

**COUNTERPARTY RISK – FURTHER ALONG THE REGULATORY PATH<sup>1</sup>***Balázs Pálosi-Németh***ABSTRACT**

This article is a continuation of the author's earlier study (*Pálosi-Németh, 2012*), written in light of regulatory changes that have occurred in the meantime and the market processes that have evolved as a consequence. It presents the capital requirements for bank exposures to central counterparties (CCPs) and for CVA risk, the new standardised approach for measuring counterparty credit risk exposure (SA-CCR) and the consequences of all these developments.

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*Keywords:* Basel III, CVA, CCP, central counterparty, counterparty risk exposure, capital requirement

**1. OVERVIEW**

The value of a bank loan's exposure is impacted by the debtor's credit risk: whether or not they will go bankrupt. The related expected loss is covered by the bank's provision, with its profit being reduced by this amount.

In other financial contracts (e.g. derivative or securities financing transactions), a claim arises for the institution against the contracting party (counterparty) as a function of the development of asset prices. Prior to settlement this represents a credit risk to the bank, irrespective of whether or not the transaction has reached maturity. The bank typically hedges its positions, so that in the event of having a claim (positive exposure) against one party, there is an obligation (loss) burdening the other party. The winning side may lose value due to the insolvency of the counterparty, but the loss-making position remains.

Similarly to a loan, the counterparty's credit risk impacts the value of the contract: if the chances of non-performance increase, the value of the (positive) claim arising from the transaction decreases. In the case of derivatives, the bank does not calculate provisions in the classic sense, but modifies the fair value of the transaction with a credit valuation adjustment (CVA), simultaneously reducing the profit.

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In contrast to a loan, the value of a derivative transaction can also be negative (where the counterparty has a claim against the bank); at such times, if the bank declares bankruptcy, it does not have to pay off the loss. The expected value of this potential “profit” can reduce the amount of the loss-making position, which is the value of the bank DVA (debt valuation adjustment). The DVA is simply the CVA calculated from the point of view of the counterparty. While the CVA reduces the profit, the DVA increases it. We should note that if the bank’s performance and creditworthiness deteriorates, carrying greater risk and thus a greater likelihood of failure, then the DVA value is also greater and the bank’s profit improves as a result.

The counterparty risk is therefore present until the liquidation of a contract. The counterparty risk exposure continuously changes, on the one hand as a function of the counterparty’s credit risk, on the other hand because of the changing value of the contract. While in the case of a loan the value of the exposure is deterministic until maturity<sup>2</sup>, in the case of a pre-settlement transaction the exposure behaves in a stochastic fashion.<sup>3</sup>

If the bank does not wish to consciously undertake and manage the counterparty’s credit risk, then it will endeavour to keep this exposure low with counterparty risk limits, netting agreements, hedging transactions, margining or marking to market, by involving clearing houses or employing credit derivatives.

In the precursor to this article (*Pálosi-Németh, 2012*), I showed how players on the financial markets have faced up to a new regulatory environment (Basel III, EMIR, Dodd–Frank) in which the previous patterns of thinking and rules of thumb no longer apply.

The prescription of mandatory clearing and margining represents a huge burden on liquidity, which market players have already begun to price in. The funding value adjustment (FVA) and liquidity value adjustment (LVA), similarly to CVA, appear in a fair valuation of positions and in the institutions’ profits.

An even more significant burden than the increased liquidity constraint is the soaring capital requirement. This is attributable to three factors:

1. *New capital requirements*: banks must set aside capital for unexpected losses arising from the CVA risk.
2. *Increased risk weights in calculating capital requirements*:
  - a. Unlike under the Basel II regulations, even exposure to qualifying clearing houses cannot enjoy a 0% risk weight.

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<sup>2</sup> Disregarding the option of pre-payment.

<sup>3</sup> In the case of a repo transaction, the value of one leg of the transaction – the collateral – moves up and down on the market (e.g. because of changing interest rates of a bond), so that the net exposure arising from the repo position (loan minus value of collateral) is also stochastic.

