REDUCING VARIATION IN THE CREDIT RISK-WEIGHTED ASSETS – CONSTRAINTS ON THE USE OF INTERNAL MODEL APPROACHES

We welcome the opportunity to comment on the Basel Committee on Banking Supervision’s (the Committee) consultation on constraints on the use of internal model approaches. We have also contributed to the British Bankers Association’s response and are supportive of it. In this paper we focus on the proposed use of floors to address variability in Risk Weighted Assets (RWA) for data rich, retail portfolios.

We are fully supportive of the Committee’s aims of reducing the complexity of the regulatory framework and improving comparability; and of addressing excessive variability in the capital requirements for credit risk.

At the same time, we believe that the approach to addressing variability requires further consideration. As identified by the Committee’s Regulatory Consistency Assessment Programme (RCAP) ‘Analysis of risk-weighted assets for credit risk in the banking book’ (April 2016), variability is driven by differences in bank practices and the regulatory environment; and by underlying differences in risk. This RCAP recommends a number of policy changes to reduce practice based variation. These sit alongside other ongoing regulatory initiatives, such as those of the European Banking Authority.

In our view, the focus should be on progressing these initiatives to address the drivers of excessive variability caused by differences in modelling practices and supervisory assessment, whilst recognising that it is not possible, or desirable, to eliminate variability completely given real differences in risk.

Such genuine variability is caused by, for example, differences across territories in legal and conduct regimes regarding collections and recovery; by different consumer attitudes to debt and debt repayment; and different insolvency and bankruptcy regimes (for example, the time taken to foreclose on a mortgaged property, the range of recovery options available post sale, whether there are government guarantees in the event of a shortfall). Within territories, genuine variability will arise from differences in the risk profile of portfolios and risk practices of the lenders. Variability arising from real differences across portfolios within an asset class should not be suppressed.

We recognise the benefits of floors that are set to mitigate extreme low side parameters: for example, to reflect the risk of unenforceable security, where this is not part of a mortgage Loss Given Default model.

We are concerned, however, that higher level floors will suppress genuine variability. In particular, we do not consider them appropriate measures for retail portfolios in long established markets with a wealth of data on which to model accurately. The application of higher floors will not address the
underlying causes of variability, nor encourage investment in sophisticated risk modelling and management practices, nor aid understanding and transparency. The use of multiple floors at various levels will exacerbate this. The resulting loss in risk sensitivity may act to the detriment of lower risk customers and incentivise higher risk lending. Further, as currently proposed, they will lead to a significant increase in capital requirements contrary to the expressed regulatory intention.

In our view it is in the interests of regulators and the wider economy to preserve genuine variability in risk sensitive models. In order to do so, excess variability must be addressed. We therefore support an approach which:

- First addresses the causes of practice based drivers of RWA variation. The initiatives to remove excessive variability identified as a result of the many recent studies\(^1\) should be implemented and their success assessed before further floors are considered.
- Focuses on implementing measure to enhance disclosure and increase transparency and explanation of differences. This will enable comparability, whereas floors serve to make differences in the underlying risk of portfolios less transparent.
- Considers proposed changes in the context of those proposed to the Standardised Approach and associated floors so as to understand the cumulative impact both on risk sensitivity and on required levels of bank capital.
- Acknowledges that the role of floors is to be an extreme backstop to the risk-sensitive calculation of capital requirements and then only after practice based drivers have been addressed. This will reduce the risk of systemic distortion and unintended consequences to credit availability and customer pricing.

We consider the above will be the most effective means of meeting the objectives of reducing complexity, improving comparability and addressing excessive variability in the capital requirements.

We provide more detailed comments in the annex to this letter and would be happy to discuss these further.

Yours sincerely

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\(^1\) BCBS Regulatory Consistency Assessment Programme ‘Analysis of risk-weighted assets for credit risk in the banking book’, EBA Consistency of Risk Weighted Assets, BCBS RCAP, FSA Hypothetical Portfolio Exercise, IIF RWA Task Force
ANNEX

1. Drivers of variability

There is a wealth of information on the sources of variation in risk weighted assets (RWA) calculated using banks' internal models. As in earlier studies, the most recent one, the BCBS RCAP ‘Analysis of risk-weighted assets for credit risk in the banking book’ (April 2016) (the 2016 RCAP study), distinguishes between practice based drivers (differences in bank practices and the regulatory environment) and risk based ones (underlying differences in risk).

