Dear Sir/Madam:

Re: IBFed response to the BCBS consultation on internal models

The IBFed1 thanks you for the opportunity to provide comments on the BCBS’s consultative document, *Reducing variation in credit risk-weighted assets – constraints on the use of internal model approaches* (“consultative document”). We note that the proposed changes are being advanced shortly after the BCBS’s second consultative document on *Revisions to the Standardised Approach for credit risk*. Furthermore, we understand that the Committee is still considering the design and calibration of capital floors based on standardized approaches.

We highlight the importance of evaluating all of the many proposed regulatory changes holistically to ensure that the Committee’s objective of not significantly increasing overall capital requirements is met. But we also encourage the Committee to analyse and disclose the result of the QIS on a portfolio basis and on a geographical basis. The comprehensive quantitative impact study that is planned to inform the final design and calibration of floors along with the work to consider the interactions of input floors, output floors, and the leverage ratio will be very important. We urge the Committee to take the necessary time to evaluate and assess the impacts of the proposed requirements, and to provide industry with sufficient time to implement any changes that are deemed necessary.

The development and implementation of Basel II was a huge undertaking with benefits in terms of information and fostering of good risk management practices that have been largely

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1 The International Banking Federation (IBFed) was formed in March 2004 to represent the combined views of a group of national banking associations. The countries represented by the Federation collectively represent more than 18,000 banks with 275,000 branches, including around 700 of the world’s top 1000 banks which alone manage worldwide assets of over $31 trillion. The Federation represents every major financial centre and its members’ activities take place in every time zone. This worldwide reach enables the Federation to function as the key international forum for considering legislative, regulatory and other issues of interest to the global banking industry. For more information visit: www.ibfed.org
Banks have made a significant investment in capacity and knowledge to build up expertise with internal risk models. As it was in the spirit and letter of the Basel II Accord, an internal rating system comprises all of the methods, processes, controls, and data collection and IT systems that support the assessment of credit risk, the assignment of internal risk ratings, and the quantification of default and loss estimates. This is where the value of internal risk models lies.

At this point the Basel III reform advances towards completion. In terms of changes to the solvency ratio, the numerator has been transformed with significant changes to the quality and quantity of capital. Recently, the Basel Committee is considering further changes to the risk-based capital ratio, this time to the denominator, namely through the revision of the standardised approach for credit risk and the constraints to the use of internal model approaches, apart from the introduction of a leverage ratio and revisions to the market risk framework and the approaches to operational risk. This part of the reform is extremely delicate as it impacts the way that banks organise their businesses and processes.

While we value the risk sensitive nature of internal models, we appreciate the Committee’s recognition that jurisdictions will be considered compliant with the Basel framework if they do not implement any of the internally modelled approaches. The vast majority of jurisdictions accept the use of internal models within their overall regulator capital regime. Recognition that the internal models approaches are optional within the Basel framework provides greater flexibility for jurisdictions that favor standardized calculations.

We would also like to underline the importance of ensuring consistency between the accounting and prudential frameworks in the light of the latest accounting norms. In this respect, we will expect to have a clear and consistent definition of how ratings should be designed, attributed, and updated.

Against this background, the banking industry remains committed to collaborating with the Basel Committee in the expectation of a careful revision of internal models that tackles what is considered problematic without removing the positive aspects of the numerous areas that are working properly.

**Variation in Risk-Weighted Assets (RWA)**

The supervisory community and the industry are working on improvements to the IRB approaches especially during the last 3 years. Since the last study on variability is dated in 2013 the data on variability should be reassessed to account for the changes experienced since then.

A common theme in the consultative document is the application of floors, either on the inputs or the outputs to the RWA calculation. While an effective application of these floors would reduce variability, we note that it would be overly punitive to borrowers with a lower risk profile and/or more rigorous credit risk management practices and we are concerned with the incentives that would create.

The Committee also does not appear to consider jurisdiction and bank portfolio specific characteristics and lending practices. We do not believe that lack of comparability in RWA is an indication that our models are not sound but rather indicates that they reflect differences in business strategy.
Overall, we believe that banks are consistent in their rank ordering of exposures and use of rating systems, and that differences in the interpretation of definitions represent a key source of variation in RWA. The consultative document does not address the wide interpretation of definitions that affect parameter estimates. More guidance on definitions such as recognition of default, length of LGD recovery periods, LGD discount rates, and required conservatism for sources of uncertainty in combination with well-informed floors would reduce RWA variability, thereby supporting the retention of the A-IRB approach for most risk classes than are permissible in the consultative document. In general, a tighter methodological framework could prevent higher variation in RWA and parameter estimates while permitting banks to continue leveraging their A-IRB infrastructure where important investments have been made including those related to risk management capabilities.

