Second Consultative Document Fundamental Review of the Trading Book

Dear Stefan,

Credit Suisse Group AG (CS) would like to thank the Basel Committee on Banking Supervision (Committee) for the opportunity to comment on the second consultative document: “Fundamental review of the trading book” dated October 2013 (FRTB), (Basel 265).

CS supports the joint responses to the consultative paper provided by International Institute for Finance (IIF), the Global Financial Markets Association (GFMA) and the International Swaps and Derivatives Association, Inc. (ISDA) to the Trading Book Group on 6th and 18th January. This letter provides CS’s additional feedback over and above the feedback provided in the joint industry response.

Our response is divided into two parts: Section 1 contains our main comments on the new rules around trading book-banking book, internal model approach, standardised calculation and QIS. Section 2 contains some additional points for clarification which we would be grateful for feedback on particularly before starting the QIS.

CS fully supports the work of the Committee in conducting the FRTB, and addressing the weaknesses of the current capital framework. We would be happy to discuss our findings and recommendations in more detail with members of the Committee at any time, and hope our feedback is helpful.

Yours sincerely

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SECTION 1: MAIN COMMENTS


CS supports the objectives of the committee to deliver a more consistent implementation of the boundary across banks by providing standards for banking book vs. trading book designation. CS also supports the joint associations (GFMA et al) concerns regarding aspects of the proposed rules, in particular with regards to the rigidity of the presumptive list as outlined in the industry response. CS recommends one additional change to the rules around trading book banking book boundary.

- **Capital surcharge (Paragraph 25-26)**: CS believes that a Pillar 1 capital surcharge following the movement of a transaction from banking book to trading book or vice versa is unnecessary. CS believes that if the movement of the transaction has been performed to comply with the regulations, has not been motivated by capital arbitrage, and has been signed off by a supervisor, then there is no need for a Pillar 1 surcharge.

2. Internal Models based approach

a. **Model parameterisation (FRTB Annex 1, Section D, 181)**

CS supports the proposed change from VaR and Stressed VaR to a Stressed Expected Shortfall measure. CS agrees that this change more accurately captures tail risk and reduces the pro-cyclicity of the market risk capital charge. In addition to the joint association comments, CS recommends one change to the calculation of the expected shortfall measure:

- **Risk factor shocks starting point**: CS does not support the proposal for the n-business day risk factor shocks to have a common starting point as outlined in footnote 36. This approach will result in the most recent market data not being captured by the internal model for up to 11 months for the most liquid risk factors (eg with a 10 day liquidity horizon). One alternative approach is that risk factor shocks are applied with a common end point rather than common starting point to ensure that the most up to date market data is incorporated for all risk factors. Another option is to employ a standard shorter liquidity horizon for all risk factors as discussed further in 2b below.

b. **Incorporating the risk of market illiquidity (FRTB Annex 1, Section D, 181)**

CS agrees that the market risk capital requirement should reflect market liquidity, and the ability to exit or hedge each risk factor during a period of stress. CS recommends two changes to the approaches outlined in the revised text over and above feedback provided by the joint associations:

- **Regulatory prescribed fixed liquidity horizons**: CS does not support the approach of using regulatory prescribed liquidity horizons as outlined in paragraph 181. Fixed regulatory prescribed liquidity horizons could result in firms changing their business mix to reduce trading in risk factors with long liquidity horizons, thereby reducing liquidity in these markets. In addition, the current classification of risk factors is too broad with no consideration given to tenor, currency/underlying within each risk factor category. CS proposes that firms should have the flexibility to agree with supervisors their own
liquidity horizons based on a set of pre-defined criteria such as trading volumes during periods of stress & size of position relative to the market.

- **Incorporation of variable liquidity horizons in Expected shortfall:** CS does not support the capitalisation of liquidity through variable holding periods in the expected shortfall calculation. For certain exotic products, long horizons combined with very different horizons between risk factors will cause a break of the no-arbitrage principle within firms’ valuation models, resulting in calibration failures and inability to apply full revaluation P&L techniques. Variable liquidity horizons also ignore the existence of mean-reversion in some markets (e.g. volatilities) and distort inter-asset correlations (e.g. equity vs. credit spread) if they are prescribed at very different horizons. CS therefore recommends that market liquidity risk is capitalised through either a set of liquidity add-ons or by adding extra risk factors in the expected shortfall for liquidity premia. This will also enable use of a 10-day holding period across all risk factors in the expected shortfall calculation and resolve any inconsistencies in market data (eg as outlined above in section 2a).

