Basel Committee on Banking Supervision
Bank of International Settlements
CH-4002 Basel
Switzerland

24 June 2016

Credit Suisse’s comments to BCBS 362: “Reducing variation in credit risk-weighted assets - constraints on the use of internal model approaches - consultative document”

Dear Mr Coen,

Credit Suisse welcomes the opportunity to comment on the Basel Committee’s proposals to reduce the variation in credit risk-weighted assets by constraining the use of internal model approaches detailed in the consultation document issued in March 2016.

We are fully supportive of the Committee’s objectives to reduce excessive variability in credit risk capital requirements, and reduce the complexity of the regulatory framework. However, in our view, the proposals do not achieve the appropriate balance between risk sensitivity, simplicity & comparability.

We are particularly concerned about the proposal to remove the A-IRB approach for exposures to banks, FIs, and large corporates, and replacement with the standardized approach. We view the standardized approach as not fit for purpose for large diversified banks with complex portfolios. We also believe the proposals will result in material increases in credit risk capital, particularly for banks with high credit quality portfolios.

In the attached document, we present our detailed views on the consultation document and some alternative recommendations. We have also contributed to the industry response produced by the IIF and are supportive of the IIF feedback.

Yours sincerely,

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Reducing variation in credit risk-weighted assets – constraints on the use of internal model approaches

(Issued for comment by 24 June)

Official Comments of Credit Suisse AG

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Appendix 10
1) **Exposures to banks, other financial institutions and corporates: General themes (Section 2.2)**

Credit Suisse (CS) has had permission to use an internal model to calculate pillar 1 credit risk capital since 2007 and is therefore one of the longest A-IRB accredited banks globally. During the years prior to obtaining approval and in the intervening period, CS has invested heavily to develop and maintain a risk sensitive measure that brings together both the quantitative and qualitative components of credit risk management framework.

CS supports the BCBS’s objective to increase risk weighted assets (RWA) comparability arising from use of A-IRB models, and recognizes the modelling challenges around low default portfolios. However, we disagree with the approach to improve comparability through removal of IRB framework for exposures to banks, FIs, large corporates and specialized lending, and replacement with the standardized approach. In our view, this approach does not strike the right balance between risk sensitivity and comparability. Our concerns are as follows:

1. **Lack of risk sensitivity of the standardized approach**

   Under the current A-IRB risk weight formula, the risk weights of exposures to banks, FIs, large corporates and specialized lending are based on a continuous function, fully sensitive to the counterparty’s estimated probability of default, loss given default, and transaction maturity. Under the standardized approach, counterparties are assigned to four risk weight buckets only, or just one for unrated corporates or three for unrated banks. CS does not believe that a credit risk capital calculation based on a maximum of four risk weight buckets is sufficiently granular and fit for purpose for large diversified banks, with complex heterogeneous portfolios. Such an approach will overstate risk and capital for the best credits, and understate risk and capital for the worst credits. The approach could result in biases in banks’ decision making towards higher risk, longer maturity transactions with high returns, at the expense of lower risk shorter maturity transactions which would attract an equivalent regulatory capital charge.

2. **Material capital impacts**

   The BCBS, along with the Group of Governors and Heads of Supervision, has stated that it does not intend to increase overall capital requirements significantly, and a QIS is being performed to assess this. However, CS believes that the current proposals could lead to material increases in credit risk capital particularly for large, diversified banks with strong credit risk portfolios and high usage of A-IRB models. Banks would therefore need to either raise significant amounts of new capital to cover an unchanged risk profile, or to materially reduce their balance sheets thereby reducing the provision of credit. We see two main reasons for the capital increases:

   - **Unrated counterparties**: We believe that there are a significant number of financial counterparties, specifically non-bank financial institutions that are not rated. Under the BCBS proposal, these counterparties would be moved to the standardized approach where they would receive an overly conservative risk weight of either 50%, 100% or 150% (20%, 50% & 150% for short term exposures), potentially resulting in significant increases in credit risk capital. Similarly, with regard to corporates, a large number of subsidiaries of large consolidated groups are not rated. Under the proposal, these counterparties would also be moved to the standardized approach where they would not be allowed to inherit the ratings from their respective group parents. The subsidiaries would then be treated as unrated and would attract an overly conservative risk weight of 100%. We also refer you to the quantitative survey performed by GCD in the IIF response to the BCBS paper, which found that only 2.5% of the non-investment grade corporate exposures (rating of
BB+ and below) and 18.5% of the investment grade corporate exposures (rating of AAA to BBB-) are rated.

