

---

## **CRR3 - Market Risk: A granular implementation of the FRTB**

---

### **Executive Summary**

In January 2019, the Basel Committee for Banking Supervision (BCBS) released a revised version of the Fundamental Review of the Trading book (FRTB), which comprises the Basel III market risk standard. The FRTB, a CRR2 reporting requirement in the European Union, is expected to become a capital requirement as a component of the CRR3. Based on EBA's Call for Advice (CfA) analysis<sup>1</sup>, trading and market-making activities represent 14% of the 15.7 percentage point increase in total risk-weighted assets (RWAs) resulting from the finalisation of Basel III reforms, excluding the output floor.

Considering that only 5% of total RWAs of EU banks are currently allocated to these activities, the impact of FRTB is disproportionate and may further limit banks' capacity to provide markets-based financing, liquidity provision and hedging solutions, and thus impede the development of the Capital Markets Union (CMU).

As recently recognized by the Final Report of the High-Level Forum for the CMU<sup>2</sup>, the implementation of the FRTB needs to be considered in conjunction with market liquidity and market-making activities of banks - both crucially important to functioning of European financial markets. ISDA and AFME provide our key recommendations for ensuring that the standard is implemented in a proportionate way in the EU at the end of this document.

### **The Fundamental Review of the Trading Book: A Brief Primer**

Following the global financial crisis, the BCBS initiated an overhaul of market risk capital rules with the Basel 2.5 framework, implemented quickly as a stop-gap measure, to address the most pressing deficiencies exposed by the crisis. However, the Basel Committee had a much broader review of the market risk framework in mind and initiated an overhaul of market risk capital rules in 2012, with the aim of replacing the Basel 2.5 framework with a more coherent and risk-sensitive package that also allows for the supervisors to better supervise model performance, and disallow their usage, when models underperform. This revised framework, finalized in January 2019, is commonly known as the Fundamental Review of the Trading Book, or "FRTB". The supervisory objective was to also reduce the variability of RWAs across banks and improve the governance framework for ensuring adequate risk model data quality - while still providing appropriate standards for banks that have limited market risk exposure to allow for proportionality.

---

<sup>1</sup> <https://eba.europa.eu/eba-updates-estimates-impact-implementation-basel-iii-and-provides-assessment-its-effect-eu-economy>

<sup>2</sup> [https://ec.europa.eu/info/news/cmu-high-level-forum-final-report\\_en](https://ec.europa.eu/info/news/cmu-high-level-forum-final-report_en)

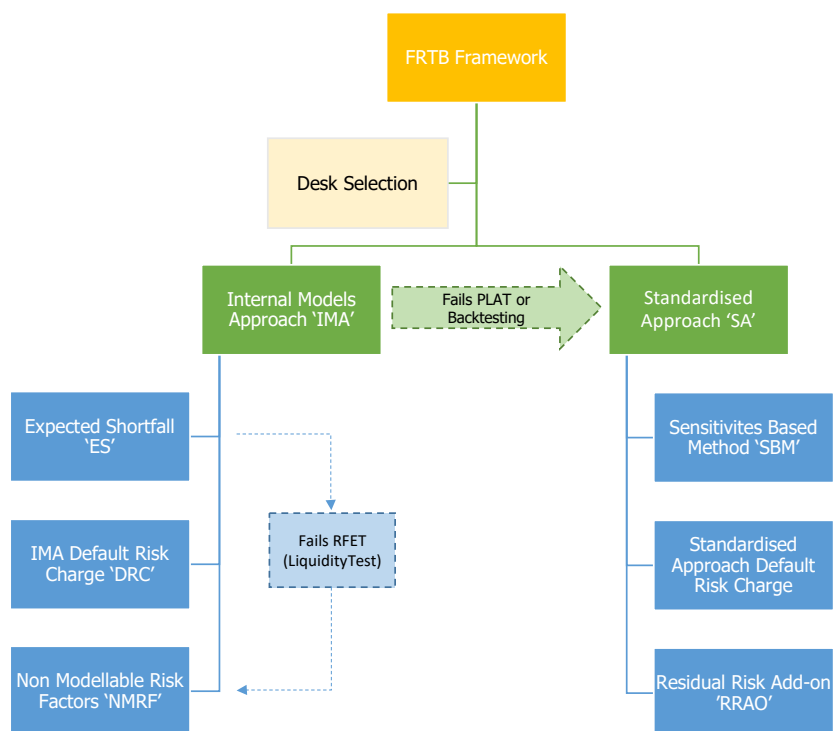
The new FRTB framework will introduce significant changes to banks' market risk capital calculations, including:

- Revisions to the boundary defining which assets fall either within the scope of trading or banking book, and reducing regulatory arbitrage resulting from moves across the boundary.
- Overhaul of the Internal Model Approach (IMA) to focus on tail risk, and the introduction of variable liquidity horizons according to the instrument traded, instead of the standard 10-day liquidity horizon for all risk factors.
- Establishment of a stringent and granular trading desk-level IMA approval processes, including an assessment of the quality of data used in risk models (through a new profit and loss attribution test).
- Introduce a stressed capital add-on for risk factors failing modellability tests, known as non-modellable risk factors ('NMRFs'); and
- Ensure the Standardised Approach ('SA') is more risk-sensitive, explicitly captures default and other residual risks, and serves as a credible fallback for the IMA.

