Introduction and purpose of paper

1. In January 2011, the International Accounting Standards Board (IASB) and Financial Accounting Standards Board (FASB) issued the joint supplementary document *Financial Instruments: Impairment* (SD) – a supplement to their original exposure drafts (original EDs) which addressed the impairment of financial assets. The comment period for the SD ends 1 April, 2011.

2. During the comment period, using feedback already received, the boards are discussing issues related to the original EDs that are not within the scope of the SD. Decisions made by the boards during the comment period will be updated, if necessary, based on feedback received and the outcome of other redeliberations related to the SD.

3. This paper discusses the measure that should be used to determine expected credit losses and considers whether the same approach should be required for single instruments and portfolios (both open and closed).

4. This paper does not refer to a ‘best estimate’ because there is no common understanding of its meaning. A best estimate is often interpreted to mean a most likely outcome; however, the term is open to other interpretations.

---

1 The original IASB ED *Financial Instruments: Amortised Cost and Impairment* (original IASB ED), was issued in November 2009. The FASB Proposed Accounting Standard Update *Accounting for Financial Instruments and Revisions to the Accounting for Derivative Instruments and Hedging Activities* (original FASB ED) was issued in May 2010, and included proposals for the impairment of financial assets.

This paper has been prepared by the technical staff of the IFRS Foundation and the FASB for discussion at a public meeting of the FASB or the IASB.

The views expressed in this paper are those of the staff preparing the paper. They do not purport to represent the views of any individual members of the FASB or the IASB.

Comments made in relation to the application of U.S. GAAP or IFRSs do not purport to be acceptable or unacceptable application of U.S. GAAP or IFRSs.

The tentative decisions made by the FASB or the IASB at public meetings are reported in *FASB Action Alert* or in *IASB Update*. Official pronouncements of the FASB or the IASB are published only after each board has completed its full due process, including appropriate public consultation and formal voting procedures.
5. This paper takes into account the discussions at the joint meeting in February 2011 on the cross-cutting paper *Measuring Uncertain Future Cash Flows*. Although the cross-cutting paper was presented in the context of cash flows, rather than losses, the staff believe that the considerations are relevant to the measurement objective for impairment of financial assets.

6. The staff acknowledge that the boards have not yet redeliberated the recognition of losses for individual assets. This paper only considers what should be the measure of expected losses (whether for single instruments or a portfolio). The actual impairment accounting including recognition of those losses will be redeliberated at a later date.

**Background**

**Original IASB ED**

7. Paragraph 8 of the original IASB ED stated:

   The estimates of cash flow inputs are expected values. Hence, estimates of the amounts and timing of cash flows are the probability-weighted possible outcomes.

8. The original IASB ED was a forward-looking model requiring estimation of expected cash flows over the life of the instrument to determine impairment. This model was developed to reflect the underlying economics of a lending transaction where there is a link between the pricing of assets and the expected losses.

9. Implicit in the original IASB ED is the concept that the pricing of financial assets considers expected losses (explicitly or implicitly, depending on the loan), which inherently is derived from an expected value. If an instrument were priced using a most likely outcome, no credit risk premium would be included (ie an entity is not likely to issue nor purchase an instrument with a greater than 50% likelihood of default). In other words, when pricing a financial asset, an entity considers the expected value of the cash flows.

---

10. The thinking in the original IASB ED was if impairment losses were measured taking into account only the single most likely outcome, the accounting would not reflect an impairment loss for an individual asset (when not using a pool overlay) until a loss event occurred (or reached a probability greater than 50%), because the single most likely outcome – until such an event occurred – would be a loss of nil. Such an approach would have a similar result to an incurred loss model and would be inconsistent with the pricing of assets.

**FASB original ED**

11. In developing the original ED, the FASB’s objective for the proposed impairment guidance was that an entity should recognize a credit impairment for contractual amounts due for originated financial asset(s) that the entity does not expect to collect and all amounts originally expected to be collected for purchased financial assets that the entity does not expect to collect (ED, par. 51) The original FASB ED did not use the term expected loss; rather it focused on the notion of cash flows not expected to be collected. The FASB believed this contrasted with the proposed guidance in the original IASB ED to estimate credit losses on the basis of probability-weighted possible outcomes (and highlighted this contrast in Question 44 in the notice to recipients of the original FASB ED).

