IMPACT OF THE NEW CVA RISK CAPITAL CHARGE

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1. Introduction

In December 2017, the Basel Committee of Banking Supervision (BCBS) published the regulatory framework "Basel III: Finalising post-crisis reforms" (BCBS 424, see [6]) including new rules for the calculation of CVA risk capital, in an attempt to

- ensure that all important drivers of CVA risk, including CVA hedges, are covered in the Basel regulatory capital standard
- align the capital standard with the fair value measurement of CVA applied under various accounting regimes
- ensure consistency with the proposed revisions to the market risk framework under the Basel Committee's Fundamental Review of the Trading Book (BCBS 352 and 457, see [1])

This paper highlights the key differences between current and future calculation approaches for regulatory CVA risk capital charges. The Basel Committee proposes two new CVA risk capital frameworks[1], to acknowledge banks' different capabilities regarding the computation of CVA sensitivities:

- **the standardized approach (SA-CVA)**, which is based on CVA sensitivities
- **the basic approach (BA-CVA)**, based on a formula similar to the current standardized method

In section 2, we define different sample portfolios as well as a market data environment which we then use to calculate example CVA risk capital requirements for the different approaches. In section 3, we present and discuss our calculation results. We conclude by summarizing and by recommending courses of action.

Current Standardized Approach

The current standardized approach for the calculation of the CVA risk capital charge has been implemented as part of the Capital Requirements Regulation (CRR, see [9], article 384); the corresponding formula for an unhedged portfolio is:

$$K_{\text{CVA}} = 2.33\sqrt{h}\,\sqrt{\left(\sum_i 0.5\cdot w_i\cdot M_i\cdot \text{EAD}_i\right)^2+\sum_i 0.75\cdot w_i^2\cdot\left(M_i\cdot\text{EAD}_i\right)^2}$$

where:

- h is the risk horizon, i.e. 1 year
- i is the considered counterparty
- w_i is the counterparty risk weight based on rating class (1 to 6)
- M_i is the effective maturity of the set of transactions with counterparty i
- EAD_i is the regulatory exposure for counterparty i, determined according to one of the regulatory methods (such as e.g. the Current Exposure Method)

Future Basic Approach

Banks must use the BA-CVA, which closely relates to the current standardized method unless they receive approval from their relevant supervisory authority to use the SA-CVA. Improvements to the current standardized approach include a better recognition of eligible credit risk hedges. Exposure hedges will remain excluded from capital charge calculations in the BA-CVA. The formula for the basic approach in its reduced form (without CDS or CDS index hedges) is (see [6]):

$$K_{\text{reduced}} = \sqrt{\left(\rho\cdot\sum_c SCVA_c\right)^2+\left(1-\rho^2\right)\cdot\sum_c SCVA_c^2}$$

where:

- $\rho = 0.5$
- c is the considered counterparty
- $SCVA_c$ is the CVA capital requirement that counter party c would receive if considered on a stand-alone basis, calculated as: $SCVA_c = \frac{\text{RW}_c}{\alpha}\cdot\sum_{NS\in c} M_{NS}\cdot \text{EAD}_{NS}\cdot \text{DF}_{NS}$
- RW_c is the counterparty risk weight based on credit quality (grade) and sector (similar to SA-CVA)
- EAD_{NS} is the regulatory exposure at default of the netting set NS, determined according to the SA-CCR (see [8])
- M_{NS} is the effective maturity of the netting set NS
- DF_{NS} is the supervisory discount factor[2] of the netting set NS

1 The internal model approach IMA-CVA, which was discussed in a consultative document (BCBS 325, see [2]) and in the CVA QIS (see [4]), has been eliminated later on; the elimination was announced in a consultation paper regarding credit risk RWA (BCBS 362, see [5]) and confirmed in BCBS 424 ([6]). A further approach may be followed by banks with less than 100 billion EUR notional in uncleared bilateral derivatives. These may choose to set the CVA risk capital equal to their capital requirement for counterparty credit risk (BCBS 424, see [6]).

2 For banks using the IMM to calculate EAD, the supervisory discount factor is set to 1.

- α is the so-called conversion factor which is defined for CCR capital in the IMM and in the SA-CCR; it is currently set to 1.4

Differences between the current standardized approach and the basic approach are further outlined in section 3, where the resulting quantitative impact is discussed.

