Basel Committee
on Banking Supervision

Consultative Document

# Guidelines

# Guidance on accounting for expected credit losses

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## Contents

# Guidance on accounting for expected credit losses

## Principles underlying this document

This supervisory guidance is structured around 11 principles.

### Supervisory requirements for sound credit risk practices that interact with expected credit loss measurement

**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 effective internal controls, commensurate with the size, nature and complexity of its lending exposures to consistently determine allowances[1] 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 the level of credit risk on all lending exposures.[2] The robust and timely measurement of allowances should build upon those methodologies.

**Principle 3**: A bank should have a 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 as defined by the Basel Core Principles, which is an amount understood to be consistent with the objectives of the relevant accounting requirements.

**Principle 5**: A bank should have policies and procedures in place to appropriately validate its internal credit risk assessment models.

**Principle 6**: A bank's use of experienced credit judgment, especially in the robust consideration of forward-looking information that is reasonably available and 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 and price credit risk, and account for expected credit losses.

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

1 The term "allowances" includes allowances on loans and provisions on loan commitments and financial guarantee contracts.

2 The term "lending exposures" includes loans, commitments and guarantees.

## 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 allowances produce a robust measurement of expected credit losses under the applicable accounting framework.

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

This guidance is intended to set forth supervisory requirements on accounting for expected credit losses that do not contradict applicable accounting standards established by standard setters.[3]

# Objective and scope

1. The objective of this paper is to set out supervisory requirements on sound credit risk practices associated with the implementation and ongoing application of expected credit loss (ECL) accounting models. Such practices include all aspects of a bank's procedures for managing credit risk. However, for the purpose of this paper, the scope of credit risk practices is limited to those practices affecting the assessment and measurement of allowances under the applicable accounting framework.

2. In June 2006, the Basel Committee on Banking Supervision issued supervisory guidance on Sound Credit Risk Assessment and Valuation for Loans to address how common data and processes related to loans may be used for assessing credit risk, accounting for loan impairment and determining regulatory capital requirements.[4] This document, once finalised, will replace the Committee's June 2006 guidance.

3. Historically, the incurred-loss model served as the basis of accounting and was implemented with significant differences from jurisdiction to jurisdiction, and amongst banks within the same jurisdiction, due to the development of national, regional 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 a high-quality, robust and consistent implementation of ECL accounting frameworks across all jurisdictions. With regard to consistency, the Committee recognises that differences exist between ECL accounting frameworks, across jurisdictions. The revised guidance does not intend to drive convergence between these accounting frameworks, but does aim to drive consistent interpretations and practices, where there are commonalities and when the same accounting framework is applied.

4. The requirements described in the main section of this paper are equally applicable under all accounting frameworks. For jurisdictions in which ECL accounting frameworks are not required, the

[3] Representatives of the International Accounting Standards Board 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 *IFRS 9 Financial Instruments*.

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

Committee expects that the relevant aspects of this guidance related to sound credit risk practices will be applied.

5. The move to ECL accounting frameworks by accounting standard setters shifts the banking industry 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]

6. As demonstrated during the financial crisis, the financial condition of a bank is highly sensitive to rapid increases in credit risk. Therefore, appropriately determining how, when and in what amount to recognise the effects of increases in credit risk should be a priority for all stakeholders in the banking industry, including bank directors and management, supervisors, investors and other users of banks' financial statements. The Committee has supported the development of ECL accounting frameworks because such frameworks better reflect the fact that credit risk builds in a bank`s portfolio and credit quality deterioration occurs far earlier than when loss events are evidenced.

7. Supervisors expect that a bank's credit risk practices will provide the basis for a high-quality, robust and consistent implementation of an ECL accounting model in accordance with the applicable accounting framework and support appropriate measures of capital adequacy. This guidance provides banks with supervisory requirements surrounding 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.[6]

8. The measurement of expected losses for regulatory capital purposes may be a starting point for estimating ECL for accounting purposes; however, adjustments will be required due to fundamental 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 in that the Basel capital framework's probability of default is through the cycle and is always based on a 12-month time horizon. Additionally, the Basel capital framework's loss-given-default reflects downturn economic conditions.

