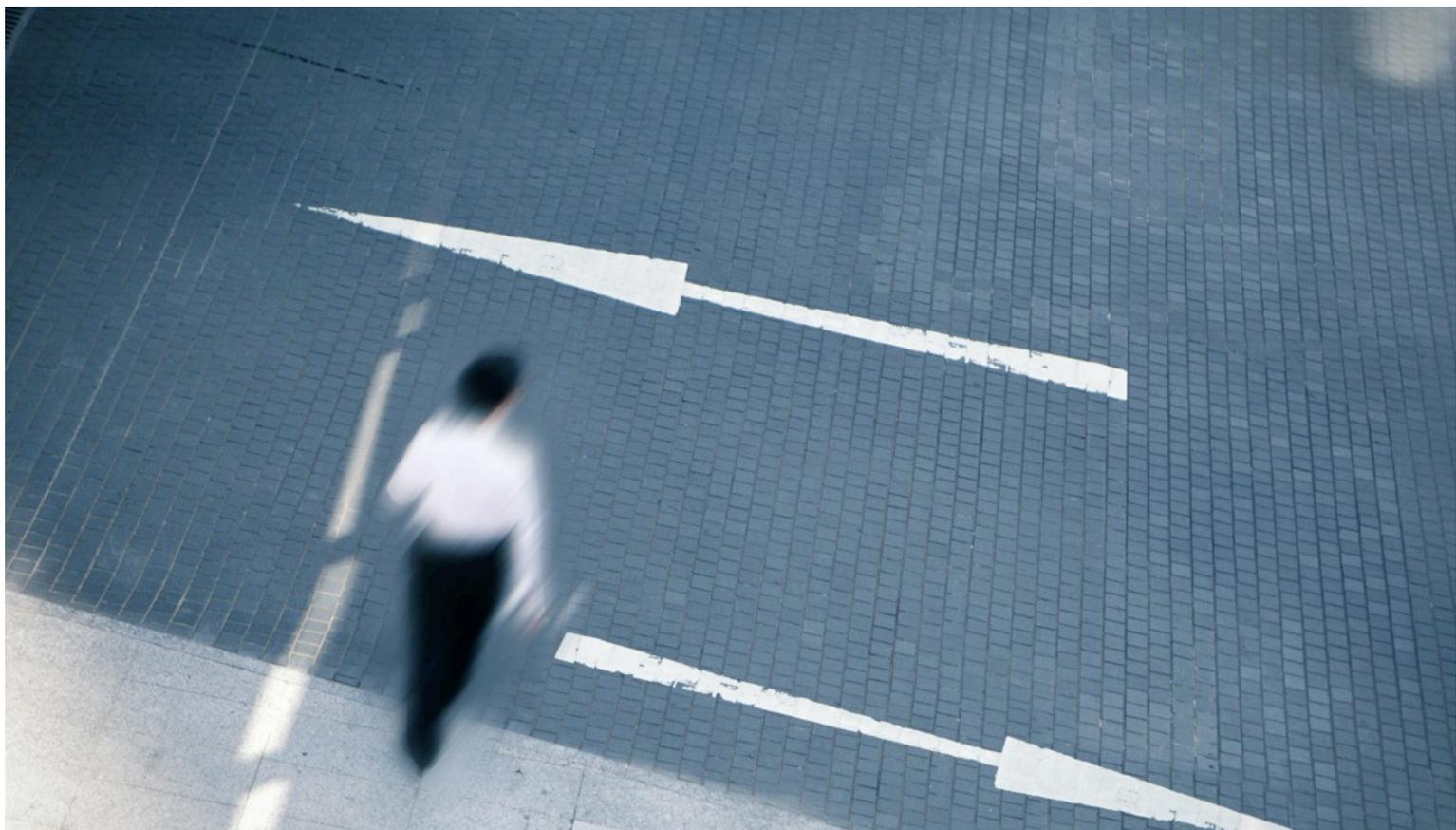




FISER CONSULTING
FINANCIAL SERVICES

**FRTB –
SUCCESSFULLY FACING
THE CHALLENGES**



Introduction: Successfully facing the challenges of the Revised FRTB Framework

In May 2012, the Basel Committee on Banking Supervision (BCBS) issued a controversial consultation paper referred to as the Fundamental Review of the Trading Book (FRTB). The suggested changes aim to cover various aspects of Market Risk in the trading book, including the definition of the trading book, the treatment of credit and the approach to risk measurement and the relationship between the risk models. However, the changes set out in the FRTB

are believed to have a crucial and profound impact on financial institutions' capital requirements.

