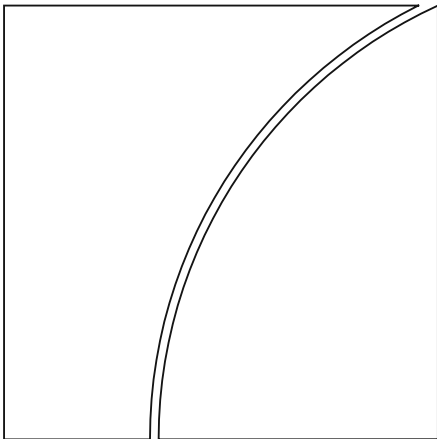# Basel Committee on Banking Supervision

Guidance on credit risk and accounting for expected credit losses

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BANK FOR INTERNATIONAL SETTLEMENTS

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Guidance on credit risk and accounting for expected credit losses

Principles underlying this document

This supervisory guidance is structured around 11 principles.

Supervisory guidance for credit risk and accounting for expected credit losses

Principle 1: A bank's board of directors (or equivalent) and senior management are responsible for ensuring that the bank has appropriate credit risk practices, including an effective system of internal control, to consistently determine adequate allowances in accordance with the bank's stated policies and procedures, the applicable accounting framework and relevant supervisory guidance.

Principle 2: A bank should adopt, document and adhere to sound methodologies that address policies, procedures and controls for assessing and measuring credit risk on all lending exposures. The measurement of allowances should build upon those robust methodologies and result in the appropriate and timely recognition of expected credit losses in accordance with the applicable accounting framework.

Principle 3: A bank should have a credit risk rating process in place to appropriately group lending exposures on the basis of shared credit risk characteristics.

Principle 4: A bank's aggregate amount of allowances, regardless of whether allowance components are determined on a collective or an individual basis, should be adequate and consistent with the objectives of the applicable accounting framework.

Principle 5: A bank should have policies and procedures in place to appropriately validate models used to assess and measure expected credit losses.

Principle 6: A bank's use of experienced credit judgment, especially in the robust consideration of reasonable and supportable forward-looking information, including macroeconomic factors, is essential to the assessment and measurement of expected credit losses.

Principle 7: A bank should have a sound credit risk assessment and measurement process that provides it with a strong basis for common systems, tools and data to assess credit risk and to account for expected credit losses.

Principle 8: A bank's public disclosures should promote transparency and comparability by providing timely, relevant and decision-useful information.

Supervisory evaluation of credit risk practices, accounting for expected credit losses and capital adequacy

Principle 9: Banking supervisors should periodically evaluate the effectiveness of a bank's credit risk practices.

Principle 10: Banking supervisors should be satisfied that the methods employed by a bank to determine accounting allowances lead to an appropriate measurement of expected credit losses in accordance with the applicable accounting framework.

Principle 11: Banking supervisors should consider a bank's credit risk practices when assessing a bank's capital adequacy.

This paper is intended to set out supervisory guidance on accounting for expected credit losses that does not contradict applicable accounting standards established by standard setters.[1] Representatives of the International Accounting Standards Board (IASB) have been provided with the opportunity to comment on this document and have not identified any aspects of it that would prevent a bank from meeting the impairment requirements of *International Financial Reporting Standard (IFRS) 9 Financial Instruments*.

Introduction

Objective

1.   The objective of this paper is to set out supervisory guidance on sound credit risk practices associated with the implementation and ongoing application of expected credit loss (ECL) accounting frameworks. The scope of credit risk practices for this guidance is limited to those practices affecting the assessment and measurement of expected credit losses and allowances under the applicable accounting framework. As used in this paper, the term "allowances" includes allowances on loans, and allowances or provisions on loan commitments and financial guarantee contracts.[2]

2.   In June 2006, the Basel Committee on Banking Supervision ("the Committee") issued supervisory guidance on *Sound credit risk assessment and valuation for loans* to address how common data and processes may be used for credit risk assessment, accounting and capital adequacy purposes and to highlight provisioning concepts that are consistent in prudential and accounting frameworks.[3] This document replaces the Committee's June 2006 guidance.

3.   This paper provides banks with supervisory guidance on how the ECL accounting model should interact with a bank's overall credit risk practices and regulatory framework, but does not endeavour to set out regulatory capital requirements on expected loss provisioning under the Basel capital framework.[4]

4.   The Committee has issued separate papers on a number of related topics in the area of credit risk, including credit risk modelling and credit risk management. Banking supervisors have a natural interest in promoting the use of sound and prudent credit risk practices by banks. Experience indicates that a significant cause of bank failures is poor credit quality and deficient credit risk assessment and measurement practices. Failure to identify and recognise increases in credit risk in a timely manner can aggravate and prolong the problem. Inadequate credit risk policies and procedures may lead to delayed recognition and measurement of increases in credit risk, which affects the capital adequacy of banks and hampers the proper assessment and control of a bank's credit risk exposure. The bank risk management function's involvement in the assessment and measurement of accounting ECL is essential to ensuring adequate allowances in accordance with the applicable accounting framework.

5.   Historically, the incurred-loss model served as the basis for accounting recognition and measurement of credit losses and was implemented with significant differences from jurisdiction to jurisdiction, and among banks within the same jurisdiction, due to the development of national, regional

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[1]   As of the date of publication of this guidance, the US Financial Accounting Standards Board (FASB), which establishes the accounting principles generally accepted in the United States, had not issued its final accounting standard on expected credit losses. The FASB issued its proposed standard on expected credit losses in December 2012, and the tentative decisions determined by its board during redeliberations are published on its website.

[2]   See paragraphs 10–11 for further discussion on scope.

[3]   Available at www.bis.org/publ/bcbs126.pdf.

[4]   Available at www.bis.org/publ/bcbs189.pdf.

and entity-specific practices. In revising its 2006 guidance on the verge of a global transition to ECL accounting frameworks, the Committee emphasises the importance of high-quality, robust and consistent implementation of applicable ECL accounting frameworks, both within and across all jurisdictions. With regard to consistency, the Committee recognises that differences exist between ECL accounting frameworks across jurisdictions. This guidance does not intend to drive convergence between different accounting frameworks when differences exist between these frameworks – for example, by requiring or prohibiting lifetime ECL measurement at initial recognition of a lending exposure. This guidance does aim to drive consistent interpretations and practices where there are commonalities across accounting frameworks and when the same accounting framework is applied.

6.   The move to ECL accounting frameworks by accounting standard setters is an important step forward in resolving the weakness identified during the financial crisis that credit loss recognition was too little, too late. The development of ECL accounting frameworks is also consistent with the April 2009 call by the G20 Leaders for accounting standard setters to "strengthen accounting recognition of loan loss provisions by incorporating a broader range of credit information".[5]

7.   This paper sets out supervisory guidance for ECL accounting that does not contradict the applicable accounting standards established by accounting standard setters. Rather, the paper presents the Committee's view of the appropriate application of those standards.

8.   The guidance in the main section of this paper is equally applicable under all ECL accounting frameworks. For jurisdictions in which ECL accounting frameworks are not required, the Committee expects that the relevant aspects of this guidance related to sound credit risk practices will be applied, as far as appropriate, within the context of the applicable accounting framework. An appendix is included that relates to IFRS 9 as issued by the IASB, which describes supervisory guidance specific to jurisdictions applying the IFRS 9 ECL requirements.

9.   Recognising that banks may have well established regulatory capital models for the measurement of expected losses, these models may be used as a starting point for estimating ECL for accounting purposes; however, regulatory capital models may not be directly usable in the measurement of accounting ECL due to differences between the objectives of and inputs used for each of these purposes. For example, the Basel capital framework's expected loss calculation for regulatory capital, as currently stated, differs from accounting ECL in that the Basel capital framework's probability of default may be through the cycle and is based on a 12-month time horizon. Additionally, loss-given-default in the Basel capital framework reflects downturn economic conditions. This guidance does not set out any additional requirements regarding the determination of expected loss for regulatory capital purposes. [6]

Scope[7]

10.   The focus of this guidance is on lending exposures – that is, loans, loan commitments and financial guarantee contracts to which an ECL framework applies. The Committee expects that a bank will estimate ECL for all lending exposures.

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[5]   Available at www.g20.org.

[6]   The Committee's guidance on *Principles for effective risk data aggregation and risk reporting* (available at www.bis.org/publ/bcbs239.pdf) recommends that risk data be reconciled with a bank's primary sources, including accounting data where appropriate, to ensure that the risk data are accurate.

[7]   It should be noted that the scope of this guidance is narrower than the scope of the impairment requirements under the applicable accounting framework.

11.   The paper also provides guidelines for supervisors on evaluating the effectiveness of a bank's credit risk practices, policies, processes and procedures that affect allowance levels.

Application

12.   Principles 17 and 18 of the Core Principles for Effective Banking Supervision (Basel Core Principles)[8] emphasise that banks must have an adequate credit risk management process, including prudent policies and processes to identify, measure, evaluate, monitor, report and control or mitigate credit risk on a timely basis, and covering the full credit life cycle (credit underwriting, credit evaluation and the ongoing management of the bank's portfolios). Additionally, adequate policies and processes must be in place for the timely identification and management of problem assets and the maintenance of adequate provisions and reserves in accordance with the applicable accounting framework.

13.   While the implementation of ECL accounting frameworks may require an investment in both resources and system developments/upgrades, standard setters have given (or are expected to give) firms a considerable time period to transition to the updated accounting requirements. On that basis, the Committee has significantly heightened supervisory expectations that internationally active banks will have a high-quality implementation of an ECL accounting framework.

The discipline of credit risk assessment and measurement

14.   The Committee expects a disciplined, high-quality approach to the assessment and measurement of ECL under the applicable accounting framework. The recommendations herein should be read holistically with the understanding that the examples provided are not all-inclusive and that a checklist approach to applying this guidance is not intended. For example, the guidance does not set out principles and expectations targeted at specific categories of loans such as corporate, retail and project finance. The Committee understands that credit risk management practices and information available to banks will vary to a certain extent depending on the type of lending exposure. In this regard, certain aspects of the guidance may be more applicable to the individual credit assessment of a large corporate borrower while other aspects may be more relevant to collective assessments of a particular group of retail customers. The principles and the expectations within the guidance should be read in such a context.

Application of proportionality, materiality and symmetry

15.   Consistent with the Basel Core Principles, the Committee recognises that supervisors may adopt a proportionate approach with regard to the standards that supervisors impose on banks and the conduct of supervisors in the discharge of their own responsibilities. The use of properly designed proportionate approaches should not jeopardise the high-quality implementation of the ECL accounting frameworks; rather, their use should enable banks to adopt sound allowance methodologies commensurate with the size, complexity, structure, economic significance, risk profile and, more generally, all other relevant facts and circumstances of the bank and the group (if any) to which it belongs.

16.   Due consideration should also be given to the application of the principle of materiality. However, this should not result in individual exposures or portfolios being considered immaterial if, cumulatively, these represent a material exposure to the bank. In addition, materiality should not be assessed only on the basis of the potential impact on the profit or loss statement at the reporting date. For instance, large portfolio(s) of high-quality credit exposures should be considered material.

17.   When, because of considerations relating to proportionality or materiality, a bank chooses to adopt an approach to ECL estimation that would generally be regarded as an approximation to "ideal"

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[8]   Available at www.bis.org/publ/bcbs230.pdf.

measures, it is important that such approximation methods are designed and implemented so as to avoid bias.

18. As banking supervisors are primarily interested in preserving the stability of the financial system and protecting deposit holders, this guidance emphasises the timely recognition of allowances, so that the recognition of credit deterioration is not delayed. Nevertheless, the Committee recognises that ECL accounting frameworks are symmetrical in the way that subsequent changes (both deteriorations and reversals of those deteriorations) in the credit risk profile of a debtor should be considered in the measurement of the allowances.

