| *IFRS | IASB/FASB Meetin Week commencin | IASB Agenda reference | 4C | |
|----------------|-------------------------------------|-----------------------------|-----------------------------|----------|
| Staff Paper | | | FASB Agenda reference | 111 |
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| Project | Financial instrume | nts: Impairment | | |
| Торіс | Credit Risk Mana between buckets | gement Approach – P | rinciple of | transfer |

Purpose of this paper

- 1. See the Cover Paper, IASB Agenda Paper 4 / FASB Memorandum 108, for a brief background on the topic.
- 2. This paper further discusses the principle of when to transfer financial assets between Bucket 1 and Bucket 2. In other words, under which circumstances it becomes appropriate to recognise the full remaining lifetime expected losses.
- 3. In particular this paper outlines the staff's current thinking and seeks the board members' direction on:
 - (i) whether the transfers between Bucket 1 and Bucket 2 should be based on an assessment of the collectability of cash flows/credit quality;
 - (ii) how the collectability of cash flows/credit quality should be assessed; and
 - (iii) at what level of credit risk the transfer between Buckets 1, and 2 should occur.
- 4. This paper does not ask the boards to make decisions.
- 5. The Appendix A to this paper provides S&P's and Moody's rating definitions and supervisory categories currently used by the US Banking Agencies.

 Appendix B provides Moody's average cumulative issuer-weighted global default rates.
- 6. This paper does NOT address how to classify newly originated or purchased loans, although at relevant points in this document reference is made to the

relevance of the decisions made on that issue by the boards. The classification of newly originated or purchased loans is discussed in IASB Agenda Paper 4B / FASB Memorandum 110.

Background

- 7. The scope of this paper focuses on commercial/wholesale loans. The application to other asset classes, such as retail loans, of the principle to transfer loans out of Bucket 1 will be discussed at a future meeting. This is because for those loans credit risk factors differ and staff needs to perform additional analysis and perform additional outreach. At this meeting the staff would like to obtain feedback from the boards on the general approach that can then be used as the basis for further development.
- 8. IASB Agenda paper 4A / FASB Memorandum 109 provides feedback we have received from constituents to date on how the transfer between the buckets should be made (particularly between Bucket 1 and Bucket 2). At relevant points, this paper refers to the feedback received during these and additional outreach meetings.¹

Transfer from Bucket 1 to Bucket 2

Introduction

9. Given the three buckets are characterized by a continuous migration in credit quality between Buckets 1 to 2 and 3, it seems appropriate to base the principle to transfer loans between the buckets on deterioration and improvement in credit quality.

(i) This paper addresses how the principle of transfer of financial assets from Bucket 1 to Bucket 2 should be assessed. Transfers as discussed in this paper are in the context of a loan that is initially recognised at high credit quality and thus clearly within Bucket 1.

¹ To date the staff have spoken to a limited number of institutions in Europe, Asia, Australia, Africa and North America.

Loans that are originated or newly purchased at lower credit quality levels are scoped out of this paper.

(ii) The staff believe that the core analysis of the assessment of credit quality is relevant irrespective of the decision that the boards make on the initial classification of loans for impairment purposes. The purpose of this paper is to get feedback from the boards to enable the staff to further develop the impairment model.

Principle of transfer

- 10. As set out in paragraphs 8, 12 and 20 of the Initial Feedback Summary (IASB Agenda Paper 4A / FASB Memorandum 109) one of the key factors underlying credit risk assessment is the notion of the probability of default. As loans deteriorate in credit quality, the probability of default increases accordingly. This measure of risk is used both by entities in their internal risk management assessment and by credit rating agencies.
- 11. As tentatively decided in April, expected losses should be measured as all shortfalls in cash flows (both principal and interest) on a discounted basis. If this concept were used, default would be defined as shortfalls in both contractual interest and principal payments. Therefore as probability of default increases, expected recovery of both contractual interest and principal payments decrease.
- 12. For the principle of transfer, the staff has considered three alternatives:
 - (i) Transfer principle based on the extent of the deterioration in credit quality
 - (ii) Transfer principle based on 'any' deterioration in credit quality
 - (iii) Transfer principle based on deterioration in credit quality to a particular level.

