Tier 1 global investment bank takes IHS Markit Counterparty Credit Risk Solution

Background

Under the Counterparty Credit Risk framework, firms require timely risk measures in order to manage counterparty credit risk exposure and create timely trading reports. The bank's previous third-party risk management software took over eight hours to calculate credit risk, impacting its ability to generate timely risk metrics. This hindered the bank's ability to achieve Internal Model Method (IMM) approval for a wider range of trading and business activities.

In addition to addressing these performance issues, the bank required a solution that provided the necessary transparency to support its IMM approval process and scalability to grow with its business.

Already a client of IHS Markit's **Counterparty Credit Risk** solution for managing exposure through Potential Future Exposure (PFE), the bank decided to extend the implementation for IMM approval after running scalability tests to achieve the target requirement of supporting in excess of 400,000 trades across multiple asset classes (interest rate, foreign exchange, credit, equity and inflation), for over 29,000 counterparties over several regions within the required calculation window.

Supports the IMM approval process and scalability to grow with the business.

Solution

Counterparty Credit Risk by IHS Markit provides support for regulatory capital calculations and an extensive range of pricing valuation adjustments on a single, modular platform.

IHS Markit subject matter experts collaborated with bank resources for a detailed business analysis to align the bank's requirements with technical specifications, before rolling out the extended solution. This was then followed by additional phases of implementation, which focused on integrating highly complex trades into a very large portfolio and generating the relevant risk measures.

This enabled the bank to upgrade/migrate scenario generation to Monte Carlo simulation of foreign exchange, interest rates, equity prices, inflation and par credit spreads and extend IHS Markit pricing models to exotic instruments and firm-specific requirements.

The solution calculates a broad range of risk measures, including regulatory capital, PFE and credit valuation adjustment (CVA). It also performs risk factor and portfolio backtesting as well as exposure stress testing required for the IMM approval process.

Achieved target of in excess of 400k trades across multiple asset classes for over 29k counterparties.

Benefits

End users were able to run ad-hoc what-if analyses and provide transparency into methodology and inputs of calculations for model validation and trader enquiries.

The project also demonstrated efficient integration with other components of the bank architecture and flexibility to support multiple hierarchies.

In addition, the bank was able to reduce calculation time from more than eight hours to less than three while providing full support through the IMM validation process and meet regulatory requirements around collateral management.

They also introduced flexibility by simulating risk factors from internal or external source alike and perform multiple aggregations on results without performing additional valuations. Operationally, the project successfully integrated with existing systems within the bank while supporting various requirements with a single solution.

Reduced calculation time from 8 hours + to less than three hours.

Financial Risk Analytics

Financial Risk Analytics provides products and solutions to financial institutions to measure and manage their counterparty credit risk, market risk, regulatory risk capital and derivative valuation adjustments. Using the latest analytics and technology such as a fully vectorized pricing library, Machine Learning and a Big Data stack for scalability, our products and solutions are used by the largest tier-one banks to smaller niche firms. Our solutions are available in the cloud and can be run as a service so we free up your internal resources to focus on your business priorities.
https://ihsmarkit.com/products/financial-risk-analytics.html