



Case Study

Erste Group

Achieving FRTB Compliance on Time and Under Budget with ActiveViam

Executive Summary

Leveraging ActiveViam technology for FRTB provided Erste Group with three main benefits:



It enabled them to meet FRTB requirements in a fast and cost-efficient manner



It made the day-to-day market risk management significantly faster and more precise



It integrated seamlessly within Erste Group's infrastructure and even enabled them to reduce their hardware costs

Erste Group Bank AG, the premier Austrian financial institution and the country's largest bank, serves more than 15 million clients in Central and Eastern Europe. Erste Group has been an ActiveViam client since 2015 and during that time has used ActiveViam technologies for market risk analysis and VaR aggregation.

Starting in 2017, in line with Europe's Capital Requirements Regulation (CRR) and Basel III requirements, Erste Group anticipated the need to calculate and aggregate the regulatory capital charge for the Fundamental Review of the Trading Book (FRTB) across all of Erste Group's entities that were running significant trading book activities for reporting in Austria and its Central and Eastern European subsidiaries.

For any institution, complying with FRTB is a significant departure from previous risk reporting rules, requiring a solution with the ability to quickly organize volumes upon volumes of data in order to report accurate figures to regulators both more frequently and in greater detail.

How did Erste Group do it?

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The FRTB Accelerator saved us a lot of time and resources from the bank's internal development teams. The FRTB Accelerator in particular provided data format definition and with our past experience working together with ActiveViam, they offered end-to-end deliveries from the beginning.

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Marcos Heerdt, Head of Trading Book Risk Analytics
Erste Group

The Selection Process

To tackle the challenges of FRTB, Wolfgang Wimmer, Head of Trading Book Risk Management and Marcos Heerdt, Head of Trading Book Risk Analytics, looked first at the solutions they were already using internally, including ActiveViam's ActivePivot. They conducted an internal pre-study for a potential implementation of the FRTB requirements which showed that, among all other solutions considered, ActivePivot was the only one that could scale efficiently within the firm's existing internal architecture for market risk and expand to what was needed to meet the very high data analysis requirements associated with FRTB.

In addition, ActivePivot also met another criterion: the ability to integrate smoothly with Erste's pre-existing technologies – in this case Calypso and Kondor+.

Finally, Erste Bank's past experience with ActiveViam played a role in their decision, as they took into consideration the company's history of being a reliable, quick and agile partner, able to meet both regulatory requirements and the bank's internal needs.

Having selected ActivePivot, Mr. Wimmer and Mr. Heerdt began working on the project implementation. Rather than developing an ActivePivot application internally, Erste Group opted for ActiveViam's FRTB "Accelerator" product, a comprehensive package dedicated to the use case, with a very short go-to-production cycle, that had already been deployed successfully and reliably in other European banks.

FRTB, Accelerated

The first stage of the project consisted in ActiveViam assessing the scope of the data that the bank needed to tap into in order to fulfill the regulatory requirements and designing the most efficient software and hardware architecture to achieve it.

The data included:

- ✓ Deal-level sensitivities from the existing market risk engine
- ✓ Credit risk data and jump-to-default risk measures for the default risk charge (DRC)
- ✓ Reporting hierarchies and trade attributes data from the existing market risk system

ActiveViam also needed to add new features to the existing system to enable risk managers to:

- ✓ Decompose and see the portfolio at any level, from the most granular (i.e. equity index decomposition) to the highest aggregation, on-the-fly
- ✓ Enrich market risk data with credit risk information relevant for the default risk charge
- ✓ Allow the existing market data infrastructure to apply the FRTB bucketing risk weights

Achieving more with less hardware

One of the conditions set by Erste Group was that ActiveViam had to find a way to optimize the existing calculation engines to provide daily deal-level sensitivities calculations for the full trade scope (i.e. existing VaR measures and FRTB sensitivities) while maintaining the same hardware footprint.



Daily regulatory reporting for trading book activities is now faster and provides much more flexibility. In choosing ActiveViam, we also benefitted from the company's quick and agile response to requirements from the regulator and the bank's internal needs.



Marcos Heerdt, Head of Trading Book Risk Analytics
Erste Group

Overcoming Roadblocks

The challenges outlined above were all anticipated at the outset of the project but new ones also arose during the implementation. Thanks to ActivePivot's flexibility and with support from the ActiveViam product team, ErsteGroup developers were able to overcome them all.

- The FRTB regulation requires banks to report all of their entities as standalones, which trigger s the need to report in multiple currencies as well as all entities in aggregate in euros. For Erste Group, it meant looking at foreign exchange risk across multiple (consolidated) geographies. This was further complicated by the fact that the regulator introduced several tweaks to the FRTB rules while the implementation was ongoing. **"This is where ActivePivot stood out,"** Mr. Heerdt said. **"With agile deployment cycles and the joint collaboration between Erste Group and the ActiveViam product team, we adapted our implementation as the regulation evolved and met the project goals and deadlines."**
- The front-end user interface for middle office risk management, built with ActiveUI, was subject to several fundamental changes which required dedicated testing. The new system introduced more transparency, the ability to explain the daily measures to a broad range of end users across multiple entities and the creation of reports for trading heads, accessible online. The new interface was built by ActiveViam based on input from the Erste Group's teams and cut down substantially on the number of spreadsheets in circulation at the bank.



The End Result

ActiveViam and the FRTB Accelerator delivered a seamless end-to-end integration and state-of-the-art technology and created a flexible, speedy workflow that met all FRTB requirements. Furthermore, they saved Erste Group significant time and costs in development and implementation and represented a significant upgrade to their risk analytics capabilities. Indeed, beyond meeting FRTB requirements, Erste Group leverages ActivePivot to provide market risk analysts with the ability to perform deep and agile 'What-If' analysis, which they use for instance to simulate instantly the effect of a trade or set of trades on the bank's risk-based capital charge.

Since the end of the deployment of the ActiveViam FRTB Accelerator, Erste Group has access to:



Comprehensive daily analysis of all market risk measures for the existing internal model and for the risk measures within the FRTB SA



Compliance with daily reporting deadlines in a cost-efficient manner



Analysis of historical trends in VaR and FTRB SA measures for backtesting



The ability to connect the existing deal-level VaR measures together with the sensitivities-based measures for SA within the same risk aggregation platform



Drill down to single trade level results in a few seconds

Erste Group was completely satisfied with this implementation and said of the FRTB Accelerator:

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For a bank comparable to Erste it's a great fit for sure.

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Marcos Heerdt
Head of Trading Book Risk Analytics
Erste Group



About ActiveViam

Founded by industry experts, ActiveViam understands the data analytics challenges faced by financial institutions across trading desks, risk, and compliance. ActiveViam pioneered the use of high-performance analytics in finance, helping the largest investment banks, asset managers and hedge funds make better decisions, explain results with confidence, and simulate the impact of their decisions. ActiveViam's mission is to deliver train-of-thought analysis on terabytes of data in the most cost-effective way so clients can explain their results with confidence and model the scenarios that will optimize their business. ActiveViam specializes in risk data analytics for one of the fastest moving and most regulated industries with a presence in the world's leading financial marketplaces – London, New York, Singapore, Sydney, Hong Kong, Paris and Frankfurt.

For more information please visit:
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