Future Standardized Approach (SA-CVA)

The new standardized approach for CVA risk (SA-CVA) is based on CVA sensitivities, following the idea and principles of the standardized approach for market risk (SA-TB) defined as part of the FRTB (see [1]). In contrast to SA-TB, banks need supervisory approval to use SA-CVA and the following requirements must be fulfilled (see [6]):

1 The calculation of regulatory CVA and CVA sensitivities from predefined market risk factors must be based on the simulation of exposure paths (discounted with the risk-free interest rate).

2 Default probabilities must be market-implied and the credit spreads of illiquid counterparties must be approximated with a suitable method.

3 The bank must have a dedicated CVA desk or similar function responsible for risk management and hedging of CVA.

Banks qualifying for SA-CVA need to follow general principles to calculate regulatory CVA. The exposure scenarios must be calculated from the same models, calibration, market, and transaction data as used for accounting CVA (and/or front-office CVA). Model calibration must be carried out with respect to market-implied parameters wherever possible. The recognition of collateral requires the capturing of all relevant contractual features and a margin period of risk with a supervisory floor of at least 10 business days. The requirements on documentation, independent validation, and processes show similarities to those applicable to internal model banks (compare IMM-CCR).

Generally, CVA risk assumes that the bank itself is default risk-free. In particular, it disregards the debt valuation adjustment (DVA).

The formula for regulatory capital based on SA-CVA is:

$$K_{\mathrm{CVA}} = m_{\mathrm{CVA}} \cdot \sqrt{\sum_b K_b^2 + \sum_b \sum_{c \neq b} \gamma_{bc} \cdot K_b \cdot K_c}$$

The multiplier m_{CVA} has default value 1.25 but may be increased by the bank's supervisory authority, e.g. to capture wrong way risk, and the γ_{bc} are regulatory correlation parameters (see [6]). The so-called bucketed capital charges K_b is defined as:

$$K_b = \sqrt{\left(\sum_{k \in b} WS_k^2 + \sum_{k \in b} \sum_{l \in b, l \neq k} \rho_{kl} \cdot WS_k \cdot WS_l \right) + R \cdot \sum_{k \in b} \left(WS_k^{\mathrm{Hdg}} \right)^2}$$

These are based on weighted sensitivities WS_k as well as intra-bucket correlation parameter ρ_{kl}, and R is the hedging disallowance factor, set to 0.01, that prevents the possibility of perfect hedging of CVA risk.

2. Sample Calculations

To carry out sample calculations we define synthetic portfolios and consider actual market data[3] in order to obtain a realistic assessment of potential CVA risk capital charges. Our calculations of SA-CVA and BA-CVA capital charges are based on the risk weights that have been introduced in the latest BCBS paper (BCBS 424, see [6]).

Sample portfolios and market data

Our sample portfolios consist of interest rate swaps (EUR) and cross currency swaps (USD/EUR) and cover typical maturities and moneyness levels. They include the following spot starting trades:

A. Vanilla swap

- Currency: EUR
- Notional: 100m
- Maturities: 1y, 4y and 10y
- Pay: annual fixed rate, fixed AT PAR[4]
- Rec: bi-annual floating rate, fixed at Euribor 6M

B. Cross currency swap

- Currency: EUR/USD
- Notional[5]: 100m EUR vs USD amount corresponding via spot FX
- Maturities: 1y, 4y and 10y
- Pay: bi-annual floating rate, fixed at Euribor 6M
- Rec: bi-annual floating rate, fixed at USDLibor 6M

3 This market data reflects a snapshot taken as of the end of October 2017.

4 We assume trades at par to have a market value slightly positive, ergo NGR is set to 1.

5 The notionals of Trade B are assumed to be exchanged at the start and maturity of the swap.

C. Same swap legs as Trade A but with fixed rate = AT PAR · 1.2 and maturity 10y

D. Same swap legs as Trade A but with fixed rate = AT PAR · 0.8 and maturity 10y

All calculations are carried out using the regulatory formulas that apply in the non-hedged case. Both the uncollateralized and the collateralized case (with and without initial margin) are considered. The CSA is assumed to have a minimum transfer amount (MTA) of 500k EUR[6], a bilateral threshold of 0 and a margin period of risk (MPOR) of 10 business days. Initial margin is assumed to cover the 99% confidence interval of the clean PnL over the MPOR, in line with BCBS 317[7] (see [7]).

For the sample calculations, we consider two different types of counterparties:

1 A financial counterparty with an investment grade rating. Interbank portfolios typically benefit from significant netting effects, and they are generally collateralized, with the collateral mitigating exposures at default.