Reasonable and supportable information

19. The Committee notes that banks are required to consider a wide range of information when applying ECL accounting models. Information considered should be relevant to the assessment and measurement of credit risk to the particular lending exposure being assessed and should include information about past events, current conditions and forecasts of future economic conditions. Information which is ultimately included in the assessment of credit risk and measurement of ECL should also be reasonable and supportable. Banks should use their experienced credit judgment in determining the range of relevant information that should be considered and in determining whether information is considered to be reasonable and supportable.

Reasonable and supportable information should be understood as information based on relevant facts and sound judgment. See Principle 6 for further guidance on a bank's use of experienced credit judgment in the consideration of relevant and reasonable and supportable information, including forward-looking information.

Consideration of forward-looking information

20. Consideration of forward-looking information, including macroeconomic factors, is a distinctive feature of ECL accounting frameworks and is critical to the timely recognition of ECL. Banks will have to employ sound judgment consistent with generally accepted methods for economic analysis and forecasting. As credit risk management is a core competence of banks, the Committee expects that a bank's consideration of forward-looking information will be supported by a sufficient set of data. The extent to which forward-looking information, including macroeconomic factors, has already been integrated into existing methodologies will differ by bank. For example, some banks might already have point-in-time methodologies that have incorporated forward-looking information and different potential scenarios, while others may not. Enhancements might be needed in both cases, but it is likely that they will be particularly needed in the latter case.

21. The Committee does not view the unbiased consideration of forward-looking information as speculative and expects management to apply its experienced credit judgment to consider future scenarios and to take into account the potential consequences of events occurring or not occurring and the resulting impact on the measurement of ECL. Appropriate oversight and an effective internal control system should help to ensure that bias is not introduced in the ECL assessment and measurement process.

22. As noted in paragraph 19, all information considered should be relevant to the assessment and measurement of credit risk and reasonable and supportable. Banks should be able to demonstrate how they have considered such information in the ECL assessment and measurement process. Information should not be excluded from that process simply because an event has a low likelihood of occurring or the effect of that event on the credit risk or the amount of expected credit losses is uncertain. The Committee acknowledges that, in certain circumstances, information relevant to the assessment and measurement of credit risk may not be reasonable and supportable and should therefore be excluded from the ECL assessment and measurement process. However, in the Committee's view, these circumstances would be exceptional in nature, and the Committee expects banks to provide a clearly documented, robust justification.

In the Committee's view, the information used shall include an unbiased consideration of relevant factors and their impact on creditworthiness and cash shortfalls. Relevant factors include those intrinsic to the bank and its business or derived from external conditions.

Supervisory guidance for credit risk and accounting for expected credit losses

23.   The fundamental concepts described below provide supervisory guidance on how banks should utilise common elements of the credit risk management process to allow for high-quality and robust assessments and measurements of ECL. These concepts also promote consistency in the assessment and measurement of credit risk, development of accounting estimates and assessments of capital adequacy.

Principle 1 – Board and management responsibilities

A bank's board of directors[9] (or equivalent) and senior management are responsible for ensuring that the bank has appropriate credit risk practices, including an effective system of internal control, to consistently determine adequate allowances in accordance with the bank's stated policies and procedures, the applicable accounting framework and relevant supervisory guidance.

24.   Consistent with Basel Core Principle 17, a bank's board of directors (board[10]) or equivalent (for jurisdictions that do not have boards) is responsible for approving and regularly reviewing a bank's credit risk management strategy and significant policies and processes for identifying, measuring, evaluating, monitoring, reporting and mitigating credit risk consistent with the approved risk appetite set by the board. In addition, to limit the risk that lending exposures pose to depositors and, more generally, financial stability, the Committee expects that a bank's board will require senior management to adopt and adhere to sound practices with respect to sound underwriting.[11]

25.   To fulfil these responsibilities, the board should instruct senior management to develop and maintain appropriate processes, which should be systematic and consistently applied, to determine appropriate allowances. The board should also require senior management to report periodically the results of the credit risk assessment and measurement processes, including estimates of its ECL allowances. Senior management should establish, implement and, as necessary, update suitable policies and procedures to communicate the credit risk assessment and measurement process internally to all relevant personnel. Senior management is in turn responsible for implementing the credit risk strategy approved by the board and developing the aforementioned policies and processes.

26.   An effective internal control system for credit risk assessment and measurement is essential to enabling senior management to carry out its duties. An effective internal control system should include:

(a)   measures to comply with applicable laws, regulations, internal policies and procedures;

(b)   measures to provide oversight of the integrity of information used and reasonably ensure that the allowances reflected in the bank's financial statements and its supervisory reports are

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[9]   See the Committee's guidance on *Corporate governance principles for banks* (available at www.bis.org/bcbs/publ/d328.pdf) for further discussion on the role of the board.

[10]   The board may delegate its responsibilities to a committee of the board, which should maintain appropriate records of its deliberations and decisions and report to the full board.

[11]   The Financial Stability Board's *Principles for sound residential mortgage underwriting practices* of April 2012 aim to provide a framework for jurisdictions when setting minimum acceptable underwriting standards for real estate lending exposures; available at www.financialstabilityboard.org/publications/r_120418.pdf.

prepared in accordance with the applicable accounting framework and relevant supervisory guidance;

(c)   well defined credit risk assessment and measurement processes that are independent from (while taking appropriate account of) the lending function, which contain:

- an effective credit risk rating system that is consistently applied, accurately grades differing credit risk characteristics, identifies changes in credit risk on a timely basis, and prompts appropriate action;

- an effective process which ensures that all relevant and reasonable and supportable information, including forward-looking information, is appropriately considered in assessing and measuring ECL. This includes maintaining appropriate reports, details of reviews performed, and identification and descriptions of the roles and responsibilities of the personnel involved;

- an assessment policy that ensures ECL measurement occurs not just at the individual lending exposure level but also when necessary to appropriately measure ECL at the collective portfolio level by grouping exposures based on identified shared credit risk characteristics;[12]

- an effective model validation process to ensure that the credit risk assessment and measurement models are able to generate accurate, consistent and unbiased predictive estimates on an ongoing basis. This includes establishing policies and procedures which set out the accountability and reporting structure of the model validation process, internal standards for assessing and approving changes to the models, and reporting of the outcome of the model validation;[13]

- clear formal communication and coordination among a bank's credit risk staff, financial reporting staff, senior management, the board and others who are involved in the credit risk assessment and measurement process for an ECL accounting framework, as applicable (eg evidenced by written policies and procedures, management reports and committee minutes); and

(d)   an internal audit function[14] that independently evaluates the effectiveness of the bank's credit risk assessment and measurement systems and processes, including the credit risk rating system.

Principle 2 – Sound ECL methodologies

A bank should adopt, document and adhere to sound methodologies that address policies, procedures and controls for assessing and measuring credit risk on all lending exposures. The measurement of allowances should build upon those robust methodologies and result in the appropriate and timely recognition of expected credit losses in accordance with the applicable accounting framework.

27   The credit risk assessment and measurement process, underscored by sound credit risk methodologies, provides the relevant information for senior management to make its experienced judgments about the credit risk of lending exposures, and the related estimation of ECL.

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[12]   See Principle 3 on the grouping of lending exposures on the basis of shared credit risk characteristics and Principle 4 on the adequacy of the allowance regardless of the nature of the assessment.

[13]   See Principle 5 on the policies and procedures to appropriately validate internal credit risk assessment and measurement models.

[14]   See the Committee's guidance on *The internal audit function in banks* (available at www.bis.org/publ/bcbs223.pdf) for further discussion on the responsibilities of the internal audit function.

28.   The Committee expects banks to leverage and integrate common processes that are used within a bank to determine if, when and on what terms credit should be granted; monitor credit risk; and measure allowances for both accounting and capital adequacy purposes. Using common underlying processes (ie systems, tools and data) across a bank to the maximum extent feasible could reduce cost and potential bias and also encourage consistency in the measurement, management and reporting of credit risk and ECL.

29.   A bank's allowance methodologies should clearly document the definitions of key terms related to the assessment and measurement of ECL (such as loss and migration rates, loss events and default). Where different terms, information or assumptions are used across functional areas (such as accounting, capital adequacy and credit risk management), the underlying rationale for these differences should be documented and approved by senior management.[15] Information and assumptions used for ECL estimates should be reviewed and updated as required by the applicable accounting framework. Moreover, the rationale for changes in assumptions that affect the measurement of ECL should be well documented.

30.   In accordance with Basel Core Principle 17, the Committee expects banks to have in place adequate processes and systems to appropriately identify, measure, evaluate, monitor, report and mitigate the level of credit risk. During the transition to the relevant new accounting standard, existing processes and systems should be evaluated and, if necessary, modified to collect and analyse relevant information affecting the assessment and measurement of ECL.

31.   A bank should adopt and adhere to written policies and procedures detailing the credit risk systems and controls used in its credit risk methodologies and the separate roles and responsibilities of the bank's board and senior management. Although this is not an all-inclusive list, robust and sound methodologies for assessing credit risk and measuring the level of allowances (subject to exposure type, eg retail or wholesale) generally will:

(a)   include a robust process that is designed to equip the bank with the ability to know the level, nature and drivers of credit risk upon initial recognition of the lending exposure to ensure that subsequent changes in credit risk can be identified and quantified;

(b)   include criteria to duly consider the impact of forward-looking information, including macroeconomic factors.[16] Whether the evaluation of credit risk is conducted on a collective or individual basis, a bank must demonstrate that this consideration has occurred so that the recognition of ECL is not delayed. Such criteria should result in the identification of factors that affect repayment, whether related to borrower incentives, willingness or ability to perform on the contractual obligations, or lending exposure terms and conditions. Economic factors considered (such as unemployment rates or occupancy rates) must be relevant to the assessment and, depending on the circumstances, this may be at the international, national, regional or local level;

(c)   include, for collectively evaluated exposures, a description of the basis for creating groups of portfolios of exposures with shared credit risk characteristics;[17]

(d)   identify and document the ECL assessment and measurement methods (such as a loss rate method, probability of default (PD)/loss-given-default (LGD) method, or another method) to be applied to each exposure or portfolio;

(e)   document the reasons why the selected method is appropriate, especially if different ECL measurement methods are applied to different portfolios and types of individual exposures. A

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[15]   The Committee's guidance on *Principles for effective risk data aggregation and risk reporting* recommends that risk data are reconciled with a bank's primary sources, including accounting data where appropriate, to ensure that the risk data are accurate. See www.bis.org/publ/bcbs239.pdf.

[16]   See Principle 6 for guidance on developing estimates that incorporate forward-looking information.