Transfer principle based on the extent of the deterioration in credit quality

- 13. Arguably, at a purely conceptual level, the transfer between buckets could be based on the extent of deterioration in credit quality if the Boards were to pursue the 2B-Bucket 1 Approach of IASB Agenda Paper 4B / FASB Memorandum 110. This would mean that the extent of change in credit risk would determine whether a financial asset should be transferred to or from Bucket 1 to Bucket 2. So using credit rating language for simplicity, a one 'notch' movement, for example, might arguably never be sufficient to cause a financial asset to be transferred but let's say a five 'notch' movement down from origination presumably a significant downward movement might be deemed sufficient. However, there are two issues related to this approach.
- 14. Firstly, from a credit perspective, even though a certain deterioration in credit quality would have an impact on implied loan spreads, yields and prices (ie spreads would widen, yields would increase and prices would be reduced), such a loss would only materialise if the instrument were sold. If the instrument was not sold and held until maturity, the only remaining risk would be default risk during the remaining life of the loan which would negatively impact the recoverability of cash flows (both interest and principal). Thus, the focus shifts to assessing credit risk deterioration to a particular absolute credit risk level which would imply a meaningful level in the uncertainty of fully recovering cash flows on the instrument.
- 15. Secondly, for an approach based on relative changes in credit risk from origination or purchase it would be necessary to track the <u>initial</u> credit quality of loans to assess their overall credit risk migration. We have been told that it is extremely burdensome from an operational perspective (see paragraphs 14-33 of IASB Agenda Paper 4B / FASB Memorandum 110). Also, this would need to be applied to all financial assets subject to impairment accounting so it would have to be implemented across a very large population.

Transfer principle based on 'any' deterioration in credit quality

16. Grounding the principle of transfer on 'any' deterioration (ie irrespective of severity) seems inappropriate. Some deterioration in credit risk might not necessarily imply a meaningful increase in the uncertainty of fully recovering

cash flows on the instrument. Consider for example an unsecured loan where, at the reporting date, the borrower has a strong capacity to meet its financial commitments and there is no or de minimis uncertainty in the ability to fully recover contractual cash flows (eg AA- or equivalent rating). At the next reporting period, the expected financial performance and therefore the repayment capacity of the borrower deteriorates, implying somewhat greater credit risk (eg moving from AA- to A-). At this point, although expected recovery of contractual cash flows is somewhat more susceptible to adverse effects of changes in circumstances and economic conditions than before, the uncertainty in respect to expected recovery of cash flows is (still) de minimus.

Thus, it is questionable whether such a change should trigger a transfer to Bucket 2. It would be meaningless from a recoverability of cash flows perspective. Also, the transfer causes a change to the recognition of an allowance based on remaining lifetime expected losses and thereby indicates a significant change in the impairment amount to the user of financial statements. It would seem that a transfer from Bucket 1 into Bucket 2 should result from an increase in uncertainty about the ability to fully recover cash flows to such a level that it becomes meaningful for the overall assessment of the credit quality of the financial asset.

Transfer principle based on deterioration in credit quality to a particular level

17. Due to the arguments and constraints described above, the staff have been investigating another approach for the transfer that focuses as much as possible on the credit risk of an asset **at the reporting date²**. In addition, due to these arguments and constraints and in order to align as closely as possible with credit risk management systems, the approach that the staff have been investigating is that financial assets should be transferred between buckets when the probability of shortfalls in cash flows occurring reaches a particular level that is meaningful from a recoverability of cash flows perspective.

² If the boards continue to pursue a model where all financial assets have a 12 or 24 month loss allowance balance established on initial recognition irrespective of credit quality for those financial assets with a credit quality below that generally used for Bucket 2 some tracking may be required.

- 18. If the Boards were to pursue a model where all loans (including newly originated or purchased loans) are classified into buckets in accordance with their credit quality, the transfer between buckets would work in the same way for all loans.
- 19. However, if the boards were to continue to pursue a model where all financial assets are initially classified in Bucket 1 irrespective of credit quality, the appropriate point of transfer out of Bucket 1 for loans with lower credit quality would need to be considered separately.

General remarks in respect of the transfer principle

- 20. In respect of the transfer principle, the staff does not envision to refer to a specific level or range of credit risk of an asset. For transfers between the buckets, the staff believe that principles will need to be established to avoid creating bright lines.
- 21. In addition, credit risk grades or classifications and credit risk characteristics differ by loan and obligor type (eg commercial/wholesale versus retail) and there are variations in how credit risk is managed between entities. Establishing a principle for transfer should provide a stronger basis to accommodate such differences.
- 22. The staff has considered the following alternatives in developing a principle to transfer loans between the buckets based on probability of shortfalls in cash flows reaching a particular level:
 - (i) capitalising on external rating definitions and regulatory classifications:
 - (ii) credit risk management objectives; and/or
 - (iii) indicators.

Defining a principle

Ratings' definitions and regulatory guidance

- 23. Rating agencies assign ratings to financial instruments and thereby express a forward looking view about the credit risk of the instrument. That is, whether or not the financial instrument will be paid according to its contractual terms. Probability of default measures are the single most important factor in assessing the level of credit risk. Thus, a principle could be developed by capitalising on the ratings' underlying definitions and concepts (instead of referring to the actual rating category/classification such as, for example, AAA, AA, A, BBB, BB etc).
- 24. It is important to note for an approach that capitalises on external rating definitions that staff does not suggest that external ratings are used in the assessment of the transfer. Rather we are suggesting an internal credit risk assessment, but analogising to the external systems.
- 25. However, not all entities use probability of default measures for all asset classes. In addition, not all entities use probability of default measures to categorise their financial assets. To help operationalise the transfer principle, to help ensure that the credit analysis that underpins the model is sufficiently robust and to increase consistent application, additional credit characteristics to reinforce the principle would be necessary. For example, similar notions are incorporated into credit management systems through regulatory guidelines which focus on the risk of not collecting all contractual cash flows. Those underlying concepts, in addition to other credit risk factors, could be used to supplement the principles.

