	
<b>New DRC</b>	<ul style="list-style-type: none"> <li>• Captures only default risk (no migration)</li> </ul>	
<b>New requirements for model approval</b>	<ul style="list-style-type: none"> <li>• Backtesting on desk level</li> <li>• P&amp;L attribution</li> </ul>	
		<ul style="list-style-type: none"> <li>• Concerning the revised internal models approach for market risk, the draft for the new CRR follows the final Basel paper (BCBS 352) very closely.</li> <li>• Some minor changes were introduced with respect to the liquidity horizons used to scale the Expected Shortfall (ES) calculated for the various risk factor classes:             <ul style="list-style-type: none"> <li>– Reduced liquidity horizon for EU sovereign debt (10d)</li> <li>– Reduced liquidity horizon for EU covered bonds (20d)</li> <li>– FX risk for non-EUR EU currencies (10d)</li> </ul> </li> </ul>

**Fig. 19 Selected revisions in detail**



## ***Standardized Approach for Counterparty Risk (SA-CCR)***

The SA-CCR approach has been introduced in 2014 as a final standard by the Basel Committee. The figure below shows its overall components, which have to be determined in order to calculate the exposure amount for derivatives:

**Fig. 20 Calculation approach for SA-CCR**

<b>Calculation of EAD using SA-CCR</b> $EAD_{SA-CCR} = \text{alpha} \times (\text{RC} + \text{Multiplier} \times \text{AddOn})$			
<b>Alpha</b>	<ul style="list-style-type: none"> <li>• Alpha = 1,4</li> <li>• Supervisory factor</li> <li>• Analogue IMM</li> </ul>		
<b>Replacement Cost</b>			
<ul style="list-style-type: none"> <li>• Current replacement costs</li> <li>• Calculation depending on secured/unsecured transactions</li> <li>• Considering parameters of collateral agreements for secured transactions</li> </ul>			
<table border="1" style="width: 100%; background-color: #d7ccc8;"> <tr> <td style="width: 50%;">                     No Variation Margin  <math>RC = \text{MAX} [V - C; 0]</math> </td> <td style="width: 50%;">                     Variation Margin  <math>RC = \text{MAX} [V - C; TH + MTA - NICA; 0]</math> </td> </tr> </table>		No Variation Margin $RC = \text{MAX} [V - C; 0]$	Variation Margin $RC = \text{MAX} [V - C; TH + MTA - NICA; 0]$
No Variation Margin $RC = \text{MAX} [V - C; 0]$	Variation Margin $RC = \text{MAX} [V - C; TH + MTA - NICA; 0]$		
<b>PFE</b>	<b>Multiplier</b>	<ul style="list-style-type: none"> <li>• Accounts for over-collateralization and negative mark to market values</li> <li>• Reduces add-on in these cases</li> </ul> $\text{MIN} \left\{ 1; \text{Floor} + (1 - \text{Floor}) \times \exp \left( \frac{V - C}{2 \times (1 - \text{Floor}) \times \text{AddOn}^{\text{aggregate}}} \right) \right\}$	
	<b>AddOn</b>	<ul style="list-style-type: none"> <li>• Potential future exposure increases of current exposure</li> <li>• Depends on the volatility of the underlying</li> </ul>	

## SA-CCR & simplified SA-CCR: taking account of proportionality

After consideration of SA-CCR requirements in supervisory quantitative impact studies, the European Commission decided to make the new approach a binding requirement for banks. Therefore, the commission has adopted the Basel Committee's revised SA-CCR as part of the CRR II and removed, as proposed by the Committee, the current exposure method and the standardized method. However, the CRR amendment is in line with proportionality considerations as proposed by the European Banking Authority (EBA). As a result, CRR II proposes three non-internal model approaches, based on materiality thresholds:<sup>1</sup>

Fig. 21 CRR II thresholds for non-internal model approaches

	Size of gross on- and off-balance sheet derivative business (relative)		Size of gross on- and off-balance sheet derivative business (absolute)	Simplified SA-CCR
Full SA-CCR (BCBS 279)	> 10% of total assets	or	> 150m EUR	<ul style="list-style-type: none"> <li>• Reduced consideration of collateral</li> <li>• Reduced possibilities for hedging</li> <li>• Supervisory prescribed maturity factors</li> <li>• Supervisory prescribed delta factors (+/- 1)</li> <li>• Multiplier set to 1</li> </ul>
Simplified SA-CCR CRR II	≤ 10% of total assets	and	≤ 150m EUR	
Original Exposure Method CRR II	≤ 5% of total assets	and	≤ 20m EUR	

<sup>1</sup> Some technical details and minor changes have been taking into account by the commission. In addition EBA mandates have been considered within SA-CCR requirements within CRR II.

