

Consultation response

Draft EBA Guidelines on PD estimation, LGD estimation and treatment of defaulted assets

10 February 2017

The Association for Financial Markets in Europe (AFME) welcomes the opportunity to respond to the EBA's consultation paper on its **Draft Guidelines on PD estimation, LGD estimation and treatment of defaulted assets.**

AFME represents a broad array of European and global participants in the wholesale financial markets. Its members comprise pan-EU and global banks as well as key regional banks, brokers, law firms, investors and other financial market participants. We advocate stable, competitive, sustainable European financial markets that support economic growth and benefit society. AFME is the European member of the Global Financial Markets Association (GFMA) a global alliance with the Securities Industry and Financial Markets Association (SIFMA) in the US, and the Asia Securities Industry and Financial Markets Association (ASIFMA) in Asia. AFME is listed on the EU Register of Interest Representatives, registration number 65110063986-76.

General comments

AFME is very supportive of the EBA's IRB repair programme. Nevertheless, as already pointed out in previous submissions, the costs and benefits of the repair programme need to be considered in light of yet further changes that may be required to firms' models given work on the IRB framework at the BCBS level. The current lack of clarity on how international developments will affect the (EBA revised) IRB framework means it is extremely difficult for firms to make model investment and strategic capital planning decisions. These issues are compounded by the ongoing review of internal models through exercises such as the ECB's TRIM project where it is not clear how these interrelate with the repair programme. Certainty on the timing, content and consistency of the international and EU requirements is becoming increasingly critical¹.

We provide a few overarching comments on the proposed Guidelines in this section before responding to the detailed questions below.

We note that the objective of the EBA Guidelines is to provide rules that will lead to comparability of model outcomes. The industry supports and agrees with this objective.

The focus must be on eliminating unjustified RWA variance, but ensuring that risk sensitivity is maintained

We are also broadly supportive of the approaches taken in the Guidelines to achieve this objective. However, there are cases where the Guidelines address issues that i) do not contribute significantly to unjustified RWA variance or ii) that are in fact justified variance arising from

¹ Please see AFME letter to EBA of 18 April 2016 on the EBA's Regulatory Review of the IRB Approach for further details on our concerns.



genuine differences in risk profile. We would encourage the EBA to consider the cost / benefit of some of the changes and whether some of the more restrictive aspects are necessary. It is not clear to industry how and when these costs are being assessed and we would welcome more information on this.

Moreover, comparability of model outcomes should not lead to the standardisation of risk modelling. Risk management and modelling should be appropriate for the business line, portfolio, risk profile and risk appetite of the institution. Therefore, the EBA should allow for continued justifiable differences in risk parameters between institutions which reflect differences in the underlying risk rather than different modelling choices.

The role of supervisors, and harmonisation in their practice, will be crucial

We would also welcome more clarification on how competent authorities intend to implement these Guidelines. We are concerned that there will still be divergence in supervisory approaches in practice, and that the Guidelines may be used in the daily business of supervision as a form of minimum requirement that may not have been intended by the experts who have developed them. We are conscious that this topic is beyond the scope of the present consultation, but still wish to stress the importance of the EBA's role in ensuring common supervisory practice in this area. To alleviate some of these concerns, it would also be helpful if the final Guidelines could include references to supervisory expectations needing to be proportionate (for instance in relation to portfolio materiality) and provide more explanation on how the unnecessary layering of conservatism present in the draft Guidelines has been avoided.

Certain portfolios may require further reflection and a more tailored approach

As they stand, the Guidelines also do not reflect the specific risk characteristics of, and practices, in certain types of business lines, portfolios or products that are of significant economic importance but where the supervisory and regulatory community may not yet have considered whether there is unjustified RWA variance that should be addressed. We encourage the EBA therefore to carefully consider the ultimate impact these Guidelines will have and to consider tailored approaches for these portfolios and products such as low default portfolios and specialised lending. We recognise that the Basel Committee has considered revisions to the scope of internal modelling for these portfolios but we would recommend that the EBA's thoughtful 'bottom-up' approach to reducing RWA variability be expanded to consideration of appropriate guidelines in these cases.

Care should be taken not to introduce unnecessary costs/burdens, for instance when it comes to LGDDs

We recognise that there is a diversity of practices in the estimation of risk parameters for defaulted exposures. This is due, in part, to the drafting of the CRR level 1 text, conflicting guidance from supervisors and the equal validity of different approaches to modelling. We believe that while some alignment of practice may be possible, some differences are valid and should remain. In particular, we do not agree that there should always be complete alignment between the methodology of LGDs in-default (LGDD) with LGDs for non-defaulted exposures. The EBA should carefully consider the overlap and interaction with provisioning models used under IFRS9 to ensure that EBA does not introduce unduly burdensome, duplicative and costly requirements. Furthermore, in situations in which the benefit of estimating the LGD-in default is below the cost of doing so and where it can be demonstrated that the approach taken by the



firm is conservative, we recommend that there should be some flexibility in the approach allowed.