Principles based on credit risk management objectives

26. The goal of credit risk management is to maximise a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. Generally, this includes a monitoring process and controls over credit risk. Although specific credit risk management practices differ among banks

- depending upon the nature and complexity of their business, the goals of credit risk management should be very similar.
- 27. Credit risk management practices for managing loans typically become more focused and deeper in analysis the lower the respective credit risk. This may also be the case when there is a significant change in the credit quality of a particular financial asset. As uncertainties about the future prospects of a company increase, entities start to pay more attention to the specific circumstances of a company's deterioration, potential solutions and expected recoveries if a default was to occur. As loans deteriorate from investment grade to non-investment grade status, uncertainty about collecting contractual cash flows increases so that loans are likely to be closely monitored, ring-fenced at a portfolio level and specific interventions may occur.
- 28. Measures that may occur at these credit risk levels, include for example renegotiating/amending loan terms (eg reset of covenants, extending the term of a loan, adjustments to interest rates, amending security, collateral or guarantee structures etc). The objective of these interventions is to try to address the issues giving rise to the problems with a specific loan and to allow appropriate re-calibration of the legal framework of the respective loan taking into account the borrower's financial situation.
- 29. As credit quality further deteriorates to a level where the loans are currently (highly) vulnerable, (highly) likely in, or very near, default the collectability of cash flows has reached such a high degree of uncertainty, that the credit risk management objective is now to maximise recovery. Exit strategies and/or the following client interventions might occur:
 - (i) A consensual restructuring:
 - (1) Borrower asking for a stand-still agreement (ie lenders agree not to enforce on their rights such as security or collateral etc).
 - (2) Borrower offers the lenders to pay for advisors and/or where a steering committee is established.
 - (ii) A consensual or non-consensual legal restructuring in court:

- (1) Restructuring discussions are driven by court process ie typically led by some form of insolvency administrator.
- (2) Lenders might start the enforcement process of the collateral etc.
- 30. Credit risk management processes and objectives might be useful to supplement the principle in the sense that it is part of the information to consider in determining a transfer. They do not serve well as the principle for several reasons.
 - (i) Credit risk management processes and objectives are not uniform. For example, insurance companies use different models and methods compared to banks. In addition, the definition of a watchlist and practices also vary across portfolios and industries (see paragraph 25 of Agenda Paper 4A / FASB Memorandum 109, paragraphs 34-41 of July Agenda Paper 7A / FASB Memorandum 100).
 - (ii) It punishes institutions with sophisticated credit risk management processes in the sense that they would have to recognise remaining lifetime credit losses earlier than institutions with less sophisticated credit risk management processes.
- 31. It is suggested that capturing processes such as 'watchlists' (incorporating items as described above) would be a good complement to a focus on credit gradings/quality and probabilities of default. However, as described in 25 of Agenda Paper 4A / FASB Memorandum 109 loans may be put on a 'watchlist' for different reasons and the definition of a 'watchlist' can vary across jurisdictions. Thus a 'watchlist' (or a subset of a 'watchlist') would only be consistent with a principle based on deterioration in credit quality to a particular level if the 'watchlist' captures financial assets that deteriorated to that level.

Indicators to transfer

32. As discussed in July, credit risk management is a holistic process that considers all available and supportable information (see paragraph 12 of July IASB

Agenda Paper 7A / FASB Memorandum 100). It is a multi-factor analysis that does not focus on whether one particular indicator changes credit loss expectations. This was confirmed at the Impairment Summit³ where the credit risk managers stated that defining the buckets or supporting the transfer principle with particular types of indicators would *not* be in line with credit analysis. In fact, credit quality is affected by all relevant information. If an indicator is met, that does not necessarily mean that the credit quality has deteriorated. Consider for example a reduction in GDP in major markets of a production company. As this factor might represent a negative impact on the particular company's financial position and on the credit quality of the loan, without further analysis of other relevant credit factors it remains unclear whether a downshift in credit quality would be adequate.