## Transactions with Central Counterparties (CCP)

Fig. 22 CRR II treatment of transactions with central counterparties

Overview	<ul style="list-style-type: none"> <li>CRR II specifies and clarifies own funds requirements for exposures to non-QCCP and QCCP</li> <li>All BCBS 282 requirements were adapted in CRR II (new approach for QCCP (including a cap based capital requirement to non-QCCP) and no alternative calculation method for the default fund)</li> <li>In line with proportionality consideration for SA CCR, all non-internal approaches can be applied</li> </ul>	
Capital requirement (K)	<p style="text-align: center;"><b>Qualified CCP</b></p> $K_{QCCP} = \text{Min} \{ \text{Requirement for trade exposure}_{QCCP} + DF_{QCCP}; K_{Non-QCCP} \}$	<p style="text-align: center;"><b>Non-qualified CCP</b></p> $K_{Non-QCCP} = \text{Requirement for trade exposure}_{non-QCCP} + DF_{non-QCCP}$
Requirements for trade exposures	<ul style="list-style-type: none"> <li>EAD calculation via SA-CCR, simplified SA-CCR or Original Exposure Method</li> </ul>	
Default Fund	<ul style="list-style-type: none"> <li>Only one approach for prefunded contributions, which incorporates the size and quality of the QCCP, the CCR exposure of the CCP and the loss bearing waterfall</li> <li>Floor of 2%</li> </ul> $K_i = \max \left\{ K_{CCP} * \frac{DF_i}{DF_{CCP} + DF_{all\ members}}; 8\% * 2\% * DF_i \right\}$ <ul style="list-style-type: none"> <li>For unfunded contributions to DF a risk weight of 0% is applied</li> </ul>	<ul style="list-style-type: none"> <li>Full coverage of prefunded and unfunded contributions (in CRR I a factor of 1, 2 was applied)</li> </ul> $K_i = (DF_i + UC_i) * 12,5$ <p><i>(UC<sub>i</sub> = Unfunded contribution)</i></p>

## Large Exposure

**Fig. 23 CRR II treatment of large exposures**

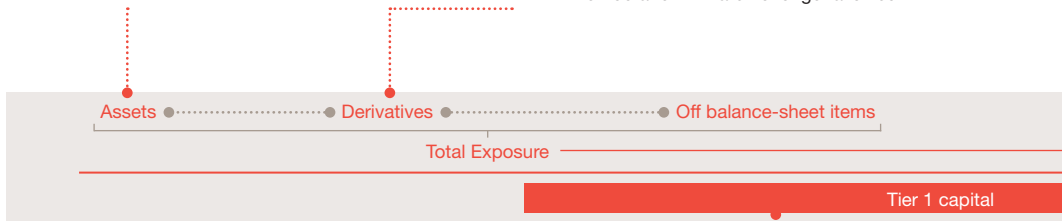
### Trading book

Offsetting long and short positions in different issues of the same client is not permitted when the short position is senior to the long position

### Counterparty credit risk

SA-CCR, simplified SA-CCR or OEM has to be used, as applicable

MtM-method and IMM are no longer allowed



### No Tier 2 capital allowed

The large exposure definition and the large exposure limit refer only to the institution's Tier 1 capital



### CRMT/collateral

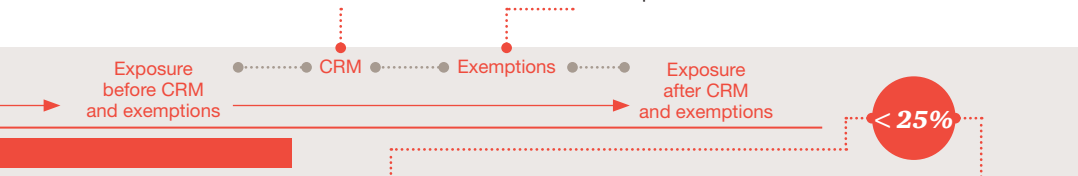
CRMT has to be applied for LE purposes accordingly when used for RWA purposes

Collateral effect has to be taken into account when calculating the exposure to the protection provider or issuer of the financial collateral

### Exemptions

Full exemptions for EU sovereign exposures will be repealed until 2022

Exemptions for trade exposures and default fund contributions will only be applicable for qualified central counterparties



### Limit breaches in exceptional cases

Institutions are required to report a plan for the timely return below the LE limit.

