

FUNDAMENTAL REVIEW OF TRADING BOOK

Compliance and Beyond

AB

Associates in
Capital Markets

Recap

In response to the scenarios witnessed on the backdrop of financial crisis, regulators globally have realised the imbalances of capital vis-à-vis the trading book exposures of the banks. This prompted the Basel Committee for Banking Supervision (BCBS) to propose significant revisions to the market risk capital framework, a step-up from the Basel 2.5 reform principles. The key idea is, as the name suggests, to fundamentally review the trading book regime and assess as to “what went wrong”. In accordance to this, the BCBS committee has released an initial consultative paper in May 2012. Based on the response from the industry participants to the paper, the committee has firmed up policy methodology in the substantially enhanced follow-up proposals published in Oct 2013 and Dec 2014. In addition, to assess the operational burden of the proposed changes made to the market risk framework, the committee also has initiated a Quantitative Impact Study (QIS) in 2014-15.

As the final report is due by the end of 2015, it is essential to revisit the key proposals and their impact on banks.

“It is a complete overhaul of Market Risk Framework”





What are the Key Proposals

Trading Book – Banking Book Boundary

- ▶ A framework for clear demarcation of banking and trading books is proposed to curtail and discourage movement of portfolios from either side of the books, either for favourable capital outcomes or for arbitrage opportunities.
- ▶ A set of instruments to be allocated to each side of the book to set clear boundaries based on “valuation-based approach” and “trading evidence-based approach”.
- ▶ The emphasis is to ensure that the bank not only has the intent of trading but actually can produce evidence that the instrument is indeed held for trading purposes.
- ▶ Strongly discourages regulatory arbitrage and as such would not yield any capital benefits from such exercise. Any residual benefit derived out of such a movement would be levied as a ‘capital surcharge’ under Pillar I.

Treatment of Credit Risk within Market Risk Framework

- ▶ Non-Securitisation Exposures:
 - ▶ Separate capital charge for credit risk.
 - ▶ Incremental Default Risk (IDR) component for addressing default risk and integrated credit spread risk capital charge handling the migration risk.
 - ▶ Unified solution for both standardised as well as model-based approaches.
- ▶ Securitisation Exposures: Capital charges across all the banks to be based on standardised approach only.

Risk Metrics and Stressed Calibration

- ▶ Migration from VaR to “Expected Shortfall” (ES) as the primary measure for the internal models-based approach.
- ▶ Calibrate ES to a period of stress as opposed to the current market conditions to ensure that the capital requirement is sufficient to absorb any potential losses during conditions of significant stress.