- 33. In addition, credit analysis for different loan types considers different sets of information. For example, borrower performance and credit scores (eg FICO scores) or loan-to-value ratios may be important factors for retail loans. For other loans, such as commercial/wholesale, generally additional criteria are relevant (eg macroeconomic or industry specific information/changes). (See also letter from the Basel Committee on Banking Supervision to IASB/FASB dated on 19 July 2011). This makes it more difficult (although not impossible) to ensure that relevant indicators are provided.
- 34. In further developing the model the staff have continued to consider whether there is a role for indicators as a basis for the transfer between Buckets 1 and 2. For the reasons stated above, the staff continues to be concerned about the practical difficulties of an approach which provides indicators to supplement the principle for transfers between buckets. It would also be open to significant interpretation and inconsistent application and could act as a barrier to the recognition of impairment losses as is apparent in the 'incurred loss' model today. However, while the staff do not think that indicators should determine the point of transfer of themselves they think that the types of examples that have been suggested as indicators reflect factors that should be considered in assessing credit quality. Therefore, the staff think that to help operationalise

³ Meeting held on 1-2 August with mostly credit risk managers. See IASB Agenda Paper 4A,/FASB Memorandum 109.

the transfer principle, to help ensure that the credit analysis applied to underpin the model is sufficiently robust and to increase consistent application, the standard could provide the following:

- (a) examples of the information/factors management should consider in assessing the transfer to Bucket 2 or 3.
- (b) examples based on real life fact patterns.

Information to consider

- 35. The boards have tentatively agreed that all available reasonable and supportable information including forward looking information should be used to determine expected losses.
- 36. Credit risk management systems typically take into account a borrower's current financial condition and paying capacity, the current value and realisability of collateral and other borrower and facility specific characteristics that affect the prospects for collection of principal and interest.
- 37. As new or additional information of relevance about the collectability of loans becomes available, a consistently applied credit risk management process should use such information in assessing credit quality and determining loan loss provisions.
- 38. In providing the examples of information to consider, the staff capitalised on the Basel capital framework and related risk management processes (eg reviewing some regulatory guidance as a starting point for developing the information to consider).
- 39. Thus, the standard could state that the assessment of credit quality should include taking into consideration all reasonable and supportable information that may affect loan collectability (such as industry, geographical, economic, business, financial, legal and political factors), and in addition should include but not be limited to:
 - (i) Historical loss experience and recent economic conditions, as well as current factors, including current market conditions.

- (ii) Changes in lending policies and procedures (eg underwriting standards, collection, charge-off, and recovery practices).
- (iii) Changes in the trend, volume and severity of past due loans and loans graded as low quality, as well as trends in the volume of impaired loans, troubled debt restructurings and other loan modifications.
- (iv) The existence and effect of any concentrations of credit, and changes in the level of such concentrations.

Examples

40. In order to help operationalise the principle, it seems appropriate to include application examples that describe the borrower, its current internal rating, the path of deterioration and the impact on whether or not a transfer to another bucket is appropriate in the specific circumstances provided. The path of deterioration should include the information considered, its impact on the borrower, the impact on the lender's internal credit assessment, the lender's reaction/steps taken as a result of the new credit assessment and its consequences.

Level of the probability of shortfalls in cash flows to be captured in the principle

41. As discussed above in paragraphs 17-19, the staff has been investigating an approach where financial assets should be transferred to Bucket 2 when the probability of default reaches a particular level that is meaningful for the overall assessment of the credit quality of the financial asset. The issue is at what level of deterioration would a transfer be appropriate.

Substantial uncertainty to fully recover cash flows (ie Bucket 1 to 2 transfer based on move at higher end of non-investment grade ratings and equivalent probability of default)

42. As mentioned above, as loans deteriorate in credit quality, the probability of default increases accordingly. A probability of default that indicates *meaningful uncertainty* in respect to the ability to fully recover cash flows is

reached when credit quality changes from being considered a relatively safe investment (for example, with its underlying borrower(s) having a strong revenue and cash flow generating business with low leverage and high debt coverage) to being a more risky investment where adverse business, financial, or economic conditions in conjunction with an increase in leverage, reduction in debt coverage and other credit risk factors could, at a future date, lead to the borrower's inability to meet its financial commitments. Said in other words, the cut off point/spectrum for loans changing from being a relatively safe investment to being a more risky investment is where a loan is viewed as becoming more vulnerable to adverse economic conditions and changing business or financial circumstances which could lead to the inability to fully recover cash flows in the medium to short term.

- 43. An equivalent risk category on an external rating scale for such more risky investments would be the non-investment grade spectrum starting with a BB+ rating (or equivalently Ba1) and going down to CC- (Ca3) or C-(C3) at the lower end of the spectrum.
- 44. S&P and Moody's define the non-investment grade spectrum as loans that have significant speculative characteristics. They further state that "while such obligors will be likely to have some quality and protective characteristics, these may be outweighed by large uncertainties or could be majorly impacted by adverse conditions." (See Moody's and S&P's definitions of rating categories.)
- 45. For those loans at the higher end of the non-investment grade spectrum (ie BB), S&P states that those borrowers would currently have the capacity to meet their financial commitments but are vulnerable in the near term to meet them. They face major ongoing uncertainties and exposure to adverse business, financial or economic conditions which could lead to the borrower's inadequate capacity to meet its contractual cash flows. Moody's describes these loans as being subject to substantial credit risk (see Moody's and S&P's definitions of rating categories).
- 46. As loans move further down the rating scales, they become more vulnerable to non-payment. Loans with a credit rating of B are already considered to have high risk (see Moody's rating definition).

