SA-CRR: Why it needs to be revisited in the course of the transposition of the agreement on the finalization of Basel III

Summary:

- The new Standardized Approach for Counterparty Credit Risk (SA-CRR) is overly conservative.
- Its impact would be amplified drastically via the Output Floor that is going to be implemented in the EU as part of the transposition of the agreement on the finalization of Basel III, under CRR III.
- If not properly addressed in CRR III, it will negatively affect the availability on the market and the pricing of derivatives hedging, in particular for end users like corporates and pension funds.
- The US authorities decided on November 19, 2019\(^1\) to deviate from the Basel standard, among others, by removing the alpha factor from the calculation of Exposure at Default (EAD) for derivative contracts with commercial end-users. This deviation, in isolation, will reduce the Exposure At Default (EAD) of US banks with commercial end-user counterparties by \(\frac{-a}{1+a} = -28.5\%\). If not reopened at the international level, the calibration of the SA-CRR should be revised at the EU level before the entry into application of the Output floor, in order not to impose constraining undue capital requirements on EU banks, which would impact their competitiveness.

What are derivatives and why are they an important risk management tool for corporates?

Generally speaking, derivatives are financial instruments whose value is reliant upon or depends on the value of another asset or group of assets, usually referred to as underlying. As such, the main – but not only – purpose of derivatives is to hedge (i.e. reduce or even fully eliminate) the risks associated with those underlyings and positions related to them. Very common underlyings are for example currencies, interest rates, stocks, bonds, commodities or market indexes.

\(^1\) https://www.federalreserve.gov/newsevents/pressreleases/bcreg20191119c.htm
Assume, for example, a company has to settle liabilities whose amount depends on a floating interest rate. If this interest rate increases over time, the company will have to make higher interest payments, accordingly. To get rid of that risk, the company can use a derivative. Entering into an interest rate swap with a bank where it pays a fixed rate to the bank and, in return, receives the amounts corresponding to the floating rate payments needed to settle its liabilities.

As another example, think of a large manufacturing company based in the EU. This company uses raw materials as input factors that are purchased from other European companies and have to be paid for in EUR. The final product is then exported to the US. This business model gives rise to foreign exchange risk. Assume, the company expects to receive the export proceeds a year from now in USD and is concerned that the USD may have devalued against the EUR. So, when converting the USD into EUR in one year from now, the company would end up with less EUR to pay for the input factors and thus suffer a loss of profit. In this case, the company could use a derivative to lock in a certain exchange rate. It could, for example, enter into a currency forward contract with a bank where the bank agrees to exchange USD for EUR at a certain rate in one year from now.

These simple examples illustrate why derivative instruments are important. Banks use them to take on all kinds of risks for their customers and thereby provide an enormous added value for the wider economy.

**What is Counterparty Credit Risk (CCR) and what is the purpose of SA-CCR?**

Counterparty Credit Risk (CCR) is the risk that counterparties to derivatives may default before the final settlement of the transaction cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty had a positive economic value at the time of default. As mentioned above, the economic value of a derivative transaction depends on the value of the underlying. Therefore, changes in the value of the underlying translate into changes in the value of the derivative. To assess how large the potential loss could be, in a first step the value of the derivative at the time of default has to be appraised, commonly referred to as exposure at default (EAD) or exposure value for short. This is where SA-CCR comes into play.

The Basel Committee defined a Standardized Approach for the calculation of Counterparty Credit Risk (SA-CCR) EAD in March 2014. The “new” standardized approach “SA-CCR” replaces both the Current Exposure Method (“CEM”) and the former Standardized Method (“SM”) in the capital adequacy framework. However, one deficiency which arose from the CEM and SM was that those two approaches were unable to recognize the risk mitigation benefits arising from the exchange of collateral. This deficiency was particularly relevant given that since the post-crisis reforms the volume of trades being cleared and margined grew significantly. Therefore, stakeholders rightly advocated that this shortcoming of these two methods that needed to be addressed.