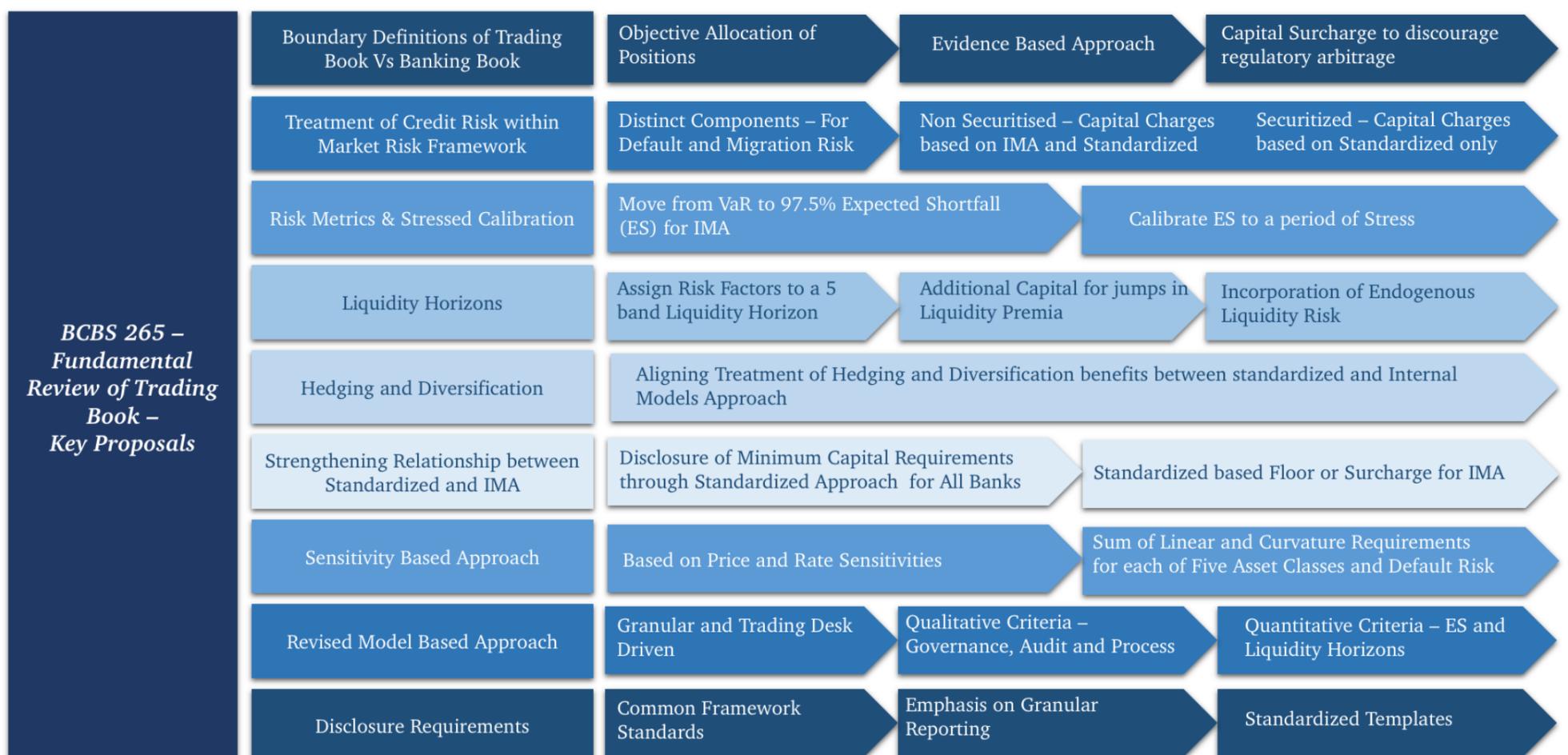
Strengthening the relationship between Standardised and Model-Based Approaches

- ▶ Proposal to make the calculation of standardised charge for each trading desk and to publicly disclose this information in the regulatory reports.
- ▶ Introduction of a standardised approach as surcharge or floor to model-based approach.

Liquidity Horizons

- ▶ A “risk factor-liquidity band matrix” with a five band liquidity horizon ranging from 10 days to one year to which risk factors/exposures should be assigned.
- ▶ Inclusion of additional capital for jumps in liquidity premia to cover for large fluctuations in times of stress.
- ▶ Incorporation of endogenous liquidity risk by either expanding the liquidity horizon bands or through the application of prudent valuation adjustments.

Figure 1: FRTB - Key Proposals



Hedging and Diversification

- ▶ Align treatment of hedging and diversification benefits between Standardised and Internal Model based approaches
- ▶ Necessary to recognise hedges only if they are likely to hold good in periods of extreme stress.
- ▶ Usage of supervisory correlation parameters for Model based approach for estimating portfolio diversification benefits.

Sensitivity Based Approach (SBA) – Standardised Approach

- ▶ Based on price and rate sensitivities as opposed to usage of cash flows. These sensitivities are to be used as input into the aggregation formulae to recognise the benefits arising out of hedging and diversification of positions in different risk factors within an asset class. The risk weights and correlations are to be provided by the regulator.
- ▶ In simple terminology, the capital requirement under SBA is a simple sum of linear and curvature requirements for each of the five identified asset classes and default risk.

