

The Fundamental Review of the Trading Book and Emerging Markets

In January 2019, the final piece of Basel III fell into place with the publication of the revised framework for market risk capital, known as the Fundamental Review of the Trading Book (FRTB). The FRTB makes a number of important changes, including the introduction of a more risk-sensitive standardized approach (SA), desk-level approval for internal models, and a capital add-on for non-modellable risk factors (NMRFs).

With the rules now finalized, attention turns to national implementation, but there are uncertainties about how the rules will be transposed, and whether all jurisdictions will meet the Basel Committee on Banking Supervision's (BCBS) 2022 implementation target.

For banks in emerging markets, implementation poses some particular challenges. These include barriers to entry, a shortage of data and concerns about the treatment of sovereign debt. While it is important for the framework to be implemented as consistently as possible, it is also imperative that regulators and market participants monitor and understand the impact on emerging market banks and economies.

WHAT IS THE FRTB?

Following the global financial crisis, the BCBS initiated an overhaul of market risk capital rules, with the aim of replacing the Basel 2.5 framework with a more coherent and risk-sensitive package, dubbed the Fundamental Review of the Trading Book, or FRTB.

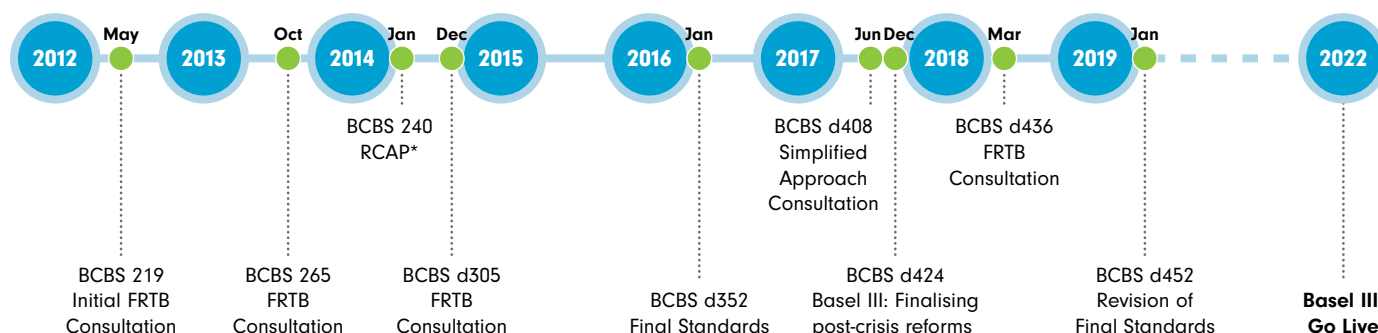
The BCBS's objective was to address shortcomings in Basel 2.5, reduce the variability of risk-weighted assets (RWAs) across jurisdictions, and strengthen the relationship between the SA and the internal models approach (IMA).

The FRTB was designed to:

- Revise the boundary between the trading book and the banking book;
- Overhaul the IMA to focus on tail risk, and take market liquidity during a period of stress into account;
- Establish stringent trading desk-level IMA approval processes, including a new profit and loss attribution test;
- Introduce a stressed capital add-on for risk factors failing modellability tests, known as NMRFs; and
- Ensure the SA is more risk-sensitive, explicitly captures default and other residual risks, and serves as a credible fallback for the IMA.

THE EVOLUTION OF THE FRTB

The FRTB framework has evolved significantly since 2012, when the BCBS published its first consultation paper.



- In 2009, the BCBS introduced a set of revisions to the Basel II market risk standards to address the most pressing deficiencies exposed by the financial crisis (called Basel 2.5). The changes included the introduction of an incremental risk charge to capture default and migration risk and stressed value-at-risk to reduce pro-cyclicality.
- The FRTB was subsequently devised to tackle a number of structural flaws in the framework that were not addressed by Basel 2.5 – for example, by developing an effective definition of the regulatory boundary between the banking book and trading book, and introducing risk measurement methodologies that are sufficiently robust to appropriately capitalize risk drivers.
- The calibration of the FRTB framework has been informed by numerous quantitative impact studies (QIS), the latest of which captured data from the first half of 2018.
- It has been a long process to develop the new market risk standards, driven by novelties in the FRTB framework and the need to incorporate feedback from industry subject-matter experts.
- The final FRTB framework was published in January 2019, and the BCBS has targeted an implementation date of January 2022.

* Regulatory consistency assessment programme (RCAP) – Analysis of risk weighted assets for market risk

HAS THE FRTB ACHIEVED ITS OBJECTIVES?