2 A corporate counterparty with an investment grade rating. Portfolios with corporates are generally smaller, with no large netting effects and no collateral in place. We point out that the exemption of certain corporate counterparties with respect to CVA risk, which is currently valid under European regulation, is not recognized in this paper.

The following market data as of 30 October 2017 is used for the calculations:

- Interest rate (IR) curves for both currencies (discounting via EONIA and USD FEDFUNDS and projection of forward rates via USDLibor and Euribor)
- IR volatilities based on co-terminal ATM swaptions up to 30 years
- EUR/USD FX spot, FX basis curve, FX volatilities up to fifteen years
- A flat CDS spread of 40 bps[8] for both the financial and the corporate counterparty
- A generic recovery rate of 40% for PD computations and CVA computations
- Realistic correlations for IR and FX, based on a 4Y history of zero rates and FX spot rates

Simulation approach

For BA-CVA and SA-CVA, we implement a framework that complies with the standards and definitions laid out in the finalized BCBS framework (BCBS 424, see [6]). For CVA sensitivity calculations, we use a hybrid Hull-White model with one driving Brownian motion per IR curve and one driving Brownian motion per FX rate. Exposures, variation margin and initial margin (IM) are simulated within the same Monte Carlo framework. The pathwise simulation of IM is based on the Nadaraya-Watson kernel regression method [13]. As required by BCBS 424, sensitivities are based on 1 bp tenor shifts for IR and credit spread delta and on relative 1% shifts for FX delta, as well as relative parallel 1% shifts for IR and FX volatilities for vega sensitivities. All calculated sensitivities are used as an input to our aggregation tool, which computes the CVA risk capital charges. An important additional input for the calculation of capital charges is given by each counterparty's risk weight. Our selection of investment grade financial and corporate[9] counterparties leads to the following counterparty risk weights for the current standardized approach and the future basic approach, and credit spread delta risk weights for the future standardized approach:

Approach	Financial	Corporate
Current Standardized Approach	1,0%	1,0%
BA-CVA	5,0%	3,0%
SA-CVA	5,0%	3,0%

Table1: Risk weights for the current and future approaches

6 According to BCBS 317 (see [7], 2.3), "all margin transfers between parties may be subject to a de-minimis minimum transfer amount not to exceed €500,000".

7 The threshold of the initial margin is set to zero (BCBS 317 [7] allows max. €50m) and it is assumed that Trade B is not subject to the FX notional exemption (which may be applied to cross currency swaps according to BCBS 317 [7]).

8 For reasons of generality and comparability, we use an artificial CDS spread instead of actual market data.

9 The corporate is assumed to belong to one of the following sectors: basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying, consumer goods and services, transportation and storage, administrative and support service activities.

3. Calculation Results

Current CVA risk capital charge

We first compute current CVA risk capital charges, using the methodology described in article 384 of the CRR (see [9]), ignoring the corporate exemption. We calculate EADs according to the Current Exposure Method (CEM) as described in article 274 of the CRR[10] and we recognize netting according to article 298 of the CRR. Since we assume the same credit quality “3” for both counterparties, we obtain identical risk weights of 1% and, thus, identical CVA risk charges.

Note that only Trade D has positive market value, resulting in a difference between collateralized and uncollateralized replacement costs.

10 In the CRR, the CEM is referred to as the Mark-to-Market method. IM is not mentioned in this method, whence we do not distinguish between collateralization with or without IM for the current CVA risk capital charge.

Trades	**No CSA**	**CSA**
Trade A 1y	11,364	11,364
Trade A 4y	42,236	42,236
Trade A 10y	275,035	275,035
A {1y,4y,10y} netted	257,697	257,697
Trade B 1y	113,635	113,635
Trade B 4y	422,357	422,357
Trade B 10y	1,375,175	1,375,175
B {1y,4y,10y} netted	1,803,880	1,803,880
Trade C 10y	110,014	110,014
Trade D 10y	584,132	366,713

Table 2: Calculation results for the CVA risk capital charge under the current standardized approach