c. **Desk level approvals (FRTB Annex 1, Section D, 183-184)**

CS agrees in principal with the proposed desk level approach regarding the model approval process although we note that additional supervisory resources will be needed to conduct this more granular approval process. We have identified some challenges in the operation of model assessment tests which are set out below:

- **Backtesting:** CS requires clarification on whether P&L should be compared to 1 day VaR calibrated to the 1 year stressed period or a 1 day VaR which uses the most recent historic market data set. In the event that backtesting is required against VaR calibrated to the most recent market data, CS’s view is that firms should be able to choose the length of the historic dataset and weighting scheme used to calibrate the VaR, to align with firms’ views on accurate market risk measurement. As an example, CS believes that a 2 year exponentially weighted VaR model is the most accurate method or market risk measurement and this approach is used for internal risk measurement and current backtesting.

- **P&L attribution tests:** The current P&L attribution tests outlined in paragraph 183(b) result in breaches if the valuation techniques employed in the expected shortfall model are consistently conservative (ie overstate absolute size of losses or profits). Banks which employ conservative valuation methodologies may therefore fail the P&L attribution test and be forced to employ the standardised approach even though their internal risk capital models are prudent and not understating capital. CS believes that the attribution tests should be adjusted so that only models with risk based P&L which consistently understate actual daily P&L fail.

- **Model independent assessment tool:** CS agrees with the industry response that the proposed Model Independent Standard is risk insensitive, and we support the alternative risk sensitive proposal outlined within the joint industry response. In particular, CS believes that a leverage ratio is not an appropriate standard for evaluating the robustness of a model of desk-level market risk. For example

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1 For example, an interest rate swaption depends upon both interest rates and volatilities so different liquidity horizons for each of these could lead to incoherent scenarios.
Prime Services will have a low market risk but a high balance sheet usage, whereas derivatives will have a much higher market risk and lower balance sheet usage.

d. Credit changes (FRTB Annex 1, Section D, 186)

CS welcomes the Committee’s approach to remove migration risk capture from the IDR and the Committee’s view that this risk is measured in stressed expected shortfall. CS also agrees with the committee’s objectives to reduce RWA variability across banks through standardised modelling, and its proposals to ensure consistency with banking book treatment. CS recommends the following changes to the regulation:

- **PD Floor of 3 basis points**: CS does not support the application of a floor of 0.03% (186 (f)) to annual PDs as this introduces undue conservatism for exposures to developed market sovereign debt denominated in the sovereign’s own currency, for which no best practice has evolved on the quantification of default probabilities. This requirement is also inconsistent with both the current banking book rules and the current standardised measurement for specific interest rates risk. CS support the industry proposal for no floor for sovereigns to align with banking book treatment or as an alternative, a nominal 1bp PD floor for sovereigns.

- **Equity based asset correlations**: CS does not support the requirement in 186 (b) that default correlations should be based on listed equity prices. Equity prices are not adequate as the sole source of information for default correlations, as equity prices do not exist for important classes of obligors (for example sovereigns and state owned enterprises). CS recommends that the rules allow the data source for correlations to be a methodology choice.

- **Scope of IDR**: CS does not support the inclusion of equity positions in IDR as it is not clear what the definition of default probability for an equity position is. 186 (c) also defines the scope of the IDR calculation to include “…all positions subject to the market risk framework, with the exception of those positions subject to standardised charges or whose valuations depend solely on commodity prices or foreign exchange rates…” This scope appears to comprise more exposures than the current IRC scope (limited to a subset of positions subject to specific interest rate risk), and we do not believe this to be the intention of the committee. For example, this would suggest that interest rate derivatives need to be included in IDR. CS requests clarification of the scope of IDR such as a list of eligible instruments.

- **Changes to CVA rules**: Section 1.2 states that the Advanced approach for the CVA charge will be based upon the banks’ Expected shortfall model, and that the Expected Shortfall model is designed to incorporate credit migration risk. CS requests clarification from the Committee on whether banks which use Advanced CVA charge will be automatically allowed to set their Maturity Adjustment to 1, on the basis that the Expected Shortfall model incorporates migration risk. The current Basel 3 rules (BCBS189, paragraph 105) state that the bank can only set maturity adjustment to 1 “provided the bank can demonstrate to its national supervisor that its specific VaR model contains the effect of rating migrations.”

e. Capitalisation of risk factors (FRTB Annex 1, Section D, 189)
CS has the following comments on the capitalisation of risk factors outlined in paragraph 189 of Annex 1.