[17]   See Principle 3 for guidance on grouping lending exposures on the basis of shared credit risk characteristics.

bank should be able to explain to its supervisors the rationale for any changes in measurement approach (eg a move from a loss rate method to a PD/LGD method) and the quantitative impacts of such changes;

(f)   document the inputs, data and assumptions used in the allowance estimation process (such as historical loss rates, PD/LGD estimates and economic forecasts), how the life of an exposure or portfolio is determined (including how expected prepayments and defaults have been considered), the time period over which historical loss experience is evaluated, and any adjustments necessary for the estimation of ECL in accordance with the applicable accounting framework. For example, if current and forecasted economic conditions are different from those that existed during the historical estimation period being used, adjustments that are directionally consistent with those differences should be made. In addition, a bank may have experienced little to no actual losses in the historical period analysed; however, current or forward-looking conditions can differ from conditions during the historical period, and the impact of these changes on ECL should be assessed and measured;

(g)   include a process for evaluating the appropriateness of significant inputs and assumptions in the ECL assessment and measurement method chosen. The Committee expects that the basis for inputs and assumptions used in the estimation process will generally be consistent from period to period. Where inputs and assumptions change, the rationale should be documented;

(h)   identify the situations that would generally lead to appropriate changes in ECL measurement methods, inputs or assumptions from period to period (eg the bank may state that a loan that had been previously evaluated on a collective basis using a PD/LGD method may be removed and evaluated individually using the discounted cash flow method upon receipt of new, borrower-specific information such as the loss of employment);

(i)   consider the relevant internal and external factors that may affect ECL estimates, such as the underwriting standards applied to a lending exposure at origination and changes in industry, geographical, economic and political factors;

(j)   address how ECL estimates are determined (eg historical loss rates or migration analysis as a starting point, adjusted for information on current and expected conditions). A bank should have an unbiased view of the uncertainty and risks in its lending activities when estimating ECL;

(k)   identify what factors are considered when establishing appropriate historical time periods over which to evaluate historical loss experience. A bank should maintain sufficient historical loss data (ideally over at least one full credit cycle) to provide a meaningful analysis of its credit loss experience for use as a starting point when estimating the level of allowances on a collective or individual basis;

(l)   determine the extent to which the value of collateral and other credit risk mitigants affects ECL;

(m)   outline the bank's policies and procedures on write-offs and recoveries;

(n)   require that analyses, estimates, reviews and other tasks/processes that are inputs to or outputs from the credit risk assessment and measurement process are performed by competent and well trained personnel and validated by personnel who are independent of the bank's lending activities. These inputs to and outputs from these functions must be well documented, and the documentation should include clear explanations supporting the analyses, estimates and reviews;

(o)   document the methods used to validate models for ECL measurement (eg backtests);[18]

(p)   ensure that ECL estimates appropriately incorporate forward-looking information, including macroeconomic factors, that has not already been factored into allowances measured on an

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[18]   See Principle 5 on model validation.

individual exposure basis. This may require management to use its experienced credit judgment to consider broad trends in the entire lending portfolio, changes in the bank's business model, macroeconomic factors etc; and

(q)   require a process to assess the overall adequacy of allowances in accordance with the relevant accounting requirements.

32.   A bank's credit risk identification process should ensure that factors that impact changes in credit risk and estimates of ECL are properly identified on a regular basis. Also, consideration of credit risk inherent in new products and activities should be a key part of the risk identification process and the assessment and measurement of ECL.

33.   Consistent with sound model development practices, management should consider relevant facts and circumstances, including forward-looking information, that are likely to cause ECL to differ from historical experience and that may affect credit risk and the full collectability of cash flows.

34.   With respect to factors related to the character, capacity and capital of borrowers, the terms of lending exposures and the values of assets pledged as collateral together with other credit risk mitigants that may affect the full collectability of cash flows, a bank could (depending on the type of exposure) consider:

(a)   its lending policies and procedures, including its underwriting standards and lending terms, that were in effect upon initial recognition of the borrower's loan, and whether the loan was originated as an exception to this policy. A bank's lending policy should include details of its underwriting standards, and guidelines and procedures that drive the bank's lending approval process;

(b)   a borrower's sources of recurring income available to meet the scheduled payments;

(c)   a borrower's ability to generate a sufficient cash flow stream over the term of the financial instrument;

(d)   the borrower's overall leverage level and expectations of changes to leverage;

(e)   unencumbered assets the borrower may pledge as collateral in the market or bilaterally in order to raise funds and expectations of changes to the value of those assets;

(f)   reasonably possible one-off events and recurring behaviour that may affect the borrower's ability to meet contractual obligations; and

(g)   timely evaluations of collateral value and consideration of factors that may impact the future value of collateral (bearing in mind that collateral values directly affect estimates of loss-given-default).

35.   Where they have the potential to affect the bank's ability to recover amounts due, factors relating to the bank's business model and current and forecasted macroeconomic conditions could be considered, such as:

(a)   competition and legal and regulatory requirements;

(b)   trends in the institution's overall volume of credit;

(c)   the overall credit risk profile of the institution's lending exposures and expectations of changes thereto;

(d)   credit concentrations to borrowers or by product type, segment or geographical market;

(e)   expectations on collection, charge-off and recovery practices;

(g)   the quality of the bank's credit risk review system and the degree of oversight by the bank's senior management and board;

(h)   other factors that may impact ECL such as, but not limited to, expectations of changes in unemployment rates, gross domestic product, benchmark interest rates, inflation, liquidity conditions or technology; and

(i)   the incentives or willingness of borrowers to meet their obligations.

36.   Robust methodologies should consider different potential scenarios and should not rely purely on subjective, biased or overly optimistic considerations. A bank should develop and document its process to generate relevant scenarios to be used in the estimation of ECL. In particular:

(a)   the bank should demonstrate and document how ECL estimates would alter with changes in scenarios, including changes to relevant external conditions that may impact ECL estimates or components of the ECL calculation (such as PD and LGD parameters);

(b)   the bank should have a documented process for determining the time horizon of the scenarios and, if relevant, how ECL is estimated for exposures whose lives exceed the period covered by the economic forecast(s) used;

(c)   scenarios may be internally developed or vendor-defined. For internally developed scenarios, a bank should have a variety of experts, such as risk experts, economists, business managers and senior management, assist in the selection of scenarios that are relevant to the bank's credit risk exposure profile. For vendor-defined scenarios, a bank should ensure that the vendor tailors the scenarios to reflect the bank's business and credit risk exposure profile, as the bank remains responsible for those scenarios;

(d)   backtesting should be performed to ensure that the most relevant economic factors that affect collectability and credit risk are being considered and incorporated into ECL estimates; and

(e)   where market indicators of future performance (such as credit default swap spreads) are available, management may consider them to be a valid benchmark against which to check the consistency of its own judgments.

37.   While a bank need not necessarily identify or model every possible scenario through scenario simulations, the Committee expects it to consider all reasonable and supportable information that is relevant to the product, borrower, business model or economic and regulatory environment when developing estimates of ECL. In developing such estimates for financial reporting purposes, a bank should consider the experience and lessons from similar exercises it has conducted for regulatory purposes, although the Committee recognises that stressed scenarios developed for industry-wide supervisory purposes are not intended to be used directly for accounting purposes. Forward-looking information, including economic forecasts and related credit risk factors used for ECL estimates, should be consistent with inputs to other relevant estimates within the financial statements, budgets, strategic and capital plans, and other information used in managing and reporting on the bank.

38.   Bank management should be able to demonstrate that it understands and is appropriately considering inherent risks when pricing lending exposures. Post-initial recognition increases in credit risk require a bank to reassess ECL and re-measure the amount of the allowance that should be recognised in accordance with the applicable accounting framework. Examples of fact patterns potentially indicative of inadequate estimates of ECL include:

(a)   the granting of credit to borrowers based on fragile income streams (that could become non-recurrent upon a downturn) or with no documentation or limited verification of borrower income sources;

(b)   high debt service requirements relative to the borrower's net available expected cash flows;

(c)   flexible repayment schedules, including payment vacations, interest-only payments (eg bullet loans) and negative amortisation features;

(d)   for real estate and other asset-based financing, lending of amounts equal to or exceeding the value of the financed property or otherwise failing to provide an adequate margin of collateral protection;

(e)   undue increases in restructurings/modifications due to financial difficulties faced by the borrower or other reasons (such as competitive pressures faced by banks);

(f)   circumvention of the classification and rating requirements, including rescheduling, refinancing or reclassification of lending exposures;

(g)   undue increases in the volume of credit, especially in relation to the increase in the volume of credit by other lenders in the same market; and

(h)   increasing volume and severity of delinquent, low-quality and impaired credit.

39.   A bank's accounting policies should address, and its allowance methodology should include, criteria for (a) restructurings/modifications of lending exposures and (b) the treatment of purchased or originated credit-impaired lending exposures as defined under the applicable accounting framework:

(a)   Restructurings/modifications can take many forms, including, but not limited to, a renewal or extension of terms, other concessions to the borrower, or a modification of the terms with or without concessions to the borrower. The allowance methodology should deliver a robust assessment and measurement of ECL such that the allowance level continues to reflect the collectability of the substance of the restructured/modified exposure whether or not the original asset is derecognised under the applicable accounting framework. It would not be appropriate to assume that restructurings automatically lead to the conclusion that there has been an immediate decrease in the credit risk on the exposure, and any decrease in the reported allowance level due to improved credit risk should be well supported by strong evidence. Typically, a customer would need to demonstrate consistently satisfactory payment performance over a reasonable period of time before credit risk would be considered to have decreased. Subsequent to a restructuring or modification, a bank may be able to demonstrate that it has increased its likelihood of receiving full payment of outstanding principal and/or interest; however, repayment performance in the form of interest payments alone may not be indicative of whether the collection of loan principal is reasonably assured. In addition, further expected delays in the payment of those cash flows may evidence that credit risk has not improved, and thus the level of ECL should be reassessed carefully. The methodologies should also call upon the lending staff to promptly notify the bank's accounting function when exposures are restructured or modified to ensure appropriate accounting for the change. For more complex restructurings and modifications, regular communication between the lending staff and the accounting function is warranted.

(b)   The methodology should enable appropriate identification and accounting for purchased or originated credit-impaired lending. The cash flow estimates for these lending exposures should be reviewed each reporting period and updated as necessary. Such updates should be properly supported and documented, and approved by senior management.

Principle 3 – Credit risk rating process and grouping

A bank should have a credit risk rating process in place to appropriately group lending exposures on the basis of shared credit risk characteristics.

Credit risk rating process

40.   As part of its credit risk assessment process, the Committee expects that banks will have in place comprehensive procedures and information systems to monitor the quality of their lending exposures. These include an effective credit risk rating process that captures the varying level, nature and drivers of

credit risk that may manifest themselves over time, in order to reasonably ensure that all lending exposures are properly monitored and that ECL allowances are appropriately measured.

41.   The credit risk rating process should include an independent review function. While front-line lending staff may have initial responsibility for assigning credit risk grades and ongoing responsibility for updating the credit grade to which an exposure is assigned, this should be subject to the review of an independent review function.

42.   The credit risk grade a bank assigns upon initial recognition of a lending exposure may be based on a number of criteria, including product type, terms and conditions, collateral type and amount, borrower characteristics and geography or a combination thereof, depending on the bank's level of sophistication. Existing credit risk grades assigned may subsequently change on either a portfolio or an individual basis due to other relevant factors such as, but not limited to, changes in industry outlook, business growth rates, consumer sentiment and changes in economic forecasts (such as interest rates, unemployment rates and commodity prices) as well as weaknesses in underwriting identified after initial recognition.

43.   The credit risk rating system should capture all lending exposures to allow for an appropriate differentiation of credit risk and grouping of lending exposures within the credit risk rating system, reflect the risk of individual exposures and, when aggregated across all exposures, the level of credit risk in the portfolio as a whole. In this context, an effective credit risk rating system will allow a bank to identify both migration of credit risk and significant changes in credit risk.

44.   In describing the elements of its credit risk rating system, a bank should clearly define each credit risk grade and designate the personnel responsible for the design, implementation, operation and performance of the system as well as those responsible for periodic testing and validation (ie the independent review function).

45.   Credit risk grades should be reviewed whenever relevant new information is received or a bank's expectation of credit risk has changed. Credit risk grades assigned should receive a periodic formal review (eg at least annually or more frequently if required in a jurisdiction) to reasonably ensure that those grades are accurate and up to date. Credit risk grades for individually assessed lending exposures that are higher-risk or credit-impaired should be reviewed more frequently than annually. ECL estimates must be updated on a timely basis to reflect changes in credit risk grades for either groups of exposures or individual exposures.