Areas that the Guidelines do not address

Finally, we note the present Guidelines do not address credit conversion factors and off balance sheet exposures and that it is not clear whether the Guidelines should apply to slotting approaches too. Industry would welcome clarification on these issues.

We are of course at the disposal of the EBA to discuss the issues raised in this response, including the appendix (and the detail of its calculations), further and wish to express our thanks for the EBA's constructive engagement with industry on this important topic.

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Responses to the consultation questions

4.1: Do you agree with the proposed requirement with regard to the application of appropriate adjustments and margin of conservatism? Do you have any operational concern with respect to the proposed categorization?

We welcome the clarity the Guidelines provide on the conservatism framework which we understand involves i) appropriate adjustments (which can either be positive or negative) and ii) a margin of conservatism (MoC), where it is necessary for the Guidelines to acknowledge clearly that MoC can be positive or zero. We stress that adjustments and MoC are already applied by banks and are an integral part of their parameter estimation methodologies to address identified data deficiencies.

We support transparency around MoC for the reasons given by the EBA and notably to explain the justified variability of risk estimated and to ensure convergence in approaches.

We are however concerned that the issue of overlap potentially created by multiple adjustments and several layers of MoC is not sufficiently addressed in the Guidelines. Moreover, MoC may not always be straightforward to determine as an adjustment on the final risk parameter, in particular where multiple MoC adjustments are required as they may not add linearly.

Further, not every "deficiency" has a material impact on modelled estimates, whereas the inclusion of MoC automatically introduces bias in the final modelled outcome. It would therefore be helpful for the Guidelines to state that MoC should be limited to those cases where it is strictly necessary. To be clear, we agree that potential deficiencies underlying the estimates should all be detected, documented and analysed. However, on the basis of the materiality of the impact of each deficiency, it should then be assessed whether the application of a consequent MoC should be applied, or whether a different treatment would be more appropriate. In our view, there are some examples in the Guidelines for which the application of MoC is not advisable and other treatments should be adopted instead (e.g. it should be possible to exclude from the LGD development sample data that is not representative or erroneous to produce solid estimates, rather than include them in the sample, adjust them and finally apply a MoC – see question 6.1 below).

At this stage, we are also not clear on how consistency between supervisors on how much MoC is sufficient will be achieved in practice. Finally, it is also unclear how models will still be able satisfy/pass the Use Test given the proposed conservatism framework in the Guidelines.

Additional explanations and clarity on these points in the final Guidelines would be welcome.

Regarding the proposed categorisation of MoC, the differences between categories A, B and D on the one hand and category C (general estimation errors including errors stemming from methodological deficiencies) on the other should be better described in para 24 as the rest of the proposal seems to indicate that category C relates to the underperformance of models that would be picked up in model monitoring processes.



5.1: Do you see any operational limitations with respect to the monitoring requirement proposed in paragraph 53?

It should be recalled that some firms calculate one year default requirements on an annual rather than quarterly basis. This proposal will therefore generate significant costs for some institutions.

Our impression at this stage is that the costs of this proposals will outweigh its benefits. We would therefore welcome additional explanation behind the rationale for this proposal and encourage the EBA to consider its impact carefully, either in the context of the associated QIS exercise or in a separate exercise which may form part of the ongoing review of the internal model framework.

Moreover, for certain portfolios, such as low default portfolios, there is unlikely to be any significant difference to the one year default rate or long run average default rates by moving from an annual calculation to a quarterly calculation. We would recommend that where it can be demonstrated that an annual monitoring period is appropriate due to the lack of new information (for example) that an annual monitoring period be allowed.

5.2: Do you agree with the proposed policy for calculating observed average default rates? How do you treat short term contracts in this regard?

We broadly agree with the proposed policy. Short term contracts are treated in the same way as long term contracts.

5.3: Are the requirements on determining the relevant historical observation periods sufficiently clear? Which adjustments (downward or upward), and due to which reasons, are currently applied to the average of observed default rates in order to estimate the long-run average default rate? If possible, please order those adjustments by materiality in terms of RWA.

We would welcome specification that it is therefore not necessarily always required to cover an entire economic cycle.

We find the requirement in para 63(a) not clear. Indeed, a comparison between the long run average default rate and the observed average of default rates on the most recent 5 years, with the ensuing possibility to apply a MoC in case the first is lower the latter is not consistent with the meaning of the long run average default rate.

Question 5.4: How do you take economic conditions into account in the design of your rating systems, in particular in terms of: d. definition of risk drivers, e. definition of the number of grades f. definition of the long-run average of default rates?

Question 5.5: Do you have processes in place to monitor the rating philosophy over time? If yes, please describe them.

Question 5.6: Do you have different rating philosophy approaches to different types of exposures? If yes, please describe them.