• **Aggregate capital charge formula:** CS does not support the proposal to compute the internally modelled capital charge as a weighted average of the constrained and unconstrained expected shortfall charges. CS’s view is that the higher correlations between risk classes that occur during a stressed period will already be captured in the unconstrained expected shortfall measure as this measure is calibrated to a period of financial stress. Application of the weighted average formula in addition to the stressed calibration of shortfall appears to be double counting. We request the Committee provide further rationale for the use of a weighted average approach, and provide clarification around the calibration of the weighting factor (p).

• **Multiplication factor:** CS does not support the application of a multiplication factor of 3 (m.) to the aggregate regulatory capital measure. Our understanding is that under Basel 2.5, 10 day 99% VaR is multiplied by 3 to take into account longer liquidity horizons and for example convert a 10 day VaR into a 90 day VaR. The introduction of variable liquidity horizons of up to 250 days in the expected shortfall measure removes the need for an additional capital multiplier (apart from reflecting poor backtesting performance). We request the Committee provide its rationale for the continued use of a multiplier of 3 under the revised liquidity horizon approach, and provide clarification on the calibration of the multiplier.

3. **Standardised approach (FRTB Annex 1, Section C, 47-175)**

CS supports the alignment in the calibration of the standardised and internal model based approach. CS has the following comments in addition to the joint association response:

• **Use of cash flows:** The proposal for the calculation of standard rules via a cash flow approach for interest rate risk is contradictory with the objectives set out within the FRTB, in particular, those of simplicity and comparability. Most banks employ a sensitivity approach for interest risk measurement, and we believe use of a more granular sensitivity based approach would more easily meet the Committee’s objective for a simplified regime capable of widespread implementation within the industry.

• **Floor:** CS requests the Committee carefully consider the level of any standardised rules floor, as a floor which is a high proportion of the standardised capital charge will reduce the incentive for banks to continually improve their internal risk capital model.

• **Calibration of risk weights and correlation factors:** The risk weights, correlation factors and recognition of hedges across asset classes appear to be defined very conservatively, and we are concerned that the resulting capital requirements are not risk sensitive and do not provide a credible fall back to internal models. For example, the capital requirement for a 20 year Investment Grade bond appears to be 55% of notional for credit spread risk, 30% of notional for interest rate risk, 15% of notional for FX risk plus an add-on for jump to default (i.e. more than a full deduction from capital). We would be grateful for further details on how the Committee has calibrated its risk weights, and urge the committee to review the factors to ensure that there are not large differences in capital between standardised and internal model approaches.
• **Default risk of securitisations:** The default risk calculation for securitised products considers any tranche with an attachment point <30% as mezzanine (or equity) therefore requiring an LGD of 100%. The proposed treatment does not take into account the creditworthiness of the underlying assets. For example, a residential mortgage-backed security (RMBS) backed by subprime loans has a different risk profile to an RMBS backed by prime loans with the same attachment point. We recommend that the seniority of a tranche is determined with greater consideration for the riskiness of the underlying assets. For example, the determination of what constitutes a senior tranche could be made in accordance with paragraph 18 of the BCBS consultative paper on “revisions to the securitisation framework” (published in December 2013).

• **Credit spread risk of securitisations:** The credit spread risk calculation for securitizations requires positions rated below BB to be risk-weighted 100% which can lead to cliff effects. CS recommends a smoother transition from low to high risk weights applied through the rating scale similar to the proposed external ratings-based approach in the December 2013 BCBS consultative paper on ‘revisions to the securitisation framework’.

• **Securitisation positions in banking vs. trading book:** The currently proposed treatment for securitisation positions in trading book seems to lead to higher capital requirements than when the same positions are held in banking book. This is on the basis that securitisation positions in trading book not only attract capital for default risk but also for credit spread and general interest rate risk. While paragraph 159 of the consultative paper allows for an adjustment of risk weights to avoid double counting of migration risk, it is not clear from the consultative papers how such an adjustment should be made.

4. **QIS**

CS welcomes the invitation to participate in the planned Quantitative Impact Study (QIS), which we believe will be an important input into the calibration of the internal model and the standardised approaches. However, as a result of the infrastructure developments required in order to conduct the study, we strongly urge the Committee to consider extending the current timescales to at least end 2014 (particularly for standardised calculations) to ensure wider participation and a robust output. We also recommend that the Committee uses the portfolios outlined in the recent GARP proposal for the CIS.