Grouping based on shared credit risk characteristics

46.   Groups should be sufficiently granular to allow banks to group exposures into portfolios with shared credit risk characteristics so that banks can reasonably assess changes in credit risk and thus the impact on the estimate of ECL. A bank's methodology for grouping exposures to assess credit risk (such as by instrument type, product terms and conditions, industry/market segment, geographical location or vintages) should be documented and subject to appropriate review and internal approval.

47.   Lending exposures should be grouped according to shared credit risk characteristics so that changes in the level of credit risk respond to the impact of changing conditions on a common range of credit risk drivers. This includes considering the effect on the group's credit risk in response to changes in forward-looking information, including macroeconomic factors. The basis of grouping should be reviewed to ensure that exposures within the group remain homogeneous in terms of their response to credit risk drivers. Grouping implemented upon initial recognition based on similar credit risk characteristics will not necessarily be appropriate subsequently, given that the relevant characteristics and their impact on the level of credit risk for the group may change over time.

48.   Exposures must not be grouped in such a way that an increase in the credit risk of particular exposures is masked by the performance of the group as a whole.

49. Banks should have in place a robust process to ensure appropriate initial grouping of their lending exposures. Subsequently, the grouping of exposures should be re-evaluated and exposures should be re-segmented if relevant new information is received or a bank's changed expectations of credit risk suggest that a permanent adjustment is warranted. If a bank is not able to re-segment exposures on a timely basis, a temporary adjustment may be used (see paragraphs 50–51 for use of temporary adjustments).

Use of temporary adjustments

50. Temporary adjustments to the allowance are adjustments which may be used to account for circumstances when it becomes evident that existing or expected risk factors have not been considered in the credit risk rating and modelling process. The Committee expects that such adjustments would be used only as a temporary solution – for example, in transient circumstances or when there is insufficient time to appropriately incorporate relevant new information into the existing credit risk rating system or to re-segment existing groups of lending exposures, or when lending exposures within a group react to factors or events differently than initially expected.

51. The use of temporary adjustments requires the application of significant judgment and creates the potential for bias. Temporary adjustments should be directionally consistent with forward-looking forecasts, supported by appropriate documentation, and subject to appropriate governance processes.

Principle 4 – Adequacy of the allowance

A bank's aggregate amount of allowances, regardless of whether allowance components are determined on a collective or an individual basis, should be adequate and consistent with the objectives of the applicable accounting framework.

52. Banks should implement sound and robust credit risk methodologies with the objective that the overall balance of the allowance for ECL is developed in accordance with the applicable accounting framework and adequately reflects ECL within that framework.

53. A robust assessment of allowances takes into account relevant factors and expectations at the reporting date that may affect the collectability of remaining cash flows over the life of a group of lending exposures or a single lending exposure. The information that banks consider must go beyond historical and current data to consider relevant forward-looking information including macroeconomic factors that are relevant to the exposure being evaluated (eg retail or wholesale) in accordance with the applicable accounting framework.[19]

54. Depending on the ability to incorporate forward-looking information into the ECL estimate, a bank may use individual or collective assessment approaches; regardless, the approach should be consistent with the relevant accounting requirements. Together, individual and collective assessments form the basis for the allowance for ECL, and a bank's use of individual versus collective assessments, if applied appropriately, should not result in materially different allowance measurements.

55. The ECL estimation technique used should be the most appropriate in the particular circumstances, and typically should be aligned with how the bank manages the credit risk exposure. For example, collective assessment is often used for large groups of homogeneous lending exposures with shared credit risk characteristics, such as retail portfolios. Individual ECL assessments are often conducted for significant exposures, or where credit concerns have been identified at the individual loan level, such as watch list and past-due loans. Regardless of the assessment approach it uses, a bank must ensure this does not result in delayed recognition of ECL. Depending on the level of sophistication of a bank's credit risk management systems, banks may be challenged to incorporate the impact of forward-looking

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[19] See Principle 6 for guidance on the need for use of experienced judgment in the robust consideration of relevant and reasonable and supportable information, including forward-looking information.

information, including macroeconomic forecasts, into assessments for individual borrowers, relying instead on collective assessments for a significant portion of their lending exposures, in order to incorporate forward-looking information.

56.   When a bank does use individual assessments, the ECL estimate should always incorporate the expected impact of all reasonable and supportable forward-looking information, including macroeconomic factors, that affects collectability and credit risk. When applying an individual assessment approach, the bank's documentation (similarly to what is expected when performing a collective assessment) should clearly demonstrate how forward-looking information, including macroeconomic factors, has been reflected in the individual ECL assessment.

57.   In instances where a bank's individual assessments of exposures do not adequately consider forward-looking information, it is appropriate to group lending exposures with shared credit risk characteristics to estimate the impact of forward-looking information, including macroeconomic factors. This process allows identification of relationships between forward-looking information and ECL estimates that may not be apparent at the individual exposure level. Conversely, when banks determine that all reasonable and supportable forward-looking information has been incorporated in the individual assessment of ECL, an additional forward-looking assessment should not be conducted on a collective basis if that could result in double-counting.

58.   As noted in Principle 3, temporary adjustments may be necessary if the bank's allowance methodology has not incorporated (or fully incorporated) events or circumstances not previously considered that affect ECL as of the reporting date. If the reason for the adjustment is not expected to be temporary, such as the emergence of a new risk driver that has not previously been incorporated into the bank's allowance methodology, the methodology should be updated in the near term to incorporate the factor that is expected to have an ongoing impact on the measurement of ECL. It is not appropriate to continually use a temporary adjustment for a continuing risk factor over the long term.

Principle 5 – ECL model validation

A bank should have policies and procedures in place to appropriately validate models used to assess and measure expected credit losses.

59.   ECL assessment and measurement may involve models and assumption-based estimates for risk identification and measurement. Models may be used in various aspects of the ECL assessment and measurement process at both the individual transaction and overall portfolio levels, including credit grading, credit risk identification, measurement of ECL allowances for accounting purposes, stress testing and capital allocation. ECL assessment and measurement models ("models") should consider the impact of changes to borrower and credit risk-related variables such as changes in PDs, LGDs, exposure amounts, collateral values, migration of default probabilities and internal borrower credit risk grades based on historical, current and reasonable and supportable forward-looking information, including macroeconomic factors.

60.   As the development and use of ECL assessment and measurement models involves extensive judgment, effective model validation policies and procedures are crucial. A bank should have robust policies and procedures in place to validate the accuracy and consistency of its model-based rating systems and processes and the estimation of all relevant risk components, at the outset of model usage and on an ongoing basis. Model validation should be conducted when the ECL models are initially developed and when significant changes are made to the models. A bank should regularly (for example, annually) review its ECL models.

61.   A sound model validation framework should include, but not be limited to, the following elements:

(a)   Clear roles and responsibilities for model validation with adequate independence and competence. Model validation should be performed independently of the model development

process and by staff with the necessary experience and expertise. Model validation involves ensuring that the models are suitable for their proposed usage, at the outset and on an ongoing basis. The findings and outcomes of model validation should be reported in a prompt and timely manner to the appropriate level of authority.[20]

(b)   An appropriate model validation scope and methodology include a systematic process of evaluating the model's robustness, consistency and accuracy as well as its continued relevance to the underlying portfolio. An effective model validation process should also enable potential limitations of a model to be identified and addressed on a timely basis. The scope for validation should include a review of model inputs, model design and model outputs/performance.

- *Model inputs* – The bank should have internally established quality and reliability standards on data (historical, current and forward-looking information) used as model inputs. Data used to estimate ECL allowances should be relevant to the bank's portfolios, and as far as possible accurate, reliable and complete (ie without exclusions that could bias ECL estimates). Validation should ensure that the data used meet these standards.

- *Model design* – For model design, validation should demonstrate that the underlying theory of the model is conceptually sound, recognised and generally accepted for its intended purpose. From a forward-looking perspective, validation should also assess the extent to which the model, at the overall model and individual risk factor level, can take into consideration changes in the economic or credit environment, as well as changes to portfolio business profile or strategy, without significantly reducing model robustness.

- *Model output/performance* – The bank should have internally established standards for acceptable model performance. Where performance thresholds are significantly breached, remedial actions to the extent of model re-calibration or re-development should be considered.

(c)   Comprehensive documentation of the model validation framework and process. This includes documenting the validation procedures performed, any changes in validation methodology and tools, the range of data used, validation results and any remedial actions taken where necessary. Banks should ensure that the documentation is regularly reviewed and updated.

(d)   A review of the model validation process by independent parties (eg internal or external parties[21]) to evaluate the overall effectiveness of the model validation process and the independence of the model validation process from the development process. The findings of the review should be reported in a prompt and timely manner to the appropriate level of authority (eg senior management, audit committee).

Principle 6 – Experienced credit judgment

A bank's use of experienced credit judgment, especially in the robust consideration of reasonable and supportable forward-looking information, including macroeconomic factors, is essential to the assessment and measurement of expected credit losses.

62.   Banks should have the necessary tools to ensure a robust estimate and timely recognition of ECL. Information on historical loss experience or the impact of current conditions may not fully reflect the credit

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[20]   Where a bank has outsourced its validation function to an external party, the bank remains responsible for the effectiveness of all model validation work and should ensure that the work done by the external party meets the elements of a sound model validation framework on an ongoing basis.

[21]   If an external auditor is engaged to undertake an audit of a bank's financial statements and the independent review of the bank's model validation process, a bank should consider any potential conflicts of interest to ensure continued adherence to applicable auditor independence requirements.

risk in lending exposures. In that context, a bank must use its experienced credit judgment to thoroughly incorporate the expected impact of all reasonable and supportable forward-looking information, including macroeconomic factors, on its estimate of ECL. A bank's use of its experienced credit judgment must be documented in the bank's credit risk methodology and subject to appropriate oversight.

63.　　　Historical information provides a useful basis for the identification of trends and correlations needed to identify the credit risk drivers for lending exposures. However, ECL estimates must not ignore the impact of (forward-looking) events and conditions on those drivers. The estimate should reflect the expected future cash shortfalls resulting from such impact.

64.　　　The Committee understands that it may be challenging and costly to incorporate forward-looking information in the estimate of ECL. Further, the Committee accepts that ECL is an estimate and thus may not perfectly predict actual outcomes. Accordingly, the need to incorporate such information is likely to increase the inherent degree of subjectivity in ECL estimates, compared with impairment measured using incurred loss approaches. In the Committee's view, consideration of forward-looking information is essential to the proper implementation of an ECL accounting model, and should not be avoided on the basis that a bank considers the cost of incorporating forward-looking information to be excessive or unnecessary or because there is uncertainty in formulating forward-looking scenarios. Nevertheless, the Committee does not expect additional cost and operational burden to be introduced where they do not contribute to a high-quality implementation of an ECL accounting framework.

65.　　　Banks should be able to demonstrate that the forward-looking information factored into the ECL estimation process has a link to the credit risk drivers for particular exposures or portfolios. For a variety of reasons, it may not be possible to demonstrate a strong link in formal statistical terms between certain types of information, or even the information set as a whole, and the credit risk drivers. Particularly in those circumstances, a bank's experienced credit judgment will be crucial in establishing an appropriate level for the individual or collective allowance. When a forward-looking factor that has been identified as relevant is not incorporated into the individual or collective assessment, temporary adjustments may be necessary.[22]

66.　　　Macroeconomic forecasts and other relevant information should be applied consistently across portfolios where the credit risk drivers of the portfolios are affected by these forecasts/assumptions in the same way. Furthermore, when developing ECL estimates, a bank should apply its experienced credit judgment to consider its point in the credit cycle, which may differ across the jurisdictions in which it has lending exposures.