In Europe, the implementation of FRTB will follow a two-step approach. In the first instance, banks will be required first to report their market risk exposure under the Standardized Approach in 2021, followed by the IMA. In the second instance, the forthcoming CRR3 will convert the reporting into a framework for calculating capital requirements.

There are significant challenges for banks to implement the FRTB framework given that the revised market risk standard is a complete overhaul of the previous framework and how the systems have been built and set-up. Given the design of the IMA, there will be ongoing consideration given to the amount of regulatory capital they are expected to hold against market risk under the new framework. There will also be significant technological upgrades and one-off and ongoing costs resulting from changes to internal infrastructures and processes to ensure compliance with the new standards.

### Structure of revised Market Risk Framework



The implementation of the FRTB will materially increase capital requirements for banks with market making activities in Europe, while elsewhere the European Commission (EC) is trying to promote market-based financing through the CMU project. The EBA's Advice published in December 2019<sup>3</sup> estimated that the impact of the FRTB would be, on average, 105% higher relative to current RWA levels for the same risks. Banks with IMA approval, in particular, experience a 108% increase in RWAs under the FRTB standard. The results highlight that the cost of holding inventory as a result of market making are still relevant, even if one assumes that banks' trading desks achieve the same level of internal model approvals as under the current standard.

It can be expected that new issues may emerge during the implementation process, which depends on the EBA developing a number of technical standards in line with its planned roadmap. The Industry acknowledges that as firms' systems and interpretations advance, they may also unearth efficiencies that reduce the RWA impact. Nevertheless, even if taking into account such potential efficiency improvements, on balance, we anticipate that the intended 22% increase in market risk (MR) RWA estimated by the BCBS will be exceeded materially<sup>4</sup>.

Alongside the results from the EBA impact study and the incentives created by problematic IMA components (e.g. NMRF), the earlier implementation timeline for SA reporting equally accentuates concerns with some components of the SA.

The capital impact is significant when considered against the importance of the market-making role of banks in capital markets in Europe. The intermediary role played by banks in capital markets through trading could thus be hampered by measures that increase capital requirements held against certain trading activities, limiting the capacity of banks to offer liquidity and act as market-makers. This was also recognized more recently in the Final Report of the High-Level Forum for the CMU.

Finally it is also important to note that the significance of the recent market turmoil in light of the COVID-19 pandemic has yet to be fully understood and quantified and therefore further detailed impact analysis is necessary to help clarify what the long-term impacts will be on the EU economy. In particular, this will help identify any pro-cyclicality that should be avoided in the future market risk framework.

#### **The centrality of bank market-making in capital markets**

Liquidity is critical to effective market functioning. Corporates, governments and investors need consistent and constant access to funding and investment opportunities at fair, accurate and transparent market prices. Banks (and non-bank intermediaries) can greatly facilitate the injection of liquidity into markets through their role as market-makers. Market-making refers to the creation and maintenance of liquid markets, by ensuring the availability of stocks, bonds, or other instruments at sufficient quantities, at consistent buying and selling prices. Simply put, market-makers, usually large financial institutions, make themselves available to buy and sell instruments at market price, thus ensuring that markets continue to function at all times. Without this crucial role played by banks, as well as other non-bank intermediaries, corporates and governments would find it more costly to raise capital as investors would add a higher liquidity risk premium to asset valuation. By providing liquidity, market-making thus facilitates the efficient allocation of economic resources. The prudential treatment of trading activities must thus ensure that banks continue to be able to fulfill this crucial role.

## **Implementing FRTB in the European Union**

When implementing the market risk framework in the European Union, the EC and co-legislators need to ensure that the impact of FRTB on banks' wholesale activities is not further exacerbated by an inconsistent timeline and transposition of the rules in key financial centers. To this end, aside from the more specific recommendations linked to its different components, ISDA and AFME strongly believe that a globally-consistent implementation of FRTB should be a key priority, along with the resolution of material issues

<sup>3</sup> <https://eba.europa.eu/eba-updates-estimates-impact-implementation-basel-iii-and-provides-assessment-its-effect-eu-economy>

<sup>4</sup> [https://www.bis.org/bcbs/publ/d457\\_note.pdf](https://www.bis.org/bcbs/publ/d457_note.pdf)

resulting from this implementation identified below. An inconsistent implementation timeline could lead to market fragmentation for inherently global markets activities.