With respect to questions 5.4, 5.5, 5.6, AFME wishes to stress that the issue of multiple rating philosophies is becoming increasingly important and challenging given the introduction of IFRS 9 and its Point in Time philosophy which differs to the prudential Through the Cycle approach.

This being said, we welcome the approach adopted in the Guidelines which we understand recognises the importance, specificity and embedded nature of firms' rating approaches. At this stage, we think that the most helpful measure to be taken would be for the EBA to identify a common methodology for defining the level of "PiT-ness" or "TTC-ness" of a rating approach so to identify the prevalence of the various philosophies on the basis of a single benchmark. This could be particularly beneficial for back testing and model monitoring purposes.

Question 5.7: Would you expect that benchmarks for number of pools and grades and maximum PD levels (e.g. for exposures that are not sensitive to the economic cycle) could reduce unjustified variability?

No, we do not believe that this will reduce *unjustified* variability as the number of pools and grades will be indicative of a firms' ability to risk discriminate. The composition and risk profile of portfolios vary across firms and this is reflected in the design and structure of grades and pools. Standardisation of the number of grades or pools and maximum PD levels may lead to a rating system that is less well suited to assess the risks of a particular portfolio. We are more supportive of common principles and standards to reduce unjustified variability.

6.1: Do you agree with the proposed principles for the assessment of the representativeness of data?

The analysis of data representativeness only makes sense when performed by comparing defaulted contracts (i.e. modelled versus recently observed) and not the reference data set used for modelling purposes (composed of defaulted contracts) to the current portfolio (performing, non-defaulted assets). It should also be noted that the distribution of risk drivers can change over time compared to their distribution in the current portfolio.

We therefore consider that Art 103(a) of the Guidelines should be modified and the Guidelines clarified to cover cases where the "lack of representativeness" is not due e.g. to changes in recovery processes or lending standards, but rather to structural features of the sample.

We would also welcome clarification on the expected consistency between PD and LGD databases (cf RTS 2016-03), especially on periods of observation and risk profiles (also in case of use of external data).

Another issue arises when assessing data representativeness in the context of theoretical models whereas the Guidelines which focus on statistical (default and loss) models.

In businesses such as specialised lending, default and loss data is complemented by a range of additional observable data, including asset information such as valuation data (often observed and provided by external appraisers), future cash flows generated by the assets financed, commodities and output prices (e.g. gas and electricity prices), as well as macro-economic data, etc. This is what we refer to as "theoretical models". They are essential in estimating risk in area of specialised lending as they reflect both the characteristics of the underlying assets (e.g. in terms asset value volatility or cash flows generated), as well as the specific structures of the deal (e.g. the existence of off-take (sale) contracts, the loan's amortising profile, political risk levels, if any, etc.).

In the case of theoretical models, as long as there is enough data to calibrate the risk drivers, the question of default and loss data representatives may not be relevant.



We think that recognition of the specificities of theoretical models is generally required throughout the Guidelines

Further, we note that the Guidelines ask for representativeness of data used for LGD estimation on the one hand, while on the other they clarify that all defaults have to be used even if they are not representative, by applying a MOC. As already mentioned in question 4.1 above, we think that this way forward will introduce bias into LGD estimates and maintain unwarranted variance between institutions' estimates. This seems counterproductive in light of the EBA's objective and a more reasonable approach would be to allow for the exclusion of this data from the development sample if this is fully documented and justified.

We understand that the driving factor behind the Guidelines is the level 1 CCR text (Art 181 (1) (a)) but consider that it would be more appropriate to make a targeted change to the level 1 text rather than perpetuate unwarranted variance. We understand that changes to the level 1 text are not within the EBA's mandate, but would welcome and support an EBA recommendation to the Commission to this effect.

In the absence of level 1 change, the Guidelines should allow for some flexibility or proportionality where "non-conventional" recovery processes (large disposals, M&A cases, etc.) are allowed to be excluded exceptionally.

6.2: Do you agree with the proposed treatment of additional drawings after default and interest and fees capitalised after the moment of default in the calculation of realised LGDs?

We agree with the proposed treatment for additional drawings (as long as they are not negligible/immaterial).

However, restructuring fees are recoveries and should not be added to the EAD. Given that recovery costs are added to the loss, and as restructuring fees and additional late interests requested from the borrower (equivalent to penalties) aim to cover recovery costs (such as the costs of restructuring teams), there is no justification for also including such fees and late interests in the EAD. Doing so would result in the double counting of recovery costs and, even though the interests and fees will effectively be paid by the borrower, they will not reduce the loss. This can clearly be seen from the formula for calculating economic loss² as presented by the EBA during the workshop on these draft Guidelines:

Economic loss = EAD + costs_d + drawings_d + fees_d + interest_d - recoveries_d

Put differently, the approach forward in the draft Guidelines overstates economic loss and should therefore not be retained in the final text.