67.　　　The Committee expects banks to exercise care when determining the level of ECL allowances to be recognised for accounting purposes to ensure that the resulting estimates are appropriate (ie consistent with neutrality and neither understated nor overstated).

68.　　　Additionally, banks are increasingly considering a wide range of information, including that of a forward-looking nature, for risk management and capital adequacy purposes. The Committee expects banks to avail themselves of information derived from the different stages in the credit risk management process in developing their estimate of ECL.

Principle 7 – Common data

A bank should have a sound credit risk assessment and measurement process that provides it with a strong basis for common systems, tools and data to assess credit risk and to account for expected credit losses.

69.　　　There is commonality in the processes, systems, tools and data used to assess credit risk, measure ECL for accounting purposes and determine expected losses for capital adequacy purposes. The use of

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[22]　　See Principle 3 for additional guidance on the use of temporary adjustments.

common processes, systems, tools and data strengthens, to the maximum extent possible, the consistency of the resulting estimates and minimises disincentives to following sound credit risk practices for all purposes.

70. A bank's credit risk practices should meet fundamental requirements and procedures, including having the appropriate tools to identify and assess credit risk. These fundamental requirements are equally necessary for assessing credit risk and fairly representing the bank's financial position for both accounting and capital adequacy purposes. These common processes are closely interrelated, which strengthens the reliability and consistency of resulting ECL estimates, increases transparency and, through market discipline, provides incentives to follow sound credit risk practices.

71. A bank's credit risk monitoring system should be designed to include all lending exposures when assessing the impact of changes in credit risk, and not only those that may have experienced significant increases in credit risk, have incurred losses or are otherwise credit-impaired.

72. Credit risk practices should not be static and should be reviewed periodically to ensure that relevant data available throughout a banking organisation are captured and that systems are updated as the bank's underwriting or business practices change or evolve over time. Moreover, a feedback loop should be established to ensure that information on estimates of ECL, changes in the credit risk and actual losses experienced on loans is shared among credit risk experts, accounting and regulatory reporting staff, and in particular with the loan underwriting personnel.

73. Common processes, systems, tools and data that are used in assessing credit risk and measuring ECL for accounting purposes and expected losses for capital adequacy purposes could include credit risk rating systems, estimated PDs (subject to appropriate adjustments), past-due status, loan-to-value ratios, historical loss rates, product type, amortisation schedule, down payment requirements, market segment, geographical location, vintage, and collateral type.

74. Estimates of ECL allowances may differ from jurisdiction to jurisdiction for various reasons, including international differences in ECL accounting standards. However, recognising that ECL accounting standards are common across many jurisdictions and that, even when they are not, different ECL models also share commonalities, the Committee encourages the narrowing of different interpretations and practices in these areas of the accounting requirements, as far as possible, through the application of consistent and sound credit risk practices.

Principle 8 – Disclosure

A bank's public disclosures should promote transparency and comparability by providing timely, relevant and decision-useful information.

75. The objective of public disclosures is to provide decision-useful information, on an entity's financial position, performance and changes therein, to a wide range of users in a clear and understandable manner. The financial crisis highlighted the importance of high-quality disclosure, as investors criticised financial institutions for failing to provide sufficient relevant information on complex issues and risk management practices. The Committee encourages banks to continue to improve their disclosure with the aim of providing information that is relevant and comparable so that users can make timely, informed decisions and are able to evaluate the stewardship of management.

76. Financial and credit risk management disclosures should be made in accordance with the applicable accounting and supervisory frameworks. Prudential and market regulators, standard setters, investors, analysts and banks continue to assess the adequacy of disclosure frameworks and make amendments to improve the transparency and relevance of the information presented. Accordingly, it is important that banks consider the disclosures needed to fairly depict a bank's exposure to credit risk, including its ECL estimates, and to provide relevant information on a bank's underwriting practices.

77.   While remaining consistent with applicable accounting standards and regulations, management will need to apply judgment to determine the appropriate level of aggregation and disaggregation of data disclosed, such that disclosures continue to meet accounting requirements, and provide insights into a bank's exposure to credit risk and ECLs for users to perform individual institution analysis and relevant peer group comparisons.

78.   The Committee expects quantitative and qualitative disclosures, taken together, to communicate to users the main assumptions/inputs used to develop ECL estimates. Additionally, the Committee expects disclosures to highlight policies and definitions that are integral to the estimation of ECL (such as a bank's basis for grouping lending exposures into portfolios with similar credit risk characteristics and its definition of default, guided by the definition used for regulatory purposes[23]), factors that cause changes in ECL estimates, and the manner in which management's experienced credit judgment has been incorporated. Disclosure of significant policies should be decision-useful and should describe, in the specific context of the bank, how those policies have been implemented.

79.   The move to an ECL model requires that forward-looking information, including macroeconomic factors, be incorporated into ECL estimates (in accordance with the applicable accounting framework). The Committee expects banks to provide qualitative disclosures on how this information has been incorporated into the estimation process, in particular when the assessment is carried out on an individual basis.

80.   A bank's decisions regarding the basis for grouping lending exposures will normally reflect a combination of factors. The Committee expects disclosures in this area to communicate how management satisfies itself that lending exposures are appropriately grouped, such that these groups continue to share credit risk characteristics.

81.   To improve the quality and meaningfulness of information disclosed for ECL estimates, the Committee expects banks to provide an explanation of significant changes to the estimation of ECL from period to period. This information should include both relevant qualitative and quantitative disclosures in a manner that enhances the understanding of how ECL estimates have changed.

82.   The Committee expects management to regularly review its disclosure policies to ensure that the information disclosed continues to be relevant to its risk profile, product concentrations, industry norms and current market conditions. In doing so, a bank should aim to provide disclosures that facilitate comparisons with its peers. Such disclosures will enable users to monitor changes in the bank's ECL estimates from period to period and allow users to perform meaningful analyses across national and international peer groups.

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[23]   See paragraphs A4–A5 in the Appendix for further guidance on definition of default.

Supervisory evaluation of credit risk practices, accounting for expected credit losses and capital adequacy[24]

Principle 9 – Credit risk management assessment

Banking supervisors should periodically evaluate the effectiveness of a bank's credit risk practices.

83.　　Banking supervisors have policies that call for the periodic prudential review of a bank's lending and credit risk assessment functions[25] and for recommending improvements where necessary. Supervisors should be satisfied that the bank has adopted and adheres to the sound credit risk practices described in this paper. For example, supervisors should evaluate whether:

(a)　　the bank's internal credit risk review function is robust and encompasses all lending exposures;

(b)　　the quality of a bank's processes and systems for identifying, classifying, monitoring and addressing changes in credit risk for all lending exposures in a timely manner is adequate, and management's experienced credit judgment considers current conditions and forward-looking information, including macroeconomic factors, and is well documented;

(c)　　the bank's processes reflect the risk appetite of the bank in a manner that ensures lending exposures on which credit risk has increased since origination or purchase to a level in excess of the bank's risk appetite are promptly identified and properly monitored, and ECL allowance estimates appropriately reflect the increases in the credit risk of these exposures as increases are identified;[26]

(d)　　appropriate information about the credit risk of lending exposures, changes in credit risk, the related ECL allowance and changes in allowance estimates is provided to the board and senior management on a regular (quarterly or, if warranted, more frequent) basis;

(e)　　forecasts included in credit risk assessments and measurements are not only reasonable and supportable, but are also consistent with forecasts used for other purposes by the bank, all of which are made available to supervisors; and

(f)　　the bank's policies and procedures for validating the accuracy and consistency of its internal credit risk assessment models are robust.[27]

84.　　In making these evaluations, supervisors may require banks to provide supplemental information, not publicly disclosed, through regular supervisory reporting, ad hoc reporting or on-site examinations.

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[24]　A primary objective of prudential supervisors is to maintain the financial soundness of individual financial institutions and the stability of the financial system as a whole. Prudential supervisors achieve this objective partly by issuing guidance on sound risk management, assessing the risk profile of each regulated institution and imposing a risk-based capital requirement.

[25]　See Principle 17 of the Basel Core Principles. Essential Criterion 3 of Principle 17 provides that supervisors regularly determine that a bank's board-approved credit risk management strategy and significant policies and processes, as implemented and developed by senior management, "establish an appropriate and properly controlled credit risk environment".

[26]　In some cases, a bank may originate or purchase a lending exposure on which credit risk at acquisition exceeds the bank's risk appetite and which therefore represents an exception to the bank's lending policies and standards. If this situation exists, supervisors should evaluate whether the bank has established and adheres to appropriate processes and controls for: the initial identification, review, approval and documentation of such exposures; the reporting of such policy exceptions to senior management and, for individually significant exposures, to the board; and the proper monitoring of such exposures after initial recognition. Supervisors should also evaluate whether the bank's processes and controls ensure that ECL allowance estimates distinguish between these riskier lending exposures and those consistent with the bank's risk appetite.

[27]　Because the implementation of accounting policies and the preparation of financial statements are management's responsibility, the Committee would not normally expect supervisors to pre-approve a bank's ECL accounting models.

Supervisors could also use these approaches for obtaining supplemental information when performing the evaluations called for in the principles below.

Principle 10 – ECL measurement assessment

Banking supervisors should be satisfied that the methods employed by a bank to determine accounting allowances lead to an appropriate measurement of expected credit losses in accordance with the applicable accounting framework.

85.   In assessing the methods employed by a bank to estimate allowances, supervisors should be satisfied that the bank is following policies and practices consistent with the ECL measurement principles outlined in this guidance, including, but not limited to, the following:

(a)   the procedures used by a bank to measure ECL are robust and timely and take into account criteria such as updated valuations of credit risk mitigants (and, in particular, collateral), cash flow estimates based on assessments of borrower-specific factors and current and future macroeconomic conditions, together with other relevant forward-looking information that affects the expected collectability of the bank's lending exposure;

(b)   the framework and methodology for establishing allowances, whether determined collectively or individually, are robust;

(c)   aggregate allowances on lending exposures are appropriate in accordance with relevant accounting requirements and in relation to the credit risk exposure in the bank's portfolio;

(d)   uncollectability is recognised in the appropriate period through allowances or write-offs; and

(e)   regardless of the method used to determine ECL, the bank's internal processes for measuring ECL take account of the credit risk that the bank has taken on and changes in the credit risk of the bank's lending exposures.

86.   Supervisors may make use of the work performed by internal and external auditors in reviewing a bank's credit risk assessment and ECL measurement functions. The Committee has issued extensive guidance on a supervisor's cooperation with internal and external auditors through its guidance on *External audits of banks* (March 2014)[28] and *The internal audit function in banks* (June 2012).[29]

Principle 11 – Capital adequacy assessment

Banking supervisors should consider a bank's credit risk practices when assessing a bank's capital adequacy.

87.   In assessing the appropriateness of the level of allowances for lending exposures as an element of a bank's overall capital adequacy, it is important to recognise that the bank's related ECL processes, methodology and underlying assumptions require the exercise of a substantial degree of experienced credit judgment. Even when a bank maintains sound processes for assessing and measuring credit risk and an effective internal control framework, the estimation of ECL will entail a degree of subjectivity due to the wide range of factors that must be considered. Further, management's ability to estimate ECL on lending exposures (whether individually or collectively) may improve over time as substantive information accumulates that confirms whether previously identified forward-looking information affecting repayment prospects has a substantive correlation with actual credit losses.

88.   In performing their assessments of a bank's capital adequacy, supervisors should consider whether management has:

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[28]   Available at www.bis.org/publ/bcbs280.pdf.

[29]   Available at www.bis.org/publ/bcbs223.pdf.