- b. The Basel III regulations prescribe an increased correlation coefficient to counterparties of a large size (with total assets exceeding EUR 70 billion), those originating from non-regulated countries or which carry out non-regulated activities.
3. *Increasing exposure values:*
  - a. In the case of securities financing transactions, due to stricter hedging-haircut prescriptions.
  - b. In the case of derivative transactions, because of a new methodology for measuring exposure (SA-CCR) which is planned to take effect from 2017.

Below we discuss these three factors in detail.

## 2. CVA CAPITAL REQUIREMENT AND CVA

The Basel Committee's Regulatory Consistency Assessment Programme (BCBS, 2014a) found implementation of the Basel III directives in the EU and the Capital Requirements Regulation (CRR, 2013) to be materially non-compliant with the Basel recommendations.

Among other things<sup>4</sup>, one essential reason for this is the derogation of the CVA capital requirement in Europe for certain OTC derivative transactions. Specifically, in Pillar 1, the CRR limits the CVA capital requirement to financial institutions, exempting the "real economy" of corporates, local governments, sovereign counterparties and even pension funds until 2016.<sup>5</sup>

As the primary reason for deviation from the Basel recommendations, we might pinpoint the range of problems which I presented in detail in my earlier study (Pálosi-Németh, 2012). The higher capital requirement threatens the OTC derivatives market with a significant decline for two reasons:

- The return on equity decreases (supply-side effect), while the number of customers aiming to hedge their positions declines due to the rising prices (demand-side effect).
- Banks shift substantial proportions to central clearing houses, where – though there is no CVA capital requirement – settlement is expensive; on the one hand due to clearing house fees, and on the other hand because of the capital requirement for clearing houses introduced by the CRR.

<sup>4</sup> Such as, for example, the SME supporting factor (0.7619) which facilitates lending to small and medium-sized enterprises. The multiplier neutralises the effects of the capital conservation buffer and allows the value of risk-weighted assets to be reduced.

<sup>5</sup> The CRR ties the corporate exemption to the European Market Infrastructure Regulation (EMIR, 2012). If a company reaches the mandatory clearing threshold value, then the CVA capital requirement is obligatory for non-cleared transactions.

Because of the higher prices, corporate clients tend not to hedge their market risks; which is to say that the prescribed higher capital requirements – through higher related costs – represents a counter-incentive for market players to adequately allocate and manage risks in the corporate sector, thus reducing the functional efficiency of financial intermediation. Without effective distribution of risk in accordance with the natural functioning of the economy, specialisation and innovation decline and costs increase. All this triggers changes in long-term orientation and reduces competitiveness. The new capital regulation inherently reinforces the procyclical behaviour of the banking system, and its negative impact on the real economy.

This vision prompted EU legislators to grant exemption from the CVA capital requirement burdening the “real economy.” As a consequence, however, the capital requirement must be applied to precisely those transactions where the risk is low, and not to those where it is high. Banks and other financial institutions work with well-developed, daily margining in transactions between themselves, so that their exposures are low. In contrast, there is no daily settlement with the majority of enterprises, making the exposure and thus the risks much more significant. Strangely enough, the CRR grants exemption to precisely these latter transactions.

Derogation from the CVA capital requirement puts European banks at a competitive advantage since they are able to serve companies’ hedging needs more cheaply. The principle of a level playing field is thereby violated. What is more, it creates an opportunity to circumvent the regulations: interposing a player enjoying exemption between two banks, both may be exempted from the capital requirement, even though no exemption is allowed among financial institutions. Fortunately, such exemption from the capital requirement is linked to size, which limits the opportunities for such “tricks.” The threshold values pertaining to exemption are defined by the European regulation on derivatives markets (EMIR) in such a way that they correspond with the prescribed mandatory clearing threshold: in the case of equity and credit derivative transactions, this is a gross notional value of EUR 1 billion, while for commodity, interest rate and foreign exchange swaps it is EUR 3 billion.

Because of the above contradictions, derogation from the CVA capital requirement has divided European supervisory bodies. Several authorities have “reinstated” it as part of the capital surplus prescribed in Pillar 2. Conciliation discussions are currently under way on the first pillar with regard to maintaining or cancelling the exemption.

