

Basel Committee on Banking Supervision
c/o Bank for International Settlements
Centralbahnplatz 2
4051 Basel
Switzerland

Submitted via www.bis.org

London, October 1st 2015

Consultation Report on *Review of the Credit Valuation Adjustment (CVA) risk framework*

Dear Sirs,

Markit is pleased to submit the following comments to the Basel Committee on Banking Supervision (the “**BCBS**”) in response to its Consultation Report on *Review of the Credit Valuation Adjustment (CVA) risk framework* (the “**Consultation Report**”).

Markit¹ is a leading global diversified provider of financial information services.² Founded in 2003, we employ over 4,000 people in 11 countries and our shares are listed on Nasdaq (ticker: MRKT). Markit has been actively and constructively engaged in the debate about regulatory reform in financial markets, including topics such as the implementation of the G20 commitments for OTC derivatives and the design of a regulatory regime for benchmarks. Over the past years, we have submitted more than 120 comment letters to regulatory authorities around the world and have participated in numerous roundtables.

Introduction

Markit provides a financial risk management platform that helps our customers address regulatory and business requirements, including managing counterparty credit risk, market risk, and credit valuation adjustments. Markit's Analytics³ platform supports risk and margin calculations, integrated resource management as well as stress testing with our calculation and simulation framework managing the portfolio simulation workflow, including data aggregation and reporting. A number of major firms use Markit Analytics for measuring, managing and optimising their credit, funding and capital requirements. Over the last several years we have experienced an increasing demand for pricing the cost of capital (KVA) and initial margin (MVA) into individual transactions.⁴ We have also observed that a growing number of firms rationalise their analytical capabilities to satisfy multiple stakeholders on a single platform, for example, IMM capital models and Front Office CVA.

¹ See www.markit.com for more details.

² We provide products and services that enhance transparency, reduce risk and improve operational efficiency of financial market activities. Our customers include banks, hedge funds, asset managers, central banks, regulators, auditors, fund administrators and insurance companies. By setting common standards and facilitating market participants' compliance with various regulatory requirements, many of Markit's services help level the playing field between small and large firms and herewith foster a competitive marketplace. For example, Markit's KYC Services provide a standardized end-to-end managed service that centralizes “Know Your Client” (KYC) data and process management.

³ See <https://www.markit.com/product/analytics>

⁴ See <http://www.markit.com/Product/File?CMSID=02ea22de83fe49e692d9483f5b9bdf45> for further details.

Further, Markit's pricing services produce daily credit default swap (“**CDS**”) spreads and sector curves. Many of our customers use those sector curves as input into the calculation of CVA for counterparties that are not traded individually in the CDS market.⁵

Comments

Markit welcomes the publication of the Consultation Report by the BCBS and we appreciate the opportunity to provide you with our comments.

We are generally supportive of the proposals that the BCBS put forward in this Consultation Report. In addition to our responses to the BCBS's specific questions we provide more general comments in relation to (i) the alignment of the CVA and the FRTB frameworks; (ii) CVA sensitivities; (iii) Expected Shortfall computation; and (iv) the use of proxy spreads.

- Alignment of the CVA and the FRTB frameworks

We believe that the integration of the CVA with the FRTB framework is overdue and is consistent both from a conceptual and an infrastructure perspective, i.e. with respect to the calculation routines and the data and business processes that are required to implement FRTB-CVA and FRTB-TB. Firms will typically be able to build shared components that are applied to both FRTB-CVA and FRTB-TB frameworks, for example the Expected Shortfall calculation or the backtesting process.

The BCBS recognizes that the CVA formula used in the Advanced approach⁶ does not reflect the counterparty risk hedging strategies that are employed by many banks today, which has resulted in the reporting of accounting losses⁷ in the past. The BCBS also notes that, with respect to the methodology used to calculate CVA, even though banks are not required to use “market-implied model calibration” under IFRS 13, they have increasingly done so.