We would stress that there are several fundamental reasons for variation in RWA - differences in modelling choices and data inputs, supervisory guidance across jurisdictions, and differences in business strategy and risk management practices. The Committee’s objective must be to only minimize variation on the factors that should be more consistent and not on account of those that could be rightfully different between banks. Moreover, some divergence in practices in measuring RWA should be reasonably expected as homogeneous results could result in even greater and undesirable systemic risk.

**Regarding floors**

By proposing floors, the Committee has also focussed on a punitive measure for reducing variation in RWA at the expense of risk sensitivity; instead, we believe that greater attention should be paid to the standardization of definitions in addition to disclosure requirements to achieve better transparency and comparability of RWA across banks.

*Input floors should only floor incorrect (too low) PD, LGD or EAD values.*

In theory, input floors should only floor incorrect (too positive) model values, they should not floor low PD and LGD values that accurately reflect the actual risks. Input floors that do not take into account the level of accuracy of the internal models could increase the unintended risk weight variation as different risk profiles that are affected by input floors will lead to similar risk weights. Overwriting accurate risk sensitive information will reduce comparability and misinform the investors.

*Input floors should only be activated if model performance is below the minimum requirements.*

In order to reflect the level of accuracy of the internal models, we suggest to include the performance of the model in the calibration process of the input floors. For PD models, the performance of the models should be assessed by comparing the predicted PDs with the observed default frequencies. For LGD models, the predicted LGD values should be compared to the actual losses. If the performance is sound (no underestimation of risks) the input floors should not be activated to the model. It should be the call of the Competent Authority (based on objective criteria from the BCBS) to activate input floors, triggered by evidence that the model for which the input floors are being activated are below a certain level of accuracy.
**Risk Sensitivity**

The foundation of IRB approaches is risk sensitivity, and we believe that this proposal fails to recognize that banks have made significant investments since the inception of Basel II in developing risk sensitive models and rating systems that have been fully integrated into overall risk management processes. This has allowed for improved risk assessment and capital determination that is commensurate with risk. The proposal to remove the option to use IRB approaches or constrain modelling of parameters for certain exposures could reduce banks’ incentives to continually invest in the enhancement of rating systems. This can lead to undesirable consequences as the relative risk of assets will not be well differentiated resulting in the potential for banks to take on higher risk assets given more favourable returns for the same level of capital required. The benefits from the accumulated knowledge and process investments would be lost. Moving back to a quasi-standardised approach will have undesirable consequences in terms of the potential for misalignment on internal risk assessment and external risk reporting as reflected in the risk weights or capital ratios. We strongly believe that the models/parameters can be enhanced, and alternatives as suggested above should be pursued to maintain a risk sensitive framework with fewer and better understood variations. We believe these alternatives should be considered first before requiring the standardized approach for certain portfolios of IRB banks as discussed below.

**Exposures to banks, other financial institutions and corporates**

We believe that the A-IRB approach should be retained for banks, other financial institutions, and large corporates even though they are low default portfolios. In our modeling approach, we use internal as well as external data sources from either rating agencies or consortium data from banks globally to evaluate PD and LGD parameters. We believe that our models that have been governed under robust model risk management frameworks properly quantify credit risk.

We note that mandatory application of the standardized approach to banks, large corporates, and sovereigns would also likely result in inappropriate pricing across risk classes/segments. Furthermore, capital requirements for low risk regulated institutions relative to higher risk institutions would increase because the proposal is not risk sensitive. At the same time, non-regulated competitors would gain an unfair advantage by being able to price their loans at better rates because they would not be subject to the same framework. There is significant potential for this to create increased risk in the industry overall.

For the above reasons, we strongly believe that IRB approaches should be retained for banks, other financial institutions, and corporates. Rather than removing the A-IRB approaches for banks and large corporates, we would suggest establishing certain qualifying criteria (e.g. requirement for a certain amount of observations or data years and a minimum number of defaults).