The version of the CRR in force also stipulates that the CVA value taken into account when determining the fair value of the exposure, and featuring in the profit and loss statement, should be deducted from the credit risk (but not the CVA risk)

exposure. In the case of the DVA, the regulation determines a phase-out period until 2018, when this is to be added back to the exposure reduced by the CVA, to an extent that decreases by 20% yearly.

The obvious intention here is for the impact of the valuation adjustments, made for expected losses already deducted and appearing in the income statement, to also appear in the capital requirement for unexpected losses. The reason that the exposure of the CVA capital requirement cannot be modified by the value of the CVA/DVA is to avoid double counting: the same profit-reducing item should not be taken into account twice in the two kinds of capital requirement.

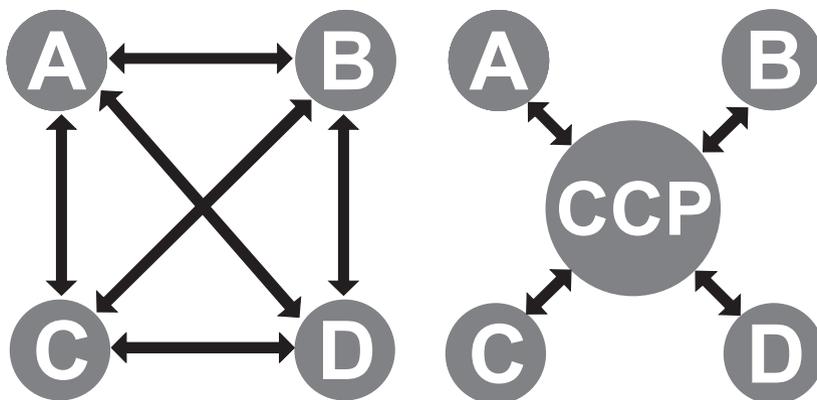
### **3. REGULATIONS ON EXPOSURE TO CENTRAL COUNTERPARTIES (CCPs)**

In OTC derivative transactions it is common practice when one party wishes to close out its position to take up another position of identical size and maturity, but in the opposite direction. Although in this way the market risk deriving from the transaction is neutralised, the counterparty risk is doubled (unless the party happens to have entered into both transactions with the same bank).

The bilateral transactions thus taking shape connect market players to one another in an opaque way. The impact of a single bankruptcy can easily be multiplied and spread contagiously.

The fundamental aim of the regulator is to render derivative transactions more transparent, efficient and stable. If market players taking part in a given transaction take advantage of the option of central clearing, then the counterparty risk is borne by the clearing house (central counterparty – CCP), eliminating the multiplying effect.

**Chart 1**  
**Role of the CCP in reducing counterparty risk**



Source: own design

This was the goal of the regulator when it prescribed mandatory clearing of every standard OTC derivative transaction through a central counterparty.<sup>6</sup>

Naturally the above advantages come at a price. At the macro level, the CCP clearly signifies the “too big to fail” risk, which translates into a cost for every taxpayer. This needs to be minimised, with clearing houses having to pass stringent qualification tests, and only exposures to the so-called qualifying CCPs are subject to the preferential capital calculation methods detailed below. At the micro level, meanwhile, high CCP fees on the one hand, and on the other hand the capital requirement of posted collaterals (initial and variable margins), as well as other loss allocation methods (default fund contribution), signify additional expenditure. Following the Basel III recommendation, therefore, the CRR breaks with the 0% risk weight under Basel II with respect to exposure to central counterparties.

Previously I presented the so-called “waterfall mechanism” which serves to divide the losses of clearing houses (*Pálosi-Németh, 2012*). There is a significant difference between the risk of trade exposures (including the initial margin) and the risk of exposure to the so-called default fund contribution which is paid in by every clearing member to support the clearing house’s own fund requirement: the latter is substantially higher.

The size of the default fund is determined by stress tests conducted daily based on the central counterparties’ portfolios, e.g. based on losses in the event of the

<sup>6</sup> In the case of equities and standardised futures contracts, the routine thus far has been for stock exchange transactions to subsequently undergo central settlement. OTC transactions, however, have largely not undergone the clearing process, although the number of centrally cleared OTC transactions has progressively increased since the turn of the millennium.

hypothetical failure of the two largest clearing members. The local supervisory body may determine the minimum (floor) and maximum (cap) values. The contributions of individual clearing members consist of fixed and variable elements. The latter depends on the activity of the clearing member (trade exposure), but is staggered rather than linear.