9. Under ECL accounting frameworks, the Committee expects that a bank will estimate ECL for all lending exposures subject to the recognition of allowances under the applicable accounting requirements, regardless of whether components of the aggregate allowance are measured on a collective or individual basis. The guidance also provides guidelines for supervisors on evaluating the effectiveness of a bank's credit risk practices, policies, processes and procedures that affect allowance levels.

10. Principles 17 and 18 of the Core Principles for Effective Banking Supervision (Basel Core Principles)[7] 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 early identification and management of problem assets and the maintenance of adequate provisions and reserves. The focus of this paper is on the assessment and measurement of

[5] Available at www.g20.org/.

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

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

credit risk for lending exposures that are subject to the recognition of allowances under an ECL accounting model.

11. While ECL accounting frameworks are new and different from current accounting frameworks and their implementation will 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 and those banks more sophisticated in the business of lending will have the highest-quality implementation of an ECL accounting framework.

12. For less complex banks, 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. This allows less complex banks to adopt approaches commensurate with the size, nature and complexity of their lending exposures

13. This paper covers the credit risk practices for lending exposures that are subject to the recognition of allowances[8] under ECL accounting frameworks. While credit risk practices for other bank exposures, such as debt securities, are outside the scope of this paper, banks should ensure that sound credit risk practices are in place in these areas and that credit risk is properly considered in developing ECL estimates for these other exposures.

14. The Committee has developed 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. 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 inappropriate and untimely recognition and measurement of increases in credit risk, which affects the capital adequacy of banks and hampers proper assessment and control of a bank's credit risk exposure.

15. This guidance includes an appendix relating to International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and which describes supervisory requirements specific to jurisdictions applying the IFRS ECL requirements. Nevertheless, the paper is intended to set forth supervisory requirements for ECL accounting that do not contradict the applicable accounting standards established by the IASB or other standard setters. Rather, the paper presents the Committee's view of the robust application of those standards, including circumstances in which the Committee expects internationally active banks to limit their use of particular simplifications and/or practical expedients included in the relevant accounting standards.

[8] The term "allowances" includes allowances on loans and provisions on loan commitments and financial guarantee contracts.

## Supervisory requirements for sound credit risk practices that interact with expected credit loss measurement

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

### Principle 1

***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 effective internal controls, commensurate with the size, nature and complexity of its lending exposures to consistently determine allowances in accordance with the bank's stated policies and procedures, the applicable accounting framework and relevant supervisory guidance.***

17. It is the responsibility of the board of directors (board)[10] or equivalent (for jurisdictions that do not have boards) to maintain ECL allowances at an appropriate level and to oversee that the bank has appropriate credit risk practices for assessment and measurement processes, including internal controls, in place to consistently determine allowances in accordance with the bank's stated policies and procedures, the applicable accounting framework and relevant supervisory guidance. To fulfil these responsibilities, the board should instruct senior management to develop and maintain an appropriate, systematic and consistently applied process to determine allowances. The board should also require senior management to report the results of the credit risk practices for assessment and measurement processes periodically. Senior management should create, implement and update suitable policies and procedures to communicate the credit risk assessment and measurement process internally to all applicable personnel.

18. Consistent with Basel Core Principle 17, a bank's board 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 controlling or mitigating credit risk consistent with the approved risk appetite set by the board. Senior management is in turn responsible for implementing the credit risk strategy approved by the board and developing the aforementioned policies and processes. In addition, to limit the risk that lending exposures pose to financial stability, the Committee expects that a bank's board will require that management adopt and adhere to best practices with respect to sound underwriting.[11]

19. An effective internal control system for credit risk assessment and measurement is essential to the ability of senior management to carry out its duties. An effective internal control system should, among other aspects:

[9] See the BCBS consultative document *Corporate governance principles for banks* (available at www.bis.org/publ/bcbs294.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 published *Principles for sound residential mortgage underwriting practices* in April 2012, which aims to provide a framework for jurisdictions to set minimum acceptable underwriting standards for real estate lending exposures; available at www.financialstabilityboard.org/publications/r_120418.pdf.