- **Higher risk weights for investment grade lending**: CS’s comparison of current standardized and internal model approaches for calculating credit RWA, published in Q1 2016, showed that for corporate and bank counterparties, A-IRB risk weights are typically lower than standardized risk weights for good quality lending (AAA to BB+ range), and higher than standardized risk weights for lower quality lending. We believe these findings also generally apply under the new standardized approach. Approximately three-quarters of CS’s corporate and bank exposures are within these strong credit quality ranges, and CS would therefore face significant increases in credit risk weights and capital as a result of moving these asset classes off A-IRB models and onto the standardized approach. We anticipate other large European banks, with similarly high credit quality portfolios and high usage of A-IRB model approvals, will face significant capital increases.

3. **Reduced influence of internal risk sensitive models in firm wide processes**

The current regulatory approach, whereby banks are permitted to use internal credit rating models to compute regulatory capital, has helped banks embed risk sensitive models into wider firm processes such as strategic planning, risk-adjusted pricing, portfolio management, performance management and risk appetite. Removal of these models from the regulatory capital regime will reduce the relevance of these models to these processes, as flatter, less risk sensitive standardised approaches drive regulatory capital and become the binding constraint on banks’ businesses. The merit of banks continuous investments in these models will also have to be considered against the mandatory investments required for the new capital calculations not just in credit risk, but also in market risk, counterparty credit risk, CVA, operational risk and interest rate risk in the banking book.

4. **Modellability of portfolios**

We believe that for some of the portfolios which the BCBS proposes to exclude from A-IRB, banks do have decent quality default data and an information advantage over external parties:

- Within the income producing real estate (IPRE) sector of specialized lending, CS believes there is reasonable default data available and that the performance of the model can be evidenced. In addition, the nature of IPRE can be very jurisdictionally specific and a global standardized approach would not cater for national differences.
- Within other sections of specialized lending (e.g. ship finance, and commodity trade finance), the risks can be very different and businesses can be structured with valuable collateral. Flat risk weights proposed in the standardized approach or IRB slotting (70% as strongest category) do not reflect the real risks of this lending. For these businesses, CS believes that banks can have reasonable quality data and an information advantage over external parties.
- Amongst corporates which belong to groups with total assets greater than EUR 50bn and revenues greater than EUR 200m, CS believes there are counterparties which are similar to the larger SMEs for which there is an abundance of data for robust LGD analysis. We believe the A-IRB approach should be retained for such exposures provided it can be evidenced by banks that there is sufficient data for modelling LGD. In addition, there is also a significant amount of lending to lower rated corporates that is secured by assets and other valuable collateral which is not recognised under the F-IRB approach.

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1 See the [Credit Suisse Pillar 3 Report](https://www.credit-suisse.com/) and the relevant extract in the appendix to this document.
We would also distinguish between “low data portfolios” and “low default portfolios” as identified by the IIF. Low data portfolios are where an individual bank lacks a full default history but can remedy this by making use of external (pooled) data. Low default portfolios are where all banks have to cope with few historic default observations due to inherently low risk sector. As an example, the mutual fund portfolio includes several thousand counterparties and hardly any defaults.

Alternative recommendations

Given the concerns raised above, CS believes the A-IRB approach should be retained for exposures to banks, FIs, large corporates and specialised lending. To address BCBS’s concerns around modellability and comparability of low default portfolios, we recommend that the BCBS introduces additional criteria around modellability at individual portfolio level such as thresholds on data requirements. We would also urge greater regulatory acceptance of external (pooled) data sources to address issues around low data portfolios. In the event that these additional criteria were not met, banks could be required to use the F-IRB approach or possibly standardised approach for credit risk. This approach would be analogous to the proposals in the new market risk framework, where the BCBS is implementing new tests for market risk model approval such as P&L attribution tests.

In the event that the proposal outlined above is not acceptable to the BCBS, CS would support recommendations made in the IIF response to allow the use of internal models for rank-ordering purposes, and then to use the model outputs to map to a set of regulatory prescribed risk weights. This includes using at least ten risk weights, to ensure that the capital calculation is sufficiently granular. This approach would make use of banks’ proven track record of being able to rank-order bank and corporate exposures correctly and develop models which exhibit good discriminatory power, which has been acknowledged by the BCBS\(^2\). The approach also retains some element of risk-sensitivity and would also meet the BCBS’s objective of reducing the variation in risk weights across banks for the same exposures. Finally, the approach will maintain the relevance of risk sensitive internal models in firms’ risk management processes (through link to regulatory capital), and would also reflect legitimate explanations of RWA variations, as identified by the IIF.