In 2012, the Basel Committee modified the approach set down in the original Basel III recommendation with regard to determining the capital requirement for clearing houses (BCBS, 2012). The latter, already widespread methodology was also adopted by EU legislators, so that it now features in the currently operative CRR. In the case of exposures to qualifying clearing houses, both the original (so-called *c-factor*) method and a second methodology (method 2) are permitted, moreover at the free discretion of the banks (who may choose the lower capital requirement).

The essence of the original methodology is that a standard, very low risk weight of 2% is prescribed for trade exposures. For the default fund contribution, the CCPs publish eight parameters which the banks can use to determine the risk weight with the help of the formula below:<sup>7</sup>

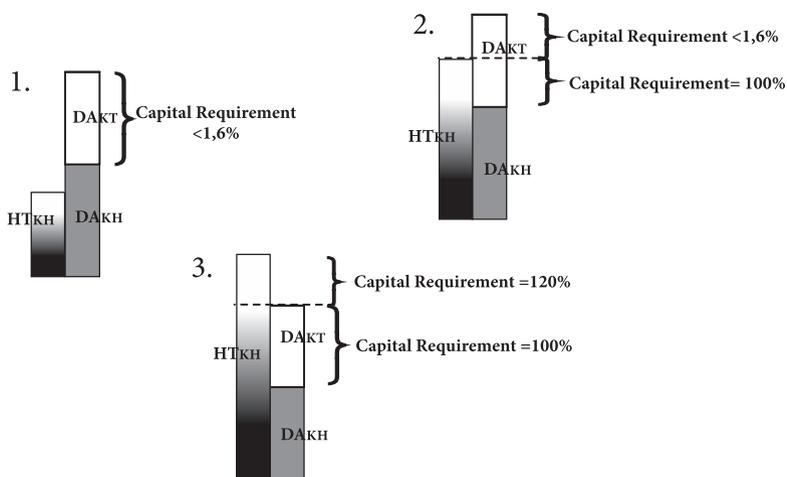
$$c - factor = \left( 1 + \beta \cdot \frac{N}{N - 2} \right) \cdot \frac{K_{KT}}{DA_{KT}},$$

where

- $\beta$  – concentration factor, determined by the distribution of exposures among the clearing members,
- $N$  – number of clearing members,
- $DA_{KT}$  – combined default fund contribution of the clearing members,
- $K_{KT}$  – amount of the capital requirement determined for all clearing members of the central counterparty (see *Chart 2*),
- $DA_{KH}$  – default fund of the central counterparty,
- $HT_{KH}$  – hypothetical capital requirement of the central counterparty.<sup>8</sup>

<sup>7</sup> The formula here does not feature all eight parameters. Further parameters are needed to calculate the KKT variable.

<sup>8</sup> The risk weight is calculated by the standard method, the value of the exposure by the market pricing method.

**Chart 2****The sum of own fund requirements for all CCP clearing members**

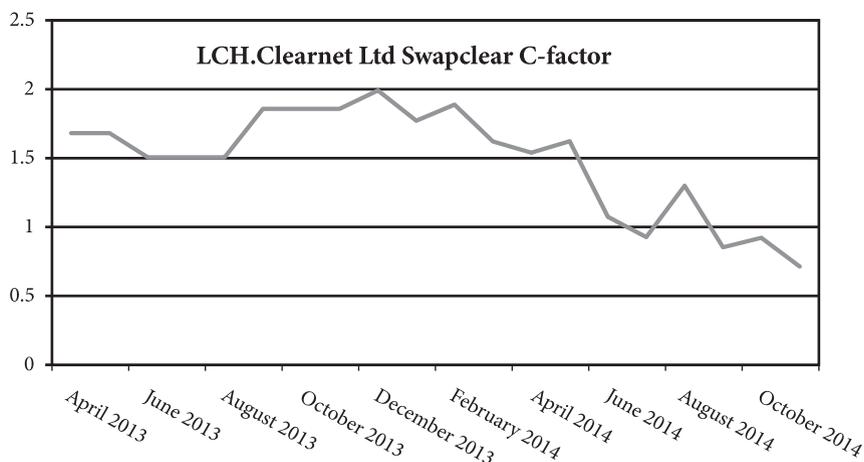
Source: Pálosi-Németh (2012)

