MSCI's FRTB Solution: Focusing on the US Implementation

Takeaways from the process of tailoring our FRTB solution to align with the US-specific requirements and calculate the standardized approach capital requirement for the trading book.

US banks join their global peers in the challenge to implement FRTB

On July 27, 2023, the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency (the "Agencies") published their long-awaited Notice of Proposed Rulemaking (NPR) to "strengthen capital requirements for large banks". As part of the final components for the implementation of the Basel III agreement, the NPR establishes the globally accepted Fundamental Review of the Trading Book (FRTB) as the new market risk capital requirement in the United States. This is applicable to all US banking organizations with total consolidated assets of $100 billion or more, or aggregate trading assets and liabilities equal to 10% or more of total assets, or $5 billion or more. Experience of banks worldwide confirms that the implementation of FRTB, even that of the Standardized Approach, is operationally challenging due to the complex requirements on sensitivity calculations and risk bucketing. National implementations of FRTB tend to follow the global standard closely, but usually there are minor differences – and the US is no exception in this respect.

The proposed rules in the US differ from the global standard in some minor but notable aspects

The explanatory text of the proposed rule and our analysis have highlighted a few points where the US proposal deviates from the global standard. Most of these changes are part of the natural process of aligning FRTB to the specifics of the US market and the other US capital rules, while the rest addresses cases where the Agencies' view is slightly different from the Basel consensus.

- **No external credit ratings:** In accordance with the Dodd-Frank act, reliance on external ratings in the capital requirements regulations is avoided. Together with the previously existing definition of "Investment Grade", the new capital rule defines "Speculative Grade", and "Sub-speculative Grade" credit qualities, and all bucketing (both in SBM and DRC) is based on these categories, without explicit references to credit ratings or their equivalents. The bucketing and risk weights are still largely consistent with the global standard.
- **Equity economy classification based on economic criteria:** To better reflect the countries' stages of economic development, objective economic criteria are proposed to distinguish emerging markets from advanced markets (called "liquid market economies" in the US proposal) for the purpose of equity bucketing. The Agencies provided a list of countries currently meeting the criteria, which, as compared to the global standard, additionally includes Chile, Israel, Malaysia, South Korea and Taiwan while Hong Kong and Norway are excluded.
- **Electricity bucketed with natural gas:** For commodity risk in SBM, the Agencies are proposing to move electricity into the bucket for gaseous combustibles, based on empirical evidence for a strong correlation between electricity and natural gas prices across multiple geographical regions. As opposed to this, the global standard includes electricity in the bucket of carbon trading.

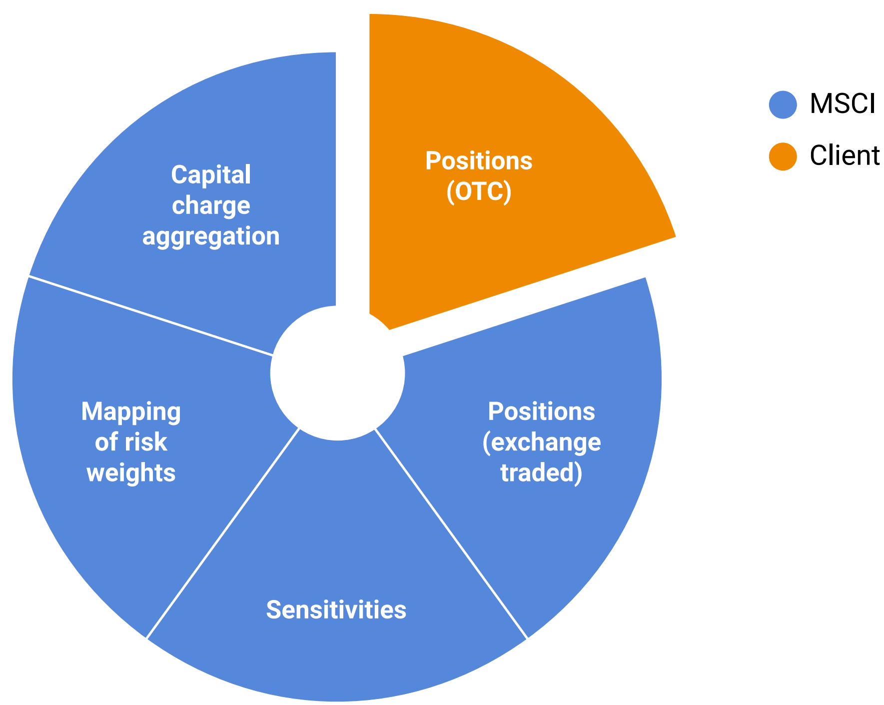
- **Distinct handling of GSE and PSE debt:** US government-sponsored and public sector entity (GSE and PSE) debt has significant market in the US. In SBM, recognizing the relevant correlation, these are placed into the bucket for government-backed non-financials, education, and public administration, while in DRC, a separate bucket is created for PSE and GSE debt.
- **Distinct handling of sub-speculative sovereigns:** The Agencies recognize the elevated level of risk in sub-speculative sovereign and multilateral development bank exposures, and a new, separate bucket has been created for them in SBM.
- **Recognizing the Uniform MBS initiative:** On one hand, the Agencies highlight that the GSEs (e.g., Freddie, Fannie) can default independently and must thus be treated as separate obligors; on the other hand, recognizing the Uniform Mortgage-Backed Securities (UMBS) initiative, full offsetting is permitted between identical UMBS regardless of the issuer.
- **More flexible maturity scaling in DRC:** The Agencies emphasize the importance of reflecting hedging relationships in DRC (e.g., an equity derivative and the cash equity hedging it), and the US proposal allows more freedom in the maturity scaling of exposures in DRC.

MSCI is adjusting its entire FRTB workflow to align with the US-specific requirements.

Banks can use MSCI's risk management platform to calculate capital – and to do much more.

Over the years, MSCI has developed a regulatory capital calculation module on its RiskManager platform, offering a simple yet flexible approach to calculate the FRTB capital charges. Along with the existing support for global standard and the European Union specific rules, MSCI offers an enhanced module to cover the rule variant proposed in the US. We offer calculation of all three components of the Standardized Approach capital charge: the sensitivities-based method (SBM), the default risk charge (DRC), and the residual risk add-on (RRAO). We passed the ISDA unit tests for the global version of our FRTB analytics, and we are working on the related Fed unit testing. We offer the module as part of a multi-asset class risk management platform with extensive analytics and reporting capabilities, including simulation-based risk measures, stress testing and liquidity analytics. Analytics for the expected shortfall calculations required by the internal model approach (IMA) is also available.

A broad-based, flexible solution



MSCI offers a solution for the Standardized Approach capital charge, which is,

- **Broad** – clients can rely on our offering to cover terms and conditions data, market data, sensitivity calculations, FRTB-specific bucketing, risk weighting, aggregation.
- **Flexible** – we can easily accommodate client-provided market data or client-specific views on bucketing and aggregation via custom position and time series tagging
- **Validated** – our offering is already benchmarked to the ISDA Unit Tests and is expected to be validated via the Fed's Unit Tests as well. It is also scrutinized by many clients globally.
- **Easy to integrate** – we have a wide range of reporting capabilities and output formats to seamlessly integrate with our clients' workflows

For enquiries, please contact **msci_marketing_analytics@msci.com**

About MSCI

MMSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process. .

To learn more, please visit www.msci.com.