FRTB RELOADED: THE 2018 CONSULTATION PAPER

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1. Overview and timeline

The Basel Committee (BCBS) published the new standards “Minimum capital requirements for market risk” [1] on 14 January 2016.

On 22 March 2018, BCBS published a new consultative document on the **Fundamental Review of the Trading Book** (FRTB) [2] along with updated FAQs [3]. This is a reaction to the challenges observed both with regard to the implementation of the new rules as well as the shift of the implementation and regulatory reporting date by the Group of Governors and Heads of Supervision (GHOS) from December 2019 to **January 2022**. The impact of the new proposals in the consultative document will be assessed based on the data, which are currently collected in the context of the Basel III monitoring for end-December 2017. The document further proposes to extend the introduction of the disclosure requirements to 2022.

This paper highlights and discusses the changes compared to the standard of 2016.

2. Summary of the most significant changes

Boundary between the trading book and the banking book

A significant novelty in the 2016 standard concerning the definition of the trading book was the introduction of **explicit lists** of instruments that should be assigned to the trading or banking book. These lists however, resulted in contradictions in themselves or when applied in combination with additional criteria in the standard. Those contradictions were resolved in the consultative document since it clarifies the **hierarchy of the applicable requirements**. A legal impediment on tradability and the “banking book list” (article 15) always have priority.

New criteria are defined for the designation of investment in **funds**. These are only permitted in the trading book if they adhere to the following three criteria: 1. daily price quotes, 2. tracking of a non-leveraged benchmark, 3. a very high correlation with the tracked benchmark.

The specification that positions, which are **managed on a trading desk,** have to be **assigned to the trading book**, has been removed from the proposal.

The assignment of **underwriting** positions to the trading book has been limited to securities underwritings.

The term “**trading-related repo-style** transactions” has been specified. These transactions have to be assigned to the trading book. Repo-style transactions for liquidity management which are valued at accrual for accounting purposes, are excluded from this new definition.

The FAQs clarify additional specific aspects.

Structural FX positions

The maximum FX position which can be **excluded from the capital requirements** calculations is now based on the **FX sensitivity**. This limit was previously defined in relation to the investments in consolidated subsidiaries or non-consolidated affiliates. Furthermore, the paper adds that structural FX positions in foreign branches of a bank can be included in the exemption.

Reassignment

The 2016 standard only permitted transfer of instruments between the regulatory books under exceptional circumstances with approval by the supervisor. The paper now recognizes that **changes in the designation** might be caused by **changes in the characteristics** of a position.

Trading desks

The requirement that traders be designated to single trading desks has been relaxed, meaning that it is now possible to assign a trader to up to **two trading desks,** given supervisory approval. Furthermore, up to **two head traders** are possible per desk. One head trader for multiple trading desks however, will only be permitted if it can be justified as a necessity.

Standardised approach

The new standardised approach has three components (sensitivities-based approach, default risk charge, residual risk add-on). The consultative document only proposes changes to the **sensitivity-based approach**.

Correlations

The BCBS proposes a **reduction of the scaling** in the "low correlations" scenario for highly correlated risk factors. The previous scaling factor of 75% underestimated the empirically observed correlations significantly, and was thus deemed too conservative.

FX risk

The updated approach acknowledges **triangulation of FX pairs**. Moreover, an FX pair that consists of a combination of two liquid FX pairs is now considered a liquid FX pair itself. This implies lower risk weights for these currency pairs.

Curvature (CVR)

The upward and downward shock are now **applied consistently per bucket** for certain risk classes, which is contrary to the former *per-risk-factor* approach. This was instantiated in order to avoid that the capital requirements for similar or highly correlated instruments are based on different scenarios. An alternative proposal suggests the introduction of additional sectors as subsets of each bucket. These sectors would be shifted consistently. The formula for the calculation of the aggregate capital requirements is adjusted in order to **avoid cliff effects**.

FX options, which do not include the reporting currency of a bank, might lead to **double-counting** in the curvature risk. BCBS seeks feedback in order to evaluate if this is a material issue. In this case, the Committee would propose the **reduction of the CVR by means of a scaling factor**. The scaling approach and the size of the scaling factor are subject to consultation.

Risk weights

Analyses of the monitoring exercises indicated an unintended increase in the capital requirements. In order to counter this, the BCBS proposes a **reduction of the risk weights for the general interest rate risk** (by 20-40%) as well as for the **equity and FX risk** (by 25-50%). The final risk weights will be based on further analyses and comments received during the consultation phase. The risk weights for one of the new approaches for the CVA risk capital charge (SA-CVA [5]) might also be adjusted accordingly, as they are based on the previous risk weight definition for market risk standardised approach.

Multi-underlying options and index instruments

Clarification has been provided on how to treat these products; the sign of the delta risk sensitivities towards underlyings is not the determining factor anymore. Additionally, a look-through approach is no longer compulsory for the curvature calculation.