2) Exposures to banks, other financial institutions and corporates: Specific points (Section 2.2)

Definition of other financial institutions

We would ask the Committee to provide further clarification around the definition of other financial institutions. We believe the definition provided in the consultative document is somewhat ambiguous and needs to be well defined for banks to truly understand the impact of the proposal.

Use of assets and revenues to determine threshold for F-IRB/A-IRB for Corporates

We believe that using total assets and revenues to determine whether a counterparty applies the F-IRB approach or A-IRB approach seems somewhat arbitrary. Based on our analysis of both internal data and industry data, assets or revenue are not material drivers of LGD, and we do not think that these factors should determine whether LGD can be modelled or not. We recommend the BCBS employs more intuitive criteria for excluding portfolios from the A-IRB approach such as the higher data standards as recommended in section 1.

\(^2\) Analysis of risk-weighted assets for credit risk in the banking book, July 2013
Complexity of regime for Corporates

We believe the use of three different regimes for the corporate asset class (i.e. Standardised Approach, F-IRB and A-IRB) adds additional complexity and introduces material operational challenges for banks. As one of the Committee’s stated objectives is to reduce complexity we believe a more appropriate approach would be to have a clear division between the Standardised Approach and a full A-IRB approach. The introduction of the revenue and asset thresholds between Standardised, F-IRB and A-IRB will also lead to a cliff effect as counterparties move across the various thresholds. This will introduce new volatility in capital requirements near the threshold, as well as discontinuities in risk-ordering and risk weights.

3) Capital floors: Output floors (Section 1), Counterparty credit risk and CVA (Section 2.4), Parameter floors (Section 3)

Output floors

We understand the BCBS’s rationale for introducing an aggregate output floor based on the standardized approach. However, CS is concerned that output floors set between 60-90% of the standardized approach could result in material capital increases, particular for banks with high credit quality portfolios, and high use of A-IRB and IMM models. The reason for this is that standardized risk weights are much higher than the A-IRB risk-weights for high quality investment grade lending, and unrated counterparties, reflecting lower risk sensitivity of the standardized approach. It is also because standardized exposure calculations can give significantly higher RWAs than model based exposures, because the standardized approach does not fully recognize the benefits of netting, portfolio diversification and collateral. We urge careful calibration of the floor to ensure that banks are not discouraged from adopting risk sensitive internal model approaches, and the BCBS’s objective of not significantly increasing capital requirements is met.

CS also notes that there are a number of other changes occurring in the pillar 1 regime at present, which could result in significant increases in pillar 1 RWA, including new approaches for Operational Risk, Market Risk (FRTB), Securitization and CVA. We recommend that the BCBS considers the capital impacts of all these initiatives together when setting any capital floors based on standardized approaches.

SA-CCR floor

We are unclear from the proposal whether the proposed counterparty credit risk exposure floor based off SA-CCR is intended to apply on a counterparty by counterparty basis (i.e. exposure for each counterparty is based off the higher of the floor or IMM approach), or overall portfolio basis (i.e. overall credit risk capital is computed using either the higher of IMM approach for all counterparties or the higher of a floored standardized approach for all counterparties). We are also unclear from the proposal whether the current counterparty credit risk floor based on Stressed EPE would be removed under the proposal. We would ask the BCBS to provide clarification on how the counterparty credit risk exposure floor should be applied.

Parameter floors

From our experience, the current PD floor of 3bps is appropriate and we have seen no evidence to indicate it is aggressive. Whilst there are generally a low number of defaults in certain parts of the corporate universe, the number of counterparties and the observation period are large enough to demonstrate statistically that a floor of 3bps is conservative. We do not therefore believe a move to 5bps is justified and would note that such a floor would provide no differentiation between investment grade counterparties rated, i.e. those with ratings in the AAA to A+ range.
With regard to transactional level floors on the LGD and CCF parameters, some transactions do have genuinely low values for these parameters which can be substantiated with robust data. In addition, some of the CCFs employed in the new standardized approach, which are being proposed as a basis to CCF floors, are much higher than the current standardized approach and are being disputed (e.g. 50% CCF for trade finance and letters of credit).