Finally, we have a number of clarification points around the new regulation in Section 2 of this letter, and would be grateful for feedback to ensure our interpretation is correct and the industry are interpreting the new rules consistently.
## SECTION 2: ADDITIONAL POINTS FOR CLARIFICATION

| Trading book banking book boundary (FRTB Annex 1, Section A, 19(a)-(d)) | 19(a) refers to inventory ageing reports. We believe that inventory ageing is a meaningful control for some instruments (e.g. corporates, mortgage bonds) but not for others (e.g. OTCs) and would anticipate that the reporting requirements would be finalised in that context.  
19(c) refers to banks with active intraday trading. We believe that this refers to high volume businesses such as our electronic market making desks. Does the Committee share this interpretation? We welcome any further clarification in regards to ‘active intraday trading’  
19(d) refers to reports on the assessment of market liquidity. We expect this assessment to utilise data available through industry bodies e.g. TRACE, and further request the Committees view on their expectation in this regard. |
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<td>Trading book banking book boundary (FRTB Annex 1, Section A, 25-28)</td>
<td>We request clarification concerning the boundary permeability with respect to changes in market conditions. If we have an instrument in the Trading Book for which liquidity has dried up and we can no longer make a market, trade or even mark to fair value, would the BCBS expect that instrument to remain in the trading book as originally designated or to be transferred to the banking book?</td>
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| Trading book banking book boundary (FRTB Annex 1, Section A, 32) | With reference to paragraph 32:  
CS assume that a bank is not expected to be able to measure intraday Expected Shortfall risk, provided it is able to control intraday risk with other tools (e.g. sensitivity limits) which are calibrated to be consistent with Expected shortfall limits. |
| Internal models based approach – Trading desk level approval (Appendix A) | The rules on trading desk approvals do not address the process in respect of business reorganisations. We would welcome clarification on the application of these rules when firms reorganise their business structure. |
| Standardised approach (FRTB Annex 1, Section C, 97) | Under the General Interest Rate Risk calculation, short and long positions a: each vertex are offset to get to net cash flow. The position that is smaller in magnitude (ignoring sign) has to be multiplied by 0.9 prior to offsetting. We would like to understand rationale for this multiplier. |
| Standardised approach (FRTB Annex 1, Section C, 150) | Under the Default Risk calculation for non-securitization short positions with a maturity less than the capital horizon must be weighted by the ratio of their maturity relative to the capital horizon. What is the definition of capital horizon? |
| Stressed Testing (FRTB Annex 1, Section D, 200) | When referring to “changes in the assumptions about volatilities and correlation”, does the BCBS expect banks to stress correlation parameters (e.g. as in equity baskets, NTD credit derivatives or CDOs?) or is this a reference to general correlations between risk factors? In the latter case, if a bank applies instantaneous shocks for different risk factor (and hence the implied correlation is 1) would the BCBS consider this a conservative approach? |
| Stressed Testing (FRTB Annex 1, Section D, 196-202) | Does the BCBS expect banks to have specific scenario limits? |
| Non Modellable Data Quality (FRTB) | We request clarification surrounding the definition of "real" prices: |
1) Currently traders save prices even when they do not hold a position, this prevents missing data in time series. If a trader's price is only real when part of a committed quote or transaction it will result in missing data. This could reduce model accuracy, and mean more proxying or scenarios are used.

2) We request clarification on the use of external data providers, vs. internally sourced data. Currently market data is used from external data providers (often collected from contributing banks - Markit etc.). How would we be able to prove that all quotes were committed or real trades? Separate to this, the section on audit links the reliability of data to the independence of data sources.

3) We request clarification that banks are permitted to use derived data (for example building an index from single-name data, or a yield curve)

| Non Modellable Data Quality (FRTB, Annex 1, Section D, 183) | Classification of risk factors into modellable and non-modellable is done at risk factor level. "To be considered modellable, a risk factor should have at least 24 observations per year with a maximum period of one month between two consecutive observations."

a) Are the checks to be performed over the entire 10Y time series up to the present day or just over the last 1Y?

b) Is it acceptable to generate older missing data where the last few recent years exist, but prior to that the quality deteriorates?

| Non Modellable Data Quality (FRTB, Annex 1, Section D, 183) | "Some risk factors that would be considered modellable under the above criteria may be temporarily excluded from a bank's firm-wide regulatory capital model. In these circumstances, the bank will be given [12 months] to include the relevant risk factors in the regulatory capital model."

Does this text imply that all current RNIVs with good (modellable) data will have to be implemented as modellable within these 12 months? Does the same apply to newly identified risk factors?

| Non Modellable Data Quality (FRTB, Annex 1, Section D, 183) | If certain model parameters are in scope for the capital for non-modellable risk factors, will offsets be allowed between the total capital charge for non-modelled risks and prudent valuation reserves as per the current regime?