As can be seen in *Chart 2*, when determining the combined capital requirement of clearing members we compare the clearing house's own funds with the hypothetical capital:

- If the clearing house's hypothetical capital is relatively low, the capital requirement of the institution's default fund contribution is also low (case 1).
- If the clearing house's hypothetical capital exceeds the size of its own default fund, but does not exceed the aggregated default funds (case 2), then the capital requirement is 100% for the difference between the hypothetical capital and the own default fund, while the capital requirement remains marginal for the remainder.
- If, however, the central clearing house's hypothetical capital exceeds the aggregated default funds, then the combined capital requirement is 120% for the aforementioned difference, and 100% for the entire default fund (case 3).

In practice, a more workable solution has become fashionable whereby CCPs publish the risk weight rather than the separate parameters; the market has termed this the "c-factor." We should note that (contrary to the 2% weight applied to trade exposures) the c-factor is not the classic risk weight where we obtain the value of risk-weighted assets (RWA). The c-factor is 8% of the risk weight, i.e. the product directly provides the capital requirement.

**Chart 3**  
**Evolution of c-factor at Europe's largest clearing house**



Source: own design, based on data available on the [www.lchclearnet.com](http://www.lchclearnet.com) website

An essential aspect of the above formula is that the c-factor can easily be greater than 1 (if the CCP's hypothetical capital requirement is significantly greater than the CCP's own funds and the default fund contribution of the clearing members). This means that the capital requirement is higher than the exposure itself. The latter caused significant reverberations on the market, contributing to a major review of the methodology. Even the regulator was not prepared for this eventuality, as reflected in the absence from the tables in the common reporting framework (COREP) of a category suitable for a risk weight exceeding 1250%.

Besides the original (c-factor) method, the CRR also permits the so-called Method 2 to be chosen for calculating the capital requirement. This specifies a further two calculation methods, of which the lower *must* be chosen<sup>9</sup>:

- Option 1:
  - Capital requirement for default fund contribution = 1250% × exposure × 8%
  - Capital requirement for trade exposure = 2% × exposure × 8%
- Option 2:
  - Capital requirement for default fund contribution = 0 (no capital requirement)
  - Capital requirement for trade exposure = 20% × exposure × 8%

<sup>9</sup> If any institution were to choose Method 2, but within this to calculate with the method resulting in the higher capital requirement, then it would scarcely need to fear supervisory rigour since its approach would be conservative and thus prudent. This, however, only means that in practice institutions are able to choose from three methods: c-factor, option 1 and option 2.

The second option under Method 2 is nothing other than the capital requirement calculated with the Basel II standard method, which functions as an upper limit according to the logic of Method 2.

In 2013, the Basel Committee once again reviewed and sent for consultation the method for calculating capital requirements for clearing houses (BCBS, 2013a). This, however, was not adopted by the European regulations. The Committee argued that the revision was necessary, on the one hand, to ensure the existence of the adequate capital requirement, and on the other hand to provide an incentive for institutions to shift to central clearing. As we have seen, the incidence of the capital requirement exceeding the exposure has had precisely the opposite effect on market players. Unfortunately, this methodology – due to its complexity – has not produced the desired result either. I will not go into its details because in 2014 the Committee once again submitted a fresh approach for consultation (BCBS, 2014b), also aligned with the new proposals for calculating regulatory exposure (SA-CCR, *see below in chapter 4*), which is expected to be introduced from 1 January 2017.