We note further that if the discount rate used is XBOR + loan margin (see question 6.3 below), this margin includes the management costs of the loan. Margins generated by all the loans in a portfolio cover all the management costs of the loans, i.e. both non-defaulted and defaulted ones. Therefore, in this case there would be no need to add internal recovery costs to the numerator of the realised LGD as it would be covered by the margin of the portfolio and taken into account by the discount rate of the defaulted loan. Nevertheless, adding these costs to the numerator enables the calculation of the specific loss of the defaulted loan (with higher management costs than for a non-defaulted loan). As the discount rate XBOR + loan margin covers the average loan management costs, internal recovery costs to be added at the numerator of the LGD should only

² See slide 14 of the <u>EBA's presentation</u> of the 19 January 2017 workshop



be the difference between the internal recovery costs of a defaulted loan and that of a nondefaulted loan.

6.3: Do you agree with the proposed specification of discounting rate? Do you agree with the proposed level of the add-on over risk-free rate? Do you think that the value of the add-on could be differentiated by predefined categories? If so, which categories would you suggest?

There is a range of views across the industry on this issue, reflecting different market practices as well as accounting requirements.

When considering this question within our membership, it has also emerged that there is a lack of clarity as to what the discount rate specified in the Guidelines is intended to address. For instance, our members see the need for a difference in the approach to the discount rate that should be adopted for calculating historical LGDs which are to be used for back testing purposes on the one hand, and the rate that should be used when determining LGDs for use as input to LGD models on the other. It is in this latter situation that MoC and downturn considerations come into play. This difference is further explained in the Appendix.

We therefore think that the Guidelines need to more clearly separate out the requirements for calculating realised LGDs for back testing purposes (i.e. comparison of modelled LGD one year before default with historical LGD in order to assess the capacity of the model to forecast future losses) from those used as model inputs. Historical LGDs used for back testing should not include any conservatism above the real loss. Historical LGDs used for back testing must reflect reality, i.e. economic losses, and they should not reflect any potential volatility on future recoveries.

Using a discount rate of XBOR + a 5% add-on for historical LGDs for back testing will create fictive losses when this is rate is higher than the contract rate, with significant economic implications for end-users. This is explained in more detail in the Appendix, which also provides numerical examples comparing the historical LGD obtained when the contract rate is used compared to XBOR + 5% and the Effective Interest Rate concept of IFRS 9.

When specifying the discount rate for LGDs to be used for modelling purposes (i.e. to estimate LGDs on future defaults), the concept of conservatism to e.g. reflect volatility in recovery cash flows comes into play, and a number of different approaches can be taken.

We understand that the EBA has already given a lot of consideration to the pros and cons of various possibilities. However, this is one of those areas where variability may be justified given underlying differences in risk and we would therefore encourage the EBA to further consider i) the cost / benefit of change and ii) what the broader economic impacts might be of a final policy choice. We briefly set out below the alternatives our members have explored.

The advantage of the XBOR plus fixed add-on proposal is of course that it is simple and reduces RWA variability. On the other hand, it may reduce justified variability, with the disadvantages of risk insensitivity. There are also concerns of overlapping conservatism with this approach (the discount rate address volatility of recoveries plus would this also be covered by ex post MoC/downturn?). Further explanation on the underlying rationale for choosing the 5% level for the add-on would also be necessary. At the very least, there would need to be a mechanism to adjust/review such a flat add-on over time.

To alleviate the disadvantages of a fixed add-on, we do recommend that at least some differentiation by category of loan be considered. Using the typical "Basel portfolios" could be a starting point for categorisation, and the EBA could either determine an add-on per portfolio or specify a common methodology whereby firms would use their own portfolio data (e.g. average contract rate per portfolio). Ideally, this categorisation should be done in a way that avoids



creating an additional misalignment with the Effective Interest Rate used in IFRS9, otherwise the virtues of streamlining for prudential purposes will disappear. With this type of approach, uncertainty should be taken into account as an ex-post MoC add-on, rather than something that is reflected in the discount rate itself.

Conservatism could be included in the discount rate itself, but it should then be ensured that there is no requirement for an additional MoC or downturn adjustment addressing the same risk, otherwise there will be unjustified layering of conservatism.

When adding conservatism in the discount rate, another approach could be taken that is in line with the risk-free plus add-on approach proposed in the Guidelines, but with some adjustments. Firstly, the risk-free rate could be set to the current risk free rate (i.e. as an average of the last n years starting from the reference date of estimation) instead of a historical one (i.e. at the default date) because in this case we are calculating LGDs to predict future losses and the current interest rate has a forward-looking perspective. Secondly, the add-on should benefit from a harmonised methodology across firms to remove unwarranted variability, but should still reflect institution-specific data/characteristics. To achieve this, a computational formula could be specified, for instance by inference from a reference benchmark risk/return relationship based on market data. The common formula would then be applied by banks to their own data to reflect internal characteristics.