	EAD CEM		**EAD SA-CCR**		
Trade	**No CSA**	**CSA**	**No CSA**	**CSA**	**CSA + IM**
Trade A 1y	500,000	500,000	682,811	904,836	640,221
Trade A 4y	500,000	500,000	2,537,639	1,461,200	330,465
Trade A 10y	1,500,000	1,500,000	5,508,517	2,352,517	654,945
A {1y,4y,10y} netted	2,500,000	2,500,000	8,728,955	3,318,565	1,103,119
Trade B 1y	5,000,000	5,000,000	5,599,966	2,379,966	1,952,070
Trade B 4y	5,000,000	5,000,000	5,600,083	2,380,000	955,881
Trade B 10y	7,500,000	7,500,000	5,599,890	2,379,890	513,034
B {1y,4y,10y} netted	17,500,000	17,500,000	16,799,897	5,739,897	2,700,504
Trade C 10y	600,000	600,000	4,452,031	1,522,948	349,993
Trade D 10y	3,185,768	2,000,000	7,868,646	4,012,646	1,310,253

Table 3: EADs for CEM and SA-CCR for different trades and maturities

Basic CVA Risk	Financial			Corporate		
Trades	**No CSA**	**CSA**	**CSA + IM**	**No CSA**	**CSA**	**CSA + IM**
Trade A 1y	23,786	31,521	22,303	14,272	18,913	13,382
Trade A 4y	328,568	189,193	42,788	197,141	113,516	25,673
Trade A 10y	1,548,166	661,174	184,072	928,900	396,704	110,443
A {1y,4y,10y} netted	1,379,170	524,331	174,292	827,502	314,599	104,575
Trade B 1y	195,081	82,909	68,003	117,049	49,745	40,802
Trade B 4y	725,088	308,158	123,766	435,053	184,895	74,259
Trade B 10y	1,573,846	668,867	144,188	944,308	401,320	86,513
B {1y,4y,10y} netted	2,654,374	906,901	426,678	1,592,625	544,140	256,007
Trade C 10y	1,251,241	428,024	98,365	750,745	256,814	59,019
Trade D 10y	2,211,479	1,127,752	368,246	1,326,887	676,651	220,947

Table 4: Calculation results for future BA-CVA risk capital charge based on SA-CCR

Future BA-CVA charge

Our calculations for the future basic approach (BA-CVA) are based on EAD figures derived from the new standardized approach for CCR capital (SA-CCR) presented in BCBS 279 (see [8]), which was scheduled to become effective by January 1, 2017.[11]

The SA-CCR provides a more risk sensitive approach than the CEM, it recognizes netting and margin agreements in a better way, and it incorporates the IMM multiplier α to account for model inaccuracies. Table 3 demonstrates that for interest rate swaps without CSA, the SA-CCR EAD is significantly higher than the EAD implied by the CEM. It also shows that while the CEM recognizes CSAs only to a small degree, the SA-CCR acknowledges CSAs in a more accurate way.[12]

Let us note that the SA-CCR requires a mapping of every trade to the risk category representing the trade's main risk driver. To this end, we regard the FX rate EUR/USD as the main risk driver[13] of the cross currency swap B.

The resulting CVA risk charges for BA-CVA, which will be compared to the other approaches further on, are presented in Table 4.

In addition to different EADs, the general differences between the current standardized approach and the future basic approach are the following[14]:

- risk weights for different counterparty sectors from the current range of 0.7% to 10% change to a new range of 0.5% to 12%
- there is a reduction by the conversion factor α =1.4 and the factor 2.33 does not appear explicitly any more

11 We point out that the SA-CCR has still not been completely adopted by many countries, including countries in the European Union (see [3]). SA-CCR is included in the CRR2 (see [10]), which entered into force in June 2019. The rules need to be applied by banks two years later.

12 For trade A 1Y, the CSA increases the SA-CCR EAD, which is due to the CSA's minimum transfer amount (MTA). For longer maturities, such effects are dominated by the PFE terms.

13 The method for determining the main risk driver(s) of a transaction is still under consultation (see [11]).

14 The scaling factor of 1.5 included in the consultative paper (see [2]) to account for additional risk from increasing exposures was dropped in the finalized BCBS framework (see [6]).

SA-CVA Risk	Financial			Corporate		
Trades	**No CSA**	**CSA**	**CSA + IM**	**No CSA**	**CSA**	**CSA + IM**
Trade A 1y	11,710	11,125	9,401	9,830	9,283	7,749
Trade A 4y	166,383	46,678	20,221	121,904	31,563	14,167
Trade A 10y	1,371,495	122,264	33,043	951,398	78,596	22,115
A {1y,4y,10y} netted	1,530,844	127,155	32,802	1,067,705	81,879	21,912
Trade B 1y	15,157	13,496	10,460	13,205	11,663	8,963
Trade B 4y	202,084	43,101	8,768	155,670	30,727	6,153
Trade B 10y	1,106,397	106,492	15,621	839,097	75,367	10,437
B {1y,4y,10y} netted	1,303,266	115,532	15,573	990,475	81,428	10,391
Trade C 10y	1,172,699	112,445	31,107	821,560	73,135	20,833
Trade D 10y	1,589,592	131,820	35,602	1,089,633	84,046	24,053