According to this, when calculating the capital requirement for qualifying central counterparties the institution may choose from the following two methods:

1. Capital requirement for non-qualifying clearing houses:
  - Capital requirement for default fund contribution =  $1250\% \times \text{exposure} \times 8\%$
  - Capital requirement for trade exposure =  $20\% \times \text{exposure} \times 8\%$
2. Capital requirement for trade exposure =  $2\% \times \text{exposure} \times 8\%$ .  
Capital requirement for default fund contribution, which is the *greater* of the following two values:
  - *Institution's default fund contribution × CCP's hypothetical capital requirement*  
*Combined default fund contribution of the CCP and all clearing members*
  - Institution's default fund contribution ×  $2\% \times 8\%$

Now that the methodology has been significantly simplified and a consensus has been reached on the market, we hope that the intensity of regulatory changes in this area will diminish. It should nevertheless be noted that, similarly to the CVA capital requirement, the CCP capital requirement is not portfolio-invariant. Its size is dependent on the part of the portfolio that the given transaction constitutes. The amount of the default fund contribution does not grow in proportion to the exposure, but in steps. This causes difficulty in risk-based pricing, the consequences of which I have already discussed in detail (*Pálosi-Németh, 2012*).

Mandatory clearing may also give rise to liquidity problems on the market since it is accompanied by the requirement of initial and variable margins.

The regulation ignores the fact that on smaller markets setting up a local qualifying CCP may entail disproportionately high costs. At the same time, many players do not have direct access to the services offered by major clearing houses, primarily because of the minimum size of the default fund contribution. The role of indirect clearing services thus increases in value as larger institutions which are clearing members settle the transactions of non-members. However, through this clearing service, positions become concentrated at the clearing members, indirectly bringing back the counterparty risk in bilateral agreements. In order to avoid this, the regulator applies a preferential capital requirement to encourage a system of segregated accounts that are portable to another clearing member in the event of bankruptcy of the clearing member settling the accounts. The operation and capital requirements of indirect clearing have already been described earlier (*Pálosi-Németh, 2012*).

It should also be mentioned at this point that the costs of clearing may result in a declining number of players, and thus of competition. We have already made clear the impact of this on the real economy in connection with the CVA capital requirement.

#### **4. THE NEW STANDARDISED APPROACH FOR MEASURING COUNTERPARTY CREDIT RISK EXPOSURES (SA-CCR, FORMERLY NIMM)**

Currently EU regulations provide four methods for determining the counterparty risk exposures of derivatives transactions:

- the Mark-to-Market Method – aka Current Exposure Method (CRR, Article 274),
- the Original Exposure Method (CRR, Article 275),
- the Standardised Method (CRR, Article 276), and
- the Internal Model Method (CRR, Article 283).

The Internal Model Method (IMM) demands a comprehensive supervisory validation process, similarly to the Internal Ratings-Based (IRB) approach to calculating capital or the own-estimated volatility haircuts used in the Financial Collateral Comprehensive Method. Due to its calculation-intensive nature,<sup>10</sup> the Internal Model Method is typically only used by the “Top Tier” banks with large derivatives portfolios.

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<sup>10</sup> The values of the expected positive exposure (EPE) and the potential future exposure (PFE) are determined with the help of a Monte Carlo simulation.

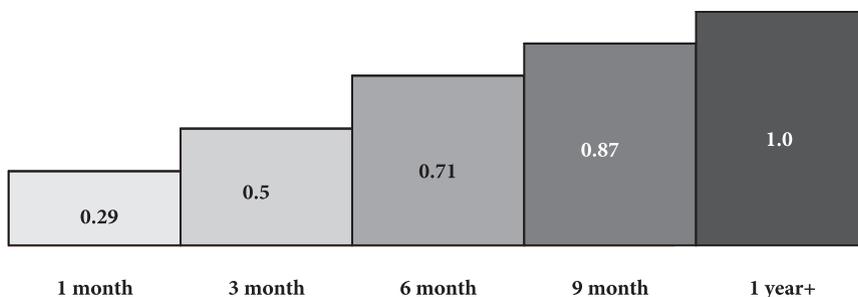
In 2013, the Basel Committee published a preliminary methodology (BCBS, 2013b), and in 2014 – after broad-ranging consultations – a revised methodology for measuring counterparty risk exposures to financial derivatives products (BCBS, 2014c; BCBS, 2014d), which would replace the first three of the above-mentioned exposure calculation methods by 2017. The 2013 consultative document named this approach the NIMM (Non-Internal Model Method), but it was later renamed the new “standardised approach for measuring counterparty credit risk exposures” (SA-CCR).