Simplified standardised approach

The simplified alternative to the standardised approach is intended to reduce the burden on banks with a small trading book. In light of this, the Basel committee opted to avoid the sensitivity-based approach discussed in the consultative document of June 2017 [4], and rather utilize the second alternative described in that paper. This alternative is a **recalibrated version of the current Basel II standardised approach**. The capital requirements are scaled with multipliers between 1.25 and 3.5 depending on the risk class. The final values of the scaling factors still have to be calibrated. The use of the simplified approach requires supervisory approval. Moreover, supervisors are given discretion to enforce that banks use the full FRTB standardised approach if they consider their trading book too large or complex, in particular, if the bank is a G-SIB, uses the IMA approach, or holds correlation-trading positions.

Internal models approach

The capital requirements under the internal models approach (IMA) consists of three components in the new approach; expected shortfall adjusted for the liquidity horizons, stress scenarios for non-modellable risk factors (NMRF), and default risk charge (DRC). A P&L Attribution (PLA) test per trading desk has been introduced both in order to determine the model quality and for approval of the FRTB model on desk level. The consultative document describes adjustments to NMRF and PLA.

PLA

The paper clarifies some aspects regarding the P&L measures: hypothetical P&L (HPL), risk-theoretical P&L (RTPL), and actual P&L.

The **treatment of valuation adjustments** is defined in more detail, e.g. for HPL the consideration of daily adjustments on trade and desk level. Adjustments already covered by other rules, e.g. CVA or DVA, are excluded. In general, a different treatment can be agreed with the competent supervisor.

Time effects are to be considered equally for HPL and RTPL.

Actual P&L and HPL should originate in the bank's P&L systems. The RTPL should be calculated using the risk factors and valuation techniques of the bank's risk management model.

The document addresses the problem of the potential of **different input data for HPL and RTPL**, e.g. different collection time of market data or different data providers. An alignment of input data will be possible, provided the bank meets specific conditions.

The BCBS proposes new metrics for the PLA test:

» **Spearman correlation** for the estimation of the correlation between HPL and RTPL
» Two alternatives for the test of the similarity of RTPL and HPL distributions: **Kolmogorov-Smirnov Test** or **Chi-Squared Test**, here HPL and RTPL are split into five non-overlapping sections

The **frequency** for the **PLA** test is set to **quarterly** with the data of the preceding 12 months as input.

New thresholds for tests are proposed, however, these are not yet calibrated.

The Committee puts forward a **"traffic light" approach for trading desks** in order to avoid volatility in the capital requirements that would be solely based on PLA test results. Desks passing the PLA test are in the "green zone" (capital requirements based on the IMA), desks failing the test are in the "red zone" (capital requirements according to standardized approach). A new "amber zone" has been defined in which a capital requirements add-on is calculated with a simple formula. The add-on is based on the difference between requirements according to IMA and the standardized approach on an aggregated level over all desks. The formula is calibrated such that the add-on equals 50% of the capital reduction by the IMA, compared to the standardised approach, if all desks were in the amber zone.

NMRF

The document clarifies the "risk factor eligibility test" (RFET), mainly concerning the **definition of "real prices"**. Major changes include the fact that committed quotes (by the bank or third parties) can now be used as real price observations and **data-pooling schemes** can be used, given that certain conditions are satisfied.

Two alternatives for the determination of **modellability for the risk factors** which are either a point on a curve or a surface via a **bucketing approach,** are given in the document:

» **Definition by the bank**, adhering to given constraints.
» **Definition by the supervisor**. The document contains proposals for the different risk factor classes.

It is further stated that the **data for the RFET does not necessarily have to be the data basis for the risk model**. However, a new annexe defines **quality criteria for alternative data** and provides examples for the required appropriateness evidence.

The document contains an **opening clause** that allows supervisory discretion to temporarily **suspend the RFET** for certain risk factors in times of market disturbance.

The BCBS does not see compelling evidence for disproportionately high **capital requirements for NMRF** and thus does not propose a revision of the capital charge calculation.

Equally, the BCBS does not recognise a potential impact of **seasonality of markets** onto the NMRF definition and eligibility. However, this being a consultative document, the BCBS encourages comments and supportive data for proposals to the contrary.

The same applies to the allegedly excessive capital requirements for **idiosyncratic equity risk**. In this case, however, the document contains a proposal for adjustments, analogous to the approach for idiosyncratic credit spread risk, which could be applied if banks provide supporting data and evidence during the consultation phase.

3. Conclusions

The majority of proposed changes are not surprising given that they correspond to clarifications and supplements that have already been discussed and addressed by banks or ISDA. The adaptions to the NMRF framework however, are not as far-reaching as was hoped. The next course of action depends on banks' responses. The consultation paper provides them an opportunity to contribute to the consultation with comments and concerns backed by data and evidence. It remains to be seen how the timeline in the consultative document will affect the European legislation.

4. References

[1] https://www.bis.org/bcbs/publ/d352.htm
[2] https://www.bis.org/bcbs/publ/d436.htm
[3] https://www.bis.org/bcbs/publ/d437.htm
[4] https://www.bis.org/bcbs/publ/d408.htm
[5] https://www.bis.org/bcbs/publ/d424.htm

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