



CC&G

Basel III Final Standards

Risk Policy Team



CC&G

A EURONEXT COMPANY

April 2021

Regulatory Framework

Overview

Regulatory framework

- **International level:** Basel Committee on Banking Supervision
 - *Capital requirements for bank exposures to central counterparties (BCBS 279)*
 - *Standardised approach to counterparty credit risk (BCBS 282)*
- **EU level:** Regulation EU 876/2019, transposing Basel Final Standards, introduces amendments to Reg. EU 575/2013. **The new Regulation will become effective from 28th June 2021.**

With regards to Bank's exposure, Regulation EU 876/2019 identifies the same two exposures types envisaged by Regulation UE 575/2013:

Changed

Default Fund exposures

CCP Default risk
CMs Default risk

- Revised K_{CCP} calculation methodology, by transposing *Standardized Approach for measuring Counterparty Credit Risk* ("SA-CCR") for derivatives exposures (BCBS 279)
- Different calculation of Capital factor (c-factor), by transposing new *Capital requirements for bank exposures to central counterparties* (BCBS 282)

Unchanged

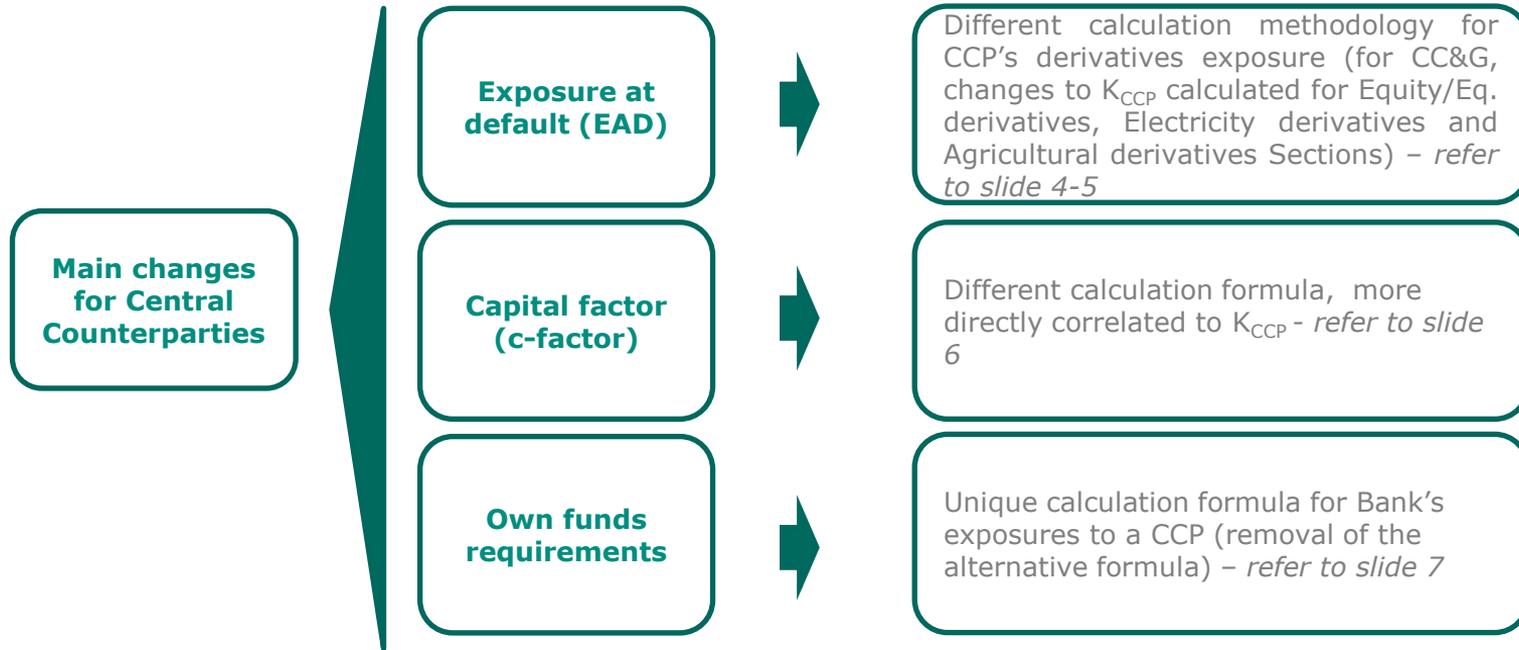
Trade exposures

CCP Default risk

- Trade exposures include **variation margin** due by the CCP to the Clearing Member or to the client, but not yet received, as well as **initial margin** posted
- If collateral is "**bankruptcy remote**" (i.e. if the CCP defaults, the Clearing Member does not lose the collateral), **the risk weight applied to the collateral is 0%**
- **A 0% risk weight is applied to margins collected by CC&G, both under *Interim Rules* and *Final Standards***

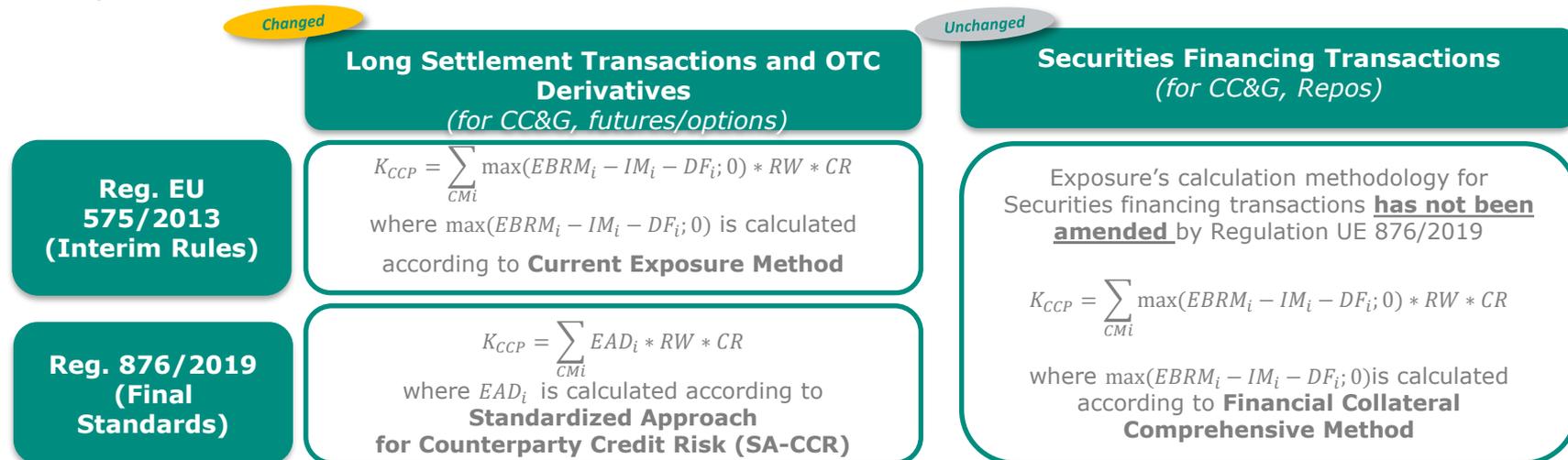
Basel Final Standards

Main Changes for Default Fund Exposures



Changes to EAD calculation

Comparison between Interim Rules and Final Standards



For derivatives exposures, the **New Standardized Approach (SA-CCR)** for measuring exposure at default (EAD) for counterparty credit risk (CCR) will replace both standardized methods in force: Current Exposures Method (CEM) and Standardized Method (SM).