In this Positioning Paper, we will outline the history, objectives, key points, changes and implications of the FRTB that need to be considered. Separately, we outline how our services respond to the complex and dynamic environment to implement regulatory compliancy to FRTB.

Timeline of the Trading Book regime

1996 - Basel I

It was 1988 when Basel Capital Accord addressed credit risk in the banking book. BCBS published the first Supervisory Treatment of Market Risks document in 1993.

2005 - Basel 2.5

The financial crisis in 2008 exposed material weaknesses in the overall framework of Basel II. These changes were also referred to as Basel 2.5.

2019 - Implementation of the FRTB

The final implementation date for the FRTB Framework is set for the end of 2019.

Before the framework's final materialisation and implementation, national regulators of individual countries will be asked to finalise their local regulations by January 1st 2019.

1996 - 2001

2002 - 2006

2007 - 2011

2012 - 2016

2017 - 2021

2004 - Basel II

It was the 2004-revision of the Amendment that changed the trading book regime, especially the treatment of specific risk. The Amendment was also incorporated in the International Convergence of Capital Measurement and Capital Standards. The incorporation led to the development of the Revised Basel II market risk framework.

2012 - FRTB

In May 2012, BCBS issued the Fundamental Review of the Trading Book (FRTB) consultation paper. The aim of the review is to reshape the entire trading book regime.

2016 - Finalisation of the FRTB consultation paper

On January 6th 2016 BCBS issued the final FRTB consultation paper.

Summary of key FRTB components

BCBS proposes fundamental changes in the FRTB including the methods for measuring market risk, the relationship between the revised standardised and internal models approaches. Ultimately BCBS strives for a clearer and more objective and extensive definition of the boundary between the Trading Book (TB) and banking book (BB) to diminish the potential for arbitrage.

BCBS aims to develop a new trading book framework with the following key objectives:

- **TRADING BOOK/BANKING BOOK BOUNDARY**

According to BCBS the current definition of the regulatory boundary causes shortcomings. The current regime has proven to be difficult to monitor and seems to be restrictive in some jurisdictions. Because of these inconsistencies, banks cannot effectively determine intent to trade, which can be disadvantageous when coupled with differences in capital requirements against similar types of risk. In order to resolve the inconsistencies regarding the current boundary, BCBS put forward alternative approaches including the trading-evidence approach and the valuation-based approach. These and other objective requirements should facilitate an effective trading book/banking book boundary condition.

- **LIQUIDITY HORIZONS**

The financial crisis caused abrupt and immediate disturbance of liquidity zones, which made it impossible for banks to instantly exit or dodge illiquid risk positions without affecting their market prices. In the consultation paper BCBS states that incorporating varying liquidity horizons should bypass such unfavourable complications.

- **NON-MODELLABLE RISK FACTORS**

The Basel Committee introduces non-modellable risk factors in her consultation paper to provide incentives for banks to source high-quality data for use within internal models. These standards will determine whether a risk factor can be utilised within an internal model calculation, or whether it has to be assigned to a non-modellable risk factor bucket and be subject to a capital add-on.

- **REVISED STANDARD RULES**

The rules for market risk capital requirements are another main revision of the FRTB. The revised standard rules are intended to provide managers with a fall-back approach if internal models turn out to be inadequate. The revised Standard approach (SA) is more risk sensitive than the current framework. Key issues of the current framework include securitisations and asymmetric correlations.