Overall approach & alternative recommendations

Overall, we note that the application of multiple floors (i.e. output floors, parameter floors, counterparty exposure floors and leverage ratios) introduces operational challenges for banks and adds complexity to the framework rather than simplifying it. As an example, if a bank has A-IRB and IMM approval, a derivative with a small corporate could be subject to floors on LGD, PD, CCF, counterparty exposure (using SA-CCR), aggregate credit risk capital, plus a leverage ratio. The use of transaction or counterparty level floors can also be interpreted by some banks as removing the incentive to accurately model the risk for individual transactions. We recommend the BCBS reduces significantly the number of proposed floors to avoid creating an overly complicated capital regime.

4) Parameter estimation practices and fixed supervisory parameters: (Section 4)

Probability of default (Section 4.1)

We believe these proposals are in line with the current expectations of a number of national supervisory authorities and would not result in a significant change to current practices. However, we request the BCBS better define the term “generally” with regards to their proposal that “rating assignments generally remain stable over time and throughout business cycles”. Differences in this definition compared to the current through the cycle rating systems could result in material changes to bank processes.

LGD (Section 4.2)

We welcome the removal of the required minimum collateral criteria under the F-IRB approach. We agree that supervisory-specified downturn add-ons under the A-IRB approach could contribute to reducing the variation in risk-weighted assets.

Exposure at default and credit conversion factors (Section 4.3)

CS’s recommendation outlined in section 1 is to retain A-IRB for exposures to banks, FIs, and large corporates subject to meeting stricter criteria for modellability. This should include retention of modelling of EAD/CCF for these portfolios. Within this context, we support the modelling constraints for EAD/CCF outlined in the third bullet on page eleven of the proposal.

We disagree with the BCBS proposal to employ a CCF of greater than 0% for the undrawn component of unconditional cancellable commitments. We request the BCBS continue with the current approach for unconditionally cancellable commitments, which includes computation of credit risk capital on drawn amounts, and 0% CCF on undrawn amounts.
5) Credit risk mitigation: Conditional Guarantees (Section 4.5)

We disagree with the BCBS proposal to prohibit conditional guarantees under the A-IRB approach. As an example, credit insurance policies have standard clauses which exclude losses caused by nuclear events (e.g. damage by nuclear power plant). CS takes the view that credit insurance policies with these conditions are "conditional guarantees" because a nuclear event is outside the control of the bank, and therefore the guarantee is not unconditional. We recommend that conditional guarantees under which the guarantor may not be obliged to perform in very specific and limited circumstances outside the control of the insurer (e.g. nuclear events), are still eligible mitigants under the A-IRB approach.

6) Credit risk mitigation: Linkages of IRB to IMM/Repo VaR/ Own estimates (Section 4.5)

Section 4.5 of the proposal states that banks who do not use IRB will be unable to use own estimates of haircuts, or Value at Risk (i.e. Repo VaR) under the comprehensive approach for Credit Risk Mitigation. Similarly, the BCBS Standardized approach for credit risk CP, also implies that IMM (Collateralized OTC derivatives), Repo VaR and Own estimates for collateral haircuts may not be permitted where IRB is not used, and that the Standardized Approach for Counterparty Credit Risk (SA-CCR) or the Supervisory method for SFTs should be used (see p18 and para 119 of BCBS 347). The implications of these changes, in combination with the BCBS proposal to constrain IRB coverage, are that banks may not be able to use internal model methods to compute exposures for any derivatives or securities financing transactions to Banks, FIs and large corporates. CS does not fully understand the rationale for this linkage, for the following reasons:

- **Data quality concerns not relevant for IMM/ Repo VaR & Own estimates:** The BCBS’s primary concern with counterparties which are proposed for exclusion from the IRB framework is that the quantity and quality of default data is inadequate or not widely available for low-default exposures. However, this argument does not apply for the modelling of exposure estimates to these counterparties, where there is plenty of good quality data on volatilities of equity, interest rate, FX and credit spread markets, which are the primary inputs for EPE, haircuts or VaR on derivatives and securities financing transactions. In addition, the report on risk-weighted assets for CCR (“BCBS 337”) did not identify data quality as a driver of variability and did not raise any recommendations related to choice of calibration (Section 3.4.2.2). Furthermore, the market data used in IMM/Repo VaR/ Own estimates to estimate exposure to Small Corporates (which are not excluded from the IRB framework under the current proposal) is in principle the same as that used to model exposure to Banks and Large Corporates (which may be excluded by the proposal).