“First, reform implementation must not only be effective but also dynamic. That means adjusting measures if there are unnecessary duplications, inconsistencies or material unintended consequences. The objective isn’t just resilience, but efficient resilience.”

Mark Carney, chairman, Financial Stability Board, April 20, 2017

The FRTB has addressed many of the shortcomings in the Basel 2.5 standards by incorporating:

- New stringent modellability criteria;
- Tail risk liquidity adjusted capital calculations (expected shortfall);
- A stressed capital add-on (NMRFs);
- A revised, risk-sensitive SA; and
- A new definition of the regulatory boundary between the banking book and trading book.

While the FRTB has been finalized, it is important that the revised framework is fully tested and continuously monitored to ensure the calibrations are appropriate and risk sensitive. The impact should also be assessed in the context of the overall Basel III package.

IMPLEMENTATION

As attention now turns to implementation, it is important that the framework is applied as consistently as possible – both in terms of substance and timing – to avoid fragmentation and the emergence of an unlevel playing field.

However, it is also acknowledged that the framework has been primarily developed and calibrated for large, globally active banks in advanced economies. As a result, there are questions about which approach might be best for smaller banks, and to what extent the framework will impact those institutions in emerging markets.

FRTB Implementation Flexibility

There are some areas that may warrant some flexibility in implementation. For example, there have been instances in the current market risk framework where certain jurisdictions have allowed a mix of the SA and the IMA to capture specific and general risks. The FRTB requires both components to be captured under the IMA for banks to achieve IMA approval. This may add to the implementation burden for banks and disincentivize some from applying for IMA approval.

SA Implementation

Considering there is no formal regulatory approval process for the SA under the FRTB, there is a need for regulators to ensure the SA is implemented as consistently as possible across the industry. The use of benchmarking based on hypothetical portfolios is a valuable tool to inform that process.

Timeline

Most jurisdictions in Asia-Pacific, including China and India, have not yet set out any plan for the transposition and implementation of the FRTB. However, Hong Kong appears to be aiming for compliance with the BCBS's 2022 timeline, following indications from the Hong Kong Monetary Authority that it will publish a consultation on the FRTB in 2019. Singapore and Australia are also expected to follow the global timeline, but there has not yet been any public information from regulators.

The European Union has proposed going live with a two-step approach, starting with reporting requirements and moving subsequently to binding capital requirements, which will form part of a separate legislative proposal.

Emerging Market Economies

While the impact of the FRTB has been analyzed throughout the development and consultation process, the effect on emerging market banks and their economies has not been assessed.

The Bank for International Settlements recently published a paper indicating the growing size of emerging markets and their impact on the international banking system¹. During 2017, emerging market economies contributed roughly two thirds to global GDP growth and now account for roughly 40% of total global GDP.

Barriers to Entry

Most emerging market banks are likely to use the revised SA to capitalize their risks. This is an improvement on the existing Basel 2.5 framework, as it is more risk-sensitive and explicitly captures default and other residual risks. It therefore serves as a credible fallback for the IMA. However, some emerging market banks are also considering the more advanced IMA framework, which provides a comprehensive risk-sensitive approach.

A key hurdle for those seeking to use the IMA could be liquidity, or the potential absence of it. The revised market risk standards provide a framework to capture those risks that do not meet certain liquidity criteria (NMRFs). This can act as a barrier to entry for institutions that wish to apply the IMA when managing and capitalizing risk. In addition, this may disincentivize global systemically important banks from operating in these jurisdictions due to the potential high costs associated with capitalizing emerging market businesses, which in turn may further exacerbate the impact on liquidity.

Vendor Solutions and Data Pooling

The revised framework introduces a test that prescribes specific criteria an institution has to pass in order to use the IMA and be eligible for risk factors to be included in the bank's internal expected shortfall (ES) model for regulatory capital requirements. Under this criteria, banks need to identify a sufficient number of real prices that are representative of the risk factor. As well as using internal trading data, the FRTB allows those prices to be obtained from a third-party vendor.

While the capabilities of vendors are continuously evolving, most solutions are not sufficiently mature for banks to fully understand the benefits and determine business decisions in support of an IMA application.

¹ https://www.bis.org/publ/qtrpdf/r_qt1812e.pdf

Sovereign Exposures

Sovereign bonds play a pivotal role in financing the economy and they are at the heart of the financial system. These assets are held in the trading book and are used as collateral for central clearing, margin for non-cleared derivatives and other financing transactions by most market participants. They also serve as liquidity reserves for small and large banks.