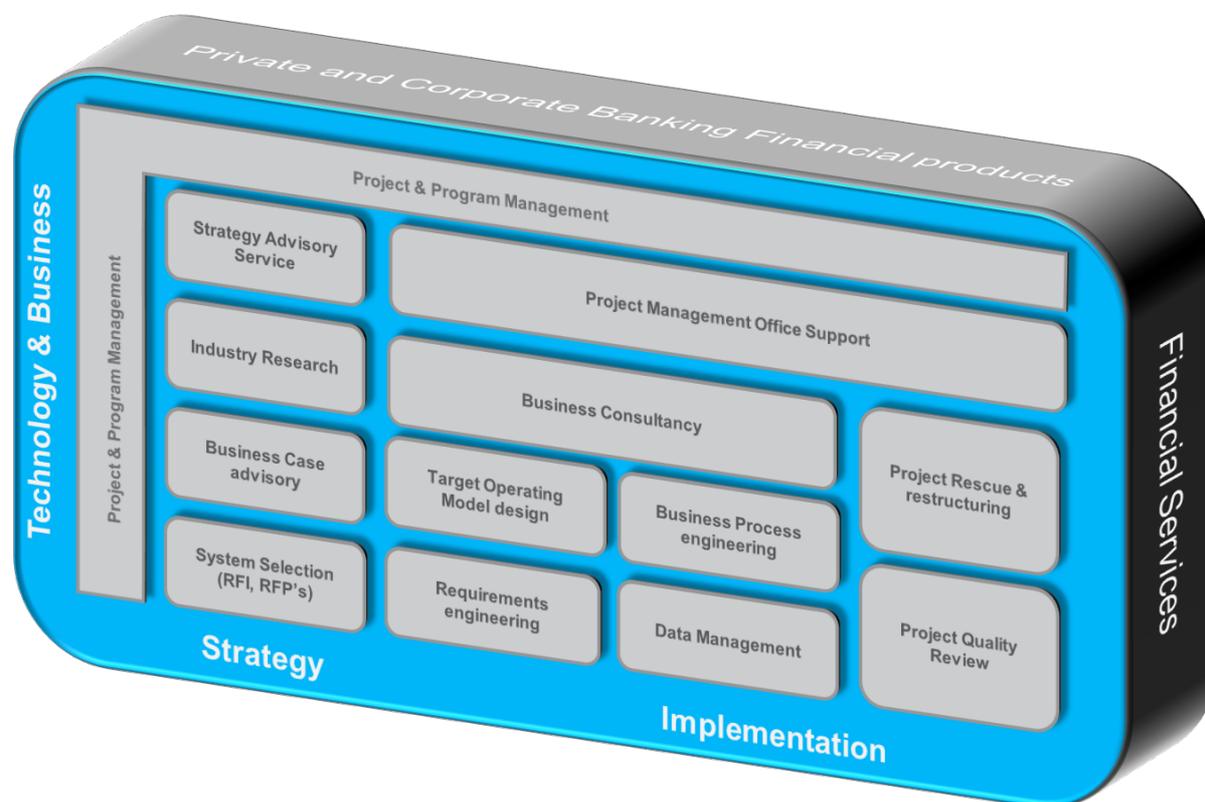
FRTB at glance: key changes and implications

| | Changes from the existing framework | Implications of the FRTB Framework |
|---|---|---|
| Trading & Banking Book Boundary | <ul style="list-style-type: none"> • Instrument documentation and disclosure to be designated to the Trading Book or Banking Book • Align TB and BB charges • Criteria for inclusion and exclusion of instruments • Non-exhaustive list of instruments • Introduction of constraints when switching instruments between the TB or BB • Reduction of regulatory arbitrage by including overt supervisory • Allow initiated change by regulators under certain circumstances • Daily fair valuing of instruments through P&L statement • Report valuation changes to ease boundary supervision | <ul style="list-style-type: none"> • The revised TB/BB Boundary will influence a firms' risk requirement, market risk management methodologies and standards • No specific quantitative thresholds have been pursued for instruments to be included in the TB • Increased operational costs due to technology and infrastructure changes |
| Standardized approach and Treatment of credit risk | <ul style="list-style-type: none"> • Separate components for capital charge for credit risk • Incorporation of migration risk into the measurement of market risk through the volatility of credit spreads • Introduction of an incremental capital charge (ICC) for default risk based on VaR calculation • Calculation of capital charges of securitisation according to the SA • Calculation of CVA charge as a standalone capital charge under the SA • Approach based on risk sensitivities across asset classes • Mandatory calculation and disclosure of SA both at the desk | <ul style="list-style-type: none"> • Certain businesses will face an increase in cost of capital due to changes in SA • Credit spreads changes lead to a shift in the mean of the default distribution. • Full integration of CVA leads to a significant variation in results • Contrasting measurements of risks across trading desks and firms are a result of implication in defining risk factors • Infrastructure challenges arise from capturing and analysing problematic risk metrics and frameworks |