6.4: Do you agree with the proposed approach with regard to the specification of historical observation period for LGD estimation?

We broadly agree and we consider it to be superior for the reasons given by the EBA in the consultation.

An issue arises however with the requirement according to which "elimination of any data that reflects an institution's internal experience would lead to a loss of valuable information and hence it was specified that all available internal data should be taken into account in the long-run average LGD". The reasoning described above regarding representativeness also applies to the historical observation period for LGD estimation. To be clear, we agree that the historical series used should be as broad as possible, but years that are not relevant years (e.g. due to non-representativeness following structural breaks and when fully justified and documented) should be excluded, as is the case for PDs.

6.5: Do you agree with the proposed treatment of incomplete recovery processes in obtaining the long-run average LGD?

We agree that inferences for the "not yet observed recovery period" should be included for open defaults, but there should be a minimum observable time horizon to trigger the inclusion in the development sample. Even though the CRR requires the use of all defaults, there is no added-value in including a very recently opened default. Again, if necessary, the level 1 text of the CRR should be adjusted to accommodate this. Ideally, this change should take place via the current CRD5/CRR2 legislative process to avoid unnecessarily perpetuating the current level 1 requirement.

When collateral is available (and of course taking enforceability conditions into account), LGDs should reflect recoveries arising from execution, i.e. even in those cases mentioned in para 138 (a).



As already suggested, we would not agree with point 138(e) if it is related to *all* open cases. Indeed, for a case which has been open for a very short time, there is no reason to think that it will lead to recovering less than in a similar closed case, except in the case where recoveries already observed in the open case are lower than the average recovery observed over the same period of time for the similar closed cases. In an extreme case, this statement means that one expects longer duration and lower recoveries on a default open today just because it is an open default, which does not reflect any economic rationale. If this is not the intention of 138 (e), we would welcome adjustment of the wording so that there is no suggestion that open cases are always characterised by longer average recovery processes and lower average recoveries in comparison to closed recovery processes.

Finally, where it can be demonstrated that the approach taken by the firm is conservative, we would recommend that there should be some flexibility on the treatment of incomplete recovery processes. For instance, for low default portfolios it may not be possible to prove that estimates of future costs and recoveries are accurate through back testing due to the low number of observations. In such cases a more flexible approach should be allowable where an appropriate margin of conservatism is used.

6.6 Do you agree with the proposed principles on the treatment of collaterals in the LGD estimation?

Further work is needed on the link between collateral haircuts and the downturn component in LGD in order to avoid double counting adverse events. This should be dealt with in the forthcoming downturn RTS, leveraging on lessons learnt in the context of the market risk framework.

We also have a number of observations to make on operational aspects of the proposals.

Recovery cash flows from collaterals not recognised by CRR still need be taken into account somewhere and agreement should be reached on this allocation. For instance, should it be on the 'prudentially' unsecured portion?

Recognising the sources of the cash flows and allocating them adequately to the specific collateral has operational challenges. For instance, a collateral may cover several exposures. There could also be operational difficulties in cases of disposals. More specifically, we consider that the current proposal to "determine which part of the price received for the sold obligations was related to the existing collateral" is not feasible without applying strong proxies, which would force the adoption of MoC. Therefore, an alternative approach should be proposed, for instance to not consider the disposed assets in pool in the estimation phase but just in the calibration phase. In any case, the price of the disposal is influenced by non-credit related components and hence a dedicated framework on how to disentangle this would be welcomed.

Collaterals are not necessarily sold on a market. They are also and mainly (in the case of specialised lending for example) a source of future cash flows, over its whole life. Considering only the market value of an asset implies a mark to market logic which is pro cyclical, whereas considering the futures cash flows generated by the asset is more Through the Cycle. Moreover, banks will not always have to reposes the collateral. The benefit of the collateral can also be achieved through extension of the loan maturity thanks to a residual asset life and an extension of the lease of the asset with an existing or new lessee³. Haircuts should be calibrated in order to take into account all these possibilities of generating cash flows.

³ See AFME's suite of discussion papers on various forms of specialised lending for more background on the role and benefits of collateral in this segment



6.7: Do you agree with the proposed treatment of repossessions of collaterals? Do you think that the value of recovery should be updated in the RDS after the final sale of the repossessed collateral?

Yes. Regarding updates of recovery values, the estimated value at the time of repossession or the estimated value regardless of repossession should be recorded in addition to the final sale value to allow for appropriate comparisons and haircut back testing.

6.8: Do you think that additional guidance is necessary with regard to specification of the downturn adjustment? If yes, what would be your proposed approach?

Yes, we expect further clarification on the notion of downturn and downturn adjustments in the forthcoming RTS on this topic and refer the EBA to AFME's Downturn LGD Discussion Paper for further suggestions on how to develop a downturn methodology.