This recognises that genuine variability will always exist due to underlying differences in products within an asset class and in their risk profiles. The 2016 RCAP study notes that the close alignment of Probability of Default (PD) estimates with actual outcomes identified by the RCAP is seen as providing indirect evidence that differences are based on differences in risk rather than differing estimation practices.

The risk based drivers include exposure to different markets and their volatility, local legal requirements and bank specific operational practices. As the 2016 RCAP paper notes, structural differences between countries, will pay a significant role in overall RWA variability. The study found that RWA densities are more homogeneous when observed at the regional level and appear to be driven by variation in Loss Given Default (LGD). This is likely to be driven by differences in legal factors relating to foreclosure and debt collection practices.

It is incorrect to assume, therefore, that lower, modelled RWAs are inherently wrong. The strength of robust internal models is that they are risk sensitive and do not treat all portfolios in an asset class in the same way.

2. Approach to addressing variability

Banks have already made significant investments in implementing the IRB approach, with material improvements to their ability to assess risk and determine capital requirements. This is an ongoing process of improvement as evidenced by the extensive industry wide reviews of drivers of RWA variability. These have resulted in a significant number of regulatory proposals to address excessive RWA variation, reducing complexity and improving comparability. These include improved definitions of parameters, standards for parameter estimation, detailed guidelines on the definition of default, guidance on rating system methodologies and harmonised supervisory assessments.

Once they have been implemented, what is left should be genuine variability.

3. Limitations of the use of floors

We support the use of floors to mitigate extreme low side parameters. Backstop floors are appropriate to avoid zero loss situations but more widespread application is likely to suppress genuine risk differentiation, decreasing the value of the models as part of a risk sensitive capital framework.

In particular, we do not consider them appropriate measures for low risk retail portfolios in long established markets with a wealth of data on which to model accurately. We set out below three instances where we consider them to be particularly inappropriate.

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2 BCBS Regulatory Consistency Assessment Programme ‘Analysis of risk-weighted assets for credit risk in the banking book’, EBA Consistency of Risk Weighted Assets, BCBS RCAP, FSA Hypothetical Portfolio Exercise, IIF RWA Task Force

3 RCAP page 24 https://www.bis.org/bcbs/publ/d363.htm
**LGD floor for residential mortgage portfolios**

Substantial variation in LGD and Exposure at Default (EAD) is to be expected, not only because of potential differences in modelling approach (practice based risk) but because, in contrast to PD, LGD and EAD are more idiosyncratic in nature, driven by each bank’s approach to the management of the exposure.

Applying an exposure level LGD floor, which is anything other than an extreme backstop, to low risk mortgage portfolios reduces risk sensitivity by making it a binding constraint.

Looking at the UK market, directionally, a 10% exposure level LGD floor would lead to models assuming the same level of loss for all accounts with a Debt to Value (DTV) of less than 80%. The simple calculation below demonstrates the impact. It utilises publicly available parameters where possible. In practice, for lower DTV bands, losses would only be expected in a small number of cases. The overall loss rates for those bands would be very low as a result.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>DTV</th>
<th>Collateral</th>
<th>Exposure</th>
<th>Haircut¹</th>
<th>LGP</th>
<th>PPD²</th>
<th>DT LGD</th>
<th>DT LGD 10% Floor</th>
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<td>40%</td>
<td>20</td>
<td>50%</td>
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</tbody>
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1. PRA Supervisory Statement 11/13 references a 40% PPD value.
2. Median 35% PPD referenced in: FSA “Residential Mortgage Downturn LGDs” 2006. Scenario 3 assumes an increased PPD for higher DTV accounts.

This constancy of loss is not reflected in observed data where losses demonstrate strong correlation with increasing Loan to Value (LTV). Analysis based on 2008 / 2009 vintages shows losses for 80% LTV were significantly higher than for <=60% LTV accounts.

