Fundamental review of the trading book - second consultative document

The Division Bank and Insurance of the Austrian Federal Economic Chamber, as representative of the entire Austrian banking industry, appreciates the possibility to comment on the document “Fundamental review of the trading book” and would like to submit the following position:

I. General Remarks

1. Introduction

In general we welcome the improvements formulated in the consultative paper.

Nevertheless the proposals would lead to a step-up in complexity regarding risk measurement models and connected validation methods. The formulated requirements for internal as well as standard models will lead to a significant increase in qualified staff (validation, modeling, risk managers, auditors and IT).

There is the need to lower the cost burden to banks when implementing regulatory requirements. With regards to this necessity we would like to contribute ideas and amendments to the proposed solutions. In our opinion the revised framework mainly addresses big banks with significant trading activity.

We expect a negative impact on the current employed business model of a universal bank with a small customer driven trading book. For medium seized banks it will be very costly to set up internal models in order to measure market risk.

2. Architecture of capital requirements

We suggest a four tier approach to cover the various business models and keep the complexity and costs out of small and medium sized banks and business models with very limited trading activity.
2.1. **Residual/ very small trading activity** - keep the existing small trading book regulation

Although not mentioned in the current consultation we would like to refer to small banks which do not exceed certain thresholds of the trading book business. Regarding Art 94 CRR credit institutions where the trading book business is normally less than 5% of the total assets and EUR 15 million and never exceeds 6% of the total assets and never exceeds EUR 20 million may apply a simplified calculation method for the capital requirement. If they fulfill these requirements they may allocate the market risk to the calculation basis of the credit risk and may calculate the capital requirement according to the provisions for the credit risk.

In Austria there are a lot of smaller banks which fulfill these requirements and therefore could apply the simplified calculation method. Only the simplified requirements enable these small institutions to take trading activities for their clients as otherwise they would have to give up these activities regarding the organizational and prudential efforts to fulfill the capital requirement according to the provisions of the trading book. The new definitions of the boundary between banking book and trading book should therefore not impede the possibility of small banks to apply the simplified calculation method for their client's activities.

The proposed presumption that listed equity belongs to the trading book should not apply to all cases. The possibility to hold a participation in a listed joint stock company in the banking book must be kept at least for cases, where the institution holding this participation has the intention to contribute to its own activities by creating a durable link to that listed company.

2.2. **Small trading activity** - keep the existing standard model regulation (rename to simplified approach)

2.3. **Normal trading activity** - revised standard model / fallback for internal models

2.4. **High / complex trading activity** - revised internal model

The set of criteria for assignment to the capital methods shall contain at least the following:

- P/L of trading activities
- Organizational structure (traders, desks, markets, products)
- Open Position sizes and trading turnover
- Complexity of products (digital payoffs, path dependent products require internal model)


The paper suggests detailed decomposition rules for standard instruments, mainly using cash flow and/or notional semantics. We suggest a different approach to capture the positions of various instruments. The simplest across all asset classes would be to take sensitivities - BPV (and Credit BPV), FX and Equity sensitivities as an input for the revised standard model. This would make it unnecessary to have a detailed description of each instrument’s decomposition and have more correctness in terms of special instrument deviation from standard like accreting swaps, reverse floaters, CMS et cetera.
Regulatory standard implementations of standard/simplified models
Regulatory reporting requirements are currently very high. Basically the same information is reported multiple times. Furthermore also the current requirements would put the authorities in the position to calculate all of the required figures.

In terms of economical aversion of costs it should be analyzed if the capital figures for the simplified / standard model could be calculated by the regulator itself or a standard IT solution can be provided to the banks.

This would have the advantage of lower costs for the whole banking system and a much better comparability of figures across all jurisdictions.

Currently the same models must be implemented by
- each bank
- auditors / external validators
- the regulator (development of the metrics and for comparison)


Aligned approaches
Although the Committee has recognized that decisions to introduce liquidity horizons as part of market risk metrics in order to capture the risk of illiquidity will lead to partial overlap with prudent valuation requirements, we would like to stress this once again.

We clearly would like to avoid the situation when prudent valuation adjustments, which include also illiquidity adjustments, are calculated differently for different portfolios. Moreover, since prudent valuation is based on accounting categories, while the trading book is not linked to trading assets / liabilities explicitly, the differentiation in illiquidity charges will create unnecessary difficulties and confusions.