We wish to recall briefly however that not all transactions are necessarily sensitive to downturn effects. Consider for example, a project finance transaction involving a power plant with an offtake contract with an AA utility. Further, institutions' portfolios are diversified in terms of sectors, regions and sensitivities to macroeconomic parameters. Not all of the loans in a portfolio will be at the same position of the cycle at the same point in time. These considerations must be factored into the downturn RTS.

7.1: Do you agree with the proposed approach to the ELBE and LGD in-default specification? Do you have any operational concerns with respect to these requirements? Do you think there are any further specificities of ELBE and LGD in-default that are not covered in this chapter?

We do not agree that there should always be complete alignment between the methodology of LGDs in-default (LGDD) with LGDs for non-defaulted exposures. For instance, LGDs in default do not necessarily have a downturn nature (see question 7.4 below).

We do understand that there is a diversity of practices in this area and that, while some alignment of practice may be possible, some differences are valid and should remain.

For instance, some firms directly build an LGDD model, and thus deduct UL = LGDD-ELBE (which is usually close to specific provisions, except for possible cost measurement or discounting effects). Other firms model the UL component, and then deduct LGDD = UL + ELBE. Both of these approaches are valid and choice should be retained. However, the EBA should specify in the Guidelines that a proper back test of the ELBE vs specific provisions vs final loss is required by firms.

We therefore do not agree with the imposition of full methodological convergence of LGD approaches for performing exposures to LGDD and convergence should be limited to the defaulted series and treatment of incomplete workouts. There is no obvious hierarchy between the values of LGDD and LGD for performing exposures.

Moreover, the requirement to consider three different types/layers of "prudence" (downturn, MoC and potential additional unexpected losses) in LGD in-default computation is excessively conservative and creates technical constraints because the different components overlap.

7.2: Do you agree with the proposed reference date definition? Do you currently use the reference date approach in your ELBE and LGD in-default estimation?

We agree with the reference date definition.



7.3: Do you agree with the proposed approach with regard to the treatment of incomplete recovery processes for the purpose of estimating LGD in-default and ELBE?

See above questions 7.1 and 6.5

7.4: Which approach do you use to reflect current economic circumstances for ELBE estimation

purposes?

Consideration of economics factors is usually done via expert judgment by sector, market of the equipment, or nature of collateral.

We understand that the draft Guidelines introduce a requirement for LGDD to reflect a downturn cycle through the introduction of a new add-on (however RTS 2016 03 does not refer to this). We disagree with this, as requiring LGDD to systematically reflect a downturn cycle will overstate total potential losses of the bank.

This is because the approach suggested does not reflect portfolio and diversification effects. Indeed, not all transactions are sensitive to macro-economic parameters, not all defaulted occur in downturn periods and, finally, any downturn effect should be considered over the life of the i.e. considering cycles which may include possible periods of economic recovery.

We would therefore welcome clarification of how the downturn notion should be applied and, possibly through examples, description of situations where there are expected sources of additional unexpected loss for calculating LGDD. In our view, recovery rate variability due to negative macroeconomic conditions is already addressed by the downturn component and any remaining volatility should be caught by MoC. We therefore consider that the Guidelines should specify that the UL component is something exceptional and rare.

7.5: Do you currently use specific credit risk adjustments as ELBE estimate or as a possible reason for overriding the ELBE estimates? If so how?

In order to avoid maintaining multiple unnecessary systems, provisioning models used under IFRS9 should be allowed to be used for the purposes of estimating ELBE, without these models having to satisfy different CRR requirements. Provisions are already heavily scrutinised by auditors prior to public disclosure.

Requiring firms to model these exposures seems a disproportionate approach that is likely to contribute relatively little in terms of material reduction in RWA variance. Indeed, Pillar 3 disclosures show that the proportion of defaulted exposures to overall performing exposures is generally small.

Moreover, requiring either the build of new ELBE models, or calibration of existing LGD models for ELBE, is yet another piece of work to add to the pipeline of activities that firms will need to undertake in the short to medium-term. The current book of work for credit risk modelling is very full including changes stemming not only from the EBA (e.g. DoD, LGD downturn and PD/LGD estimation and exposures in default) but also IFRS9 and future changes that will be introduced via the new Basel package.

These model-related changes will require the use of the same talent and resources for supervisors and firms alike; therefore, we would urge caution in considering and measuring the cost/benefit of which changes will truly contribute to a reduction in RWA variance.



This is therefore in our view another area where the level 1 CRR text would benefit from a targeted change in the short term to avoid creating a disproportionate costs/benefit situation for firms.

There is therefore the need to adopt a more proportionate approach in general, or at least to introduce a materiality threshold to allow the use of impairments for ELBE/ when the proportion of defaulted exposures to overall performing exposures is demonstrated to be immaterial.