(a) include measures to provide oversight of the integrity of information used and compliance with applicable laws, regulations, internal policies and procedures;

(b) reasonably ensure that the allowances reflected in the bank's financial statements and its supervisory reports are appropriate in accordance with the applicable accounting framework and relevant supervisory guidance, respectively;

(c) include a well-defined credit risk assessment and measurement process that is independent from (while taking appropriate account of) the lending function, which contains:

- an effective credit risk rating system that is consistently applied, accurately rates differing credit risk characteristics, identifies changes in credit quality in a timely and forward-looking manner, and prompts appropriate actions;
- an effective process which ensures that all relevant information, including forward-looking information and macroeconomic factors, is appropriately considered in assessing and measuring ECL. This includes maintaining appropriate reports, details of reviews performed, and identification and description of roles and responsibilities of 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 consistent with the requirements on grouping exposures based on identified shared credit risk characteristics;[12] and
- 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 model, as applicable (eg evidenced by written policies and procedures, management reports and committee minutes); and

(d) include an internal audit function 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

***A bank should adopt, document and adhere to sound methodologies that address policies, procedures and controls for assessing and measuring the appropriate level of credit risk on all lending exposures. The robust and timely measurement of allowances should build upon those methodologies.***

20. 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 quality of lending exposures, and the related estimation of ECL.

21. The Committee expects banks to maximise the extent to which underlying information and assumptions are used consistently within a bank to determine when credit should be granted and its corresponding terms; monitor credit quality; and measure allowances for both accounting and capital adequacy purposes. Using the same information and assumptions across a bank to the maximum extent possible reduces bias and encourages consistency in interpretation and application of the applicable accounting framework. Information and assumptions used should be reviewed and updated each

[12] See principle 3 on grouping of lending exposures on the basis of shared credit risk characteristics.

reporting period, and the rationale for changes in assumptions that affect the measurement of ECL should be well documented.

22. A bank's credit risk methodologies should clearly define key terms related to the assessment and measurement of ECL (such as loss and migration rates, loss events or default). Where different 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.

23. In accordance with Basel Core Principle 17, the Committee expects banks to have in place suitable processes and systems to appropriately identify, measure, evaluate, monitor, report and control the level of credit risk and collect and analyse all relevant information affecting the assessment and measurement of ECL.

24. At a minimum, a bank should adopt and adhere to written policies and procedures detailing the credit risk systems and controls inherent in the methodology and the separate roles and responsibilities of the bank's board and senior management. Though not an all-inclusive list, a robust and sound methodology for assessing credit risk and measuring the level of allowances will:

(a) include a robust process that equips the bank with the ability to know the level, nature and components of credit risk upon initial recognition of the lending exposure to ensure that subsequent changes in credit risk can be tracked and determined;

(b) include criteria to duly consider the impact of forward-looking information and macroeconomic factors.[13] Whether the evaluation of credit risk is conducted on a collective or individual basis, a bank must demonstrate that the assessment and measurement of ECL goes beyond considering historical and current information, 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 instrument terms and conditions. Macroeconomic factors relevant to the assessment 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;[14]

(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 other) to be applied to each exposure or portfolio;

(e) document the steps performed to determine that the selected method is most appropriate, especially if different ECL measurement methods are applied to different portfolios and types of individual exposures. A bank should be able to explain to its supervisors the rationale for any changes in measurement approach (eg move from a loss rate method to a PD/LGD method) and 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 have been considered), the historical time period over which loss experience is evaluated, and any qualitative adjustments.