It is also necessary to underline that principles behind illiquidity risk treatment under the market risk framework as well as under the prudent valuation requirements should be the same - otherwise the shift of positions between banking and trading book (if it is happening) will lead to indirect capital benefits. (We are aware of the Committee’s proposal to permit capital benefits in case of switch between portfolios; however we fear that in this particular situation it still may be possible, since prudent valuation adjustments are not directly included into capital requirements.)

We would like to draw the Committee’s attention to the topic of illiquidity. This is still understood differently from a prudent valuation point of view and a capital requirements point of view. In the discussion paper on prudent valuation issued by EBA in July last year it is stated that valuation adjustments are to be defined with 90% certainty. On the contrary under the revised market risk framework potential losses are measured with 97.5% confidence interval (one should keep in mind that the last is to define within expected shortfall framework calibrated under the stress conditions).
Illiquidity adjustments for banking book
We completely agree with the Committee’s opinion that market liquidity and increase of liquidity spreads is a crucial question for bank solvability, especially in time of crisis events on the market. However, we would like to underline that it is a particular problem of the trading book, but it is also relevant for banking book exposures, booked in at fair value accounting categories. Thus the existence of a single framework for capturing this risk will make it simpler both for the supervisors and for the management of banks.

We would propose to incorporate a market liquidity capital charge as an incremental capital charge, which can be monitored and managed separately. An incremental capital charge should be designed in a way that it can be easily incorporated into a prudent valuation framework. In light of the Committee’s consideration to incorporate interest rate risk and credit spread risk of the banking book into Pillar 1 capital requirements it would create additional benefits for supervisors.

Liquidity horizons (Consultative Document p. 13 et seq. and p. 16)
For us the classification into 5 buckets is questionable. Why 5 buckets? Also the classification of risk factors is questionable. Are exceptions from this standard rule allowed? We would see e.g. no need that liquid FX currency positions should not be in the first bucket together with equities. Also the other classifications are not consistent with our assumptions we see on the market. Furthermore for illiquidity scenarios it is already taken care of in the prudent valuation scheme. We see an overlapping/double-counting here.

We would also like to draw the attention to the issue that liquidity of a particular position depends on both internal and external factors, namely: liquidity of the market in general, liquidity of certain issuer and issue, concentration of positions in relation to market size; to capture all these nuances in a single framework seems to be an ambitious task. Thus we understand the will of the Committee to simplify the issue via introducing standard liquidity horizons on a level of risk factors. However we would like to underline that the proposed approach seems to be too simple, and a lot of crucial factors influencing market liquidity are remaining out of scope (like market liquidity or concentration). This may lead both to overestimation as well as to underestimation of capital needs. As a minimum solution we would propose to incorporate different currencies / currency pairs into proposed liquidity horizons.

For instance the proposed values for some classes are too conservative, for instance western world FX rates (EUR, USD, GPB) are very liquid. Even big positions can be liquidated in some minutes during one day. At least the regulator should introduce a new category for FX and IR (also implied volas) where the liquidity horizon is more realistical. (5 days)

5. Disclosure platform for risk factor / market data
We observe that it is very difficult and expensive for a bank to get the market data to develop quantitative models for assessment of market liquidity and concentration risks. Transaction level data throughout the markets are usually not easily available to banks.

Regulators have broader access to data and would need the data as well to understand the current state of financial markets. Therefore we would see it as an advantage if the regulator discloses the appropriate data for banks usage.
6. **Participations**

The current requirement to hold all equities in the trading book is against many banks current practice of having a participation book that is not traded on a trading desk and is not steered on daily prices. There should be a solution for investment in equities. This should include criteria for the assignment to the trading / banking book.

7. **Revised Internal model approach (Consultative Document p. 23 et seq.)**

**Move from VaR to Expected-Shortfall (ES) (Consultative Document p. 17 and 18)**

ES is a useful measure. However, the inability of VaR to capture tail risk should not be the principal argument in favor of ES. ES is just a different measure; its purposed ability to capture tail risk is not measure-inherent. For ES to capture any tail risk, or to provide a different view on it, the underlying distributions must be correct in the first place. Given the great difficulty in assuming any tail behavior as defined by distribution choice and parameterization, ES is not better in giving an accurate view on those tails, as they are in fact determined not by the measure, but by the entity (the joint distribution) being measured/estimated.