In the event, however, that the Committee proceeds with its proposal to require the standardized approach for these exposures the Committee should consider appropriate amendments to the standardized approach which would increase risk sensitivity. At the current time the revised standardized approach does not have the necessary risk sensitivity or granularity to differentiate between low risk and high risk credit obligors – particularly for unrated corporates.
We would also like to ensure that the proposed thresholds of EUR50bn in total assets and EUR200m in annual revenues for Corporates will be open to further calibration based on the QIS results. In particular, we believe that the EUR200m threshold is set too low and will capture a large number of Corporates where data for modelling, including number of defaults, is readily available both internally and externally.

We believe that the Committee should also consider the use of a maturity adjustment to recognise the lower risk of short term credit exposures and the introduction of a recovery adjustment to recognize the lower credit risk losses from exposures with higher recovery rates.

**Specialized lending**

Specialised Lending involves structured transactions that are mainly focused on credit risk reduction resulting in a safer asset structure and as a result creating financial possibilities that are aligned with the interest of the client and the society. Due to its individual and collateralised approach, Specialised Lending is unsuited to standardisation.

Specialised Lending exposures are by nature highly structured transactions. A-IRB provides a platform to include these structures in the risk assessment and risk quantification. Through the PD, LGD and EAD models, the risk quantification includes non-financial covers, risk mitigating monitoring processes and in depth knowledge of the clients, the products and the markets.

The current internal models (PD, LGD and EAD) reflect the expected losses. These predictions are periodically tested against observed default frequencies and realised losses and if needed models are adjusted to ensure a sufficient level of accuracy, which make these models fit for their purpose (including calculating minimum regulatory capital requirements). Also these model outputs are an important ingredient for determining the provisions. We view that the decision to grant permission to use A-IRB should be based on clear and transparent set of rules, focusing on sufficient ability to make robust models. Therefore data quantity and quality as well as other minimum requirements for example focusing on risk management should trigger such a decision. Within the area of Specialised Lending, special consideration is requested for the fact that the LGD modelling is also based on a translation of the risk mitigating management and monitoring processes into LGD modelling. Hence, next to quantitative aspects the LGD modelling is strengthened with qualitative aspects, such as in depth market and product knowledge, including robust risk management and monitoring processes.

We believe that the current A-IRB approach measures credit risk better than either a supervisory slotting criteria (SSC) approach or the revised standardized approach for credit risk. Under the SSC approach, banks are required to map their internal grades to five supervisory categories. We note, however, that the current slotting approach lacks the robustness of an effective risk rating system to meet the objectives of risk sensitivity, consistency and transparency. We believe that the current qualitative criteria established for the five supervisory categories would be open to excessive levels of interpretation and, therefore, would not meet the stated objective of improved comparability. Similar to banks and financial institutions, we recommend more granularity in the risk weight buckets than is proposed in the Revised Standardised approach and risk weights could also be mapped to the
Bank’s internal ratings that are based on more comprehensive risk assessments as opposed to the use of qualitative descriptions proposed in the consultative document.

Furthermore, we note that the amount of available data for modelling these exposures has increased significantly in recent years. In particular for project financing, it has become more prevalent for government sponsored financing for major infrastructure or power/renewable energy projects on a global basis. As an example, there is global consortium data comprised of thousands of projects and including several hundred cases of defaults over the past twenty plus years.

Regarding the revised standardized approach for credit risk, we believe that the definitions of specialized lending and IPRE are vague and too general, and similar issues noted for the SSC approach apply. Additionally, the proposed option to apply either the Standardised or SSC approaches, which are very different in terms of assessment criteria and corresponding risk weights, would create further variation in RWA.

When Build-to-Hold and Build-to Sell fall under the SSC or standardized approach, there would also need to be a far more granular risk-based differentiation than is currently allowable.

For the above reasons, we believe that the IRB approaches should be retained for exposures classified as specialized lending.

**On removal of IMA-CVA**

The IBFed appreciates that, while variability in IMA-CVA results can always be an underlying concern, the primary concern expressed by the Committee on this issue relates to the overall complexity of an IMA-CVA model and the reservation as to whether such models can adequately capture risk. We agree that the additional complexity of IMA-CVA may not be warranted in the event that CVA risk is significantly reduced by greater use of central clearing and margining for non-centrally cleared transactions. However, despite those advances, there will still be parts of the portfolio where CVA risk will be quite significant. For instance, positions with Sovereigns and Corporates will not include the benefits of margining and will, therefore, contribute the vast majority of CVA risk while constituting a smaller portion of the portfolio’s overall positions. Moreover, these sub-portfolios are usually simpler to model as they are often one-directional and contain more of the plain-vanilla derivatives which will reduce the complexity of IMA-CVA calculations. We therefore recommend that the IMA-CVA option be retained and, if used, be subject to satisfying local regulatory model validation requirements pertaining to P&L attribution and backtesting.