We welcome the proposal of the BCBS that would allow firms to calculate a new regulatory CVA using the same exposure models that they use to calculate Accounting CVA. We believe that such approach will help in the development of a coherent framework. It is also likely to result in more accurate capital requirements by recognizing the “hedging efficiency” for firms that mitigate CVA sensitivities to market risk factors by use of trading instruments that are fair-valued in a “risk neutral environment”.⁸

The BCBS states that Accounting CVA is “sensitive to the same risk factors as instruments that are held in the trading book.” It concludes that a revision of the CVA framework would therefore result in better alignment with the market risk framework under FRTB which “relies on fair value sensitivities to market risk factors”.

We agree with these observations. Our experience in supporting major banks with their risk and CVA calculations has shown that many have started integrating their credit risk, market risk, and CVA systems. As a benefit of the new framework proposed by the BCBS we would expect capital requirements to be more accurate, in particular for those banks that are currently hedging their Basel III CVA VaR via CVA hedges.⁹

⁵ Markit's CDS sector curves leverage spreads from end-of-day CDS pricing data that are based on contributor submissions that have undergone a rigorous cleaning process. See <http://www.markit.com/Product/Pricing-Data-CDS-Sectors>.

⁶ See page 2 of the CR, “Alignment with industry practices for accounting purposes”

⁷ See <http://www.risk.net/risk-magazine/news/2426794/banks-shun-internal-models-in-cva-impact-study>

⁸ See page 3 of the Consultation Report.

⁹ See <http://www.risk.net/risk-magazine/news/2426794/banks-shun-internal-models-in-cva-impact-study>

- CVA sensitivities

The BCBS states that quantifying CVA sensitivities to market risk factors is "computationally very expensive" and it has therefore reduced the granularity of supervisory market factors it would require.¹⁰

Specifically, it seems that the BCBS, on this basis, would expect firms to calculate only hundreds of CVA sensitivities per month, significantly less than the number of sensitivities that are currently used in the SA-TB approach. Based on our experience providing market participants with CVA software, we know that many of the larger firms already calculate hundreds of CVA sensitivities per day. They should therefore generally be in a position to perform the monthly CVA delta and vega risk calculations as required by SA-CVA.

- Expected Shortfall computation

The IMA-CVA approach as proposed by the BCBS would require a number of partial Expected Shortfall (ES) runs to be performed,¹¹ one for each combination of risk type and liquidity horizon applicable to the specific portfolio. We agree that such requirements will make a full revaluation of CVA on 250 historical dates¹² computationally demanding. However, the BCBS should note that sophisticated CVA calculation software already allows firms to perform this volume of calculations today.

In this context, we have observed that some firms will attempt to calculate their CVA on historical dates using a Taylor expansion, hereby re-using the CVA sensitivities that they calculated under the SA-CVA approach rather than performing a full revaluation for those dates. However, the use of a Taylor expansion¹³ will result only in an approximation of the true value and such calculation might hence fail the model validation requirements of the IMA-CVA such as P&L attribution and backtesting.

- The use of proxy spreads

BCBS acknowledged that credit spreads might not be available for all individual counterparties that firms need to calculate CVA for but it contends that nevertheless the CVA risk for such "illiquid counterparties" should be determined. It proposes that firms, to be able to use the FRTB-CVA framework, need to have in place "a methodology for approximating the credit spreads of illiquid counterparties."¹⁴

We welcome the approach that the BCBS takes in this respect which seems consistent with other regulations.¹⁵ The IMA-CVA approach also requires the use of proxy credit spreads for the CVA calculation for counterparties that are illiquid and do not trade individually. Since there is no standard methodology for generating proxy credit spreads we believe that the provision of guidance on the creation of proxy spreads would be beneficial to ensure that the resulting capital numbers for different firms are broadly comparable. This could be achieved by

¹⁰ See Section 3.4 (ii)

¹¹ See page 27 under (d) Capital Calculations: "A bank must also calculate six partial expected shortfall values for each of the following risk types: (i) counterparty credit spread; (ii) interest rate; (iii) FX; (iv) reference credit spread; (v) equity; and (vi) commodity. When a partial expected shortfall is calculated for a given risk type, all other risk factors should be held constant. These partial expected shortfall values will then be summed to provide the gross expected shortfall charge, ES (gross)."