(a)   maintained effective systems and controls for identifying, measuring, monitoring and controlling the level of credit risk, significant increases in credit risk and asset quality problems in a timely manner;

(b)   analysed all significant relevant factors that affect credit risk and the collectability of the portfolio; and

(c)   established an acceptable allowance estimation process that, at a minimum, meets the principles set out in this guidance, including the relevant accounting requirements.

89.   In communicating deficiencies or recommending improvements in a bank's credit risk practices, supervisors should consider the full range of supervisory measures at their disposal to bring deficiencies to the attention of management and encourage timely correction. The supervisory response, including the extent of the supervisor's communication with the board, should be commensurate with the severity of the deficiencies, the impact on the bank's risk level and the bank's risk profile, as well as the risk-bearing capacity of the bank and management's responsiveness in addressing concerns. For example, supervisory responses could include the following approaches and measures:

(a)   communicating concerns routinely or on an ad hoc basis to a bank's senior management and/or board and evaluating management's response as to how the bank will address these concerns (remediation plan);

(b)   factoring into supervisory ratings any concerns about the bank's credit risk practices (eg factoring this into prudential risk management or capital adequacy ratings); and

(c)   taking informal or formal supervisory action (which can be of a non-public or public nature) requiring management and the board to remedy the deficiencies within a specified time frame and to provide the supervisor with periodic written progress reports.

90.   When assessing capital adequacy, supervisors should consider how a bank's accounting and credit risk assessment policies and practices affect the measurement of the bank's assets, earnings and, therefore, its capital position.

91.   To the extent that credit risk assessment or ECL measurement deficiencies are significant or are not remedied on a timely basis, the supervisor should consider whether such deficiencies should be reflected in supervisory ratings or through a higher capital requirement under Pillar 2 of the Basel capital framework. For example, if a bank lacks appropriate credit risk assessment policies, systems or controls, the supervisor may consider these deficiencies when assessing whether the bank's capital position is adequate in relation to its risk profile. Moreover, the supervisor should consider how these deficiencies affect the level of reported allowances and, if the aggregate amount of allowances is not appropriate under the applicable accounting framework, the supervisor should discuss this with the bank's management and board and take further appropriate supervisory action when necessary.

Appendix

Supervisory guidance specific to banks applying IFRS

This Appendix outlines supervisory expectations specific to banks reporting under International Financial Reporting Standards (IFRS). It is limited to providing guidance on certain aspects of the expected credit loss (ECL) requirements in the impairment sections of IFRS 9 that are not common to other ECL accounting frameworks. Supervisory guidance on common elements of an ECL accounting framework, such as sound practices for the assessment and measurement of ECL, whether or not the allowance is based on 12-month or lifetime expected losses, is provided in the main section of this paper. The Appendix should be read in conjunction with the main section of the guidance, including the introductory sections that set out the Committee`s view on reasonable and supportable information, materiality and proportionality.

This Appendix provides additional supervisory expectations on: (i) the loss allowance at an amount equal to 12-month ECL; (ii) the assessment of significant increases in credit risk; and (iii) the use of practical expedients.

1. Loss allowance at an amount equal to 12-month ECL

A1. In accordance with the International Accounting Standard Board's (IASB's) impairment standard for financial instruments, "if, at the reporting date, the credit risk on a financial instrument has not increased significantly since initial recognition, an entity shall measure the loss allowance for that financial instrument at an amount equal to 12-month expected credit losses".[30] The Committee expects that a bank will always measure ECL for all lending exposures, and that a nil allowance will be rare[31] because ECL estimates are a probability-weighted amount that should always reflect the possibility that a credit loss will occur.[32]

A2. The Committee expects banks to adopt an active approach to assessing and measuring 12-month ECL that enables changes in credit risk to be identified in a timely manner. In accordance with Principle 6 of the main section of this guidance, estimates of the amount and timing of 12-month ECL should reflect management's experienced credit judgment, and represent an unbiased probability weighted estimate of expected credit losses by considering a range of possible outcomes The methodology used to estimate 12-month ECL should be robust at all times and should allow for the timely recognition of ECL.

A3. IFRS 9 defines an amount equal to 12-month ECL as the "portion of lifetime expected credit losses that represent the expected credit losses that result from default events on a financial instrument that are possible within the 12 months after the reporting date".[33] The Committee emphasises that an amount equal to the 12-month ECL is *not* only the losses expected in the next 12 months; rather, it is the expected cash shortfalls over the life of the lending exposure or group of lending exposures, due to loss events that could occur in the next 12 months. The Committee also emphasises that, to assess whether a financial instrument should move to a lifetime expected credit loss (LEL) measure, the change in the risk of a default

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[30] See IFRS 9, paragraph 5.5.5.

[31] An example where a bank may have a nil allowance is for fully collateralised loans. However, a bank should be cautious when developing estimates of collateral value, as valuation of collateral at origination may change over the life of the loan.

[32] See IFRS 9, paragraph 5.5.17.

[33] See IFRS 9, Appendix A, Defined terms.

occurring *over the expected life* of the financial instrument must be considered. In some circumstances, IFRS 9 allows changes in the risk of a default occurring over the next 12 months to be used to make this assessment; however, this may not always be appropriate, and particular attention is drawn to the examples set out in IFRS 9, paragraph B5.5.14.

A4.   IFRS 9 does not directly define default, but requires entities to define default in a manner consistent with that used for internal credit risk management. IFRS 9, paragraph B5.5.37, also includes a rebuttable presumption that default does not occur later than 90 days past due. The Committee recommends that the definition of default adopted for accounting purposes is guided by the definition used for regulatory purposes. The default definition provided in paragraph 452 of the Basel capital framework includes both:

(a)   a qualitative criterion by which "[t]he bank considers that the obligor is unlikely to pay its credit obligations to the banking group in full, without recourse by the bank to actions such as realising security (if held)" ("unlikeliness to pay" events); and

(b)   an objective indicator where "[t]he obligor is past due more than 90 days on any material credit obligation to the banking group", equivalent to the rebuttable presumption in IFRS 9, paragraph B5.5.37.

A5.   In accordance with the Basel capital framework, a default event occurs when either of the criteria in paragraphs A4 (a) and (b) is met, or both are met. In this context, the "unlikeliness to pay" criterion of the debtor permits identification of default before the exposure becomes delinquent with the 90-days-past-due criterion acting as a backstop. In line with the approach followed for regulatory purposes, the list of elements provided in the Basel framework as indications of unlikeliness to pay should be implemented in a way that ensures a timely detection of "unlikeliness to pay" events that precipitate eventual cash shortfalls. As regards the criterion in paragraph A4 (b), the Committee is aware that, for regulatory purposes in the case of retail and public sector entity obligations, for the 90 days figure a supervisor may substitute a figure up to 180 days for different products, as it considers appropriate to local conditions (see footnote 89 in the Basel capital framework); however, this possibility should not be read as an exemption from the application of the 90-days rebuttable presumption in IFRS 9, paragraph B5.5.37, for those exposures.

A6.   In formulating the estimate of the amount equal to 12-month ECL, it is important to consider reasonable and supportable information[34] that affects credit risk, especially forward-looking information, including macroeconomic factors. A bank should exercise its experienced credit judgment to consider both qualitative and quantitative information that may affect the bank's assessment of credit risk. IFRS 9 provides that an entity need not undertake an exhaustive search for information when measuring an amount equal to 12-month ECL; nevertheless, banks should actively incorporate information that may affect the estimate of ECL, and a bank should not exclude or ignore relevant information that is reasonably available. For the measurement of an amount equal to 12-month ECL to be sufficiently sensitive to relevant drivers of credit risk, the Committee expects a bank to consider all reasonable and supportable information that is reasonably available, without bias, and known to affect the assessment and measurement of credit risk. This will permit the timely recognition of ECL in response to changes in credit risk and better reflect the inherent credit risk associated with lending. The Committee acknowledges that IFRS 9 requires that the information used in measuring ECL is that which is available without undue cost and effort. Paragraph A47 sets out the Committee's views on this concept for internationally active banks.

A7.   IFRS 9 requires a bank to identify significant increases in credit risk since initial recognition for all financial instruments, including those measured at 12-month ECL. IFRS 9 includes the option of making assumptions about low credit risk exposures, the application of which is addressed in paragraphs A48–

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[34]   See paragraphs 19–22 for the Committee's view on what constitutes reasonable and supportable information.

A51 below. The measurement of an amount equal to 12-month ECL must be updated each reporting period, and any changes to this amount are to be recorded and monitored through the allowance account.

A8.　　The Committee expects that, where a bank originates high-credit-risk exposures[35] and their allowances are initially measured at 12-month ECL, the bank should monitor these exposures closely for significant increases in credit risk to ensure a timely movement of the exposure to LEL measurement. That is because high-risk exposures are likely to exhibit greater volatility and to more readily experience a rapid decline in credit risk. Where a bank has a policy that allows it to extend credit for high-risk lending exposures, the Committee expects that the rationale for extending these exposures and associated governance process will be well documented, and that the bank will be in adherence to sound underwriting practices and implement commensurately robust credit risk management practices.

A9.　　An amount equal to 12-month ECL measurement may be determined on an individual or collective basis. The Committee expects that a robust implementation of the IFRS 9 ECL requirements, taking into account the migration of credit risk, will allow increases in credit risk to be reflected in increased allowances well before exposures move, either individually or collectively, to LEL measurement.

A10.　　Even if an increase in credit risk is not judged to be significant, a bank must adjust its estimate of 12-month ECL to adequately reflect changes in credit risk that have taken place.

A11.　　Where a collective assessment is performed, exposures within that group must adhere to the requirements set out in Principle 3. In particular, where information becomes available to management indicating that further or different segmentation within a group of lending exposures is required, the group should be split into subgroups and the measurement of the amount equal to 12-month ECL should be updated separately for each subgroup[36] or, in the case of transient circumstances, a temporary adjustment should be applied.[37]

A12.　　Lending exposures should *not* be grouped in such a way as to obscure the identification of significant increases in credit risk on a timely basis. See also Principles 3 and 4 for additional requirements regarding grouping and collective assessments of ECL.

2.　　Assessment of significant increases in credit risk

A13.　　IFRS 9, paragraph 5.5.4, states: "The objective of the impairment requirements is to recognise LEL for all financial instruments for which there have been significant increases in credit risk since initial recognition – whether assessed on an individual or collective basis – considering all reasonable and supportable information, including that which is forward-looking."

A14.　　The Committee understands that the rationale for this approach is that the creditworthiness of the counterparty, and thus the ECL anticipated upon initial recognition, is taken into account in the pricing of credit at that time.[38] It follows, then, that a post-origination increase in credit risk may not be fully

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[35]　　The reference to "high credit risk" exposures should not be understood, in the context of this paragraph, as meaning the opposite of "low credit risk" as defined by the IASB.

[36]　　Where information becomes available which indicates that a particular subgroup has suffered a significant increase in credit risk, then lifetime expected credit losses should be recognised in respect of that subgroup.

[37]　　See paragraphs 51–52 for guidance on the use of temporary adjustments.

[38]　　See, for example, IASB, *Project summary on IFRS 9*, July 2014, page 20, which notes that "[w]hen credit is first extended the initial creditworthiness of the borrower and initial expectations of credit losses are taken into account in determining pricing

compensated by the interest rate charged, and, as a consequence, a bank must carefully consider whether there has been a significant increase in credit risk.[39] If so, the lending exposure would be subject to LEL measurement.