12. In terms of measurement of credit impairment losses, the FASB believed that an entity should be permitted to use an appropriate measurement technique to estimate the amount of credit impairment losses. The original FASB ED did not offer any specific guidance on the appropriate calculation of credit impairment losses.

13. In discussing the measurement of credit impairment losses using loss rates to be applied to pools of financial assets, paragraph 59 of the original FASB ED indicates that historical loss rates should reflect cash flows that the entity does not expect to collect over the life of the financial assets in the pool and specifically states that it does not specify a particular methodology to be applied by an entity for determining historical loss rates. It notes that the methodology may vary
depending on the size of the entity, the range of the entity’s activities, the nature of
the entity’s pools of financial assets, and other factors. The Basis for Conclusions
in the original FASB ED noted that the FASB did not want to limit entities to a
specific measurement model, including a model that required complex statistical
analysis that limited an entity’s ability to use judgment in altering statistically
determined expectations for relevant existing conditions and events.

14. In addition, with respect to estimating credit impairment losses for individual
financial assets, paragraph 65 of the original FASB ED required that for a
financial asset evaluated for impairment on an individual basis, where there are no
past events or existing conditions indicating that the financial asset is impaired, an
entity could not automatically conclude that no credit impairment exists. Instead,
the entity must assess the financial asset together with other financial assets that
have similar characteristics (ie the ‘pool overlay’) and if a credit impairment exists
in that circumstance, the entity must measure the amount of the impairment by
applying to that financial asset the historical loss rate (adjusted for existing
economic factors and conditions) applicable to the group of similar financial assets
referenced by the entity in its assessment.

**Feedback on the original EDs**

**Original IASB ED**

15. Feedback on the original IASB ED largely supported the move from an incurred
loss model to an expected loss model. However, many respondents were
concerned with the description of ‘expected value’ as requiring an estimate of the
probability-weighted expected cash flows of all possible outcomes. They raised
concerns about:

(a) the practical difficulties of applying an expected value approach; and

(b) the relevance of the measure for single instruments.
**Practical difficulties**

16. Respondents stated that such an approach would require significantly more data than is currently available, and in particular they were concerned that estimating the specific timing of the amounts of expected cash flows would be difficult over the life of instruments with estimating the specific timing becoming more difficult the longer the time frame. Many respondents stated that they would be comfortable using historical information, industry estimates and/or other information to estimate the amount of credit losses over the life of the instrument (but not necessarily the specific timing of when those losses were expected).

17. Many respondents were also concerned that by using the term ‘probability-weighted possible outcomes’, the original IASB proposals would require entities to consider an infinite number of situations in estimating expected losses (e.g., a stochastic model or a Monte Carlo simulation). The following response from CL167 to the IASB original ED states (emphasis added):

> While probabilities of default are used in credit risk management, there is no explicit consideration of all possible outcomes and their possibilities. Accordingly, we believe that this measurement principle is both highly impracticable and unnecessarily prescriptive.

18. Therefore, some respondents said that requiring the measure of expected cash flows to be an expected value (when defined as probability-weighted possible outcomes) adds additional operational complexity to the model without providing improved loss estimates.

19. Many users also did not support the sole use of probability-weighted possible outcomes for estimating expected cash flows and losses. They stated that the expected loss which management is using for controlling the business will be adequate with appropriate disclosure\(^3\). They also felt that estimates of expected losses could be made without having to consider probability-weighted outcomes with disclosure of the inputs and assumptions used.

---

\(^3\) See CL186 to the original IASB ED.
Relevance of expected value measures for single instruments

20. Many respondents agreed that an expected value approach is conceptually correct for portfolios because, over time, the actual losses on the individual loans may approximate the expected value of losses for the portfolio. While loss expectations may not accurately predict losses on individual loans, over time the deviation of the amount of the actual losses from the expected losses will be minimised. They state that portfolios often have historical and industry data which can be used to predict expected losses, and the transactions occur frequently enough that, over time, expected value approximates actual results.