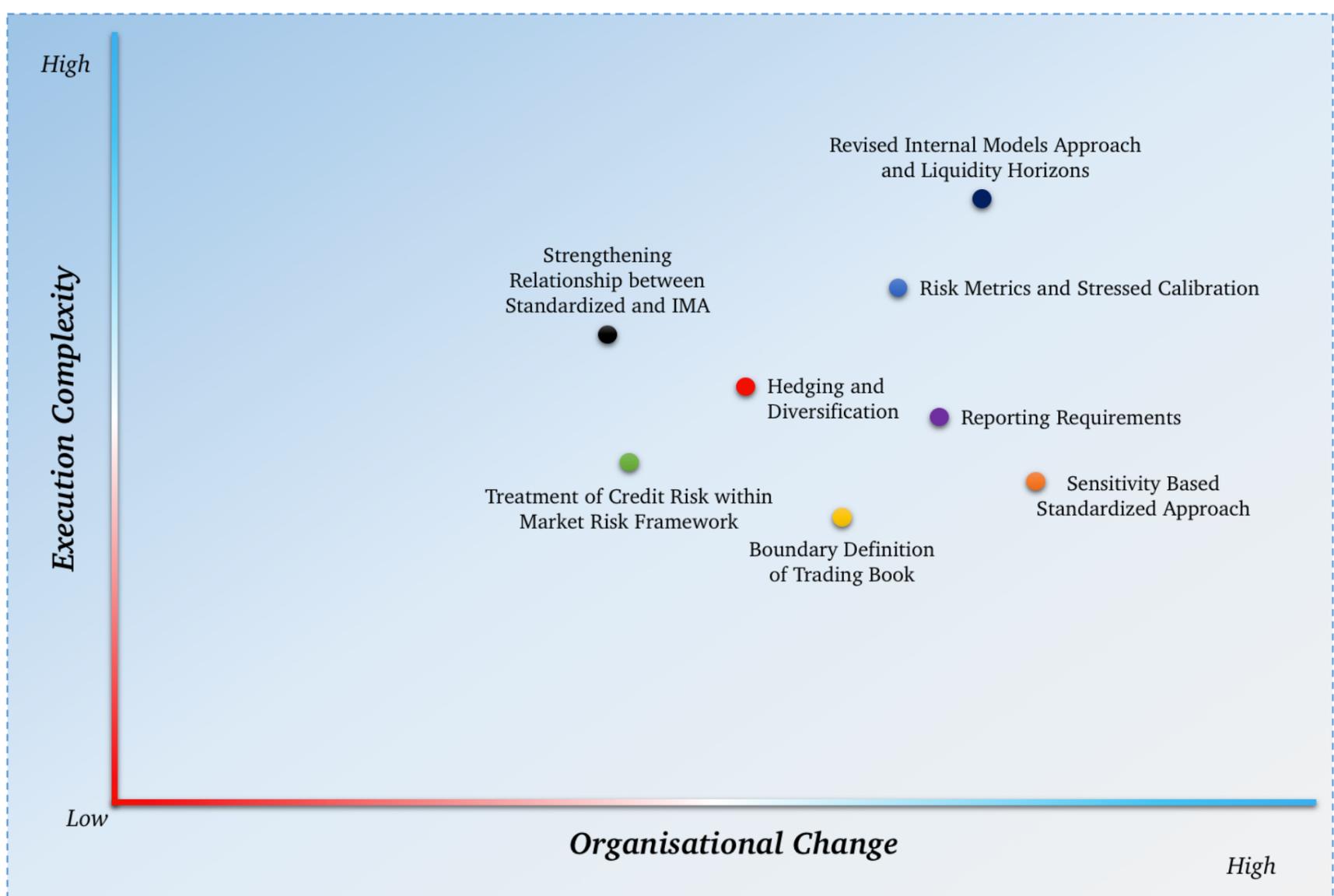
Revised Model based-Approach

- ▶ Aims to ensure that the model outputs reflect the full extent of trading book risk.
- ▶ Model approval more granular and trading desk driven – broken down into more discrete steps.
- ▶ Nominated trading desks eligible for model based-approach to be subjected to approval process based on P&L attribution, backtesting and independent model assessment tool.
- ▶ Desks which are identified as not eligible to be ‘amalgamated and capitalised at a portfolio level’.