The new standardised approach is the successor to the present Mark-to-Market Method, following its logic. The value of the exposure is the sum of the current market price (Mark-to-Market, MtM) and an add-on. The SA-CCR, however, is more complex and risk-sensitive:

- It takes into account the impact of margining and overcollateralization (reduced exposure), as well as the reduced exposure of OTM (out-of-the-money) options.
- As a new element, it includes a multiplier (1.4) reflecting the general wrong-way risk.<sup>11</sup>
- It defines so-called hedging sets (but only within certain asset classes): trades that are compensating each other are grouped in hedging sets, even when these are not part of a netting agreement; e.g. in an interest rate swap transaction, if the bank has claims at fixed and variable interest against the same counterparty.
- It introduces adjustments (multipliers) regarding notional value, which are
  - 0.5 in the case of basis swap transactions,
  - 5 in the case of volatility (vega) trades (e.g. variance swap transactions),
  - in the case of options, the adjustment is not a constant but a function of the option’s delta, taking into account the strike price, the price of the underlying product, the remaining maturity and the volatility, which is dependent on the asset class and determined by the regulator.
- The new approach breaks with the practice of simplified reckoning of the average duration of transactions, instead prescribing an adjustment which is proportionate to the square root of the remaining tenor. This is favourable for maturities of less than one year, particularly with regard to foreign exchange, commodity and equity positions. “In return,” however, it is typically more conservative than its predecessor when determining the value of the add-ons.

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11 Regarding wrong-way risk, see also Pálosi-Németh (2012).

**Chart 4****The exposure correction factor for transactions of less than 1 year's maturity**

Source: own design

- The directive makes an explicit distinction between a transaction's contract maturity and its end date. For example, the contract maturity of a 5-year swaption with a remaining 6 months term is 6 months, while its end date is 5 and a half years.<sup>12</sup>
- In the case of amortising swaps, the notional value can be averaged.
- In the case of a derivatives transaction for multiple assets, the value of the exposure is to be determined according to the asset class appropriate to the primary risk driver (leaving untouched the supervisory discretion to assign the notional to more asset classes).

Below I present the logic of the calculation using two simple products as examples, comparing the new approach with one of the currently defined methods:

**Table 1**

**Short-term (less than 1 year) foreign exchange forward transaction and options in one direction**

	Mark-to-Market Method	New standardised approach
Market price (MtM)	64	64
Add-on	86	100
<b>Exposure</b>	<b>150</b>	<b>220</b>

The SA-CCR produces a higher exposure as a consequence of the higher add-on and the wrong-way risk multiplier (1.4).

<sup>12</sup> The end date is not to be confused with the duration. The duration of a pay-fixed receive-variable swap is the length of the first settlement period, while in the case of a pay-variable receive-fixed swap it is the cash-flow present value weighted average of the tenors of the cash flows.

**Table 2**  
**Long-term interest rate swap transactions in the same direction**

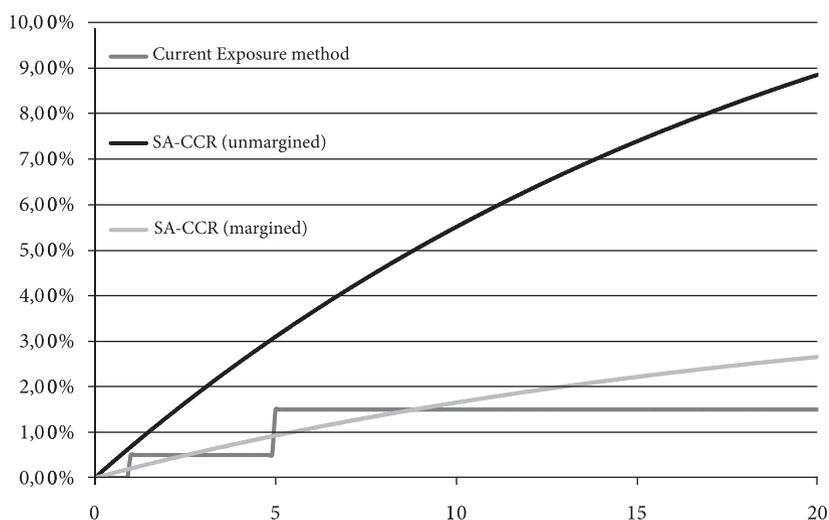
	Mark-to-Market Method	New standardised approach
Market price (MtM)	25.5	25.5
Add-on	9.5	38.5
<b>Exposure</b>	<b>35</b>	<b>90</b>

The SA-CCR is significantly more conservative due to the notional value  $\times$  discounted maturity formula, as well as because of the wrong-way risk multiplier.