21. However, there was less support for an expected value approach for single instruments. Whilst a few respondents, including a few users, were in favour of using an expected value approach even for single instruments, many respondents would prefer a most likely outcome estimate in those situations. They believe that using an expected value for a single instrument is inappropriate because the estimated loss, as an average of several discrete outcomes, is not necessarily equal to any of the possible outcomes. Respondents said that when a single instrument is originated, the most likely loss outcome will likely be nil, given historical information for similar originations. Since the probability of loss is minimal, the expected value of credit losses would be small and hence not too different from the most likely outcome (which would most likely be nil). Those respondents state that the small difference between the two measures would be immaterial, so estimating a most likely outcome should be permitted.

Original FASB ED

22. FASB constituents supported a ‘forward-looking’ expected loss impairment model. Constituents were largely in favour of the removal of the ‘probable’ threshold in ASC 310-10. Constituents encouraged the use of past, present and future events and conditions for the estimate of expected future uncollectible cash flows. Constituents did not specifically comment on the measure to be used for
the expected loss calculation, as this was not specifically addressed by the original FASB ED.

23. However, the FASB staff received inquiries on this matter, because while the original FASB ED did not specifically address this issue, several areas of current US GAAP related to impairment require a ‘best estimate’ (although none specifically require an expected value or a most likely outcome):

(a) ASC 310-10-35-26 (formerly FAS 114): If a creditor bases its measure of loan impairment on a present value calculation, the estimates of expected future cash flows shall be the creditor's best estimate based on reasonable and supportable assumptions and projections.

(b) Subtopic 310-10 (formerly SEC SAB Topic 6L): A systematic methodology that is properly designed and implemented should result in a registrant's best estimate of its allowance for loan losses.

(c) Subtopic 310-30 Master Glossary Term ‘Cash Flows Expected at Acquisition’ (formerly SOP 03-3): The investor's estimate, at acquisition, of the amount and timing of undiscounted principal, interest, and other cash flows expected to be collected. This would be the investor's best estimate of cash flows, including the effect of prepayments if considered, that is used in determining the acquisition price, and, in a business combination, the investor's estimate of fair value for purposes of acquisition price assignment in accordance with Subtopic 805-20.

(d) Paragraph 325-40-35-3 (formerly EITF 99-20): After the transaction date, cash flows expected to be collected are defined as the holder's estimate of the amount and timing of estimated principal and interest cash flows based on the holder's best estimate of current information and events.
**Expected value and most likely outcome**

24. The cross-cutting paper *Measuring Uncertain Future Cash Flows* compares the two measures and identifies the circumstances in which each measure could be viewed as more suitable. It concludes that the expected value could be the most appropriate measure:

(a) if the most relevant measure of the asset or liability is its current value, either in the market or to the entity; or

(b) if the transactions recur frequently enough that the long-run outcomes will tend towards the sum of the expected values (By measuring the transactions at expected value, the entity avoids a systematic long-run gain or loss on settlement.); or

(c) if investors place importance on the outliers (extreme, relatively unlikely outcomes) and changes in estimates of the outliers (eg if the outliers are large outflows); or

(d) if other measures would be susceptible to ‘cliff edges’; or

(e) if the boards would have difficulty specifying the unit of account.

25. For single instruments (without considering a pool overlay), the most relevant factors might be those in subparagraphs (c) and (d) (ie the importance of the outliers and the possibility that other methods would lead to cliff edges). The outliers are future credit losses, which are fundamentally important to the measure of an impairment allowance.

26. The paper concluded that the most likely outcome (the mode) is the more appropriate measure:

(a) if the transactions do not recur frequently enough for their average outcomes to approximate to the long-run average; or

(b) if investors do not place importance on the outliers (eg if the outliers are highly uncertain inflows, or outflows that will occur only if they benefit the entity); or
(c) if these measures are less susceptible to estimation error than expected value (e.g., if the outliers are subject to more estimation uncertainty than the more likely outcomes); or

(d) if expected value measures are more costly to prepare and the benefits to investors do not outweigh the additional costs.