The purpose of SA-CCR, as envisioned by the Basel Committee, was to develop a more granular and risk-sensitive methodology. The Basel Committee designed the SA-CCR to achieve an appropriate differentiation between margined and unmargined trades, which at the same time would also recognize the benefits of netting.
The US legislator decided on November 19, 2019 to deviate from the Basel standard, by removing the alpha factor from the calculation of exposures with commercial end-users under the SA-CCR.

**Why SA-CCR is a key element of capital requirements for credit institutions and why it is closely connected to the implementation of the agreement on the finalization of Basel III?**

SA-CCR itself has already been implemented in Regulation (EU) 2019/876 (CRR II) and thus will be applicable from June 2021. However, most of its impact will only be effective when the Output Floor (i.e. BCBS d424) comes into force via the implementation of the latest Basel reforms in the EU.

As of now, if authorized by supervisory authorities, institutions can in principle use a modelled approach, the so-called Internal Model Method (IMM), instead of SA-CCR for measuring their exposure to Counterparty Credit Risk. But, once the output floor, comparing capital requirements calculated under modelled approaches and standardized approaches, will have been introduced in Europe, all banks actually using the modelled approach will have to calculate their capital requirements under the SA-CCR methodology besides the IMM. The exposure at default (EAD) would [more than] double on average.

Such an increase in the exposure measurement is amplified by the new standardised credit risk framework (SA) that has to be used for the purpose of the Output Floor instead of the Internal Ratings based Approach (IRB). The standardised credit risk framework imposes penalizing risk weights (RWs) to corporates and financial institutions alike. This translates into an additional 2 times average increase of RWA when incorporating standardised Basel III credit RWs via the Output Floor.

Consequently, the resulting full-SA RWAs for derivatives are over four times the RWAs under internal approaches. In the event that the Output Floor turns out to be binding overall, the bank will be forced to replace the Counterparty Credit Risk RWA derived under internal approaches with 72.5% times the capital requirement under the standardised approach. Eventually, this means that the impact of the output floor is around x3 (72.5% x4).

Moreover, SA-CCR is eventually going to be used in many other areas across the prudential framework (see Annex). As a result, it will have additional impacts via various other channels as well. But, the full impact of SA-CCR on the EU real economy has never been assessed properly.

**Quantitative Impact Studies**

To assess the side effects of SA-CCR on the revised Basel requirements defined by BCBS d424, we ask the European Commission to include it in the impact assessment which is going to be performed shortly, before any transposition of the international agreement. This is all the more relevant given that the impact likely seems to be significant. A recent

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2 https://www.federalreserve.gov/newsevents/pressreleases/bcreg20191119c.htm
study\textsuperscript{3,4}, which was based on a sample of listed German companies and conducted by the Deutsches Aktieninstitut, estimates – under the assumption that costs resulting from regulation are being passed on to customers – additional hedging costs for non-financial companies between around 112 to 167 million Euro per year that arise from the SA-CCR framework in conjunction with the output floor. The European Commission’s quantitative impact assessment would help to estimate the EU wide costs of the SA-CCR framework.

**Why the regulation with regard to Counterparty Credit Risk is particularly sensitive in Europe?**

Compared to their US counterparts, many EU Non-financial Counterparties (‘NFCs’) have much higher Foreign Exchange (‘FX’) exposures due to the importance of imports and exports denominated in US dollar, since it is the dominant currency in many markets. In many sectors, such as aeronautics and commodities, European NFCs orders are denominated in USD, whereas the functional and operating currency is the euro. Indeed, the note “The euro as an international currency”\textsuperscript{5} published by the Bruegel institute on December 2018 and the article “The Challenges of Dollar Dominance”\textsuperscript{6} published by “the Bridge” on September 6\textsuperscript{th}, 2019 show the dominance of the US dollar as the world’s leading currency.

Derivative contracts between banks and corporates are usually unmargined (i.e. there is no regular exchange of variation margin to cover changes in market values). These very transactions are particularly penalized by SA-CCR. Establishing margining agreements with corporate clients is not a viable option to alleviate this problem. That would usually be too much of an operational burden for corporates. Moreover, while reducing Counterparty Risk for the bank, it would create a liquidity risk for the client.