A15.   The IFRS 9 approach to impairment assessment and measurement is demanding in its requirements for data, analysis and use of experienced credit judgment, particularly regarding whether an exposure has suffered a significant increase in credit risk and the measurement of required 12-month ECL and LEL. In the Committee's view, strong governance, systems and controls must be placed around these processes. Unless already established, banks will need to implement systems that are capable of handling and systematically assessing the large amounts of information that will be required to judge whether or not particular lending exposures or groups of lending exposures exhibit a significant increase in credit risk, and to measure LEL where that is the case. Ensuring that the approach is consistent across entities within a consolidated group is important. For example, processes should be in place to ensure that forecasts of economic conditions in different jurisdictions and economic sectors are reviewed and approved by an entity's senior management, and that the process, controls and economic assumptions around developing forecasts and linking these to expectations of credit loss are consistent across the entity (ie at the jurisdictional and the group level). The need for consistency should not be interpreted as a requirement that the practice be identical across a group. On the contrary, within a consistent framework there may be differences across jurisdictions and products, depending for instance on the availability of data. These differences should be well documented and justified.

A16.   The IFRS 9 objective stated above means that the timely determination of whether there has been a "significant" increase in credit risk subsequent to the initial recognition of a lending exposure is crucial. Banks must have processes in place that enable them to determine this on a timely and holistic basis so that an individual exposure, or a group of exposures with similar credit risk characteristics, is transferred to LEL measurement as soon as credit risk has increased significantly, in accordance with the IFRS 9 impairment accounting requirements.

A17.   As noted in the IFRS 9 Application Guidance, the range of information that will need to be considered in making this determination is wide. In broad terms, it will include information on macroeconomic conditions, and the economic sector and geographical region relevant to a particular borrower or a group of borrowers with shared credit risk characteristics, in addition to borrower-specific strategic, operational and other characteristics. A critical feature is the required consideration of all reasonable and supportable forward-looking information in addition to information about current conditions and historical data.[40]

A18.   In order to recognise allowances on a timely basis in line with the IFRS 9 requirements, banks will need to:

(a)   assemble data and forward projections for the key drivers of credit risk in their portfolios; and

(b)   be able to quantify the credit risk in each of their exposures or portfolios based on these data and projections. This will both enable management to judge whether there has been a significant increase in credit risk, and form a key input to the measurement of ECL and allowances.

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and other terms and conditions" and that "[a] true economic loss arises when expected credit losses exceed initial expectations (ie when the lender is not receiving compensation for the level of credit risk to which it is now exposed)".

[39]   The Committee notes that IFRS 9 requires entities to consider a wide range of factors in assessing for significant increases in credit risk and that pricing may be one of those factors.

[40]   IFRS 9 requires that information included in the measurement of ECL and the assessment of changes in credit risk is available without undue cost and effort. The Committee's views on this concept for banks are set out in paragraph A47.

A19.   The Committee strongly endorses the IASB's view that "lifetime expected credit losses are generally expected to be recognised before a financial instrument becomes past due" and that "typically, credit risk increases significantly before a financial instrument becomes past due or other lagging borrower-specific factors (for example a modification or restructuring) are observed".[41] Therefore it is important that banks' analyses take into account the fact that the determinants of credit losses very often begin to deteriorate a considerable time (months or, in some cases, years) before any objective evidence of delinquency appears in the lending exposures affected. Delinquency data are generally backward-looking, and the Committee believes that they will seldom on their own be appropriate in the implementation of an ECL approach by banks.

A20.   For example, within retail portfolios adverse developments in macroeconomic factors and borrower attributes will generally lead to an increase in the level of credit risk long before this manifests itself in lagging information such as delinquency. Thus, the Committee believes that, in order to meet the objective of IFRS 9 in a robust manner, banks will need to consider the linkages between macroeconomic factors and borrower attributes to the level of credit risk in a portfolio based on reasonable and supportable information. To that end, banks should start with a detailed analysis of historical patterns and current trends, which would allow for identification of the most relevant credit risk drivers. Experienced credit judgment should facilitate the incorporation of current and forecasted conditions likely to affect those risk drivers, the expected cash shortfalls and therefore loss expectations.

A21.   The Committee expects analyses of this kind to be performed not only in the context of portfolios of individually small credits, such as credit card exposures, but also for large, individually managed exposures. For example, for a large commercial property loan, banks should take account of the considerable sensitivity of the commercial property market in many jurisdictions to the general macroeconomic environment, and consider using information such as levels of interest rates or vacancy rates to determine whether there has been a significant increase in credit risk.

A22.   Banks must have a clear policy including well developed criteria on what constitutes a "significant" increase in credit risk for different types of lending exposures. Such criteria and the reasons why these approaches and definitions are considered appropriate should be disclosed in accordance with IFRS 7, paragraph 35F. IFRS 9, paragraph 5.5.9, requires that, when making the assessment of significant increases in credit risk, "an entity shall use the change in the risk of default occurring over the expected life of the financial instrument instead of the change in the amount of expected credit losses". In other words, this assessment is made in terms of the risk of a default occurring and not expected credit loss (ie before consideration of the effects of credit risk mitigants such as collateral or guarantees).

A23.   In developing their approach to determining a significant increase in credit risk, the Committee expects banks to consider each of the 16 classes of indicators in IFRS 9 (insofar as they are relevant to the financial instrument being assessed) as set out in paragraphs B5.5.17 (a)–(p) and, in addition, to consider whether there is further information that should be taken into account. Such indicators (in both IFRS 9 and this guidance) should not be viewed as a "checklist". Some will be more relevant than others to assessing whether a particular type of exposure exhibits a significant increase in credit risk. At the same time, banks should take particular care to avoid the risk of a significant increase in credit risk not being acknowledged promptly when it is, in fact, present. In particular, banks should not restrict significant increases in credit risk to situations when a financial instrument is anticipated to move to the third stage. Rather, debtors may exhibit a significant increase in credit risk without evidence that the related exposures are likely to become impaired. The fact that credit risk has increased significantly does not necessarily mean that default is probable – merely that it is more likely than at initial recognition. This point is underlined by the symmetry of the IFRS 9 model: it is possible for exposures to move to LEL but subsequently be moved back to 12-month ECL if the threshold of a significant increase in credit risk is no longer met.

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[41]   See IFRS 9, paragraph B5.5.2.

A24.   While it is neither possible nor desirable for universally applicable criteria to be developed, the Committee emphasises that particular consideration should be given to conditions (a)–(f) below in assessing a significant increase in credit risk:

(a)   a discretionary decision by management such that, were an existing loan newly originated at the reporting date, the element of the price of the loan that reflects the credit risk of the exposure would be significantly higher than it was when the loan was actually originated because of an increase in the credit risk of the specific borrower or class of borrowers since inception;

(b)   a decision by management to strengthen collateral and/or covenant requirements for new exposures that are similar to exposures already advanced because of changes in the credit risk of those exposures since initial recognition;

(c)   a downgrade of a borrower by a recognised credit rating agency, or within a bank's internal credit rating system;

(d)   for performing credits subject to individual monitoring and review, an internal credit assessment summary credit-quality indicator that is weaker than upon initial recognition;

(e)   deterioration of relevant determinants of credit risk (eg future cash flows) for an individual obligor (or pool of obligors); and

(f)   expectation of forbearance or restructuring due to financial difficulties.

Most of the factors listed above are related to a bank's credit risk management practices. While implementation of IFRS 9 should reflect such practices where possible, the Committee notes that in some cases that would not be appropriate. For example, in a case where a bank manages most exposures in the same way regardless of credit risk – with the exception only of particularly strong or weak credits – the manner in which an exposure is managed is unlikely to be a sound indicator of whether there has been a significant increase in credit risk.

A25.   In addition, the assessment of whether there has been a significant increase in credit risk for a lending exposure should take account of the more general factors below:

(a)   deterioration of the macroeconomic outlook relevant to a particular borrower or group of borrowers. Macroeconomic assessments must be sufficiently rich to include factors relevant to sovereign, corporate, household and other types of borrower. Furthermore, they must address any relevant regional differences in economic performance within a jurisdiction. See Principle 6 in the main section of this guidance for additional considerations regarding guidance on the consideration of forward-looking information, including macroeconomic factors; and

(b)   deterioration of prospects for the sector or industries within which a borrower operates.

A26.   Accurate identification of drivers of credit risk, and reliable demonstration of the linkages between those drivers and the level of credit risk, are both critical, as a seemingly small change in a qualitative characteristic of a loan can potentially be a leading indicator of large increase in the risk of a default occurring. Furthermore, IFRS 9, paragraph 5.5.9, states that the significance of a change in credit risk since initial recognition depends on the risk of a default occurring at initial recognition. In this regard, where a bank uses changes in probability of default (PD) as a means of identifying changes in the risk of a default occurring, the significance of a given change in PD can be expressed in a ratio (or the rate of fluctuation) proportionate to the PD at initial recognition (ie a change in the PD divided by the PD at initial recognition). However, the Committee also acknowledges that the width of the change in PD itself (ie PD at measurement date minus PD at initial recognition) should also be taken into consideration.

A27.   It is necessary to look beyond how many "grades" a rating downgrade entails because the change in PD for a one-grade movement may not be linear (for example, the default probability over five years of an exposure rated BB is around three times that of one rated BBB, based on current data and analyses applicable to certain jurisdictions). Furthermore, because the significance of a one-grade movement would

depend on the granularity of a bank's rating system – and hence the "width" of each grade – an appropriate initial segmentation is important to ensure that a significant increase in credit risk for an individual exposure or group of exposures is not masked within a segment. As such, a bank should ensure that credit risk rating systems include a sufficient number of grades to appropriately distinguish credit risk. A bank should also be mindful of the fact that a significant increase in credit risk could occur prior to a movement in a credit grade.

A28.　　There are some circumstances in which an adverse movement in the factors listed in paragraphs A24–A26 above might not be indicative of a significant increase in credit risk. For example, it may be the case that the default probability of an exposure rated AA is low, and not much greater than one rated AAA. However, very few bank loans are of such apparently low credit risk – and, as noted in paragraph A27, the sensitivity of default probability to rating grades may increase strongly as rating quality declines.

A29.　　There could also be circumstances in which some factors move in an adverse direction but may be counterbalanced by improvement in others (see IFRS 9 Implementation Guidance, Example 2). Nonetheless, in view of the importance of detecting whether there has been a significant increase in credit risk, the Committee stresses that banks must put in place governance processes capable of reliably validating any judgment that negative factors are counterbalanced by positive ones.

A30.　　The Committee stresses that thorough consideration and full weight must be given to discretionary decisions by a bank's management which point to a change in credit risk. For example, if because of concerns about credit risk a decision is made to intensify the monitoring of a borrower or class of borrowers, it is unlikely that such action would have been taken by the decision-maker had the increase in credit risk not been perceived as significant.

A31.　　Sometimes a bank will assess that there has been significant increase in credit risk for some, but not all, of its exposures to a counterparty. While it is possible for this to be the case – for example, because of differences in the timing of when lending was provided – particular care should be taken in this situation to ensure that all exposures are identified where there has been a significant increase in credit risk.

A32.　　Where a bank makes the assessment of significant increases in credit risk on a collective basis (ie such as retail), the definitions of portfolios must be reviewed regularly to ensure that the exposures within them continue to share risk characteristics in terms of their response to credit risk drivers. Changing economic conditions may require regrouping. Exposures must not be grouped in such a way that an increase in the credit risk of some individual exposures could be obscured by changes in the credit risk of the portfolio as a whole.

A33.　　IFRS 9, paragraph B5.5.1, states that, in order to meet the objective of recognising LEL for significant increases in credit risk since initial recognition, it may be necessary for the assessment to be performed on a collective basis by considering information that is indicative of significant increases in credit risk in a group or subgroup of financial instruments even if evidence of such significant increases in credit risk at the individual instrument level is not yet available. Accordingly, the Committee expects that, in instances where it is apparent that some exposures in a group have experienced a significant increase in credit risk, that a subset or a proportion of the group will transfer to LEL measurement of ECL even though it is not possible to identify this on an individual exposure basis (see IFRS 9, Illustrative Example 5).