27. Factor (a) could apply to single instruments. It acknowledges that an expected value may not be the most appropriate measure for transactions that do not occur frequently.

28. Factor (d) could also apply to the measurement of impairment losses. If the probability of an expected loss on a specific instrument is well below 50%, less work would be required to identify the most likely outcome (no loss) than would be required to estimate the expected value of the losses, and the results would be largely similar.

29. Paragraph 38 of the cross-cutting paper *Measuring Uncertain Future Cash Flows* explains that:

   No IFRSs or US pronouncements clearly require entities to measure any asset or liability at the most likely outcome. Some pronouncements require entities to measure the ‘best estimate’ of an asset or liability, and the best estimate is often interpreted to mean most likely outcome. However…the term is open to other interpretations.

30. Some staff believe that some uses of ‘best estimate’ in US GAAP imply use of a most likely outcome. The SD refers to the use of a ‘best estimate’ in determining the foreseeable future period; however, the boards did not discuss the precise meaning of that term as used in the SD. Paragraph B11 of the SD states the following:

   For the purpose of paragraph 2(a)(ii), an entity would make its best estimate of credit losses expected to occur in the future time period for which specific projections of events and conditions are possible and the amount of credit losses can be reasonably estimated based on those specific projections. That future period is referred to as the ‘foreseeable future’ for the purpose of this guidance.
Alternatives

31. The staff has identified the following alternatives for the boards’ consideration:

(a) **Alternative A**: Establish an objective that would require estimating expected losses based on the expected value (mean) of possible outcomes. This is in a pure sense a probability-weighted basis analysis, but it would be acknowledged that a proxy using techniques such as starting with appropriate loss rates to calculate an expectation would be acceptable;

(b) **Alternative B**: Establish an objective that would require estimating the actual amount of cash flows that an entity does not expect to collect (also referred to as losses) using the best available and supportable information at the date of estimation (historical, current, and forecasted). This approach would not prescribe how an entity should develop its estimate and would not preclude the use of an expected value.

Staff analysis and recommendation

32. Regardless of the alternative used, staff note that the information set for measuring expected losses has already been jointly agreed to tentatively by the boards (and included in the SD). The common information set proposed is all reasonable and supportable information available, including forward-looking information. The SD included this information set because feedback received on both of the original EDs (FASB and IASB) requested that such information be used. Therefore, the measure of expected losses will be made on the basis of the same information set regardless of whether the objective is to measure credit losses as an expected value or a most likely outcome.

Alternative A – Expected value as an objective

33. Some staff support an expected value approach as an objective for the measurement of credit losses. These staff believe that the primary objective of
estimating expected losses is to approximate the actual outcomes over time to minimise gains and losses rather than to predict the actual losses. Those staff who are in support of an expected value believe that the most important reason for using an expected value is that an expected value estimate is an inherent part of an expected loss model. When considering expected losses based on all the available evidence (including forward looking), an entity will inherently consider multiple scenarios and possible outcomes.

34. In addition, the staff who support the expected value approach believe that the outcome of an expected loss estimate should not vary depending on whether the estimate is made on an individual or portfolio basis. These staff note that this was implicit in the original IASB ED which did not differentiate between a single and portfolio based impairment analysis.

35. Furthermore, the staff who support an expected value calculation believe that the pricing of financial assets includes consideration of expected losses. These staff believe that although specific loss estimates may not be attributed to single instruments and pricing is influenced by competitive pressures, entities still consider loss expectations for the credit quality of like obligors in pricing loans on origination and purchase (consistent with a pool overlay). Keeping the time-proportional approach as a component of the impairment accounting for the good book retains this concept of the link between pricing and the consideration for credit losses.

36. These staff understand the concern that an expected value of a single instrument will never equate to the actual outcome; however, these staff believe that the expected value will provide useful information to investors about the instrument (ie information about the risk that the instrument might not perform as contractually required). These staff do not believe that the primary objective of estimating expected losses is to predict the actual losses, but to approximate the actual outcomes over time to minimise gains and losses.