- 47. Loans at the lower end of the spectrum (ie rated at CC) are described as currently highly vulnerable, highly likely to be in, or very near, default and thus dependent upon favourable business, financial and economic conditions to meet its financial commitments. (See Moody's and S&P's definitions of rating categories.)
- 48. To put those descriptive definitions into perspective represented by probability of default numbers, the separation of investment grade to non-investment grade becomes clearer. A typical loan with a five-year maturity in the highest non-investment grade category BB has an average probability of default of 11.5% over the life of the loan. This number increases to 26.5% for B-rated loans and becomes very high with 51.8% for loans rated CCC. In comparison, a five-year loan rated in the lowest investment grade category of BBB shows only an average probability of default of 2%. So there is a clear step-up in risk by a factor of larger 5x going from a 2% PD for BBB investment grade to an 11.5% PD for the next category down (BB) in non-investment grade territory⁴.
- 49. Not all financial assets are rated by the credit rating agencies; nor are all financial assets assigned a 'probability of default'. However, while not all entities use probability of default measures to categorise their financial assets, similar notions are incorporated into systems through for example, regulatory guidelines which focus on the risk of collecting contractual cash flows. For example, US regulatory guidance incorporates similar concepts and classifies those loans with speculative characteristics as 'special mention', 'substandard' and 'doubtful' with 'special mention' being at the higher end of the spectrum.
- 50. 'Special mention' is defined as "having potential weakness that deserve management's close attention. If left uncorrected these potential weaknesses may, at some future date, result in the deterioration of the repayment prospects..." (See 'special mention' of US Banking Agencies Classification definitions.)

⁴ See Moody's Investor Service (2011): Special Comment: Corporate Default and Recovery Rates, 1920-2010, Exhibit 35, p. 33. Note that the default rates in Exhibit 35 are referenced to the specific time from 1983-2010 and could differ if referenced to a different time period. Note also that currently banks typically use 12 months probability of default rates.

- 51. Financial assets at the lower end of the non-investment grade spectrum are characterised as assets where collection or recovery of cash flows in full, on the basis of currently existing facts, conditions, and values, are highly questionable and improbable. (See 'doubtful' classification of US Banking Agencies Classification definitions.)
- 52. Based on the information above, deterioration in credit quality results in substantial uncertainty to fully recover cash flows when a loan changes from being investment grade quality to non-investment grade quality (ie the higher end of the non-investment grade spectrum).
- 53. This may be an appropriate point in time to transfer loans out of Bucket 1 into Bucket 2. Investors make a clear distinction between investment and non-investment grade debt. They consider non-investment grade debt as becoming more speculative and higher in credit risk clearly separating it from investment grade debt in terms of market origination, pricing, liquidity and investor coverage.
- 54. In the context of the model being discussed, some also argue that it is appropriate to use the higher end of the non-investment grade spectrum as the point of transfer to Bucket 2 to reduce the so-called 'cliff effect'. When financial assets are transferred to Bucket 2, the boards are proposing that an allowance for the entire expected losses for that asset should be recognised. If the transfer also coincides with the credit quality of the asset falling to a particular level, the allowance balance will also reflect that increase in credit risk. Therefore two factors (duration and default risk) will act to increase the allowance balance. Those who support the higher end of the non-investment grade spectrum as a line for Bucket 2 argue that moving assets to Bucket 2 when their credit quality is better (ie at a higher cut-off line) reduces this 'cliff effect'. It may also reduce the risk that entities will seek to avoid a transfer if the line is lower because the incremental impact on the impairment allowance is so severe.⁵

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⁵ Note that other constituents do not share this view (see paragraph 59).

- 55. Some believe that there is an interaction with the boards' future discussion on the measurement of the allowance balance for Bucket 1. From the perspective of the adequacy of the allowance balance, an investment/non-investment grade line at the higher end of the non-investment grade spectrum for transfers into Bucket 2 might imply that an allowance balance of 12 months of expected losses for Bucket 1 is sufficient.
- 56. There is also an interaction with the boards' discussion on the treatment of loans on origination or purchase (see IASB Agenda Paper 4B / FASB Memorandum 110). If the line were drawn at this relatively high level of the non-investment grade spectrum the tensions caused by newly originated or purchased loans are heightened. The higher the credit quality at which loans are transferred to Bucket 2 the more financial assets that would be originated or purchased at a credit quality that falls below the line. If the boards decide to require all such loans to have an allowance balance of 12 or 24 months of expected losses, the problem of tracking would be greater than if the line were drawn at a lower level. On the flip side, if the boards decide that even newly recognised financial assets should be classified based on their credit quality, then having the line drawn at this level increases the instances when an allowance balance equal to the lifetime loss is required to be established on newly recognised loans.