In this case, we envision banks having a hierarchy of CVA approaches that can be tailored to different parts of their portfolio. For instance, simple banks that have a relatively small portfolio of un-marginated derivatives could be handled under the BA-CVA approach. Financial counterparties which will have their CVA risk significantly reduced through margining could be handled under an appropriately calibrated SA-CVA approach. Corporates and Sovereigns which will constitute the majority of CVA risk, and which will continue to be actively managed, could be handled through IMA-CVA.

Allowing this hierarchy of approaches offers many tangible benefits. First, it addresses the Committee’s concerns regarding the complexity of IMA-CVA approaches by relegating this...
approach to simpler sub-sets of the overall portfolio. Second, it promotes consistency with FRTB in recognizing that one particularly modeling approach may not be suitable across all parts of a bank’s portfolios. Third, it would allow for a better risk-sensitive approach. Allowing firms to focus computational power in areas where it matters the most to their portfolio will result in a better representation of CVA risks overall. Fourth, such an approach would provide an incentive for firms to continually improve their risk management as it relates to CVA. Having a better understanding of the key drivers of CVA and how to manage and hedge those drivers will help reduce CVA and default risks in stressed market circumstances. Fifth, without a suitable internal understanding of risks, eventual calibration of regulatory-standard models becomes difficult. Risk-sensitive models have often acted as the benchmark for regulatory calibration exercises. Without the existence of internal approaches, it becomes difficult to gauge what reasonable regulatory parameters should look like.

**Retail and smaller corporate exposures**

For the Retail classes, we appreciate the Committee’s decision to separate QRRE transactors from QRRE revolvers. Nevertheless, we recommend that the distinction between transactors and revolvers be made on the basis of not having any interest charged on the facility (e.g. credit card) within the last 6 months on a rolling basis as opposed to the current proposal.

**Parameter floors**

We believe that setting parameter floors will be a crude fix to solve RWA variability and disregards the extensive work and effort that the industry has invested in establishing modelling practices and governance processes that ensure the models perform well in managing risk.

Instead of setting floors at the parameter level, the Committee should consider establishing further standards in modelling and validation practices, as well as regulatory oversight to ensure consistency in approaches as highlighted in our earlier comments.

We also note that extensive data exists for the behaviour of revolving credit facilities to model LGD and is a viable approach to estimating EAD. Static and punitive CCFs to address undrawn amounts simply do not capture the actual behavioural experience and demonstrable ability to cap or reduce available amounts and limit access to deteriorating credits. For example, where available lines are based on A/R and Inventory margining, it is clearly the case that such undrawn amounts are not fully available and are managed on a monthly basis.

**IMM-CCR Floor**

We have significant concerns about the Committee’s proposal to introduce a floor to the Internal Model Method (IMM) for counterparty credit risk capital. We believe it is imperative to once again reiterate the importance of risk-sensitivity to the capital framework and the incentives of using sophisticated credit risk measurement in the capital framework. The IMM approach allows banks to model the specific risk factors to which they are exposed, as well as portfolio composition, volatilities and correlations. The level of accuracy delivered by IMM is simply not achievable with the Standardised Approach to Counterparty Credit Risk (“SA-CCR”) which is only a notional based measure of risk.
It is important to highlight that the IMM framework has always allowed banks flexibility in measuring risks with the goal of producing greater accuracy in the estimates of counterparty risk exposure, therefore some variation in the model outputs was intended. The Committee published its Regulatory Consistency Assessment Programme (RCAP) report on risk weighted assets for counterparty credit risk in October 2015. The report included a number of recommendations to harmonise firms’ internal modelling practices and reduce RWA variation in counterparty credit risk capital, however, banks have not had the opportunity to address these recommendations. We would propose that instead of introducing a floor, banks are given the opportunity to harmonise modelling practices highlighted by the Committee, as they are doing in other areas of the framework together with regulators. We note that not one of the recommendations in the report was to introduce a floor.