37. These staff believe that an expected value measure is appropriate because it does not revert (at any time) to an incurred loss model – these staff believe that from
when initially recognised, except in unusual circumstances (such as fully collateralised loans where the collateral will in all circumstances be sufficient) all financial assets would have expected losses associated with them so the model would never revert to an incurred loss model. On the other hand, if an entity estimates expected losses using the approach in Alternative B, these staff believe that the model will not recognize losses in all situations for individual loans. Losses are accounted for later and the general desire to enable expected losses to be accounted for earlier to overcome one of the key shortcomings of an incurred loss impairment model would fail to be achieved.

Practical considerations for expected value

38. The staff who support an expected value approach believe that many respondents who did not support the measure in response to the original IASB ED were indicating their lack of support for probability-weighted possible outcome calculations rather than the notion of expected losses per se. The most common reason provided in the feedback received for why probability-weighted possible outcome calculations were not appropriate to use when measuring expected losses was the complexity of the calculation and the amount of additional information required.

39. The staff supporting an expected value approach believe that the term ‘probability-weighted possible outcomes’ causes many constituents great angst by leading them to believe that preparers would be required to perform complex statistical analysis for every asset or portfolio of assets losses (eg a stochastic model or a Monte Carlo simulation). The intention of using that term was only to provide one description of expected value. These staff do not believe that an expected value calculation must be unduly onerous – many entities have substantial experience and economic data upon which to draw, though small to medium sized entities may need to look to external data. Consequently, they believe that the benefits to users of receiving earlier information about the risk of loss, instead of waiting for a loss to become the most likely outcome, would outweigh the costs to preparers (as the information is already available).
40. The staff supporting the expected value method believe that providing clarity around the intention of the expected value measure will alleviate some concerns that the measure is too difficult. (That is, that an expected value need not be a rigorous mathematical exercise where every single possible outcome and its probability is required to be used, but also includes consideration of qualitative factors. The key point is that more than one alternative is considered.) These staff believe that many preparers are already performing calculations for internal purposes that would provide an appropriate measure of expected values (ie a proxy). Therefore, these staff believe that by acknowledging that proxy techniques to a pure probability-weighted basis analysis could be used, entities would not have to deviate significantly from their current practice.

41. These staff believe that application guidance should be included in a final standard to explain this point, similar to that set out in paragraphs B3 and B4 of the IASB limited re-exposure draft amendment to IAS 37 (included as Appendix A). The staff would coordinate these projects to ensure that any guidance provided in a final standard addressing impairment would be consistent with that used elsewhere for expected value.

42. For example, these staff believe that the guidance should explain the difference between (the theoretical notion of) an expected value and the process of estimating that value. That guidance could indicate that in practice a concrete estimate of an expected value would not require the use of every single possible outcome. Rather, in the case where there are many possible outcomes, a representative sample of the complete distribution can be used for determining the expected value of the credit loss. In identifying that sample, the entity would need to take into account only the information that is available about the outcomes. It would not have to (and should not) make up anything else.

43. One can also think of the expected value (ie expected losses) as a long-run average. Therefore, when sampling, the sample mean approaches the expected value as the sample size grows.
44. The staff supporting an expected value approach accept that it relies on statistical inputs. However, entities are required to consider all reasonable and supportable information. This will inevitably also require the use of judgment and qualitative considerations.

Other methods for calculating an expected value

45. In their discussions, the Expert Advisory Panel (EAP) confirmed that there may be other calculation methods which could reasonably approximate a probability-weighted possible outcomes calculation thereby representing an expected value. One of these proxies for expected value could be the use of historical loss rates as a starting point, as discussed earlier.

46. In addition, many entities use probabilities of default (PDs), loss given default (LGDs), and exposure at default (EADs) data when calculating expected losses for regulatory purposes, and also for internal risk management. A PD is derived as an estimate of a probability-weighted number (eg the weighted average of a sample population for the look-back period determined by a regulator). Hence, a PD is an estimate of the expected value for the defaults, which are then multiplied by the LGDs and EADs because a default can have different loss consequences.