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

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

Examples of factors that may require qualitative adjustments are the existence of concentrations of credit risk and changes in the level of such concentrations, increased usage of loan modifications, changes in expectations of macroeconomic trends and conditions, and/or the effects of changes in underwriting standards and lending policies;

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

(h) identify the situations that would generally lead to changes in ECL measurement methods, inputs or assumptions from period to period (eg the conditions when the time horizon over which expectations are to be formed would change; or the conditions under which an exposure originally monitored on a collective basis would be removed from the group for individual assessment);

(i) consider the relevant internal and external factors that may affect ECL estimates, such as underwriting standards and industry, geographical, economic and political factors;

(j) address how ECL rates are determined (eg historical loss rates or migration analysis as a starting point, adjusted for current conditions, forward-looking information and macroeconomic factors). A bank should have a realistic view of its lending activities and consider forward-looking information that is reasonably available, macroeconomic factors, and the uncertainty and risks inherent 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 over at least a 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. An entity should adjust estimates of ECL based on historical data, for current conditions and forecasts of future conditions that did not affect the period on which the historical data is based;

(l) consider the appropriateness of historical data/experience in relation to current conditions, forward-looking information and macroeconomic factors, and document how management's experienced judgment is used to assess and measure ECL;[15]

(m) determine the extent to which the value of collateral and other credit risk mitigants incorporated in the lending agreements affect ECL;

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

(o) require that analyses, estimates, reviews and other tasks/processes that act as an input or output to the credit risk assessment and measurement process are performed by competent and well trained personnel who are independent of the bank's lending activities. The inputs and outputs from these functions must be well documented, and include clear explanations supporting the analyses or rationales;

(p) document the methods used to validate models used for ECL measurement (eg backtests);[16]

15 See principle 6 on the use of management's experienced credit judgment.

16 See principle 5 on model validation.

(q) include a top-down analysis to measure collective allowances when forward-looking information and macroeconomic factors cannot be factored in on an individual basis. This will require that a bank 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

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

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

26. Management should consider a wide range of facts and circumstances that are likely to cause ECL to differ from historical experience and that may affect the full collectability of cash flows.

27. 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, or other credit risk mitigants, a bank should assess:

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

(g) the extent of a bank's adherence to best practices with respect to loan underwriting;[17]

(h) 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); and

(i) all other relevant information.

28. Where they have the potential to affect the incentives or willingness of borrowers to meet their obligations, or the bank's ability to recover amounts due, factors relating to the bank's business model and macroeconomic conditions should be considered, such as:

(a) competition and legal and regulatory requirements;

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

(c) the business model of the institution and overall credit risk profile of its lending portfolio and expectations of changes thereto;

[17] See footnote 9.

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

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

(f) the experience, ability and depth of lending management and staff;

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

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

29. Since consideration of forward-looking information and macroeconomic factors is a distinctive feature of ECL models and is critical to the timely recognition of ECL, a bank should develop and document its process to develop appropriate scenarios used in the estimation of ECL. In particular:

(a) a bank should demonstrate and document how ECL estimates would fluctuate with changes in scenarios, including changes to forward-looking information and macroeconomic factors and other relevant external information that may impact ECL estimates;

(b) the bank should have a documented process for determining the time horizon of the scenarios and, if relevant, how ECL is estimated in the period following that which is reasonably estimable;[18]

(c) scenarios may be internally developed or, for less sophisticated banks, may be 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 its own business and credit risk exposure profile, as the bank remains responsible for those scenarios;

(d) backtesting should be performed to ensure that appropriate factors are considered and incorporated, in light of historical experience; and

(e) where market indicators of future performance (such as credit default swaps) are available, management should assess the consistency of such indicators with its own judgments, and support and document material differences.

30. While a bank need not necessarily identify or model every possible scenario through complex scenario simulations, the Committee expects it to consider the full spectrum of 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 regulatory purposes are not intended to be used directly for accounting purposes. Forward-looking information and related credit quality factors used in regulatory expected loss estimates should be consistent with inputs to

[18] IFRS 9 does not include a concept of a "reasonably estimable" period. However, the ECL estimation method may vary depending on the forecast horizon for the estimate.

other relevant estimates within the financial statements, budgets, strategic and capital plans, and other regulatory reporting.[19]

31. Bank management should be able to demonstrate its adherence to sound underwriting practices and that the price at which lending exposures are granted appropriately reflects inherent risks. 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 showing inadequate underwriting practices may include:

(a) the granting of debt 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 servicing requirements as compared with the borrower's net available expected cash flows;

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

(d) for real estate financing, lending of amounts equal to or exceeding the value of the financed property or otherwise failing to provide a margin of collateral protection;

(e) increases in troubled debt restructurings and other concessions or modifications to lending exposures;

(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.