Standardized Default Risk Charge

The FRTB framework uses a rating-based approach to identify the relevant risk weight, which penalizes holders of some emerging market sovereign debt if national discretion is not applied to domestic currency sovereign risk. Table 1 sets out the risk weights for the SA default risk charge (DRC). The risk weight jumps from 2% for AA-rated sovereigns such as South Korea to 15% for BB-rated sovereigns such as Vietnam.

Credit Quality Category	Default Risk Weight
AAA	0.5%
AA	2%
A	3%
BBB	6%
BB	15%
B	30%
CCC	50%
Unrated	15%
Defaulted	100%

Source: Basel Committee on Banking Supervision

Domestic vs. Foreign Currency Sovereign Bonds

The inclusion of national discretion for the treatment of sovereign risk in domestic currency for the SA DRC recognizes that this type of debt is generally considered safer than sovereign debt issued in foreign currency. This is reflected in bond ratings, which are typically higher for local currency bonds. However, this principle is not carried through to the sensitivity based method in the SA, where there is no national discretion to distinguish between bonds issued in foreign currency and domestic currency. Both would generally be subject to the same risk weights.

Sovereign debt that has a non-investment grade rating will attract a 2% credit spread risk weight as part of the standardized framework. A sovereign bond issued in domestic and foreign currency will therefore attract the same credit spread risk charge irrespective of the issuance currency.

A sovereign bond issued in domestic currency is deemed to be a proxy for 'risk-free'. This concept should be consistently reflected across the FRTB framework by recognizing the different behavior between domestic and foreign currency sovereign debt.

The risk weights for emerging markets are typically calibrated using a base of G-7 currencies. However, other factors could also be considered, such as trading volume and other empirical evidence, to support a wider interpretation of ‘liquid’. This is important, because the risk profile of an emerging market bank could be very different to that of a bank in a developed market.

Bucket Number	Credit Quality	Sector	Risk Weight
1	Investment Grade (IG)	Sovereigns including central banks, multilateral development banks	0.5%
2		Local government, government-backed non-financials, education, public administration	1.0%
3		Financials including government-backed financials	5.0%
4		Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying	3.0%
5		Consumer goods and services, transportation and storage, administrative and support service activities	3.0%
6		Technology, telecommunications	2.0%
7		Healthcare, utilities, professional and technical activities	1.5%
8		Covered bonds	2.5%
9	High-Yield (HY) & Non-rated (NR)	Sovereigns including central banks, multilateral development banks	2.0%
10		Local government, government-backed non-financials, education, public administration	4.0%
11		Financials including government-backed financials	12.0%
12		Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying	7.0%
13		Consumer goods and services, transportation and storage, administrative and support service activities	8.5%
14		Technology, telecommunications	5.5%
15	Healthcare, utilities, professional and technical activities	5.0%	
16	Other Sector		12.0%
17	IG Indices		1.5%
18	HY Indices		5.0%

Source: Basel Committee on Banking Supervision

CVA Capital

The revised credit valuation adjustment (CVA) capital framework was finalized as part of the overall Basel III reforms.

However, a key area of concern with the current framework is the limited recognition of hedges, which is further amplified for emerging market banks by the difficulty of hedging exposure to less liquid counterparties.

The risk weights used as part of the CVA framework will be informed by the revised FRTB SA framework, so it is possible that further refinements to the CVA framework may be needed.

Way Forward

There is a need for supervisors to consider local specificities when implementing the FRTB in less developed markets. However, caution is required to avoid any significant divergence from the Basel framework that may result in market fragmentation.

There have been instances where further granularity has been introduced in the framework for specific products, and these interventions are considered consistent with the overall objectives of the framework. A further clarification for emerging market sovereign debt issued in domestic currency would not disrupt or alter the foundation of the core BCBS objectives, but would ensure a more consistent application of the standards.

While a number of emerging market jurisdictions in Asia-Pacific are BCBS members, a substantial number – including Malaysia, the Philippines and Vietnam – are not. These jurisdictions are not compelled to implement the Basel framework, but generally do so as best practice.

The final revised market risk standards contain many positive changes. However, further detailed analysis and QIS will be required to fully understand the impact at an aggregate and granular level as banks further develop their capabilities.

A dynamic implementation approach allows close analysis of the needs of individual jurisdictions. As the impact is further refined, the need to address certain areas through targeted assessments should be considered, especially where specific regulatory standards have a disproportionate effect or are creating unintended consequences on certain asset classes, business areas or even entire markets.

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