47. Similarly, some entities use historical default information to develop a loss rate which reflects management’s estimate of credit losses on a portfolio of assets based on actual historical experience for similar assets (eg historical write-off data). Entities could use these loss rates as the starting point for estimating the expected value of future losses, because an historical loss rate based on actual outcomes would be the mean of those outcomes. When using a more forward-looking approach, an entity would have to use judgement to adjust the historical information to the extent that conditions are different from those in the past (to which the historical information relates). That adjustment for changes in circumstances, however, does not have to be an exercise of spurious accuracy. For example, there might only be a small number of major alternative scenarios that would have to be weighted for the purpose of an expected value calculation.
The use of the PDs/LGDs described above is one way to determine a loss rate; other methods include a migration matrix and roll rate analysis.

48. Loss rate methods are not an ‘impairment model’ by themselves. Rather, they are a flexible tool that can be used as a means to implement different impairment models. The particular impairment model would dictate how appropriate loss rates for that purpose would be determined. For example, loss rates can be calibrated to apply for different outlook periods, as annualised rates or as cumulative rates. Loss rates could be applied to pools of homogenous loans with similar risk characteristics that are not individually evaluated and impaired. Further, staff learnt from the EAP that loss rates have good compatibility with banks’ credit functions and systems, including that they can be applied to open portfolios. In addition, we learnt that loss rate methods might provide a simplification for smaller institutions and non-financial institutions.

49. Regarding single instruments, these staff believe that a single instrument should effectively be viewed as if it were part of a portfolio, and expected losses should be considered based on the characteristics of the single instrument and the general credit risk characteristics of similar instruments. These staff believe this is how pricing occurs in practice. This consideration inherently requires an entity to look at the historical mean and adjust it for any current or future expectations.

50. On balance, therefore the staff supporting Alternative A believe that there is a benefit in setting an expected value objective consistent with the pricing of financial assets while acknowledging proxies to estimate these amounts rather than requiring a probability-weighted possible outcomes approach.

Alternative B – Estimate credit losses based on the amount of cash flows that an entity does not expect to collect as an objective

51. Other staff members believe that the objective for measuring credit impairment losses and the allowance for credit losses does not necessarily need to be expressed in the context of a particular statistical methodology. These staff members believe that the objective of the impairment model can be expressed
more simply. These staff prefer that the objective be that an entity would be
required to estimate the amount of cash flows that an entity does not expect to
collect (also referred to as losses) using the best available and supportable
information at the date of estimation (historical, current, and forecasted). Said
another way, this would be the entity’s estimate of defaults that will occur related
to loans in the entity’s portfolio. Under this line of thinking, the process of
estimating losses is one that tries to be predictive of actual losses before they
occur, as opposed to an objective of approximating actual losses over time to
minimize gains/losses when estimates are wrong. This approach would not
prescribe how an entity should develop its estimate and would not preclude the use
of an expected value.

52. These staff believe that an entity should be required to use all available and
supportable data to estimate the cash flows that an entity does not expect to
collect. This is consistent with the guidance in the FASB ED.

53. This view may be considered by some to be a consistent with a most likely
outcome approach. However, these staff members don’t consider it to be a most
likely outcome approach because they believe that these terms infer that a
statistical analysis is required and that the most likely point in a range resulting
from the statistics is the loss estimate. Rather, these staff members believe that the
estimate should be the amount of losses (uncollectible cash flows) that an entity
can reasonably predict at a point in time. These staff members believe that
estimates of an entity’s assessment of uncollectible cash flows should not be
limited to or require specific statistical analysis. Entities communicated and the
Boards agreed that considering the impact of qualitative factors (that are not
probability-weighted) including future events and economic conditions are critical
for entities to more realistically estimate credit losses.