Main objectives of the SA-CCR approach:

- Devise an approach suitable for a wide variety of derivatives transactions
- Address known limits of the CEM
- Improve the risk sensitivity of the capital framework

Exposures at Default under SA-CCR

The exposures under the SA-CCR consist of two components

Exposure at Default: $EAD = 1.4 * (RC + PFE)$

Replacement cost: $RC = \max(V - C; 0)$

The loss that would occur if a counterparty were to default at the present or at a future time, if closeout and replacement of transactions occur instantaneously

- From a CC&G perspective, V consists of CMs' net variation margins on Futures and net Options premiums.
- C is the overall collateral posted by the Clearing Member (covering Initial Margins and Default Funds). C includes also excess collateral.

Potential Future Exposure $PFE = m * AddOn$

Potential change in value of the trades during the period between the last exchange of collateral before default and replacement of the trades in the market

- m allows reduction of PFE, how much more collateral is posted by CMs over the required amounts.
- **AddOn:**
 - represents a potential conservative increase in CCP's exposure, over the time horizon needed to close-out positions of the defaulting CM
 - allows a full risk offset when trades lie within the same underlying and a partial offset between trades stemming from different underlying
 - it is a function of trade's adjusted notional, time horizon needed for position's close-out, product's delta and a supervisory factor reflecting volatility.

Changes to C-factor Calculation

Calculation of c-factor under *Interim Rules* vs. *Final Standards*

**Regulation EU 876/2019
(Final Standards)**

$$c - factor = \max\left(\frac{K_{CCP}}{DF_{CCP} + DF_{CM}}; 8\% * 2\%\right)$$

**Regulation EU 575/2013
(Interim Rules)**

$$c - factor = \left(1 + \beta * \frac{N}{N - 2}\right) * \frac{K_{CM}}{DF_{CM}}$$

Under Final Standards:

- A floor on capital coefficient is established (equal to 0.16%)
- Concentration Factor β is no longer applied
- K_{CCP} is directly involved in c-factor calculation
- K_{CCP} is calculated at sub-account level

where

- DF_{CM} = total DF contributions
- DF_{CCP} = CCP Skin-in-The-Game
- K_{CCP} = CCP Hypothetical Capital
- K_{CM} depends on K_{CCP} level compared to DF_{CCP} and DF_{CM}

Changes to calculation of own funds requirements for exposures to a CCP

Interim Rules: pursuant to Regulation UE 575/2013 (Part Three, Title II, Chapter 6, Section 9), Banks can choose between two methods to calculate their capital requirement:

Method 1

2% RW against 'Trade Exposure' +
Pre-funded Default Fund multiplied by '**C-Factor**' (provided by CCP)

~~Method 2~~

Minimum of:

- 2% RW against 'Trade Exposure' + 1.25% RW against pre-funded Default Fund
- 20% RW against 'Trade Exposure'

Final Standards removed the possibility to opting for **Method 2**.

By way of derogation from the above, if collateral is "bankruptcy remote" (i.e. if the CCP defaults, the Clearing Member does not lose the collateral), **the risk weight applied to the collateral is 0%**

A 0% risk weight is applied to margins collected by CC&G, both under "Interim Rules" and "Final Standards".

Results for Equity Derivatives Asset Class

- Simulation on Equity Derivatives C-factor under SA-CCR, highlight **very low risk weights** to calculate each CM Capital Requirement (Jun-Aug 2020)
- In the simulation period C-factor settles down to the floor value, equal to 0.16%
- Under *Final Standards* c-factor is lower than under *Interim Rules*
- The prudential amount of CC&G Default Funds contributes to have very low levels of C- factors
- **Central Clearing through CC&G allows significant savings in Capital Requirements**

Reference date	C-factor comparison	
	Interim Rules	Final Standards
Jun-20	0.29%	0.16%
Jul-20	0.34%	0.16%
Aug-20	0.34%	0.16%

CC&G Final Standards Monthly Reporting

In order to provide CC&G participants with an earlier assessment of their own funds Requirements pursuant to the upcoming SA-CRR, CC&G discloses on LSEG website the monthly figures for Capital Requirements calculation with Final Standards, under the following link:

<https://www.euronext.com/en/post-trade/ccg/risk-management/basel-iii-reporting>



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