8.1: Do you see operational issues with respect to the proposed requirements for additional conservatism in the application of risk parameter estimates?

No, but it should be acknowledged in the final Guidelines that, as triggers for additional conservatism are remediated/improved, conservative steps to RWA and/or individual risk parameters should be removed. This should not require a Material Change request or approval.

9.1: Do you agree with the proposed principles for the annual review of risk parameters?

Yes, we generally agree, although greater consideration of costs and benefits to the institution would be welcome in this section.

We also have an issue with Art 204 which requires the definition of a "regular cycle for full review of the rating systems, taking into consideration their materiality, covering all aspects in development, estimation of risk parameters and, where applicable, of model components...". Indeed, we deem that to be really effective the review of the models should not be pre-defined based on a regular cycle but it should be triggered by specific events. In this context, we consider that the requirements set out in Art 198-203 define the best approach for model monitoring, because they allow to detect, assess and address potential model issues in a continuous way during the life of the model.

For the avoidance of doubt, the Guidelines should also specify more clearly that this section also applies to LGDs as well as PDs. In particular, the Guidelines should clarify whether the back testing requirements for LGDs are similar to those specified for PDs (see para 200 ii).

Moreover, if Annex IV is included in the final Guidelines, it should be further stressed that it is only exemplary to avoid this being used as a "minimum requirement checklist" by competent authorities.

10.1: Do you agree with the clarifications proposed in the guidelines with regard to the calculation of IRB shortfall or excess?

Yes



11.1: How material would be in your view the impact of the proposed guidelines on your rating systems? How many of your models do you expect to require material changes that will have to be approved by the competent authority

Members generally expect material model changes across the board. They also have significant concerns regarding overlapping layers of MoC and the creation of additional distortions (that would also require costly change) but that could be avoided through targeted changed to the level 1 text.

Finally, members have also noted the changes to LGD, LGDD and ELBE estimation as being amongst the most impactful.

We understand that the EBA intends these Guidelines to be implemented by end 2020, along with the rest of the repair programme and in accordance with its opinion of 4 February 2016.

We wish to highlight again the heavy workload that will be required for both industry and the supervisory community within this time frame. As the EBA knows, our view has always been that most appropriate way to ensure high quality data while at the same time alleviating the burden of change for firms (and supervisors) is to apply these new requirements prospectively. However, if this is not possible, some flexibility and proportionality to accommodate transition should be introduced into these Guidelines.

Other comments (not directly related to questions posed)

- Para 4 point 1 of the Guidelines should be adjusted to clarify that while modelling and business/process segmentations are related and usually very similar, a perfect correspondence does not always exist. For instance, in some cases, processes and their relevant complexity can be more related to the client's exposure, while segmentation adopted for modelling purposes can have other drivers. Moreover, there are some cases where other customer's characteristics should be taken into account for business segmentation: e.g. Small Business clients belonging to Corporate Groups could be treated like Corporate.
- The current legislation requires that the estimated LGD used to calculate capital requirements must not be less than zero, which makes sense for modelling purposes. However, the EBA proposal to extend this floor to individual realised LGDs is not justified in our opinion and would arbitrarily raise LGDs for types of lending which are generally low risk, like leasing. In fact, the EBA recognises this potentially significant impact to leasing portfolios in the consultation on page 113.



Appendix: A discussion on the LGD discount rate

The XBOR + 5% proposal of the draft Guidelines is likely to result in a discount rate that can be much higher than the loan interest rate (e.g. euribor + margin) in many cases and, in these cases, it will create fictive losses. While its simplicity is appealing at first sight, this will have significant economic implications:

- If the borrower ultimately pays the entire principal due and all interests invoiced (at euribor + margin), there is no loss for the bank. Yet discounting the recoveries with a higher rate will imply the calculation of a loss which does not exist.
- Estimating losses that are higher than reality then implies that the modelled LGD would have to be increased leading to higher financial charges for borrowers and higher prices for consumers.
- The apparent simplicity and conservatism would thus imply bias which would harm economic growth.

Any predetermined rate should take into account other criteria such as maturity or the type of commitment, but this would add complexity.

Using the contractual rate which actually takes into account maturity and the loan characteristics would be more accurate in our view:

- In the previous example of the borrower who pays the entire principal due and all interests, discounting with the contractual rate implies a 0 loss
- In our example, the bank will have however not only made 0 loss but also made a profit corresponding to the interests received minus interests invoiced by the treasury of the bank, i.e. the margin net of liquidity costs, minus management costs of the deals and minus taxes. Therefore, using the contractual rate is conservative and takes into account possible increases in liquidity and managements costs.