32. A bank's allowance methodology should include accounting policies related to the assessment and measurement of ECL to include criteria for (a) restructurings/modifications of lending exposures and (b) the treatment of purchased or originated credit-impaired lending exposures:

(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. Regardless, the methodology should drive a robust assessment and measurement of ECL such that the allowance level continues to reflect the substance of the restructured/modified exposure. The occurrence of a restructuring should not 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 quality should be well supported by strong evidence. Typically, a customer would need to demonstrate consistently satisfactory repayment performance over a period of time before credit risk would be considered to have decreased. Subsequent to a restructuring or modification, a bank may expect full repayment of any outstanding principal and/or interest; however, expected delays in the timing of those cash flows may still evidence that credit quality has not improved, and thus the level of ECL should not decrease. The methodologies should also call upon the lending staff to promptly notify the bank's accounting function when

[19] For example, forward-looking information and related factors affecting the allowance should be consistent with the information used in scenarios used to estimate cash flow expectations for goodwill or other asset impairment testing.

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 may be warranted.

(b) The methodology should enable appropriate identification of purchased or originated credit-impaired lending. The cash flow estimates for these exposures should be regularly updated, to improve the estimation of ECL. Such updates should be properly supported and documented and approved by senior management.

## Principle 3

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

33. As part of its credit risk assessment process, the Committee expects that banks will develop and implement comprehensive procedures and information systems to monitor the quality of their lending exposures. These include an effective credit risk rating system that captures the varying level, nature and components of credit risk that may be manifested over time, in order to reasonably ensure that all lending exposures are properly monitored and that ECL allowances are appropriately estimated.

34. With regard to rating systems, the procedures should clearly specify the key factors, including forward-looking information and macroeconomic factors, that form the basis for assigning credit risk ratings and thus help support the monitoring, assessment and reporting of ECL for all lending exposures across the entire credit risk rating system.

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

36. The credit risk rating a bank assigns upon initial recognition may be based on a number of criteria, including product type, collateral type and amount, borrower characteristics and geography or a combination thereof depending on the level of sophistication of a bank. Credit risk ratings 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 flaws in underwriting identified after initial recognition. The ECL estimates must be updated on a timely basis to reflect changes in credit risk ratings for either groups of exposures or individual exposures.

37. The design of the credit risk rating system should ensure that a bank incorporates all relevant information, including forward-looking information and macroeconomic factors, into its credit risk assessment and rating processes both upon initial recognition and over time. In this context, an effective credit risk rating system will allow a bank to track changes in credit risk, regardless of the significance of the change, and consequent changes in credit risk ratings.

38. The credit risk rating system must 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.

39. In describing elements of its credit risk rating system, a bank should clearly define each credit risk rating and delineate the personnel responsible for the design, implementation, operation and performance of the system as well as those responsible for periodic testing and validation.

40. Credit risk rating systems should take into account a borrower's current and expected financial condition and payment capacity over the expected life of the lending exposure or portfolio of exposures. This includes expectations of impacts from forward-looking information and macroeconomic factors

such as interest rates and unemployment rates. In this context, the rating of guaranteed or collateralised exposures on the basis of credit risk should consider the bank's expectation of the debtor's paying capacity.

41. Both accounting and regulatory frameworks recognise credit risk rating systems as tools for accurately assessing the full range of credit risk. Where a credit risk rating system is used for both regulatory capital calculations and financial reporting, the Committee expects banks to seek consistency between credit risk ratings assigned to a lending exposure, or portfolio of lending exposures. Where credit ratings assigned differ for regulatory capital and financial reporting purposes, the rationale should be documented.