Very high uncertainty about the ability to fully recover cash flows (ie Bucket 1 to 2 transfer based on move at lower end of non-investment grade rating and equivalent probability of default)

- 57. Some argue that it is only appropriate to recognise lifetime expected credit losses when loans are at a quality at the lower end of the non-investment grade spectrum, such as when a borrower at the reporting date already shows signs of being vulnerable and reliant on favourable business, financial and economic conditions to meet its financial commitments (in contrast to the situation where they can currently meet them, but are vulnerable or very vulnerable in the near term). An equivalent rating category to this is CCC+.
- 58. Those who support the line being drawn at such a level note that probabilities of default become truly material at such levels which, in their view, creates a

clear distinction in credit quality. They also note that if the line were drawn higher at the non-investment grade level, then a large part of normal lending businesses would fall below this line (for example, most commercial loans are made to obligors that are non-investment grade). They question whether it would be appropriate and whether it would provide meaningful information to book lifetime expected credit losses on such a large portion of their business.

- 59. The group of participants at the Impairment Summit suggested a low threshold (CCC+) because it reflects the shape of the risk curves. For example, Bucket 2, with a low threshold (CCC+) will capture 80-90% of expected loss plus lifetime expected loss. They note that a 'cliff effect' already exists to a certain extent today and were not unduly concerned about the 'cliff effect', assuming the line between Bucket 1 and Bucket 2 is sufficiently low. This is because the lower the line between Bucket 1 and Bucket 2, the smaller the difference between 12 months expected credit losses and lifetime expected credit losses.⁶
- 60. The cliff effect would also be lessened by transfers in both directions between Bucket 1 and Bucket 2, albeit these would be stronger during a change in cycle conditions and will also be influenced by tenor of loans and the value of any security. It was acknowledged that setting the bar too low may have the appearance of appearing as 'too little, too late' even though it is still more forward looking than the incurred loss approach today. None of these approaches will mitigate against cycle effects.
- 61. However at those low levels of credit risk, borrowers are already stressed to distressed, the time to default is typically short (eg about 2 years) and expected non-collectability of cash flows is high.
- 62. As discussed above, some believe that there is an interaction with the boards' future discussion on the measurement of the allowance balance for Bucket 1. From the perspective of the adequacy of the allowance balance, such a low line for transfers into Bucket 2 might imply that an allowance balance of 24 months instead of 12 months of expected losses for Bucket 1 is appropriate.

⁶ Note that this view is in contrast to the view stated by other constituents (see paragraphs 54 and 65).

- 63. Some are concerned that transferring a loan out of Bucket 1 into Bucket 2 based on such credit risk levels would be very close to an incurred loss model and the threshold that is applied today. They question whether this would sufficiently address the 'too little, too late' issue.
- 64. In addition, such a low line between Bucket 1 and Bucket 2 might make it more difficult for the readers of the financial statements to understand the risk contained in Bucket 1. For example, consider a loan with a low credit quality (eg equivalent rating is AA-). The loan deteriorates down to an equivalent rating of BB- over a relatively short time period. Clearly the risk of the loan has increased substantially if newly originated the lender would be likely to price the loan differently, or they might not want to originate the loan at all. Keeping this loan in Bucket 1 would send the wrong signal to investors it is not a low risk and not performing to the same extent anymore even though the BB-credit rating level implies that a potential default is not imminent.
- 65. Finally, some constituents argue that as loans deteriorate, the probability of default increases and thus remaining lifetime losses increase. As a result, they state that generally the later loans are transferred from Bucket 1 to Bucket 2 (ie the lower the credit quality), the bigger the cliff effect. This effect creates an incentive to avoid moving loans into Bucket 2 especially those for which the effects are more pronounced (ie those with lower credit quality).⁷

Request for direction and next steps

- 66. The staff has been investigating a principle that is based on deterioration of credit quality to a particular level. This is because of the operational complexities that arise if the principle were to be grounded on the extent of deterioration in credit risk. In addition deterioration in credit risk might not necessarily imply a meaningful increase in the uncertainty of fully recovering cash flows.
- 67. If the principle is based on deterioration in credit quality to a particular level, the underlying concepts of rating definitions coupled with concepts of

⁷ Note that this view is in contrast to the view stated by other constituents (see paragraph 59).

- regulatory guidance and other credit risk characteristics seem to best reflect this principle. It would have the benefit that it is grounded in credit risk management practices and commonly understood.
- 68. To help operationalise the principle, the standard could provide examples of the information to consider and examples based on real life fact patterns.