To summarise, the new methodology rewards well-diversified trades with daily margining, and punishes all other transactions. Typically daily margining takes place in the case of exposures among financial institutions (and the largest companies). At the majority of companies, however, the exposure and the capital requirement calculated by SA-CCR can significantly increase, and consequently financial intermediation can become more expensive (as already described in the case of CVA and CCP capital requirements).

It is likewise a rule of thumb that the longer a derivative's duration, the greater the surplus exposure due to SA-CCR. The diagram below makes clear these orders of magnitude.

**Chart 5**  
**Size of exposure as percentage of notional value**



Source: own design

The new methodology is undeniably a step forward from the point of view of risk sensitivity. It is also clear that it represents a very significant challenge for institutions to implement, partly because of the logic of calculation, but particularly due to the reporting obligations.

Whether the above-detailed SA-CCR methodology will undergo further modification, and what will be adopted into the EU regulation, is still uncertain for the time being. This is particularly true given that the International Swaps and Derivatives Association (ISDA) is still lobbying in hope of further changes, although the Basel Committee has published the methodology as a final document. It is also a fact that the version published by the Committee still fails to clarify a number of questions:

- The advanced CVA capital requirement calculation methodology can only be used by banks validated for the Internal Model Method (IMM). For the rest, the standard CVA capital requirement is mandatory. The exposure used for calculating the standard CVA capital requirement is special: it is the exposure calculated by the currently operative Mark-to-Market Method, modified with collateral and then discounted. It is very unlikely that it will remain like this if the SA-CCR replaces the Mark-to-Market Method, but the Committee has published no information in this regard. Another possible scenario is that the SA-CCR will be prescribed without modification for the calculation of the standardised CVA capital requirement, which could considerably raise the capital requirement for given products.
- In December 2014, the Committee sent a proposal for consultation regarding the introduction of a capital floor value (BCBS, 2014e), whereby the capital requirement calculated by the Standardised Method would have to serve as the lower limit even for banks applying the advanced (IRB) capital requirement. The logical next step in this direction would be for the regulator to set a limit for the calculation of exposure as well, prescribing the new standardised approach as a floor. Another alternative scenario is that the exposure calculated according to both methods will be mandatory for reporting purposes. Whichever scenario comes about, calculation of exposure according to the new standardised approach would be required for IMM banks as well.
- The latter is all the more likely given that, similarly to the IRB, the option of gradual roll-out exists for the IMM as well. In this way, the SA-CCR will obviously be the only alternative for portfolios not yet included under the IMM.
- Also awaiting clarification is what exposure banks should use as a basis for the leverage ratio introduced by Basel III, as well as for revised large exposure reports. In view of the regulator's endeavours at standardisation, the SA-CCR can be expected to be prescribed for these supervisory reports as well.

- In discussing central counterparties (CCPs), I already pointed out that the capital requirement on CCPs proposed for introduction from 2017 is a function of the hypothetical capital requirement of the qualifying clearing house. The Committee explicitly requires the SA-CCR methodology for calculating the latter (BCBS, 2014b). If this materialises, then the new standardised methodology – because of its more risk-sensitive approach – can be expected to reduce both the default fund contribution and banks’ capital requirement for CCP-related exposures.

## 5. CONCLUSIONS

There is scarcely any other area of prudential regulation where the “regulatory volatility index” is higher than in the area of counterparty risk. The regulatory changes discussed here are radically transforming the logic of financial markets’ operation. The goal of ongoing infrastructural developments in the sector – besides ensuring conformity to regulatory requirements – is to preserve competitiveness. The burdens of liquidity and capital requirements need to be priced in. The concept of XVA means taking into account not only the CVA but the DVA, FVA and all other circumstances altering the price of financial products. I will discuss the background to this and specific empirical results in a later study.

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