54. This recommendation is consistent with the feedback received related to the
original IASB ED where most respondents were opposed to an expected value for
single instruments. Also, the staff supporting Alternative B believe this approach
is largely consistent with what is being done in practice today and that the cost of
disrupting practice by requiring a new measurement method does not outweigh the benefits of such a disruption. This alternative would mean that in practice, entities would need to adjust their loss estimation process for purposes of determining the allowance for credit losses by (1) giving effect to the removal of the threshold that credit losses must be probable to be recognized and (2) incorporating more forward-looking information into these estimates. These staff are concerned that having an objective of determining the expected value could imply a different process is needed, potentially necessitating explicit consideration of the probabilities of alternative outcomes, whether quantitative or qualitative.

55. Regarding single instruments, these staff believe that the pool overlay, as proposed in the original FASB ED, will provide timely recognition of losses that an entity is most confident estimating. These staff also believe that a pool overlay will require consideration of losses experienced in loans with similar characteristics, which would result in recognizing a loss when appropriate.

56. These staff acknowledge that certain inputs used in practice are consistent with an expected value approach. These staff believe that these inputs are relevant and valuable inputs to any impairment loss estimate. However, these staff believe that establishing an expected value approach as an objective limits the estimation of credit losses to statistical analysis that must be the sole support for the credit loss estimation process. These staff contend that although the expected value may result in fewer deviations from actual losses over the estimated lives of financial assets, the model in Alternative B will provide users with an estimate of credit losses that an entity is most confident predicts actual outcomes.

57. These staff believe that by focusing on the estimation of losses without an objective of expected values, preparers will have greater ability to undertake a method that doesn’t rely solely on a quantitative analysis. In other words, qualitative factors can be considered and factored into the determination of expected losses without being probability weighted.
Questions for the boards

58. As the paper notes staff are split on their recommendations. The specific staff recommendations related to each alternative is:

(a) **Alternative A** – Some staff recommend that *expected losses for both single instruments and portfolios* be estimated using *expected value* as an objective. The staff also recommend that clarity be provided related to the calculation of the expected value. For example, one way to estimate a pure expected value would be to identify the possible outcomes (or a representative sample of the possible outcomes), estimate the likelihood of each and calculate their probability-weighted average. The staff also recommend that a final standard should acknowledge that other appropriate methods could be used as a proxy to a pure expected value calculation (e.g., loss rate methods and use of PDs, LGDs, and EADs).

(b) **Alternative B** – Some staff recommend that *expected losses* be estimated using all available and supportable information to estimate cash flows that are expected to be uncollectible at the date of estimation. These staff recommend that if losses are estimated on single instruments, then a pool overlay also be required.

<table>
<thead>
<tr>
<th>Questions: Estimating credit losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do the boards prefer Alternative A (expected value as an objective) or Alternative B? Why or why not?</td>
</tr>
<tr>
<td>2. If the boards support alternative A (expected value as an objective), do the boards agree with the staff recommendation in paragraph 58 to clarify that one way to estimate a pure expected value would be to identify the possible outcomes (or a representative sample of the possible outcomes), estimate the likelihood of each and calculate their probability-weighted average. However other methods could be used as a proxy to a pure expected value calculation (e.g., loss rate methods and use of PDs, LGDs, and EADs)? Why or why not?</td>
</tr>
</tbody>
</table>
Appendix A – January 2010 IASB limited re-exposure of proposed amendment to IAS 37

59. B3. The range of outcomes and their effects shall be taken into account by estimating the expected value of the outflows. Estimating the expected value involves:

(a) identifying each possible outcome;

(b) making an unbiased estimate of the amount and timing of the losses for that outcome;

(c) determining the present value of these losses (if discounting); and

(d) making an unbiased estimate of the probability of each outcome.

The expected value is the probability-weighted average of the values of the losses for the possible outcomes.

60. B4. In some cases, an entity might have access to extensive data and be able to identify many outcomes. In other cases, the information available to the entity might be more limited. Even if there is evidence to support many outcomes, it is not always necessary to consider distributions of literally all possible outcomes using complex models and techniques. Rather, a limited number of discrete outcomes and probabilities can often provide a reasonable estimate of the distribution of possible outcomes.