42. Credit risk ratings should be reviewed whenever relevant new information is received or a bank's expectation of credit risk has changed. Credit risk ratings assigned should receive a periodic formal review (eg at least annually or more frequently if required in a jurisdiction) to reasonably ensure that those ratings are accurate and up to date. Credit risk ratings for individually assessed lending exposures that are either large, complex, higher-risk or credit-impaired should be reviewed more frequently than annually.

43. The basis for grouping exposures into portfolios with shared credit risk characteristics will impact the assessment of credit risk. A bank's methodology for grouping exposures to assess credit risk (such as by instrument type, industry/market segment, geographical location, vintage, amongst other bases) should be documented and subject to appropriate review and approval.

44. Lending exposures should be grouped such that exposures in the group share similar credit risk characteristics and are expected to react to the current environment, forward-looking information and macroeconomic factors in a similar way with respect to changes in the level of credit risk. The basis of grouping must be reconsidered regularly 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, and the responsiveness of credit risk to those characteristics, will not necessarily be appropriate subsequently, given that the relevant characteristics and their impact on credit risk may change through time.

45. The method of grouping exposures should be granular enough that banks can reasonably assess changes in credit quality that lead to migration to a different credit risk rating and thus impact the estimate of ECL.

46. 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 segment as a whole. Where changes in credit risk after initial recognition affect only some exposures within a group, those exposures must be segmented out of the group into relevant subgroups, to ensure that the ECL allowance is appropriately updated.

47. Where it is assessed that the level of credit risk has increased on a group basis (which assessment includes consideration of forward-looking information), the entire group should migrate to a higher credit risk rating, indicative of lower credit quality. In addition, a bank should consider the potential effect on other groups or individual exposures held by the bank. This may in some cases require a bank to also perform a credit risk assessment on an individual basis.

48. The grouping of exposures should be re-evaluated and exposures should be re-segmented whenever relevant new information is received or a bank's expectations of credit risk have changed. The group of exposures assigned should receive a periodic formal review (eg at least annually or more frequently if required in a jurisdiction) to reasonably ensure that those groupings are accurate and up to date.

## 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 as defined by the Basel Core Principles, which is an amount understood to be consistent with the objective of the relevant accounting requirements.***

49. Banks should implement sound and robust credit risk methodologies with the objective that the overall balance of allowances is developed in accordance with the applicable accounting framework and appropriately reflects ECLs. This requires that banks identify as early as possible any changes in credit risk and report increases in credit risk (also known as credit risk migration) through the allowance account.

50. A robust assessment of allowances takes into account relevant factors at the reporting date that may affect the collectability of cash flows over the life of a group of lending exposures (or a single lending exposure). The information set considered must go beyond historical and current data, to include forward-looking information and macroeconomic factors.

51. Individual assessments of credit risk may be appropriate in many circumstances, such as when an exposure is closely monitored or for large-value loans. Regardless of the nature of the assessment, ECL estimates should always incorporate the expected impact of all reasonably available forward-looking information and macroeconomic factors. This might require exposures (even those that are initially assessed individually using primarily historical and current information) to be placed in a group with shared credit risk characteristics and assessed collectively using a top-down approach to consider forward-looking information and macroeconomic factors that could not be assessed on an individual basis. Such collective assessment could allow identification of relationships between risk factors, as affected by forward-looking information and the ensuing cash shortfalls, that may not be apparent at the individual exposure level. When exposures are assessed both individually and collectively in this way, banks should be careful to ensure that there is no double-counting.

52. In addition to historical information and current conditions, forward-looking information and macroeconomic factors are also critical when estimating future cash shortfalls, for a group of exposures or an individual exposure. Methodologies for the determination of the cash flow shortfalls may start with simple averages of a bank's net loss experience on loans with shared credit risk characteristics over a relevant credit cycle, progressing to more complex techniques, such as migration analysis or models that estimate ECL. All methodologies should require appropriate adjustments to historical loss estimates for changes in factors that affect repayment, in particular due to forward-looking information and macroeconomic factors.