| | | |
|---|--|--|
| <p>Internal model-based approach</p> | <ul style="list-style-type: none"> level and bank wide • New risk factor definitions • SA capitalized correlation trading positions • Capture basic risk based on the correlation-disallowance factor • Introduction of 5 varying liquidity horizons categories (LH) • Introduction of additional risk assessment tool for desks • Moving from Value at Risk (VaR) to Expected Shortfall (ES) • Introduction of non-modellable risk factors • Replacement of IRC with DRC • Introduction of Incremental Capital Charge for default risk based on VaR calculation | <ul style="list-style-type: none"> • Impact on capital outcomes • Increased capital charges can be a result of long LH • DRC doesn't require migration risk • ES requires large scaled modelling efforts |
| <p>Model performance at desk level</p> | <ul style="list-style-type: none"> • Desk model approval process • Daily P&L attribution and back testing for desks • Model-independent assessment tool for desks | <ul style="list-style-type: none"> • Facing challenges when implementing P&L attribution • VaR based backtesting and ES based backtesting have different drives which can result in variations and inconsistencies • Businesses will need to update their technology infrastructure |
| <p>Reporting</p> | <ul style="list-style-type: none"> • Transparent, consistent and comparable reporting of market risk across banks and jurisdictions • Enhanced public disclosures on market risk capital charges | <ul style="list-style-type: none"> • Enormous adjustment in infrastructure to support the requirements of reporting |

FiSer Consulting: How can we help?

The transformation of a financial institution according to a compliant FRTB regime is complex. The transformation requires significant changes in organisation set-up, operating model, governance framework (policies and processes), risk models and methodology, and systems and IT infrastructure.



FiSer Consulting can assist you in the transformation processes of the following areas:

Project & Program Management

The implementation of FRTB covers changes that affect many stakeholders of the organisation. Front Office is affected by changes in e.g. trading book/banking book treatment and impacted by pricing issues, such as changed capital treatment. The same impact applies to ALM / Treasury. Clearly the Risk Management and Modelling functions are heavily impacted. All these changes ask for investments supporting advanced IT infrastructure. Our Project & Program Management capability can help you structure and manage this complex field of stakeholders. Our project & program managers combine multiple years experience with in-depth

knowledge of the market risk domain.

Project Management Office Support

Next to our Project & Program Management capability the FRTB transformation requires detailed and frequent risk & issue and planning & dependency management and internal & external status reporting. Our Project Management Officers, with proven experience within the Financial Services industry, assist the organisation in these challenging activities.

Business Consultancy, Requirement Engineering & Business Process engineering

Because of our exclusive focus on Financial Services, our consultants have a strong content background in specifically the Markets Risk area. With a strong

background in treatment of Financial Instruments and extensive knowledge of the organisation and processes, our consultants can assist you with:

- Changes within operating models;
- Updates to trading mandates in the light of changed Trading/Banking Book treatment;
- Changes to Front Office and Risk processes;
- Regulatory Self-Assessment.

Data Management

The changes concerning the calculation of risk measurement requires changes to risk models. Moreover, the introduction of

liquidity horizons requires the analysis of data collection and data sourcing strategies.

FiSer consultants can support you with this matter by implementing the according and necessary required changes.

System Selection (RFI, RFP's)

Due to the significance of the FRTB changes a re-evaluation of the financial institutions landscape might be required for risk calculators, risk capital calculators or data management systems. Especially when it comes to trade off between rebuilding or buying. FiSer Consulting can support you by creating well-founded decisions for a specific trade off.

Next steps

For further discussion on the impact of FRTB and where FiSer Consulting can assist you, please contact:



Dirk Worm - Managing Partner

Dirk has over 20 years of experience in the Investment Banking and Corporate & Commercial Banking industries. Dirk's consulting skills lie in risk management, capital management, front office transaction management and the implementation of asset & liability management. Furthermore, Dirk has a comprehensive and broad understanding of treasury functions and the implementation of regulatory processes, including Basel II, III, MiFID and EMIR.

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