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Fundamental Review of the Trading Book (FRTB) Standardised Model Approach From SAS®

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Review of the
Trading Book is a
new and substantive
regulation from the
Basel Committee on
Banking Supervision

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The Fundamental Review of the Trading Book (FRTB) is a new and substantive regulation from the Basel Committee on Banking Supervision (BCBS) that heralds a major overhaul and rethink of trading book capital rules. In overview, the rules are designed to increase governance in the following key areas:

- New rules to dictate which instruments qualify for inclusion in the trading book coupled with more rigorous guidelines governing internal risk transfers between the banking and trading book.
- The introduction of a revised standardised model for market risk based on price sensitivities.
- For those institutions wishing to retain an advanced approach, a mandatory substitution of value at risk (VaR) with an expected shortfall (ES) risk measure to a desk level.
- The introduction of liquidity horizons in the ES calculation to reflect the time required to sell or hedge a given position during a period of stress.
- Greater disclosure and transparency of market risk capital charges including capital ratios calculated using both standardised and internal model approach where applicable.
- Vigorous back-testing requirements for institutions retaining an advanced approach to a trading desk level. Failure to meet the validation criteria would force a desk to revert to using the standardised approach, thus incurring incremental capital charge.

For an already under-fire sector struggling to implement and adopt the recent tidal wave of regulation, FRTB signals a sharp shift in regulatory focus designed to shore up the capital rules introduced after the last financial crisis under the guise of Basel 2.5 and replace them with a more coherent and robust framework of measures to reduce the vast variability in capital levels previously observed across financial institutions and harmonise modelling practices to help increase public confidence in reported capital ratios.

The common denominator for all institutions is the introduction of a revised standardised model. All institutions, regardless of size, complexity or whether they have allotted to retain an advanced approach, must deploy and report capital charge based on the standardised model. This presents a number of challenges to institutions of all shapes and sizes.

- Significant programs of work, including major IT projects to cope with the
  weight of changes under FRTB which will require entirely new calculation
  measures to be implemented along with the associated changes and
  additions for requisite data sources.
- The revised standardised model requires reporting of data not commonly extracted under current regulation, so will require wide-spread changes to trade and risk management IT with revised data standards and sources.
- FRTB calls for a greatly increased number of simulations to be performed and this will have an impact on the performance and availability of current hardware infrastructure with some major upgrades likely.
- Following on from BCBS 239, FRTB will induce an increased focus and reliance on data management techniques and in particular, greater rigour around data quality regime. This is likely to drive further significant investment in complimentary programs of work.
- Front line changes that will impact capital allocation and pricing to accommodate the standardised approach which may end up influencing business mix and dictate business line policy as some portfolios become more attractive than others from a capital perspective.



From the outset, SAS® has remained engaged in the evolution of FRTB that culminated in the approval and publication of the Market Risk Framework in January of this year. At SAS, we have conducted a thorough and extensive review of the regulation, with particular scrutiny on the impact that the introduction of the revised standardised model will have on institutions.

This focus has led to the development of a new SAS solution designed to meet the exacting capabilities and requirements of standardised model under FRTB that we believe provides a unique and pioneering answer for financial institutions seeking an innovative and cost-effective route to gaining regulatory compliance in this area.

Realising there is no 'one size fits all' response to FRTB, the SAS solution is both highly scalable in recognition of the highly variable data volumes across organisation and offers a range of flexible deployment options ranging from true multi-tenancy software as a service (SaaS) to a traditional customer deployment with options in between.

All of this is designed to make the SAS solution a viable and coherent alternative to both internal development and the more outmoded vendor software propositions that you may be familiar with.

As an embodiment of innovation, the SAS solution harnesses our industry-leading analytics capabilities, our high-performance risk technology platform, our provocative Event Stream Processing (ESP) technology and combines our extensive data management environment to deliver a truly end-to-end solution that embodies all the principles of the regulation.

For institutions wishing to retain the advanced approach, the SAS solution has the potential to realise some highly demonstrable and tangible benefits:

- Significant reduction in operational overhead with timely and practical capability for standardised models in advance of the regulatory deadlines.
- Allow institutions to focus on refining the advanced approach.
- Highlight errors in the advanced approach before it hits the regulator.
- Trigger recalibration events to avoid desk suspension or flip to standardised model.
- Provide detailed reports on advanced / standardised comparison.
- Provide a mechanism to benchmark model performance.
- Early deployment will helps banks ascertain impact analysis in advance of the regulatory deadline.

Institutions of all sizes will benefit from:

- Greatly simplify implementation though the introduction of a standard data model to enable an organisation to focus on sourcing the right data.
- Early adoption will reduce regulatory focus and avoid becoming an outlier.
- Calculations and reporting requirements will inevitably be refined by the regulators. Instead of tying up resources to monitor and add all of these changes, SAS will undertake the task.

The above are a small selection of the benefits that can be unleashed through the adoption of a SAS solution for standardised model under FRTB. To reveal more and fully comprehend the full scope of our capabilities in this area, please visit <a href="https://www.sas.com">www.sas.com</a> to find contact details for your area.

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