A34.　　Consistent with paragraph B5.5.6 of IFRS 9 and paragraph IE39 of the Implementation Guidance for IFRS 9, if it is not possible on the basis of shared credit risk characteristics to identify a particular subgroup of borrowers for which credit risk has increased significantly, an appropriate proportion of the overall group should be subject to LEL measurement.

A35.　　"Significant" should not be equated with statistical significance, meaning that the assessment approach should not be based solely on quantitative analysis. For portfolios which have a large number of individually small credits, and a rich set of relevant historical data, it may be possible to identify "significant" increases in credit risk in part by utilising formal statistical techniques. However, for other exposures, that may not be feasible.

A36.   "Significant" should also not be judged in terms of the extent of impact on a bank's primary financial statements. Even where an increase in credit risk defined in terms of probability of default is unlikely to affect the allowance made – for example, because the exposure is more than fully collateralised – identification and disclosure of such increases are likely to be important to users seeking to understand trends in the intrinsic credit risk of a bank's loans.

A37.   The IASB ECL model is a relative model: the assessment of significant increases in credit risk is based on comparing credit risk on exposures at the reporting date *relative* to credit risk upon initial recognition. IFRS 9, paragraph BC5.161, and Illustrative Example 6 suggest that banks can set a maximum credit risk for particular portfolios upon initial recognition that would lead to that portfolio moving to LEL measurement when credit risk increases beyond that maximum level. This is an example of the application of the principle in the Standard, whereby changes in the risk of default need to be assessed relative to that upon initial recognition, rather than an exception to that principle. The Committee notes that this simplification is only relevant when exposures are segmented on a sufficiently granular basis such that a bank can demonstrate that the analysis is consistent with the principles of IFRS 9. Specifically, it would be necessary to demonstrate that a significant increase in credit risk had not occurred for items in the portfolio before the maximum credit grade was reached.

A38.   The Committee expects banks to develop ways of rigorously reviewing the quality of their approach to assessing whether credit risk has increased significantly. This could involve some form of analysis of the treatment of exposures through time. Management should consider whether there are additional factors that should be taken into account in the assessment of significant increases in credit risk which would improve the quality of their approach.

A39.   Banks should be alert to any possibility of bias being introduced that would prevent the objectives of the Standard from being met. For this reason, the Committee is of the view that, in order to implement IFRS 9 in a robust manner, practical expedients (see below) should have limited use by banks, as these have the potential to introduce significant bias. For example, as noted below, use of a 30-days-past-due criterion introduces bias leading to a move to LEL later than the objective of the Standard requires.

A40.   In cases where banks believe that their approach to implementation is likely to have introduced bias, they should correct their assessment for identified bias and thus ensure that the objective of the Standard is met (see in particular IFRS 9, paragraphs B5.5.1–B5.5.6).

A41.   IFRS 9, in paragraphs 5.5.12 and B5.5.25–B5.5.27, sets out the requirements for the assessment of significant increases in credit risk for lending exposures whose contractual cash flows have been renegotiated or modified. In particular, for modifications that do not result in de-recognition in accordance with IFRS 9, a bank must assess whether credit risk has increased significantly by comparing (a) the risk of a default occurring at the reporting date based on the modified contractual terms with (b) the risk of default occurring upon initial recognition based on the original, unmodified contractual terms.

A42.   Modifications or renegotiations can mask increases in credit risk, resulting in ECL being underestimated, and delaying the transfer to LEL for obligors whose credit risk has significantly deteriorated, or can inappropriately result in a move from LEL measurement back to 12-month ECL measurement.

A43.   When determining whether there is a significant increase in credit risk for a modified lending exposure, the Committee expects a bank to demonstrate whether such modifications or renegotiations have improved or restored the ability of the bank to collect interest and principal payments compared with the situation upon initial recognition. In developing ECL estimates, a bank should also take into account whether the modification or renegotiation has improved or restored the ability of the bank to collect interest and principal payments as compared with the situation prior to modification. Consideration should also be given to the substance of modified contractual cash flows as well as the implications of the modifications for the future credit risk of the exposure (taking into consideration the obligor's credit risk). Factors to consider include, but are not limited to, the following;

(a)   whether the modification or renegotiation of the contractual terms and resulting cash flows is economically beneficial to the obligor, compared with the original, unmodified contractual terms, and how the modification economically affects the obligor's ability to repay the debt;

(b)   whether factors can be identified that support a bank's assessment of the obligor's ability to repay the debt, including circumstances leading up to the modification, and future prospects of the obligor as a result of the modifications, considering current conditions, macroeconomic forecasts, and prospects for the sector/industry within which the obligor operates, the obligor's business model, and the obligor's business (management) plan that outlines the obligor's expectations of its future performance, financial resilience and cash flows; and

(c)   whether the obligor's business plan is feasible, realisable and consistent with the repayment schedule of interest and principal under the modified contractual terms of the lending exposure.

A44.   Exposures transferred to LEL that are subsequently renegotiated or modified, and not de-recognised, should not move back to 12-month ECL measurement unless there is sufficient evidence that the credit risk over the life of the exposure has not increased significantly compared with that upon initial recognition. For example, where a bank grants various concessions such as interest rate reductions or postponements of principal repayments to obligors in financial difficulty, the lending exposure may exhibit characteristics of a lower credit risk even though in reality the obligor may continue to experience financial difficulty with no realistic prospects of making scheduled repayments over the remaining term of the exposure. IFRS 9 notes that evidence that the criteria for the recognition of LEL are no longer met could include a history of up-to-date and timely payment performance against the modified contractual terms. Typically, a customer would need to demonstrate consistently good payment behaviour over a period of time before the credit risk is considered to have decreased. For example, a history of missed or incomplete payments would not typically be erased by simply making one payment on time following a modification of the contractual terms.

3.   Use of practical expedients

A45.   IFRS 9 includes a number of practical expedients, intended to ease the implementation burden for a wide range of companies in recognition of the fact that IFRS 9 will be used by a variety of entities, including firms outside the banking industry. The Committee expects that the use by internationally active banks of the practical expedients discussed in the paragraphs that follow will be limited, particularly because – given their business – the cost of obtaining relevant information is not considered by the Committee to be likely to involve "undue cost or effort".

A46.   The paragraphs below address the following practical expedients: limiting the information set which an entity must consider in measuring ECL; the exception for "low" credit risk exposures; and the 30-days-past-due rebuttable presumption. In instances where these exceptions from the core requirements of the Standard are applied, the Committee expects that justifications for the use of such practical expedients by banks should be clearly documented. They will be subject to increased scrutiny by supervisors to determine appropriateness.

The information set

A47.   IFRS 9 states that "an entity shall consider the best reasonable and supportable information that is available, without undue cost and effort" and that "an entity need not undertake an exhaustive search for information".[42] The Committee expects that banks will not read these statements restrictively. Since

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[42]   IFRS 9, paragraph B5.5.15.

the objective of the IFRS 9 model is to deliver fundamental improvements in the measurement of credit losses, the Committee expects banks to develop systems and processes that use all reasonable and supportable information that is relevant to the group or individual exposure, as needed to achieve a high-quality, robust and consistent implementation of the approach. This will potentially require costly upfront investments in new systems and processes but the Committee considers that the long-term benefit of a high-quality implementation far outweighs the associated costs, which should therefore not be considered undue. Nevertheless, the Committee does not expect additional cost and operational burden to be introduced where they do not contribute to a high-quality implementation of IFRS 9.

"Low credit risk" exemption[43]

A48.   IFRS 9 introduces an exception to the general model in that, for "low credit risk" exposures, entities have the option not to assess whether credit risk has increased significantly since initial recognition. It was included to reduce operational costs for recognising LEL on financial instruments with low credit risk at the reporting date. Although use of the low-credit-risk exemption is provided as an option in IFRS 9, the Committee expects that use of this exemption should be limited. In particular, it expects banks to conduct timely assessment of significant increases in credit risk for all lending exposures. In the Committee's judgment, use of this exemption by banks for the purpose of omitting the timely assessment and tracking of credit risk would reflect a low-quality implementation of the ECL model and IFRS 9.

A49.   In that context, the Committee expects that banks should always recognise changes in 12-month ECL through the allowance where there is not a significant increase in credit risk and a move to LEL measurement if there is a significant increase in credit risk. In the Committee's view, in order to achieve a high-quality implementation of IFRS 9, any use of the low-credit-risk exemption must be accompanied by clear evidence that credit risk as of the reporting date is sufficiently low that a significant increase in credit risk since initial recognition could not have occurred.

A50.   According to IFRS 9, paragraph B5.5.22, the credit risk on a financial instrument is considered low if:

(a)   the financial instrument has a low risk of default;

(b)   the borrower has a strong capacity to meet its contractual cash flow obligations in the near term; and

(c)   adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations.

A51.   To illustrate the meaning of low credit risk, IFRS 9, paragraph B.5.5.23, cites as an example an instrument with an external "investment grade" rating. The Committee is of the view that this is only an example and that all lending exposures that have an "investment grade" rating from a credit rating agency cannot automatically be considered low credit risk. The Committee expects banks to rely primarily on their own credit risk assessments in order to evaluate the credit risk of a lending exposure, and not to rely solely or mechanistically on ratings provided by credit rating agencies (where the latter are available). Nevertheless, optimistic internal credit ratings, as compared with external ratings, would require additional analysis and justification by management.

More-than-30-days-past-due rebuttable presumption

A52.   The Committee agrees with the view expressed in IFRS 9 that delinquency is a lagging indicator of significant increases in credit risk. Banks should have credit risk assessment and management processes

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[43]   See IFRS 9, paragraph B5.5.22.

in place to ensure that credit risk increases are detected well ahead of exposures becoming past due or delinquent. As noted in paragraphs A19 and A39, the Committee expects that a bank would not use the more-than-30-days-past-due rebuttable presumption as a primary indicator of transfer to LEL, while recognising that appropriate use of this rebuttable presumption as a backstop measure would not be precluded in accordance with IFRS 9 alongside other, earlier indicators for assessing significant increase in credit risk.

A53.   The Committee expects that any assertion that the more-than-30-days-past-due presumption is rebutted on the basis that there has not been a significant increase in credit risk will be accompanied by a thorough analysis clearly evidencing that 30 days past due is not correlated with a significant increase in credit risk.[44] Such analysis should consider both current and reasonable and supportable forward-looking information that may cause future cash shortfalls to differ from historical experience.

A54.   In this regard, the Committee expects a bank to use relevant forward-looking information that is reasonable and supportable, to analyse whether there is any substantive relationship between such information and credit risk drivers. The Committee expects that a bank will not use the 30-days-past-due rebuttable presumption unless it has demonstrated that the forward-looking information had no substantive relationship with the credit risk driver or such information is not available without undue cost or effort.[45]

A55.   In the limited instances where past-due information is the best criterion available to a bank to determine when exposures should move to the LEL category, banks should pay particular attention to their measurement of 12-month ECL allowance to ensure that ECL are appropriately captured in accordance with the measurement objective of IFRS 9. Moreover, banks should recognise that significant reliance on backward-looking information will introduce bias into the implementation of an ECL model and that the Committee expects banks to pay particular attention to ensuring that the objectives of the IFRS 9 impairment requirements (ie to reflect ECL that meet the stated measurement objectives and to capture all significant increases in credit risk) are met.

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[44]   For example, in some jurisdictions it is common practice for borrowers to delay repayment for certain exposures, but history shows that those missed payments are fully recouped in the succeeding months (often referred to as a technical default). Note, however, that even when missed payments are fully recouped, the present value of cash flows received may be materially lower because of the delay in receiving them.

[45]   The Committee's view on undue cost and effort for banks is set out in paragraph A47.