**Personal Current Accounts (PCA) – PD floors**

In our view, higher PD floors are structurally inappropriate. Capital is held against customers who have no lending facility available (i.e. no approved overdraft) and who are managing their account within the agreed terms of the product.

This is to address the potential for credit loss due to leakage which can be caused by a variety of issues such as transactions below floor limits. The probability of default for these customers is, however, very low as these occurrences are rare. The introduction of significant PD floors will have the effect of moving a significant proportion of the PCA portfolio to the same floored PD. This would significantly reduce the accuracy of the rating system and serves to not incentivise advanced modelling techniques.

The effect of any proposed PD floors on PCA is magnified by the fact that under the proposed definition all PCAs have to be classified as revolvers. For portfolios where the vast majority of the book is in credit on their PCA this would seem overly penal.

**Credit Cards - PD floor**

Similarly for well-established credit card portfolios, where a large proportion of the book is very low risk in nature and a significant proportion of customers is not currently utilising the facility, the impact of the most penal floors required under the QIS is highly significant. This gives rise to similar concerns to those detailed above with regards to risk sensitivity and incentive to create more sophisticated models.
We consider the definition of revolvers is unduly broad. In a market where customers may have the same credit card for many years, the requirement for balance to have *always* been paid at the scheduled repayment date means that very few accounts will be classified as transactors, even when that reflects their recent behaviour. For example, where a customer has had a card with Bank A for ten years and not missed a payment since year one, Bank A will be required to classify them as a revolver from then on, even though the customer’s cards usage and financial circumstances are likely to have changed. If, however, that customer had transferred to Bank B in year two, Bank B would classify them as a transactor.

The proposed definition does not enable recognition of the current risk of the customer. We would suggest that customers should be classified as revolvers based on their behaviour over a period consistent with risk management practices, which in the UK we understand to be the most recent six-twelve month history.

We would also request that consideration be given to how inactive customers should be handled. In our view, these customers should not be classified as revolvers, as they typically have a very low risk profile.

4. Potential adverse consequence of the use of floors

As noted above, the application of higher floors will not address the underlying causes of variability, nor encourage investment in sophisticated risk modelling and management practices, nor aid understanding and transparency. The use of multiple floors will exacerbate this.

The consultation paper discusses various considerations regarding the calibration of floors.

*Reliability of model estimates*

Floors on individual model parameters will not necessarily address concerns about the reliability of inputs. Exposure level floors set by retail asset class do not distinguish between exposures within a class which have genuinely lower capital risk parameters and those with unduly lower capital risk parameters, and will potentially penalise the former. As discussed, national and bank specificities can drive legitimate differences across apparently similar products.

*Reduction in RWA variability*

We are concerned that risk sensitivity is being under-valued. In our view, risk sensitivity should be maintained at the centre of the capital framework and capital metrics should be aligned with risk. We consider internal models to be the best means of estimating the true underlying risk of large retail portfolios.

We would also note that a strongly discriminating model with a broad distribution of PD is likely to be affected by the floor, increasing the overall PD of the portfolio, whereas a weaker, less discriminating, model with a narrower distribution might not be.

*National specificities*

We agree that higher parameter floors risk unduly affecting products, particularly retail portfolios which have specific features that result in lower default rates and loss rates than similar products in other jurisdictions.

*Incentives*

We agree that floors may act as a perverse incentive to higher risk lending. This may result in systemic distortion by making lower risk, lower return exposures and products less attractive and unduly penalising strong quality customers.
Consistency with standardised approach and modelled incentives

We agree that floors that lead to minimum risk weights that are significantly higher than those used in the standardised approach would be inconsistent with the structure of the capital framework. We are concerned that the application of such floors reduces the incentive to develop and introduce more advanced risk measurement tools.

In addition, with regard to the mapping of IRB exposures to the new standardised approach (set out in the Annex to the consultation), retail exposures are described as ‘Exposures to individuals, owner-occupier in the case of mortgage’. In our view, residential buy to let mortgages should also be included in this class, where there is evidence of a well-established property market, with readily available market prices and low loss rates.