

# Tier 1 global investment bank implements Counterparty Credit Risk Solution

## THE CLIENT:

A tier-1 Investment bank

## USERS:

Head of risk, derivatives trader, and counterparty credit risk manager

Keeping up to date with counterparty credit risk regulation is an on-going challenge for banks. After an overhaul of the Internal Model Method (IMM) under Basel III, regulation has turned to improving the standardized approach with SA-CCR. Despite being the simpler of the regulatory capital approaches, regional variations in SA-CCR are causing headaches for international banks.

Under the Counterparty Credit Risk framework, firms require timely risk measures in order to manage counterparty credit risk exposure and create timely trading reports.



## Pain Points

This tier 1 bank already used a third-party risk management solution, however they faced significant challenges both in its performance and level of transparency, which impacted its ability to gain IMM approval.

- 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 slow performance hindered the bank's ability to achieve Internal Model Method (IMM) approval for a wider range of trading and business activities.
- The bank required a solution that provided the necessary transparency to support its IMM approval process and scalability to grow with its business.
- Amidst budgetary constraints the cost of the existing solution was an ongoing challenge

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

## The Solution

Counterparty Credit Risk by S&P Global Market Intelligence provides support for regulatory capital calculations and an extensive range of pricing valuation adjustments on a single, modular platform. Our 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.

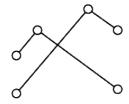
Already a client of S&P Global Market Intelligence's Counterparty Credit Risk solution for managing exposure through Potential Future Exposure (PFE), the bank decided to extend the implementation for IMM approval after running scalability tests to achieve the target requirement of supporting in excess 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.

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 S&P Global Market Intelligence 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.



**Consistent risk control and regulatory capital**

A consistent view of Potential Future Exposure (PFE) and counterparty credit risk capital under both IMM and SA-CCR.



**Aggregation without compromise**

The technology underpinning the solution allows users to store intermediate results so that PFE and Exposure at default (EAD) calculations can be explored for model validation and reused for portfolio calculations.



**Unifying front and middle office**

The solution enables efficiency gains by calculating real-world PFE alongside risk neutral valuation adjustments so that risk managers and traders can work off the same platform giving a consistent view of the risk.



**Cloud compatible across major providers**

Pay only for what you use with our cloud enabled componentized technology. Our solution is built to scale up or down depending on your needs.



**Reducing TCO**

The platform allows firms to reduce total cost of ownership (TCO) execution costs by leveraging turnkey capabilities and a proven project acceleration track-record without sacrificing flexibility. Managed by our team of technology and subject matter experts, the solution frees up our clients' internal resources.



**Track record of IMM approval**

Our platform has been used by multiple clients to gain IMM approval for their regulatory capital and have benefited from the capital savings compared to the standardized approach. Fast track your path to IMM with support from our subject matter experts.

## Key Benefits

The bank's 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's 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.

**[Click here to learn more about our Counterparty Credit Risk solution.](#)**

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