- **Inconsistent use of IMM/ Repo VaR & Own estimates across the CCR framework:** BCBS 347, Annex 1, Article 119 removes IMM as a permitted approach for standardized portfolios for collateralized OTC transactions only. IMM would continue to be a permitted approach for uncollateralized transactions, which could be seen by some banks as not incentivizing collateralization. This is inconsistent with the impending market regulation introducing mandatory margin requirements for non-centrally cleared derivatives (“BCBS 317”). Furthermore, prohibiting IMM/Repo VaR & Own estimates for non-IRB portfolios would mean these methods being applied inconsistently for the same exposure types across the portfolio. For example, IMM would be permitted to model exposure arising from a 2 year interest rate swap with a Small Corporate but not for the same trade with a Large Corporate, even though the modelling issues and exposure outcome should be identical.

- **Ongoing regulatory CVA consultation:** The consultative document on ‘Review of the Credit Valuation Adjustment Risk Framework’ (“BCBS 325”) considers whether exposure profiles generated via accounting CVA exposure models (Option A) or via IMM exposure models (Option B) should be used in the standardized approach for CVA within the FRTB-CVA framework.
Removal of IMM as a permitted approach for Banks and Large Corporate counterparties would largely negate the viability of Option B. The BCBS 347 and BCBS 362 proposed regulation looks inconsistent within the context of this ongoing consultation.

- **Increase in overall capital requirements:** One of the Committee’s aims (as stated in BCBS 362) is to not significantly increase overall capital requirements with the introduction of the new regulation. This aim is unlikely to be met across the industry if IMM, Repo VaR and Own estimates were removed as a permitted approach for non-IRB portfolios.

We did note that footnote 10 of the BCBS IRB constraints CP states that the proposal to require the use of the Standardized Approach to calculate credit risk weights for exposures to certain counterparties (e.g. Banks and Financial Institutions, Large Corporates) does not preclude the use of IMM to estimate the exposures to these counterparties. We also noted p4 of the “additional guidance for completing the IRB QIS” issued by the BIS on 6 May 2016 includes further clarification that paragraph [119] of the standardized approach is only applicable if the bank does not use the IRB approach for any of its exposures. These statements suggest that the BCBS may not intend to restrict the use of IMM to portfolios only on IRB, provided that the bank has some part of their total portfolio on IRB. However, it is not defined what part or how much of the total portfolio needs to be on IRB to be able to use IMM. The conditions are also not extended to Repo VaR and Own estimate haircuts.

**Alternative recommendation**

We recommend that drafting be applied in both the new Standardized Approach for credit risk and in the finalization of IRB treatments to ensure clear guidance on these points, and avoid variability in interpretations across banks and supervisors. We do not see the logic behind a link between the use of IMM, Repo VaR and own estimates to IRB approval, and therefore our recommendation is that the new regulation should state that banks can use these internal modelling techniques (subject to regulatory approval) for exposure measurement irrespective of whether they have any IRB approval.
Appendix – relevant extract from the comparison of risk weighted assets under the model based and the standardized approach disclosed in the Credit Suisse 2015 Pillar 3 report.

1) Corporates

The graph below shows the risk weights assigned to counterparties under the A-IRB approach and the standardized approach. For the IRB risk weight curve, an LGD value of 45% and a maturity adjustment of 2.5 years are chosen, as these are the Basel Foundation IRB parameters. For counterparties in the AAA to BB+ range (based on external ratings), higher risk weights (20%, 50% and 100%) are assigned under the standardized approach than under the A-IRB approach.

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3 Note also that the Probabilities of Default (PD) for each rating shown in the graph are consistent with Credit Suisse’s PD masterscale.
2) Banks

The graph below shows the risk weights assigned to counterparties under the A-IRB Approach and the standardized approach. For the IRB risk weight curve, an LGD value of 45% and a maturity adjustment of 2.5 years are chosen, as these are the Basel Foundation IRB parameters. The graph shows that counterparties in the AAA to BBB+ range (based on external ratings) attract higher risk weights (20% and 50%) under the standardized approach than under the A-IRB approach.

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4 Note also that the Probabilities of Default (PD) for each rating shown in the graph are consistent with Credit Suisse’s PD masterscale.