FRTB Studio Standardized Approach

A lightweight, interactive, intraday aggregation and analytics tool that gives banks immediate access to FRTB SA calculations.

While simpler to implement than the FRTB internal model approach (IMA), the standardized approach (SA) for market risk still requires extensive interpretation, analysis and development to turn regulation into production-strength implementation. Misinterpreting the regulatory requirements can give high capital charges that may lead to banks falsely questioning the profitability of their trading business.

FRTB Studio, part of the IHS Markit FRTB Solution Suite, offers a lightweight, interactive, intraday aggregation and analytics tool that gives banks immediate access to SA calculations. The low cost of deployment and maintenance of FRTB Studio and the rapid time to market combined with its scalability and engine-neutral design, enables banks to reuse existing valuation engines to produce the required inputs for consistent aggregation and capital calculations accurately and cost effectively.

FRTB Studio comes with an API that can be seamlessly integrated into a production architecture and is being implemented at several European banks, with the results used to monitor and support all the components of the SA capital charge including:

— Sensitivity Based Method (SBM)
— Residual Risk Add-on (RRAO)
— Default Risk Charge (DRC)

The tool takes in sensitivities in an industry standard format (common risk interchange format - CRIF) and returns results to the user in an intuitive notebook user-interface. FRTB Studio includes the functionality required not only to execute the calculations, but also to quickly view the impact on an organization, both as part of a quantitative impact study (QIS) exercise and in production. It provides a consistent view of trading book risk and capital measures allowing banks to explore the capital implications of business decisions interactively.

Valuation-engine agnostic

FRTB Studio is valuation-engine agnostic and designed to coexist with a bank's existing pricing and risk analytics infrastructure. It is built on Apache Spark and as a result can process large portfolios in near real-time, even when running on commoditized hardware. FRTB Studio can be deployed on a single machine or a cluster.

Rapid time to market

FRTB Studio provides a fast and effective way to be fully operational in a production ready environment within a short timeframe, on a small hardware footprint. Best business practices are embedded in the product that is supported by a team of experts.

Local market interpretation

FRTB Studio is pre-configured to follow our in-house experts' interpretation of the Basel Framework MAR21[1] to MAR23 rules. Users can configure FRTB Studio to follow their own local market interpretation, as well. By using the concept of calculation contexts, FRTB Studio allows the creation of different settings in separate contexts. Capital difference for different risk weights can be measured for what-if analysis and decision-making purposes.

Instant answers to trader questions

With FRTB Studio, users get instant answers by configuring a new context in Studio and comparing it to the baseline. A simple intuitive domain specific language allows users to query the aggregation engine directly and get answers in near real-time.

Low cost of deployment and maintenance

FRTB-Studio is easy to install and intuitive to use with low overall cost of ownership. Based on our analysis and users experience, we approximate the internal build costs to meet the FRTB-SA requirements to 2 FTE for 1 year for the initial build and 0.5 FTE for on-going maintenance.

Supports FRTB-IMA aspirations

FRTB Studio has full IMA calculation capabilities and is integrated with the other components of the IHS Markit FRTB Solution Suite. This means banks can easily assess the potential capital save of going IMA at any point in time.

1 https://www.bis.org/basel_framework/chapter/MAR/21.htm?inforce=20220101, https://www.bis.org/basel_framework/chapter/MAR/22.htm?inforce=20220101 https://www.bis.org/basel_framework/chapter/MAR/23.htm?inforce=20220101

Figure 1- SA-Sensitivities Based Method (SBM): capital charge per correlation shock and risk type

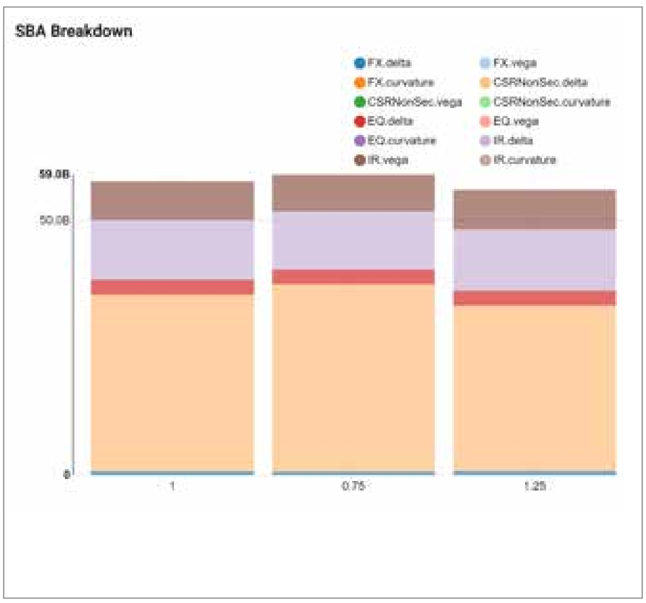
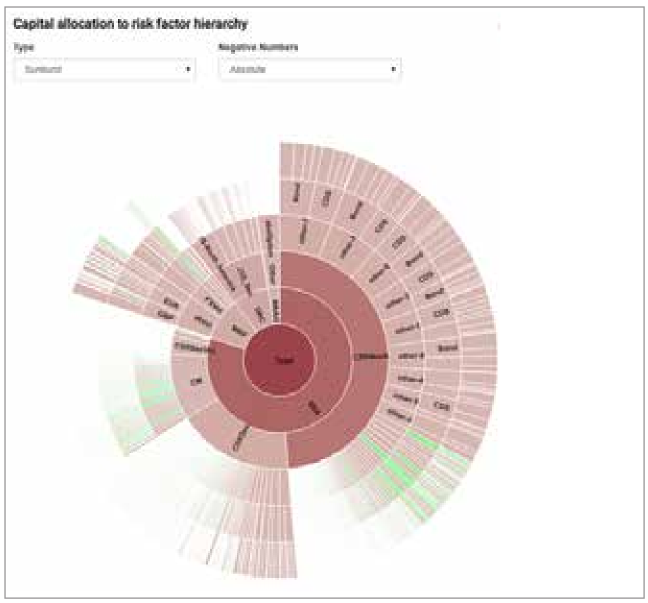


Figure 2 - Capital allocation to risk factors. Segment size is proportional to the capital usage. Red is capital consuming and green is capital reducing



More information on IHS Markit products and services

AMERICAS
+1 212 931 4900

EMEA
+44 20 7260 2000

APAC
+65 6922 4200

sales@ihsmarkit.com