Questions to the boards

- Do the boards agree that the staff should further develop a principle for determining allowance balances that is based on deterioration of credit quality to a particular level? If not, what direction would you like us to pursue and why?
- 2. Do the boards agree that the staff should further develop the broad approach of using the underlying concepts and definitions of rating classifications coupled with concepts of regulatory guidance and other credit risk characteristics to describe credit quality? If not, why not?
- 3. Do the boards agree generally that additional information to consider and examples based on real life fact patterns should accommodate the principle to help operationalise it? If not, why not?
- 4. Do the boards have any initial comments on 'where the line should be drawn' to determine the credit quality distinction between Buckets 1 and 2 and/or on the factors they think should be considered in making that determination?

Appendix A

Standard & Poor's (S&P's) long term issue credit ratings

(Source: S&P (2009), General Criteria: Understanding Standard & Poor's Rating Definitions, p. 12-13)

AAA: An obligation rated 'AAA' has the highest rating assigned by Standard & Poor's. The obligor's capacity to meet its financial commitment on the obligation is extremely strong.

AA: An obligation rated 'AA' differs from the highest-rated obligations only to a small degree. The obligor's capacity to meet its financial commitment on the obligation is very strong.

A: An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong.

BBB: An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.

BB, B, CCC, CC, and C:

Obligations rated 'BB', 'B', 'CCC', 'CC', and 'C' are regarded as having significant speculative characteristics. 'BB' indicates the least degree of speculation and 'C' the highest. While such obligations will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions.

BB: An obligation rated 'BB' is less vulnerable to nonpayment than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions, which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.

B: An obligation rated 'B' is more vulnerable to nonpayment than obligations rated 'BB', but the obligor currently has the capacity to meet its financial commitment on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment on the obligation.

CCC: An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.

CC: An obligation rated 'CC' is currently highly vulnerable to nonpayment.

- C: A 'C' rating is assigned to obligations that are currently highly vulnerable to nonpayment, obligations that have payment arrearages allowed by the terms of the documents, or obligations of an issuer that is the subject of a bankruptcy petition or similar action which have not experienced a payment default. Among others, the 'C' rating may be assigned to subordinated debt, preferred stock or other obligations on which cash payments have been suspended in accordance with the instrument's terms or when preferred stock is the subject of a distressed exchange offer, whereby some or all of the issue is either repurchased for an amount of cash or replaced by other instruments having a total value that is less than par.
- D: An obligation rated 'D' is in payment default. The 'D' rating category is used when payments on an obligation are not made on the date due even if the applicable grace period has not expired, unless Standard & Poor's believes that such payments will be made during such grace period. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of similar action if payments on an obligation are jeopardized. An obligation's rating is lowered to 'D' upon completion of a distressed exchange offer, whereby some or all of the issue is either repurchased for an amount of cash or replaced by other instruments having a total value that is less than par.

Moody's long term corporate obligation ratings

(Source: Moody's Investors Service (2009), Moody's Rating Symbols & Definitions, p. 8)

- **Aaa** Obligations rated Aaa are judged to be of the highest quality, with minimal credit risk.
- **Aa** Obligations rated Aa are judged to be of high quality and are subject to very low credit risk.
- **A** Obligations rated A are considered upper-medium grade and are subject to low credit risk.
- **Baa** Obligations rated Baa are subject to moderate credit risk. They are considered medium grade and as such may possess certain speculative characteristics.
- **Ba** Obligations rated Ba are judged to have speculative elements and are subject to substantial credit risk.
- **B** Obligations rated B are considered speculative and are subject to high credit risk.
- **Caa** Obligations rated Caa are judged to be of poor standing and are subject to very high credit risk.
- Ca Obligations rated Ca are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest.
- C Obligations rated C are the lowest rated class of bonds and are typically in default, with little prospect for recovery of principal or interest.

Note: Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category.

The supervisory categories currently used by the US Banking agencies:

Special Mention: A 'special mention' asset has potential weaknesses that deserve management's close attention. If left uncorrected, these potential weaknesses may result in deterioration of the repayment prospects for the asset or in the institution's credit position at some future date. Special mention assets are not adversely classified and do not expose an institution to sufficient risk to warrant adverse classification.

Substandard: A 'substandard' asset is inadequately protected by the current sound worth and paying capacity of the obligor or by the collateral pledged, if any. Assets so classified must have a well-defined weakness, or weaknesses that jeopardize the liquidation of the debt. They are characterized by the distinct possibility that the institution will sustain some loss if the deficiencies are not corrected.

Doubtful: An asset classified 'doubtful' has all the weaknesses inherent in one classified substandard with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently known facts, conditions, and values, highly questionable and improbable.

Loss: An asset classified 'loss' is considered uncollectible, and of such little value that its continuance on the books is not warranted. This classification does not mean that the asset has absolutely no recovery or salvage value, but rather it is not practical or desirable to defer writing off this basically worthless asset even though partial recovery may be affected in the future.