**Overlapping returns (Consultative Document p. 15)**

On using/allowing overlapping returns: At first sight, long-period returns seem useful to capture risks. They, of course, would require unreasonably long time series. So the choice is between short returns, and scaling of results, vs. long, overlapping returns. In our view, the former approach is preferable. Scaling generally behaves quite well in most circumstances; the approach is very simple, easy to handle, and transparent in the sense of comparability and use of rules-of-thumb. The latter approach introduces autocorrelation of returns, which prohibits simple checks or analyses.

The aversion to scaling is, in our view, unjustified. Just because it is a very simple, almost heuristic rule this should not preclude its use. In short, the performance of scaling can easily be validated; it will perform well most of the time, and might be falsified in certain instances; in this case, an additional scaling factor can mitigate the problem. Overlapping returns, due to their properties, are much less transparent.

**Stability of ES model not improved in comparison to VaR (Consultative Document p. 15)**

"Moving to expected shortfall": ES provides some benefits. We disagree with the statements "more stable model output" and "less sensitive to extreme outlier observations" - VaR has these properties, as the quantile is not greatly affected by extreme tail behavior; ES, however, is likely to be influenced to a non-trivial degree by both outliers and tail distribution assumptions. (Except if the period of returns used for calculation is kept constant in a stressed ES setting.) Nevertheless, we welcome the increased weight given to this additional measure.

**General comment on risk metric extensions (Consultative Document p. 19)**

General remarks to section 1.5, as well as to default handling, and liquidity horizons in general:

Internal models are quite rigid, and tuned to one specific purpose. Alternative and additional risk views are often difficult to natively incorporate into the VaR/ES framework. For example, extreme events, or liquidity issues are conceptually (e.g., outliers don’t affect VaR) or numerically (e.g., longer simulation periods with various additional assumptions) not well-
suited to the scope of a typical return distribution estimation. Whenever possible, such separate risk assessments should be made possible by specific stress tests. They are easy to define consistently, and can be calculated consistently within the overall distribution approach. (This also applies to the artificial restriction of market observed diversification effects.)

**P&L attribution / backtesting (Consultative Document p. 26)**

One of the main questions is if the economic backtesting procedure shall follow the accounting P&L or the FO P&L scheme. Either has advantages and disadvantages. The FO P&L is daily available on a granular level required for the P&L attribution comparison where the accounting P&L is not available on a daily basis in most of the small to medium sized banks.

Section 2.2, (ii), "P&L attribution requirements": Should "mean of difference" be "mean of abs(difference)? And should standard deviations be used instead of dimension-wise less expressive variances?

**Partial uses not defined**

Currently there are some banks who have a partial use (risk factor level) approved. The paper does not give any guidance on how to deal with partial uses particularly validation and backtesting requirements as well as P&L attribution.

**Requirement of daily booking of P&L in accounting for trading assets**

We see the requirement to have a daily P&L and a daily risk and limit reporting as enough for proper trading risk management. The extension to not only measure and report P&L from the FO systems but also book daily in accounting is not necessary in our opinion and does not bring a value-added utility.

**II. Detailed Comments:**

Comments directly to paragraph numbers in the Consultative Paper (starting on page 48):

**Par. 10: Instruments in the trading book:**

How is a “net short risk position” exactly defined? Especially from the view of a bank with different trading desks; further clarification is needed.

**Par. 10 et seq.: Credit spread risk for no securitizations**

The Risk Weight Matrix for buckets starts with a bucket of maturities up to five years. Short term instruments (money market, T-bills, short dated bonds) would be extremely punished. Lower credit duration would significantly reduce credit spread volatility. Therefore it is proposed to include more buckets on the short end of the matrix (e.g. > 3m, 3m - 1y, 1y-2y, 2y-5y).

Risk weights are partially very high for single exposures with limited diversification potential in a portfolio. Additionally overlap between the CSR risk weights and default risk needs to be addressed.

**Par. 11: General presumptions for instruments:**

All options should be included in the trading book. Which exceptions from this rule are planned to be allowed or are no exceptions planned?
Par. 19: Reports to supervisors:
“Inventory ageing” is a rather unusual term. What is exactly meant by it?

