



The SA-CVA Business Case

Choosing the right approach.

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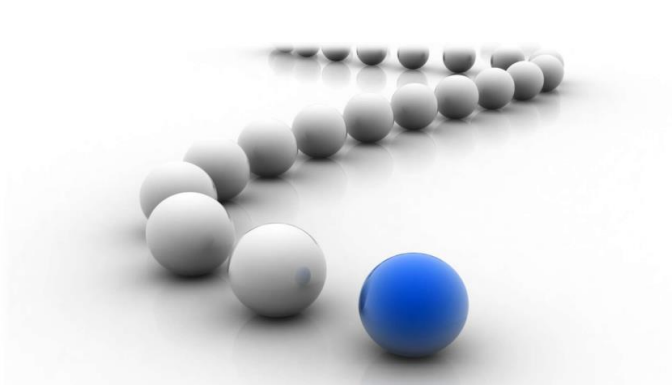
STRATEGY & MANAGEMENT CONSULTING

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Assessing Financial Benefits

The new capital charge framework for CVA risk, also called FRTB CVA (“Fundamental Review of the Trading Book), allows banks to apply for the Standardised Approach instead of relying on the default Basic Approach. By doing so, banks hope to lower their capital requirements while strengthening their economic risk management framework at the expense of a potentially significant initial investment. This paper aims to help undecided institutions in choosing the right approach for their profile.



The Basic Approach (BA-CVA) is meant as a simple solution for banks to measure the capital requirements for CVA risk. As such, the obtained result reflects a very crude assessment of the underlying risk based on regulatory Exposures At Default recycled from the Counterparty Credit Risk RWA calculations, credit quality of the counterparty (investment grade vs high-yield), and sector of the counterparty. This will usually be considered as a conservative methodology resulting in higher capital requirements.

A key objective of the Standardised Approach (SA-CVA) is to align more closely to the real risk undertaken by the bank. To that effect, the calculation is driven by a more accurate representation of the economic risk: CVA credit and market risk sensitivities. This much more complex implementation – similar to FRTB market Standard Approach – should lead to a less conservative result, hence potentially significant RWA benefits over BA-CVA. The question becomes then: **by how much?**

The quantification of the RWA impacts faces many challenges:

- Because the regulation has been fluctuating during the past years and some decisions are still pending,
- Because quantitative approximations are often required to circumvent the lack of implementations and data,
- Because of the difficulty to project the effects of banks' SA-CVA optimizations until or after FRTB CVA enforcement.

Economic vs Regulatory Sensitivities

Despite a material alignment, both still differ:

- ✘ Regulatory sensitivities include SFTs and client cleared derivatives, often excluded from economic sensitivities
- ✘ Some models may diverge, notably for Wrong Way Risk, MPoR management or shock format
- ✘ Regulatory sensitivities are calculated on prescribed risk factor buckets, potentially not relevant for economic risk management

Regulatory-wise, Basel has published its final revisions in July 2020, a key milestone materialized notably by the relative calibration of SA-CVA vs BA-CVA in addition to bringing new concepts such as index buckets and aligning risk weights with FRTB SA. Another key step towards the final standard is the draft CRR3 published in October 2021 maintaining EU exemptions on non-financial counterparties and clarifying the treatment of directional CVA hedges in the market risk framework. The remaining key unknowns are limited to market hedges on excluded counterparties, criteria for excluding Securities Financing Transactions, and details around the ECB approval process of a standard model.

Quantitative approximations are required and their materiality depends on the current state of banks regulatory implementations. 2 areas of concern can usually be observed: the existing frameworks do not calculate CVA sensitivities as per the regulatory standards and FRTB buckets' content data quality is lacking (although rapidly progressing thanks to the convergence with the FRTB market Standard Approach).

Finally, assumptions should be taken to project the bank's situation past regulatory enforcement as SA-CVA offers significant opportunities for internal improvements:

1. Current trade and counterparty portfolios have been built factoring in the existing regulatory framework and will be optimized for the singularities of the selected approach. In particular, counterparty risk sector is a key RWA driver for BA-CVA while SA-CVA relies more significantly on the counterparty credit quality.
2. Similarly, CVA hedge portfolio will evolve to the benefit of SA-CVA as the approach not only better recognize hedges but also extends their recognition to non-credit hedges, as such providing an added incentive to implement a more robust market risk hedging strategy
3. Finally, the standard approach is not bound to the IMM-approved perimeter: new CVA pricers following bank's internal model standards will automatically extend its perimeter without requiring regulatory applications. This facilitates the avoidance of the double punishment of capitalizing under BA-CVA using conservative SA-CCR EADs via the development of new CVA pricers targeting this specific trade population