Disclosure Requirements

- ▶ Set of common framework standards to be followed across all the banks and jurisdictions.
- ▶ Proposals ranging from common standards in frequency of reporting, segmentations of components and drivers of the change to disclosure of key modelling choices, composition of trading book and desk structures.
- ▶ Key emphasis on disclosure at a more granular level with more standardised templates.

Figure 2: FRTB - Requirement Insights





What is the Impact

Data and Infrastructure

Clearly the impact on data and infrastructure requirements for banks would increase substantially based on the revised framework. The requirement of mandatory calculations according to standardised approach, proposition to use additional risk metrics such as ES, implementation of robust backtesting & independent model assessment tools and increased disclosure requirements are all going to put tremendous pressure on already constrained systems and resources of the banks. Certain parts of the requirements (incorporating liquidity horizon into ES, risk factor analysis etc.) also mandate availability of historical data to support model-based approach which could pose considerable challenge.

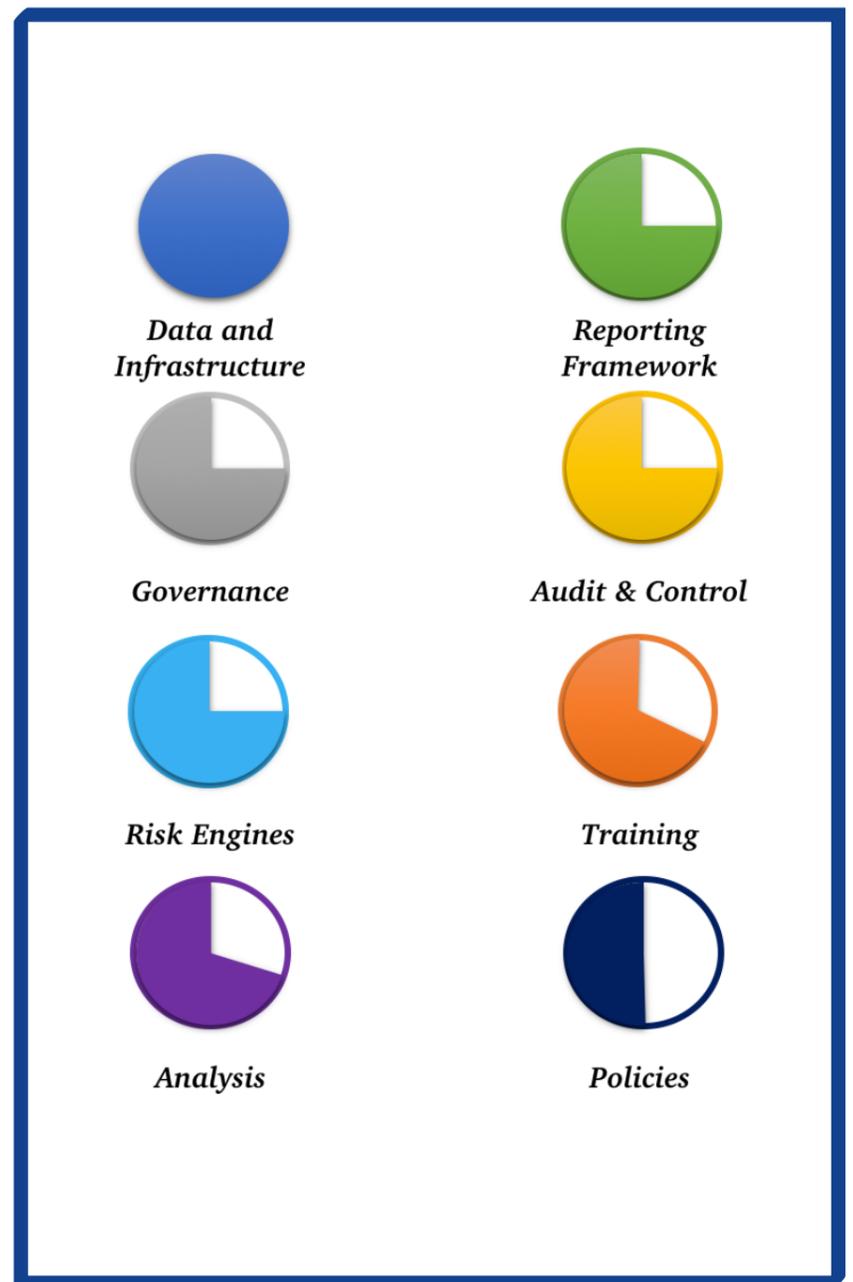
A slew of data management challenges (storage, archival, purging mechanisms etc.) arise with the above requirements - those which the banks have to deal with before the final implementation. Banks will also have to make extensive changes to the existing infrastructure (data base architecture, data server support, calculation engines etc.) through latest alternative technology deployments or upgradation to support the proposed changes.