EBA develops GL to specify the exceptional cases, the time considered appropriate for returning to compliance and the relevant measures to be taken by the institutions

### Lower LE limit

G-SIIs are not allowed to incur exposures to another G-SII larger than 15% Tier 1

## *Other changes – Equity investments in funds*

### *Definition of Funds*

All collective investment undertakings (CIUs), including investment compartments thereof, which raise capital from a number of investors, with a view to investing it in accordance with a defined investment policy for the benefit of those investors

**Fig. 24 Treatment of investment funds**

Methods to calculate the risk weighted exposure amount of a CIU in the banking book	Regulated funds (UCITS or AIF that are allowed to be marketed in the EU)	Unregulated funds
Look-through approach (LTA)	All underlying exposures of the funds are risk weighted as if they were directly held by the institution	Not applicable
Mandate-based approach (MBA)	<p>In accordance with the limits set in the CIU's mandate and relevant legislation as a sum of on-balance sheet, off-balance sheet and derivative exposures</p> <ul style="list-style-type: none"> <li>• If LTA or MBA is performed by a third party a factor of 1.2 applies to the risk weighted assets</li> <li>• To account of the increased risk because the institution has to rely on a third party instead of its own information</li> </ul>	Not applicable
Fall-back approach (FBA)	Applicable risk weight = 1.250%	



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# *Challenges & Impacts*

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## Challenges & Impacts

Implementing CRD V and CRR II will be a major challenge for institutions in the years to come. While the **finalization of Basel III** builds on existing reporting requirements for Leverage Ratio and NSFR, the draft CRR II has to be analysed in detail to uncover hidden surprises that will impact the banks' planned ratios. Also, institutions will have to analyse the impact of the new rules on proportionality to profit from the reduced burden of reporting and disclosure, if applicable.

With regard to **Recovery and Resolution**, G-SIIs now see clearer the EU implementation of the FSB's TLAC rules. All other banks should update their current planning on MREL to take account of the revised rules. This may impact capital planning as well as the issuance of senior debt.

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The largest challenge by far will however be the implementation of the first parts of **Basel IV**. Nearly all parts of the proposal will have severe impacts on capital ratios or large exposure limit utilization and vastly increase the complexity of necessary calculations, especially with regard to market and counterparty risk. Once again, institutions have to analyse the impact of the EU's wording on proportionality to infer the level of their affliction. Especially medium-sized banks that do not fall below the proposed thresholds should start impact assessments and analyse the data availability for the calculation of FRTB and SA-CCR in 2017.

It is to be expected, that on the one hand side, further CRR drafts will be circulated in 2017 as the trilogue between EU Commission, Parliament and Council starts. On the other hand, it is likely that the Basel Committee will reach a compromise on the outstanding Basel IV issues such as credit- and operational risk. This may in turn lead to further proposals for the adoption within EU law. As a consequence, the regulatory tsunami is far from over and banks should prepare themselves for further impact assessments in the near future.





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# *Our Services*

### *Our Expertise*

Whether regarding the Basel Committee, EU-regulation or national legislation – we use our established know-how of the analysis and implementation of new supervisory regulation to provide our clients with high-quality services. Embedded into the **international PwC network**, we have access to the extensive knowledge of our experts around the world.

**PwC's international Basel IV Initiative** was established to support you in all aspects of getting compliant with the new regulatory requirements of the CRD V and CRR II as well as future changes certain to follow from the ongoing work of the Basel Committee.

PwC can draw on long lasting experience of implementing new regulatory requirements by supporting a number of banks in completing quantitative impact studies prior to the implementation of Basel II and Basel III and by the functional and technical implementation of **CRD IV and CRR**.

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