Par. 23: Definition of trading desks:
The definition of trading desks is a very important topic. Here further clarification is needed e.g. what size or structure a trading desk must have. Does it have to be aligned with organizational structure or can trading activities be done by specification into asset classes? Does every change in organizational structure need an approval by the supervisor?

Model-independent assessment tool for desks:
Further clarification about this assessment tool is needed. Who is deciding about the shape of this framework? Is it a common approach for all banks or an individual solution per bank? On the one hand Value-at-Risk shall be replaced by Expected Shortfall, but on the other hand for back-testing purposes on the trading desk level; once again a value-at-risk-calculation is necessary. In the end more calculations have to be carried out.
For an easy business model the Standardized Approach is allowed on its own. How is the boarder exactly defined with regards to the business and size of a bank?

Par. 51: Cash Flow decomposition of Bonds
The decomposition of a fixed bond into cash-flows for the FX risk framework is overly complicated. The FX risk of a bond is connected and managed according to the current market value.

Par. 52: Floating rate instruments
Taking only the fixed payments of a floating rate instrument for the general interest rate framework it does not give correct interest rate sensitivity. A “plain floater mapping” as it is used in the current standardized approach should be used. As above, for the FX risk framework the current market value should be used, no decomposition of cash flows should be imposed.

Par. 59, Par. 76: Swaps
Please see our comments as of for bonds and floating rate instruments above.

Par. 91 et seq.: General Interest Rate Risk (GIRR)
In Par. 95 it is stated that only fixed cash flows should be included. The proposed treatment of floating rate instruments is inconsistent with risk management practice. A plain floater mapping approach (mapping notional to next fixing date) should be applied instead. The proposed treatment of off-setting cash flows in buckets (Par. 97) by a factor of 0.9 is highly disturbing the risk sensitivity of the approach for large but balanced portfolios (e.g. derivative portfolios with high number of trades and resulting low net risk). Such treatment will give high residuals positions per Vertex that do not reflect the true interest rate risk of the portfolio.
Furthermore the set-up of a discounting curve is very complex. It is questionable whether the final results of discounting cash flows bring added value to risk measurement.

Par. 137 et seq.: FX risk
The approach is inconsistent with the economic currency risk resulting from an open currency position. Splitting into cash flows and discounting, mapping onto 3 time buckets would deviate from real FX-risk for all instruments that have a Present Value.
The inclusion of FX risk outside of the trading book (i.e. “rest of the bank”) is unclear. Would banks need to split cash flow of all other banking book positions in a similar complex way? A market value approach for all trading book assets and book value approach for banking book assets would be more realistic. For derivatives a Delta-approach can be used. The allocation of cash flows into 3 buckets is highly complicated for all products of the balance sheet (need to involve all future payments, floating rate cash flows a.s.o.). Higher Risk weight for single currency exposure compared to current treatment (new: 15%, old 8%) with limited diversification effects due to regulatory correlation parameter of 60% will result in a higher capital requirement.

Par. 146 et seq.: Default risk for non-securitizations
Current default risk weights are rather high and show significant cliff effects between the different rating categories. In lower rating classes there is a potential high overlap to Credit Spread Risk. Would this apply for banks holding the paper outside the country? What does funded in same currency mean (e.g. term funding, generally all bonds are funded in the issue currency)?  
Par. 153 indicates national discretion for certain government paper. This will potentially destroy a level playing field between countries. One question is then whether the lower default risk weight should also be reflected in the Credit Spread Risk.

Par. 180: Organizational separation of validation and model development
Annex 1, D, 2, (c), "A distinct unit must conduct the initial and ongoing validation of all internal models": This strict separation between modellers and validators is a very cost-intensive and possibly prohibitive requirement.

We propose that the regulator provides a set of criteria when a full independent validation team has to be established. For medium sized banks this is a criteria which will certainly withhold the bank from going into internal models.

Par. 180: Scaling horizons
Annex 1, D, 3, (k), instantaneous shock requirement/n-value: It would be desirable to have additional guidance of how risk factors’ n value should be handled in case of joint models, where different risk factor classes are driven by the same engine, relying on identically-sized return time windows.

Please take our remarks into due consideration.

Yours sincerely,

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