Measuring Non-Financial Benefits

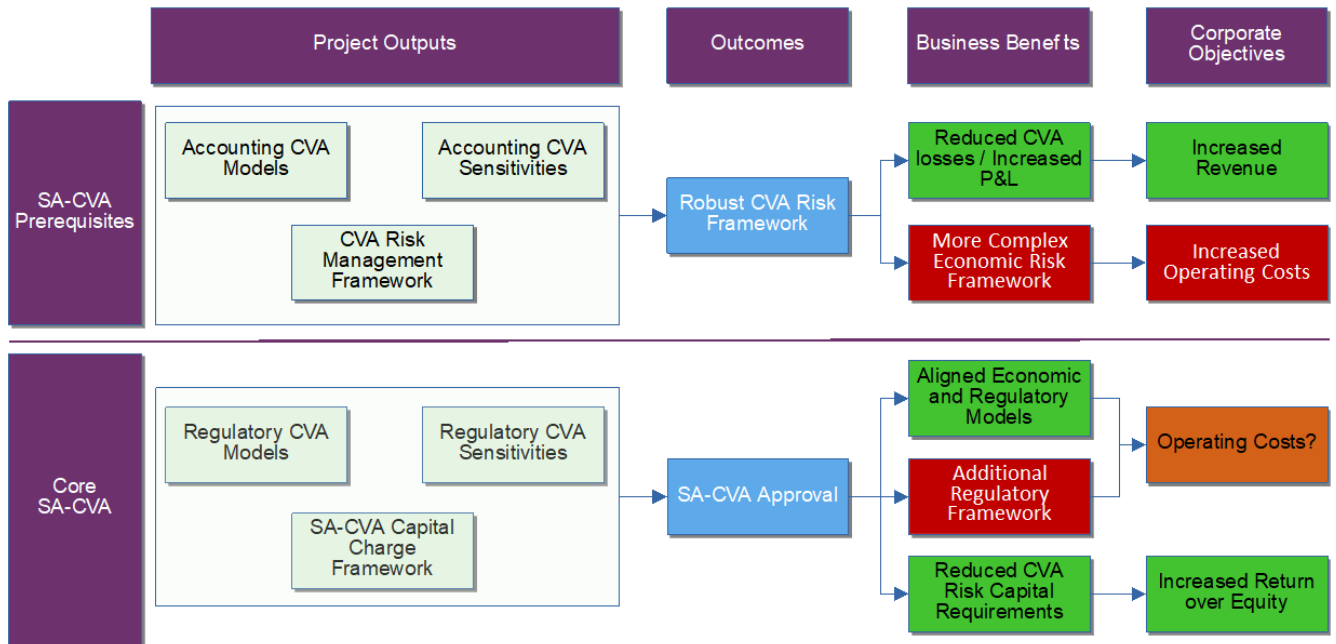
Financial benefits such as RWA are usually the easiest to sell in the very quantitative world of trading. However, in the case of FRTB CVA, they ultimately might not be the biggest argument to choose SA-CVA.

Upon closer analysis of SA-CVA business impacts, the closer alignment of economic risk with capital requirements might ultimately be the most important.

- No more conflict between economic and regulatory objectives: hedging economic risk is the primary objective and regulatory risks are reduced as a consequence
- The organization and its processes are streamlined: limited overhead is required for regulatory calculations due to their alignment with economic risks
- Bridges are built between economic and regulatory model governance (common diffusion and pricing models albeit some minor exceptions)

Finally, SA-CVA raises internal expectations for CVA Risk management: the approach leads to the bank into adopting market's best practices and also encourages establishing robust CVA Risk framework.

SA-CVA Benefits Map



Estimating SA-CVA Costs

One-off investment costs of adding SA-CVA calculations on top of an existing state-of-the-art CVA risk management framework is not extravagant:

1. **New regulatory specific CVA models:** depending on the firm strategy, this could include the exclusion of the effect of the bank's own default, regulatory Margin Period of Risk, Wrong Way Risk and many other small-to-medium model changes.
2. **Regulatory CVA sensitivities:** scenario configuration, bucket management, regulatory-specific sensitivities models.
3. **Capital charge framework:** aggregation rules (similar to FRTB market Standard Approach), management of hybrid BA/SA CVA, collateral allocation methods.
4. **Execution, control and reporting processes.**
5. **Regulatory approval costs:** could range between an internal model approval to a straightforward application.

However, chances are enhancements to the CVA risk framework are required: sensitivity calculation capacities, CVA model improvements, and robust Risk Management systems and processes. For a lot of banks, this required investment will be much higher in itself than the purely regulatory deliverables.

The real question becomes how much is the bank willing to invest to build a robust CVA risk management framework implementing market's best practices?

Aside from implementation costs, operating costs are at the same time reduced by the alignment of economic and regulatory risks and increased by the need to maintain robust and complex frameworks (economic and regulatory).

How Capteo can assist you?

- **Capteo can support you on the set up of each step on SA-CVA model implementation.**
Achieving SA-CVA financial and non-financial benefits while maintaining its implementation and running costs low can only be secured thanks to seasoned change professionals with an expertise on state-of-the-art XVA risk management framework, regulatory change, and project methodology.
- Our assistance could notably cover:
 - ✓ **Framing and leading the setup** of the new SA-CVA Business Case
 - ✓ **Steer and oversee** regulatory and internal financial risks
 - ✓ **Lead and/or support the improvement of methodologies and processes** used to compute economic capital and all types of SA-CVA impacts
 - ✓ **Implement metrics and methodologies** to perform benefits
 - ✓ **Review existing risk management frameworks** and assist institutions on using new SA-CVA approach results as part of the strategy of the bank, its risk appetite, and its risk management
 - ✓ **Assist organisations on the set up** of SA-CVA framework (process, metrics, methodologies, tools) to comply with ECB's expectations.
- More broadly, Capteo is a strategy and management consulting company specialised in the transformation of financial institutions. We are providing subject matter expert advice on risk and finance topics to financial institutions

CONTACTS

Gabriel LETHU

Partner Risk & Finance
+33 (0)6 77 56 69 22
glethu@capteo.com

Alexis BUNEL

Director – Traded Risks SME
+33 (0)7 66 89 11 57
abunel@capteo.com