Unconditionally cancellable commitments

Credit Conversion Factor (CCF) should be deliberately considered for off-balance sheet exposures depending on terms and conditions of facilities. In particular, commitments need to be categorized considering 3 elements, (i) whether fees/commissions are received by a bank, (ii) whether it is unconditionally cancellable by a bank, and (iii) whether an approval is required by a bank for draw-down. If (i) a bank doesn't receive fees/commissions and (ii) it is unconditionally cancellable, then the CCF should be zero or reasonably low considering its lower risk than ordinary commitments. In addition, if (iii) an approval by a bank is needed for any draw-down, then it should be regarded as not being a commitment at all.

We also believe that the range of 50 – 75% for non-retail UCC is overly conservative as it does not reflect the actual usage ratios of these credit lines and would adversely affect lending and economic growth. Furthermore, the introduction of this approach would mean that there is little to no difference in capital requirements between the cancellable and non-cancellable commitments and the banks will receive very little capital relief from making a commitment cancellable. We would argue that there are good reasons why a commitment is judged to be unconditionally cancellable as it puts the bank in a better position to manage its risks which should be recognized in reduced capital requirements.

For product types that truly allow the bank to cancel uncommitted facilities at any time in practice, we believe that it is reasonable to apply the lower CCF proposed for Retail UCC to non-Retail exposures where there are demonstrated controls and legal rights, monitored with robust internal bank governance processes.

Removal of the 6% scaling factor on IRB exposures

The 1.06x IRB scaling factor was introduced by the Committee in 2003 as a temporary measure aimed at maintaining the overall capital level in the system after transitioning to the IRB approach at a level slightly lower than under the Basel I regime. This multiplier was calibrated based on the results of QIS 3 in the second half of 2002, which noted materially lower expected levels of RWA under the proposed IRB approach for some portfolios (notably mortgages) in certain jurisdictions, and therefore for the overall system.

We believe that this concern has now been fully mitigated by the accumulation of empirical data for the banks' credit portfolios since 2002, which included mortgage default rates and

\[^2\] http://www.bis.org/bcbs/publ/d337.pdf
LGD observed during the recent financial crisis, and have resulted in materially higher input parameters than those contemplated back in 2002. This is irrespective of whether the changes in the consultative document are adopted. Therefore, we believe that the rationale for maintaining the 1.06x multiplicative factor for IRB RWA no longer exists, on either a conceptual or quantitative basis.

We suggest that the Committee remove the 1.06 scaling factor on IRB exposures. Furthermore, the BCBS could use a scaling factor lower than 1 to ensure that the overall capital charge after the review of the regulatory framework will remain at the current level.

**Output floor**

The establishment of a floor for IRB banks based on the standardized approach capital requirements is something banks at large continue to disagree with. We believe that simply imposing a floor based on the standardized approach which is in itself inferior in risk sensitivity compared to the IRB approaches will not accomplish the Committee’s stated objectives. From a conceptual point of view, there is no need for a non-risk sensitive Capital Floor next to the non-risk sensitive Leverage Ratio. Also the input floors on A-IRB should increase the confidence that A-IRB values are sound. From a capital impact point of view, the Capital Floor, even calibrated at 60%, would have a serious capital impact for lower risk portfolios. It will be almost impossible to introduce a Capital Floor and adhere to the GHOS intent that significant capital impacts should be avoided.

Application of a floor above 60% will also significantly reduce the risk sensitivity reflected within the A-IRB modeled portfolios (retail, small corporate/commercial) which are subject to very little granularity within the Standardized Approach. We look forward to the opportunity to review and comment on future proposals on the capital floor framework.

**Implementation**

We also highlight that there would be a considerable amount of system, process, and methodology changes required to implement the proposed changes. In particular, this would involve changes to credit risk management practices and processes with respect to specific requirements on due diligence, assessment of exposures under different approaches and changes in rating systems, and model modifications given the proposed constraints on IRB. We also believe that the new requirements related to collateral and commitments are too restrictive, and would negatively impact our business and operations.

There are also underlying levels of granularity in the proposal that are not easy to operationalize (i.e. separating banks and other financial institutions, parameter floors at the sub-asset class level). Given the inter-linkages and evolving requirements, the banks will need to be provided with sufficient lead time to fully implement the final changes. We suggest that it could take as many as three years to implement the changes in the consultative document. We would request clarification from the Committee as to when they expect banks to operationalize the changes under this consultative document and other related proposals.
We thank you for taking our comments into consideration, and we look forward to future discussions on these issues.

Yours sincerely

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