¹² The number of daily observations within a 12 month period.

¹³ See Appendix A "Paul Wilmott introduces Quantitative Finance" for a definition of the Taylor Expansion

¹⁴ See page 6, Section 3.1 Eligibility Criteria

¹⁵ For example, the EBA's Final draft RTS "on CVA risk for the determination of a proxy spread and the specification of a limited number of portfolios under article 383(7) of Regulation (EU) No 575/2013 (CRR)" state that for the purposes of calculating CVA VaR: (a) The institution should use "CDS spreads over a set of tenors and related to single counterparties", and (b) "Where a CDS for a counterparty is not available, institutions 'shall use a proxy spread that is appropriate having regard to the rating, industry and region of the counterparty.'"

a more specific description of how proxy spread curves could be derived from relevant CDS spreads or from the spreads of cash products such as bonds.¹⁶

Question 4: To what extent is there synergy between the calculation of accounting CVA and the EAD calculation for IMM with respect to processes, data and methodology?

Our experience has shown that there is a significant degree of synergy between the calculation of accounting CVA and the EAD calculation for IMM. Importantly, such overlap will reduce the incremental effort required if IMM-approved banks are required to start supplying accounting CVA for CVA Risk capital purposes.

Our customers will generally use our Analytics software to calculate both the accounting CVA and the IMM EAD. We believe that such approach is establishing itself as an industry standard where firms make use of a common library of simulation and pricing functions contained in the software that demonstrates a high degree of overlap on processes and methodology. The data used in this process is also largely common between the CVA and EAD calculations. This is true with the exception of simulation model calibration data where, following current industry practice,¹⁷ CVA uses implied market data¹⁸ whereas EAD uses historical market data.¹⁹

Question 5: Is Option A (accounting-based CVA) or Option B (IMM-based CVA) preferred for exposure calculation?

The BCBS proposed two possible options for the computation of CVA, namely (a) accounting-based CVA (Option A) and (b) IMM-based CVA (Option B).

Based on our experience we believe that the use of an accounting-based CVA should be the preferred choice for exposure calculation. This is because such calculation will be more accurate and more closely aligned with the desk valuation model, i.e. the Front Office (accounting) CVA model. It is hence more likely to pass the P&L attribution model validation requirements for IMA-CVA. This would be advantageous because, when failing the P&L attribution test, the CVA desk would have to be capitalised under the more conservative SA-CVA approach. Such jumps between the two methods would also lead to an undesirable increase in the volatility of capital numbers. Further, as mentioned above, the use of Option A would also allow banks to reflect their efficient hedging of CVA sensitivities to market risk factors.²⁰

Question 6: Is Option 1 or Option 2 preferred for simulation time horizons?

The BCBS proposed two options for the simulation time horizons which “differ in simulation horizon values for counterparty credit spreads”.

We believe that, from a systems perspective, the second option would be preferable as it would minimize implementation complexity. The BCBS should note that, as the counterparty credit spread partial ES calculation does not require exposure re-simulation, the difference in implementation complexity between the two options will generally be small in any case.

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¹⁶ Markit calculates same-day CDS and bond curves based on using a variety of inputs and techniques. On this basis, we calculate spreads also for average ratings and sectors such as country, currency, and tier.

¹⁷ I.e., accounting models rely on fair value or values implied from market prices whereas IMM EAD is typically concerned with using actual historical movements to estimate future risk factor distributions.

¹⁸ For example, interest rate swaption volatilities.

¹⁹ For example, observed historical interest rate volatility.

²⁰ See <http://www.risk.net/risk-magazine/news/2426794/banks-shun-internal-models-in-cva-impact-study>

We hope that our above comments are helpful to the BCBS. We would be more than happy to elaborate or further discuss any of the points addressed above in more detail. In the event you may have any questions, please do not hesitate to contact us.

Yours sincerely,

A handwritten signature in dark ink, appearing to read 'M. Schüler', with a stylized flourish at the end.

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