Any increase of CCR capital charges could severely impact the availability on the market and pricing of derivatives hedging for end users, notably NFCs and pension funds. Alternatively, NFCs could be forced by banks to setup margin calls in order to reduce CCR exposure which would either destabilize their liquidity or consume unwarranted credit lines (creating credit risk anyway). Not a viable option.

**What should be done**

As we have no clear visibility on a review of SA-CCR by the BCBS at international level, we urge the EU regulator to revise SA-CCR in CRR III.

**Proposed amendments:**

a) **Need for removing the application of Alpha Factor**

The scaling factor of 1.4, set by the Basel Committee for IMM in 2005 and calibrated with studies dating back to 2003, does not reflect the current market environment, in particular


\textsuperscript{4}For more information on the sample and the simplifying assumptions made, please see Annex I of the study


\textsuperscript{6}https://www.mercatus.org/bridge/commentary/challenges-dollar-dominance
the shift towards increased clearing and collateralization and the larger portfolio diversification effects.

In addition, the alpha factor was set in part to cover for model risk but also to capture any positive correlation between the exposure and the counterparty’s credit quality. Hence, there is no rationale for the alpha factor to be applied to the replacement cost (RC), i.e. the current positive market value of the transactions which is a given. Therefore, until a sound revision of SA-CCR is done at international level, we recommend to set the alpha factor at 1 in the EU regulation.

Based on the same rationale, the alpha factor should not apply to the Leverage Ratio exposure (or at least should not apply to exposure facing NFC-counterparties to align leverage ratio methodology between EU & US banks and allow for a level playing field).

b) **EU transposition of the refinements brought by the Consolidated Basel Framework should be included in CRR III**

The Consolidated Basel Framework\(^7\) published in April 2019 proposes a refinement relative to multiple margin agreements under a same netting agreement (CRE52.74, FAQ1). This refinement defined by the International agreement should be included in the update of Regulation (EU) 2019/876 (i.e. overriding Articles 274(4)).

c) **Consistent large exposure capital requirement for EU and US banks should be ensured by aligning CRR III to US final rules**

In the “Standardized Approach for Calculating the Exposure Amount of Derivative Contracts” published on November 2019, the Federal Reserve, the FDIC\(^8\) and the OCC\(^9\) maintained the use of IMM for calculating the exposure value of derivatives in the context of the Large Exposure ratio, whereas BCBS requires the use of SA-CCR.

EU authorities required few months ago under Regulation (EU) 2019/876, institutions to only use SA-CCR in the context of calculating the Large Exposure ratio. The divergence of regulatory approach between the EU and the US puts EU banks at a disadvantage and will ultimately make the EU real economy overly dependent on US banks for its financing and hedging needs. This is all the more worrying since European finance and investment banks (FIBs) already lost 10 points of market share in the last 10 years in the EU, to the almost exclusive benefit of American competitors (please see the report from the Bruegel Institute “The United States dominates global investment banking: does it matter for Europe?” March 7\(^{th}\), 2016\(^{10}\)). In order not to amplify this trend, EU authorities should, at least, align the EU regulation for large exposure ratio with the US framework.

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\(^7\) [https://www.bis.org/basel_framework/](https://www.bis.org/basel_framework/)

\(^8\) Federal Deposit Insurance Corporation

\(^9\) Office of the Comptroller of the Currency

\(^10\) [https://bruegel.org/2016/03/the-united-states-dominates-global-investment-banking-does-it-matter-for-europe/](https://bruegel.org/2016/03/the-united-states-dominates-global-investment-banking-does-it-matter-for-europe/)
Annex

Annex I: Use of SA-CCR throughout the prudential framework\textsuperscript{11}

The impacts in blue are related to CRR2 (i.e. Regulation (EU) 2019/876)
The impacts in green are related to the future CRR III

\textsuperscript{11} The graphic was taken from the paper of ISDA and FIS titled "SA-CCR: Why a change is necessary"
About EBF

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