Risk Engines

The risk engines deployed at the banks should be capable of supporting additional calculations like parallel runs for standardised and model-based approaches etc. Banks would need to enter into the long hauled phase of upgrading existing business logic, models and such critical business analysis activities.

On the positive side, the question remains if this can be seen as an opportunity to replace legacy systems at some banks and upgrade to a more robust and scalable systems to be able to support and weather the regulatory storm in the near future.

Figure 3: FRTB - Impact Analysis



Risk Reporting Framework

Enhanced disclosure requirements would mean that the reporting framework of the banks should be able to support the additional requests for ad-hoc reporting, precise management dashboards and drill-down visualisations from one-bank level to trading desks. The reporting framework should also support the delivery of additional standardised supervisory reports in a timely manner. This is a critical piece for compliance and disclosure requirements.

Governance and Policy

Banks would need to formulate and develop new policies and procedures governing market risk framework, model management, model validation and backtesting. Also equally critical is the set up of a strong governance framework with clear roles and responsibilities and tighter controls to support and comply with the implementation timelines.

Timelines and Adoption

The BCBS has recently (Nov 2015) published the results of fourth Quantitative Impact Study (QIS), an exercise which was conducted in July 2015. The committee is expected to finalise and publish the final rules before the start of 2016. The compliance deadlines, however, are aggressively pegged at early 2018.

It is expected to be adopted across majority of markets across the globe including, Americas, Europe and Asia - with local supervisory discretion on exact timelines and nuances.

Our Take

It is clear that the new trading regime is vast and aims to address a wide of range of complex and critical issues. The current proposal is viewed as a consolidated and consistent market risk framework that for reducing the variability in capital requirements across banks and methodologies.

But on the flip side it is imperative to note that given the scale and complexity of the proposal, the committee should carefully consider the nuances before the final conclusions. The new framework which was proposed with the intention of replacing basel 2.5 should not be a quick fix solution, rather as a strategic long term change.

This is vital lest certain business lines (like securitisation for example) would be adversely affected with high capital levels forcing banks to draw down from those activities. It is also critical for regulators internationally to ensure that there is consistency in implementation.

There are questions that are still open pending clarifications from the committee. While the industry is awaiting the final draft from the committee, it should prepare for the overhaul to ensure timely and satisfactory regulatory compliance.

The key to success for the banks is to adopt a multidimensional approach!



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