



Bank Hapoalim transforms XVA/CCR batch from 20 hours to 15 minutes

EXECUTIVE SUMMARY

Bank Hapoalim faced inefficiencies in its XVA/Counterparty Credit Risk (CCR) batch processing, which took over 20 hours daily and restricted scalability. Pressured by Internal Model validation, the bank turned to SS&C Algorithmics for a high-performance solution. By implementing SS&C Algorithmics High Performance Risk Engine, (HiPER™) for XVA/CCR with the SS&C Algorithmics Riskflow solution, the Bank reduced its batch processing to just 15 minutes, achieving unmatched operational efficiency, real-time insights and a competitive edge.

Founded in 1921, **Bank Hapoalim B.M.** is one of Israel's largest banks, overseeing assets of approximately \$182 billion. Renowned for its comprehensive suite of financial services, including corporate banking, retail banking and asset management, the bank plays a pivotal role in Israel's financial ecosystem. With a strong foothold domestically and internationally, Bank Hapoalim is lauded for innovation in digital banking and financial stability.

The bank has worked with SS&C Algorithmics since 1998, pioneering the use of Market Risk software in Israel. For decades, Algorithmics has partnered with the bank through various upgrades and enhancements. Most recently, in 2023, Bank Hapoalim sought to modernize its XVA/CCR systems to meet increasing operational and regulatory demands.

THE PROBLEM

Bank Hapoalim's existing XVA/CCR batch processing system impeded the bank's operational agility but also posed a barrier to meeting evolving regulatory and business expectations.

-  **Lengthy Processing Times:** Daily batches required more than 20 hours to execute, consuming resources and creating operational bottlenecks.
-  **Business and Regulatory Pressures:** Regulatory authorities required an increase in the number of scenarios and granular insights, which were unattainable under the existing system.
-  **Scalability Concerns:** Growing assets meant escalating demands on computational capacity, making the existing process unsustainable.
-  **Outdated Technology:** Bank Hapoalim's RiskWatch CCR solution was no longer receiving development updates, limiting future functionality and innovation opportunities.

THE SOLUTION

Bank Hapoalim partnered with SS&C Algorithmics to implement the **SS&C Algorithmics HiPER Risk Engine™ XVA/CCR solution** supported by **SS&C Algorithmics Riskflow**. This combined approach directly addressed the bank's challenges while laying the groundwork for future capabilities.

KEY COMPONENTS OF THE SOLUTION

High-performance processing with HiPER: SS&C Algorithmics HiPER Risk Engine™ reduced the time required to compute XVA/CCR batches from 20 hours to just 15 minutes. The full simulation transformation was achieved by optimizing trade-level calculations, aligning collateral modeling with existing logic, and handling exceptions seamlessly through RiskWatch integration.

Automation and efficiency via Riskflow: SS&C Algo Riskflow provided a modular and automated platform to orchestrate batch processes efficiently. This tool enabled seamless batch execution, monitoring, and troubleshooting, further enhancing operational control and reducing manual effort.

Business and regulatory scalability: By migrating to HiPER, the bank now has the foundational capabilities within the platform to support portfolio-level PFE, ColVA (Collateral Valuation Adjustment), and FVA (Funding Valuation Adjustment). These advanced measures will be enabled through subsequent implementation efforts. This ensures not only compliance with current regulatory demands but also readiness for future expansions, including the introduction of additional XVA measures and sensitivity analyses.

"Thanks to the dedication and professionalism of the SS&C Algorithmics team, we've achieved a ground-breaking improvement in our XVA/CCR batch processing. This milestone ensures we can be more agile in meeting regulatory demands, serve our front office more effectively, and prepare for future advancements in risk management."

● **HAIM FISHER, HEAD OF MARKET RISK MANAGEMENT, BANK HAPOALIM**

RESULTS

Given Bank Hapoalim's longstanding relationship with SS&C Algorithmics, including its use of Market Risk and CCR batches, Algorithmics was able to fast-track implementation. Existing market data and position formats were utilized to minimize implementation time and cost, ensuring the solution was operational without disrupting critical processes.

 **Drastic Reduction in Processing Time:** XVA/CCR batch processing now completes in just 15 minutes, a staggering improvement from the previous 20-hour durations.

 **Real-Time Insights for the Front Office:** The reduced processing time enables the bank to provide near real-time XVA metrics to the front office, empowering informed decision-making and enabling competitive differentiation.

 **Risk Management Improvement and Regulatory Compliance:** The system now supports an increased number of scenarios and timesteps as demanded by regulators, ensuring compliance and mitigating potential risks.

 **Expanded Functionality:** HiPER's advanced modeling and analytical capabilities pave the way for the rapid introduction of new features like ColVA, FVA, and portfolio-level exposure metrics.

 **Automation and Monitoring:** Riskflow has introduced a higher degree of automation and reliability to the bank's operations, simplifying complex processes and reducing error rates.

Conclusion

Through its partnership with SS&C Algorithmics, Bank Hapoalim has transformed its XVA/CCR batch processes. This accomplishment not only resolves long-standing pain points but also equips the bank with scalable, future-proof technology to meet evolving demands.

Looking ahead, Bank Hapoalim plans to expand its use of HiPER to incorporate new functionalities such as dynamic initial margin, sensitivity analysis and additional CCR and XVA measures. The bank will also explore Riskflow's potential in automating market risk batches, further reinforcing its leadership position in financial innovation.

 **Are you ready to enhance your risk management processes with SS&C Algorithmics? Book a demo today**