Appendix B

(Source: Moody's Investor Service (2011): Special Comment: Corporate Default and Recovery Rates 1920-2010, Exhibit 35 on p. 33 and p. 60)

| ODY'S INVEST | ORS SERVICE | | | No. | | | GLOBAL CORPORATE FINANCE | | | |
|--------------|--------------|-------------|--------------|--------------|-----------------|--------|--------------------------|----------|--------|------|
| | | | | | | • | | | | |
| CHIBIT 35 | <u>;</u> | | | | | | 7 | | | |
| verage Cum | ulative Issu | er-Weighted | l Global Del | fault Rates, | 1983-2010 | k | | | | |
| Rating | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| Aaa | 0 | 0.016 | 0.016 | 0.048 | 0.086 | 0.132 | 0.182 | 0.186 | 0.186 | 0.1 |
| Aa | 0.023 | 0.066 | 0.116 | 0.202 | 0.291 | 0.351 | 88£.0 | 0.419 | 0.447 | 0.5 |
| A | 0.062 | 0.2 | 0.414 | 0.623 | 0.853 | 1.099 | 1.371 | 1.677 | 1.969 | 2.7 |
| Baa | 0.202 | 0.561 | 0.998 | 1.501 | 2.06 | 2,636 | 3.175 | 3.71 | 4.26 | 4 |
| Ba | 1.197 | 3.437 | 6.183 | 9.067 | 11.51 | 13,757 | 15.76 | 17.679 | 19.526 | 21.3 |
| В | 4.466 | 10.524 | 16.526 | 21.774 | 26.524 | 31.034 | 35.301 | 39.032 | 42.312 | 45. |
| Caa | 15.529 | 27.592 | 37.251 | 45.146 | 51.803 | 56.26 | 59.232 | 62.759 | 67.199 | 73.0 |
| Ca-C | 38.739 | 50.58 | 59.678 | 66.353 | 71,652 | 73.385 | 75.92 | 78.884 | 78.884 | 78.5 |
| Inv Grade | 0.095 | 0,274 | 0.508 | 0.769 | 1.054 | 1.343 | 1.622 | 1.907 | 2.185 | 2. |
| Spec Grade | 4.944 | 10.195 | 15,233 | 19.671 | 23.477 | 26.82 | 29.79 | 32.433 : | 34.804 | 39. |
| All rated | 1.819 | 3.717 | 5.485 | 6.988 | 8.241 | 9.303 | 10.212 | 11,006 | 11.706 | 12. |
| Rating | 11 | 12 | 13 | .74 | 15 | 16 | Ş. 17 | 18 | 19 | |
| Aaa | 0.186 | 0.186 | 0.186 | 0.186 | 0.186 | 0.186 | 0.186 | 0.186 | 0.186 | 0 |
| Aa | 0.586 | 0.722 | 0.869 | 0.993 | 1.126 | 1.262 | 1.445 | 1.763 | 2.268 | 2 |
| Α | 2.449 | 2.673 | 2.934 | 3.241 | 3.633 | 4.125 | 4.762 | 5.519 | 6.104 | 6 |
| Baa | 5.541 | 6.225 | 7.079 | 8.004 | 8.881 | 9.845 | 10.738 | 11.492 | 12.165 | 1 |
| Ba | 23.033 | 24.843 | 26.653 | 28.663 | 30 <i>.</i> 722 | 32,449 | 33.992 | 35.325 | 37.036 | 38 |
| В | 47.76 | 50.361 | 52.884 | 55.42 | 57.456 | 58.903 | 60,602 | 62.768 | 64.315 | 65 |
| Caa | 77.147 | 77.369 | 77.369 | 77.369 | 79.539 | 83.436 | 84.472 | 84.472 | 84.472 | 84 |
| Ca-C | 78.884 | 78.884 | 78.884 | 78.884 | 78.884 | | | ····· | | |
| inv Grade | 2.75 | 3.045 | 3.394 | 3.768 | 4.167 | 4.627 | 5.14 | 5.703 | 6.222 | • |
| Spec Grade | 38.877 | 40.781 | 42.631 | 44.574 | '46.411 | 47.908 | 49.294 | 50.636 | 52.066 | 53 |
| All rated | 12.918 | 13.48 | 14.056 | 14.653 | 15,245 | 15.829 | 16.435 | 17.074 | 17.688 | - 18 |

^{*}Data in percent

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SPECIAL COMMENT: CORPORATE DEFAULT AND RECOVERY RATES, 1920-2010

Guide to Data Tables and Charts

Exhibits 33 through 37 show issuer-weighted historical average default rates by rating category over various investment horizons. These data were generated by averaging the multi-year default rates of cohorts formed at monthly intervals. In addition to their being statements of historical fact, these data are also useful proxies for expected default rates. For example, over a five-year period a portfolio of Brated issuers defaulted at a 26.5% average rate between 1983 and 2010 (see Exhibit 35). For an investor with a five-year exposure to a B-rated debt obligation or counterparty, this estimate also happens to be the best estimate of the expected risk of default for a B-rated exposure based on the available historical data, particularly over long investment horizons.