Table 5: Calculation results for future SA-CVA risk capital charge

Overall, for the investment grade financial counterparty (with an old risk weight of one percent), the scaling factor between the BA-CVA charge and the current standardized approach charge (assuming unchanged EADs) is[15]:

$$\frac{RW_{fin}^{BA\text{-}CVA} \cdot scaling^{BA\text{-}CVA}}{RW^{curr\text{-}SA} \cdot scaling^{curr\text{-}SA}} = \frac{5\% \cdot 1.4^{-1}}{1\% \cdot 2.33} \approx 1.53$$

and for the corporate counterparty it is:

$$\frac{RW_{corp}^{BA\text{-}CVA} \cdot scaling^{BA\text{-}CVA}}{RW^{curr\text{-}SA} \cdot scaling^{curr\text{-}SA}} = \frac{3\% \cdot 1.4^{-1}}{1\% \cdot 2.33} \approx 0{,}92$$

In particular, the differences between the financial and the corporate counterparty are triggered by the different risk weights (5% vs. 3%) for the same rating class, so the ratio of financial to corporate is 5/3 = 1.67 for all trades.

Future SA-CVA charge

Results for the future standardized approach are presented in Table 5. The most relevant risk factors are credit spreads, especially for the collateralized portfolios. For those portfolios with cross currency swaps, the FX Vega cannot be neglected either. Both effects are prominently visible in Trade B with a maturity of 10y, due to the large exposure originating from the notional exchange at maturity. For instance, in the Financial case without CSA, the bucketed capital charge K_b is around 530k EUR for credit spread delta, 180k EUR for IR delta and 130k EUR for IR vega, while the total charge for FX is around 50k EUR. Since we assume identical credit spreads (and, thus, identical CVA sensitivities) for both counterparties, the differences between Financial and Corporate are solely due to different risk weights for credit spread delta.

Comparison

Table 6 compares the results for the current standardized method, for BA-CVA and for SA-CVA.

The general observation is that the BA-CVA is unfavorable in the uncollateralized case. In a collateralized setting, the SA-CVA is most favorable.

15 We write curr-SA for the current standardized approach.

no CSA

		Financial			Corporate		
		Current	BA-CVA	SA-CVA	Current	BA-CVA	SA-CVA
IR ATM	A01	11,364	23,786	11,701	11,364	14,272	9,830
	A04	42,236	328,568	166,383	42,263	197,141	121,904
	A10	275,035	1,548,166	1,371,495	275,035	928,900	951,398
	AN	257,697	1,379,170	1,530,844	257,697	827,502	1,067,705
XCCY	B01	113,635	195,081	15,157	113,635	117,049	13,205
	B04	422,357	725,088	202,084	422,357	435,053	155,670
	B10	1,375,175	1,573,846	1,106,397	1,375,175	944,308	839,097
	BN	1,803,880	2,654,374	1,303,266	1,803,880	1,592,625	990,475
IR OTM	C10	110.014	1,251,241	1,172,699	110.014	750,745	821,560
IR ITM	D10	584,132	2,211,479	1,589,592	584,132	1,326,887	1,089,633

CSA

		Financial			Corporate		
		Current	BA-CVA	SA-CVA	Current	BA-CVA	SA-CVA
IR ATM	A01	11,364	31,521	11,125	11,364	18,913	9,283
	A04	42,236	189,193	46,678	42,263	113,516	31,563
	A10	275,035	661,174	122,264	275,035	396,704	78,596
	AN	257,697	524,331	127,155	257,697	314,599	81,879
XCCY	B01	113,635	82,909	13,496	113,635	49,745	11,663
	B04	422,357	308,158	43,101	422,357	184,895	30,727
	B10	1,375,175	668,867	106,492	1,375,175	401,320	75,367
	BN	1,803,880	906,901	115,532	1,803,880	544,140	81,428
IR OTM	C10	110.014	428,024	112,445	110.014	256,814	73,135
IR ITM	D10	366.713	1,127,752	131,820	366.713	676,651	84,046