In terms of specific provisions in the FRTB, ISDA and AFME would like to bring to the attention of the co-legislators the following five areas:

1. The first relates to the investment in funds, or Collective Investment Undertakings (CIUs) eligible to the Trading Book. Banks often offer derivative products to their clients on performance of specific funds and hedge these products with underlying positions in the reference funds. The FRTB allows for equity investments to be included in the scope of the internal models *if* the bank is able to calculate capital requirements based on the assets underlying the fund (i.e. if the bank can “look through” to the underlying assets). Otherwise, three different approaches under the Standardized Approach (SA) are used. Two of them lead to conservative capital charges. The third one (the look-through approach under SA), which is the most risk sensitive approach, introduces computational intensity comparable to the IMA. These provisions regarding IMA and SA look through approaches result in operational complexity in relatively simple and low risk strategies and may result in activity in funds being prohibitively expensive.
2. The residual risk add-on (RRAO) is a capital charge intended to only apply to exotic risks. Its design, a flat risk weight on the gross notional of affected products, is risk insensitive and penalizes well-hedged portfolios which can result in overly high capital charges for banks, and lead to trading services becoming overly expensive. Moreover, the industry is concerned with the excessive RRAO charge for interest rate (IR) yield curve options and spread options. IR yield curve options are widely used as hedging tools against interest rate curve exposure by clients such as pension funds, life insurance companies, corporates, asset managers and the RRAO charge could increase significantly their cost of hedging.
3. Correlation Trading Portfolios (CTP): The FRTB introduces particularly punitive charges for this business line in terms of default and credit spread risks and limits recognition of hedges. This may incentivize banks to break economic hedges in order to reduce capital which should not be an aim of a regulatory capital framework. In addition, the rules still lack clarity, which might result in limited own funds requirements comparability between banks.
4. When a non-securitization instrument has multiple underlying risks, the calculation of its loss given default (LGD) is not consistent with that of an instrument with a single underlying. This may make it difficult to invest in EU markets, as the default risk for bucket/index products may incur punitive capitalization.
5. Finally, it is essential to ensure the viability of the internal model approaches. While supporting a number of methodology and supervisory measures that will lead a more robust IMA, we are increasingly concerned that the extent of these measures may challenge the viability of the IMA altogether. Certain requirements that are unique to the internal model - which due to the strictness of requirements or obvious inconsistencies across model approaches - are potentially undermining this approach as a viable option for banks. Of particular relevance are:
  - a. the Profit and Loss Attribution Test (PLAT), which requires testing on real portfolios to ensure appropriate calibration before becoming a requirement for IMA eligibility.
  - b. the Non-modellable Risk Factors (NRMF) with the prescriptive nature of the requirements potentially leading to a competitive disadvantage; and
  - c. an obvious inconsistency in the Default Risk Charge (DRC) between IMA and SA due to issuers of low risk such as EU Sovereign issuers that are not distinguished from other issuers of a lesser credit quality and a floor of 3bp leads to a significantly higher charge under IMA (than for SA) for the equivalent risk.

### **AFME and ISDA recommendations on FRTB**

We would recommend that the following changes be considered:

- For Collective Investment Undertakings (CIUs), it will be important to clarify from the BCBS rules and ensure that
  - the IMA should not include the mandatory look through requirements, instead it should be acceptable for CIUS to be included in IMA as a single risk factor using the daily liquid price of the CIU as currently permitted the ECB by paragraph 40 of the ECB guide to internal models;
  - flexibility should be introduced for the SA look-through approach in order banks are allowed to use sensitivities to underlying fund's components provided by third parties (already allowed for the treatment of CIU in the non-trading book).
- RRAO should address only risks not capitalized elsewhere in the framework (ex. volatility risk of volatility or variance swaps could well be captured in the SBM Vega risk charge and should not be subject to the 1% RRAO charge), it should be ensured that only real truly exotic underlying risks are subject to the 1% charge and more generally RRAO does not disproportionately charge vanilla rates products.
- Correlation Trading Portfolios (CTPs) rules remain ambiguous and require to be revised to limit comparability issues between banks. In addition, CTP exposures should be able to be decomposed to constituents of the product for better recognition of economic hedging.
- The loss given default (LGD) for products with multiple underlying risks should be calculated based on the LGD %s found in BCBS MAR22.12 to ensure the CRR2 text is updated based on the latest Basel FAQ.
- Careful implementation of the key IMA requirements using real portfolios and addressing obvious inconsistencies between the IMA and SA approach before go-live of FRTB own funds requirement to ensure the viability of IMA.