Aligning the discount rate with the Effective Interest Rate (EIR) would introduce convergence towards provisioning standards and reduce the gap with accounting practices. Yet this would also introduce a bias. In our example (see next page), as the EIR is higher than XBOR + margin (because it includes upfront fees), although the borrower would have paid all the principal and interests due, the calculation would still imply a loss. The use of EIR would be appropriate if the part of upfront fees spread over the loan term were to be added back to the recoveries through the accounting of interests with the EIR. However, this approach is complex.



Examples : Comparison of LGD using different discount rates.

Hereunder is an example of loan characteristics.

Base case	31/12/2013	31/12/2014	31/12/2015	31/12/2016
loan granted cash flow	-100			
principal outstanding		100	100	100
loan rate	2,50%			
upfront fee paid (EIR equivalent)	0,34%			
principal repaid				100
interests paid		2,5	2,5	2,5

We consider two scenarios: one with 1 year recovery period, the other one with 2 years recovery period.

Default scenario				
	31/12/2013	31/12/2014	31/12/2015	31/12/2016
scenario 1 year recovery period			default	emergence
scenario 2 years recovery period		default		emergence

The different discount rate are as follows:

Assumptions for discount rate			
Discount rate	XBOR+ margin	EIR	XBOR + 5%
XBOR	0,60%	0,60%	0,60%
Add on (loan margin		1,90%	
or fixed add on)	1,90%		5,0%
Upfront fees paid at origination		1%	
Discount rate	2,50%	2.85%	5,60%



The LGD are calculated hereunder according to the different discount rate , and to the 1 or 2 years recovery period scenarios, and considering that the borrower either fully repays principal and interests, or fully repays principal but does not pay any interests.

Compariso	on of LGD calculation u	sing different disco	unt rates
Discount rate	XBOR + margin	EIR	XBOR+ 5%
Add on	1,9%		5,0%
Discount rate	2,50%	2.85%	5,60%
LGD with 1 year recovery period, full principal and interest repayment	0,0%	0,33%	2.86%
LGD with 2 years recovery period full principal and interest repayment	0%	0.65%	5.58%
LGD with 1 year recovery period , full principal repayment but no interest repayment	4.82%	5.14%	7.61%
LGD with 2 years recovery period full principal repayment but no interest payment	7.14%	7.77%	12.51%

Supposing the borrower fully repays interests and principal, and with a 1 year recovery period, the LGD using Bor +5% would be very overstated. Using EIR would also imply some overstatement, as this rate incorporates upfront fees paid at origination and is thus higher than Bor + loan margin.

Discounting interests paid at a rate higher than the contractual loan rate, i.e. Bor + loan margin, unduly overstates the LGD.

With a longer recovery period, the overstatement would be higher.

With 2 years recovery period and assuming that the borrower fully repays principal but pays <u>no</u> <u>interests</u> at all:

- the <u>LGD calculated in this example with Bor +5%</u> would be <u>1.7 times higher than the LGD</u> <u>calculated using Bor + loan margin.</u>
- the LGD calculated with EIR would 1.09 times higher than the LGD calculated using Bor + loan margin.

Using Bor + a fixed add on of 5% would thus strongly overstate LGDs given the bias introduced by the use of a discount rate different from and much higher than the contractual loan rate.



Using the EIR, as the EIR is higher than the contractual loan rate given the incorporation of the upfront fees paid at origination in the EIR, would also imply some bias. +9% in this example is not negligible and should be avoided.

Using the contractual loan rate, i.e. either xBor + the contractual loan margin or the fixed contractual rate, would have no bias and would be in line with accounting losses.

When the borrower fully repays interest and principal, the LGD calculated using such discount rate is 0% and thus consistent with reality, i.e. no losses.

• Portfolio

When choosing the discount rate, it should be considered that margins generated by banks portfolios are sized in order to cover refinancing costs (risk free plus liquidity cost), and as well loan management costs and also expected losses. The margin net of these elements enable to remunerate the capital, according to the risk taken.

As the portfolio margins cover the actual losses, there is no need to add additional elements of risk or of increased liquidity cost in the discount rate.

• Discount rate choice

It should depend on:

- the use of LGD calculated: historical or predictive (modelled LGD).
- \circ $\,$ The way MoC and Downturn are taken into account
- The type of model (statistical or theoretical).

	Requirement	Possible Discount rate
LGD used for back testing only	 To be close to reality. No MoC or downturn to be added All recovery cash flows are known Historical risk free is known The margin of the loan is known 	 Risk free + contractual loan margin A proxy: risk free + average loan margin of the portfolio Risk free is the historical one, observed between default date and emergence date.
LGD used for modelling predictive LGD	MoC and downturn to be taken into account in the predictive LGD	 MoC and downturn can be incorporated by different means in the LGD model: Average calculated with boot strapping if statistical model Or higher discount rate than contractual loan rate Or haircuts and volatilities applied to collateral asset values or borrowers cash flows if theoretical model The discount rate used can be: Risk free + contractual loan margin Risk free + average loan margin of the portfolio Risk free + add on Risk free is a "predictive" rate