CSA + IM

		Financial			Corporate		
		Current	BA-CVA	SA-CVA	Current	BA-CVA	SA-CVA
IR ATM	A01	11,364	22,303	9,401	11,364	13,382	7,749
	A04	42,236	42,788	20,221	42,236	25,673	14,167
	A10	275,035	184,072	33,043	275,035	110,443	22,115
	AN	257,697	174,292	32,802	257,697	104,575	21,912
XCCY	B01	113,635	68,003	10,460	113,635	40,802	8,963
	B04	422,357	123,766	8,768	422,357	74,259	6,153
	B10	1,375,175	144,188	15,621	1,375,175	86,513	10,437
	BN	1,803,880	426,678	15,573	1,803,880	256,007	10,391
IR OTM	C10	110.014	98,365	31,107	110.014	59,019	20,833
IR ITM	D10	366.713	368,246	35,602	366.713	220,947	24,053

Table 6: Comparison of the current standardized method, the BA-CVA and the SA-CVA for different collateralization scenarios and different counterparty scenarios; Trade A 1y is abbreviated as A01, netting set A {1y,4y,10y} is abbreviated as AN, and similarly for the other trades / netting sets. The spark lines indicate which method yields the highest (red) or lowest (green) capital charge for the trade or netting set, whereas the heat map relates all results.

For the Financial, CVA risk charges for BA-CVA show a significant increase compared to the current standardized approach. Exceptions are the collateralized cross-currency swaps and the IM collateralized portfolios, for which the larger collateralization benefit recognized by the SA-CCR EAD is visible.

Without CSA, the basic approach significantly increases the capital charge for both counterparties – except for the 10y cross currency swap[16] – compared to current standardized approach.

The ratio of Financial to Corporate for BA-CVA is flat at 1.67, while for SA-CVA it is within the range of 1.1 to 1.6.The variation originates from varying credit sensitivities between the trades which remain the dominant part of the SA-CVA capital charge.

It is plausible that the future SA-CVA capital charge is favorable for collateralized trades; the SA-CVA computations build upon real CVA sensitivities, fully acknowledging the exposure mitigating effect of collateral. For trades with maturities larger than 4y and without CSA, SA-CVA charges are generally higher than the current capital charge, whereas for trades with CSA this order is reversed.

The differences among the new approaches derived in the unhedged case are likely to increase further in the case where CVA hedges are present, due to the following reasons:

- SA-CVA allows credit spread as well as exposure hedges, while BA-CVA only allows credit spread hedges
- the hedging benefit for BA-CVA is capped at 75% of the unhedged BA-CVA, while SA-CVA in principle allows hedging up to 90% of the unhedged SA-CVA

4. Conclusion

Our sample calculations show the potential impact of the two approaches that have been presented in the finalized BCBS framework (BCBS 424, see [6]). The most important results are:

- Compared to the current standardized approach, BA-CVA will increase of the CVA risk capital charge for most portfolios
- Collateralised portfolios (and portfolios with exposure hedges) will significantly benefit from the SA-CVA

The new CVA risk regulation framework can be a turning point for many medium-sized banks; for these institutions, the capital savings entailed by the SA-CVA for collateralized portfolios may outweigh the costs associated with the introduction and maintenance of a Monte Carlo based CVA sensitivity computation framework as well as an active CVA desk[17]. For these banks it is the first time that the Basel committee has acknowledged simulation based approaches to CVA, which already prevail at the accounting level, at the level of regulatory capital requirements.

These results are also supported by the EBA impact study (see [14]), which determined an increase of the CVA risk charge by more than 200% on average for smaller banks. With the removal of the corporate exemption, the average impact on all banks is even 558%. The impact study also shows that, while the increase in capital requirements is almost certain for small and large banks, medium sized banks have the chance to get through the reform with zero or even negative impact.

This chance must not be missed. Banks should prepare now, conducting individual impact and gap analyses and getting their CVA sensitivity calculations and CVA hedging activities running in time, to avoid falling into the BA-CVA capital trap.

d-fine combines financial expertise and deep regulatory insight to offer solutions for SA-CCR, the new CVA risk charge and CVA management.

16 Let us note that trade B 10y without CSA is an exemption since here the SA-CCR EAD is smaller than the CEM EAD (see Table 3). This is because for FX contracts, the CEM percentage applied to the notional changes from 5% to 7.5% for maturities exceeding five years, which has no equivalent counterpart at the SA-CCR level.

17 We refer to [12] for a comprehensive discussion of further benefits coming along with active CVA management.

Appendix

References

[1] Basel Committee on Banking Supervision. Minimum capital requirements for market risk (BCBS 352, 457). January 2016, revised January 2019

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