



Front-Office xVA Solution

Support for an extensive range of pricing valuation adjustments across the full range of asset classes and financial instruments

Demand is increasing in the front office for xVA analytics that enable banks to remain competitive by pricing risks and regulatory capital charges into their trades. Adoption of such a framework presents a number of challenges, including the range of calculations involved, the computational power required and the management of xVA volatility.

IHS Markit supports the front office by providing fast and flexible xVA analytics across all asset classes, including interest rates, inflation, foreign exchange, equity, commodities and credit.

The risk measures provided include:

- CVA
- DVA
- FVA (including re-hypothecation of funds across the funding set and asymmetric funding rates)
- KVA
- _ M\//
- COLVA (capturing cheapest-to-deliver collateral)
- Sensitivities
- P&L attribution
- What-if analysis
- Inception pricing/pre-deal analysis

Efficient pre-trade calculation of incremental changes to these valuation adjustments ensures pricing and hedging decisions are made in full knowledge of P&L and capital impact.

The Front-Office xVA Solution supports the highly variable computational demands of financial institutions through the use of a server grid. The flexibility and open structure of the solution's underlying architecture mean firms can easily add or integrate new models as required.

Cutting-edge technology stack

IHS Markit leverages industry-leading technologies in the distributed processing and application space. This includes using a subset of the Apache big data technology stack to underpin the Front-Office xVA Solution. The result is an open, extensible platform that uses best-of-breed components. The solution is available through a number of deployment models, including hosted, managed service and on-premises installation.

Regulatory support

The Front-Office xVA Solution supports compliance with ASC 820 (FAS 157) and IAS 39, and delivers the risk measures required for Basel II and Basel III. An SA-CCR module is embedded within the Monte-Carlo engine, allowing for projection of the measure as required for an accurate KVA methodology. FRTB-CVA capital rules leverage sensitivities in the calculation of CVA capital, supporting impact studies.

Fast, detailed results

An accurate full revaluation approach provides batch, real-time and pre-deal xVA with sub-second turnarounds without the use of approximations. The solution supports full sensitivities, including deltas, gammas and crossgammas, and trade-level results can be sliced and diced with a dynamic interface.

Flexibility

It is easy to add and integrate new instruments, models and risk measures. A state-of-the-art yield curve bootstrapping framework also provides a rich set of functionality for building interest-rate curves and enabling xVA sensitivities to be calculated directly on market quotes. An open and easy-to-use sensitivity and stress analysis framework allows financial institutions to unify all of their scenario calculations for internal and regulatory purposes on a single platform.

More information on IHS Markit products and services

London +44 20 7260 2000 **Dallas** +1 972 560 4420 **Toronto** +1 416 777 4485 **New York** +1 212 931 4900 Frankfurt +49 69 299 868 100 **Singapore** +65 6922 4200 Amsterdam +31 20 50 25 800 Sydney **Hong Kong** +852 3726 7000 +61 2 8076 1100 **Boulder** +1 303 417 9999 Tokyo +81 3 6262 1700