53. Robust methodologies and parameters should consider different potential scenarios and not rely purely on subjective, biased or overly optimistic considerations. Banks must use their expertise to consider the full spectrum of reasonable information relevant to the group or individual exposure, to ensure that allowance estimates incorporate timely recognition of changes in credit risk.

54. The cash flows that a bank expects to receive should be estimated without bias, and within the context of the required neutrality of accounting information, when assessing the amount of, and costs related to, any collateral and any support provided by guarantors. Because the credit standing of a borrower over time can affect both the amount and the timing of the cash flows, the remaining life of the exposure should be carefully determined and should take account of expected prepayments.

55. To reasonably ensure that the reported amount of allowances appropriately reflects ECL, the estimate of ECL should be reviewed on a periodic basis consistent with the bank's financial and regulatory reporting requirements.

Principle 5

***A bank should have policies and procedures in place to appropriately validate its internal credit risk assessment models.***

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

57. As the use of 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 credit risk assessment models are initially developed and when significant changes are made to the models. A bank should regularly (at least annually) validate its models.

58. Consistent with regulatory requirements for validation of internal credit risk models, a sound model validation framework should include, but is not limited to, the following elements:

(a) <u>Governance</u>

- Banks should establish an overarching governance framework over the model validation process, including the appropriate organisational structures and control mechanisms, to ensure that the models are able to continue to generate accurate, consistent and predictive estimates.
- Banks should ensure that the ultimate responsibility for the continuing appropriateness of the models is clearly and formally defined, and resides with the appropriate level of authority (ie the board and senior management). Banks should equip such persons with an understanding of the objectives and basis of the models to ensure that they are able to perform their roles effectively.
- Senior management should establish, and the board should approve, comprehensive and adequate written policies and procedures relating to the oversight and control of the model validation process. At the minimum, these policies and procedures should include:
  - (i) the accountability and reporting structure of the board, senior management and other personnel involved in the model validation process;
  - (ii) the internal control processes and independent review of the model validation process;
  - (iii) internal standards for assessing the discriminatory power of the bank's models and associated remedial actions to be taken when such standards are not met;[20]

[20] Remedial actions may include recalibration of the models.

(iv) internal standards for approving, at the appropriate level of authority, revisions made to models in response to deficiencies identified in model output/performance or as a result of the findings stemming from the independent review of the model validation process;

(v) matters which the bank considers material to the model validation process[21] and the internal authority and approval levels for these matters; and

(vi) the frequency and level of detail of reporting to the board and senior management on the continuing appropriateness of the models.

(b) <u>Clear roles and responsibilities</u>

- Banks should ensure that roles and responsibilities for (i) model validation and (ii) independent review of the validation process are clearly and formally defined.
- There should be a centralised unit responsible for model validation. This unit should comprise staff with the necessary experience and expertise to ensure that the model validation process is robust. The unit should also be independent of the model development process. Responsibilities of this unit should include ensuring that:

(i) the models are suitable for their proposed usage, at the outset and on an ongoing basis;

(ii) where a bank has outsourced its validation function, the bank has policies in place to ensure that qualified staff, who are independent of the development process, assess the quality of the work done by the external party in validating the models. In such a situation, the bank is still ultimately responsible for all model validation work and for ensuring that model validation work is endorsed by the appropriate level of bank management; and

(iii) the findings and outcome of model validation are reported in a prompt and timely manner to the appropriate level of authority.

- There should be an independent party (eg the internal auditor or an external auditor[22]) responsible for independent review of the model validation process (see also (e) below). This party should have the necessary experience and expertise and be independent of the model development and validation processes.

(c) <u>Validation scope and methodology</u>

- The validation of internal credit risk assessment models is a systematic process of evaluating the model's performance on a current and forward-looking basis. This includes the model's robustness, consistency and accuracy as well as its continued relevance to the underlying portfolio. Validation can help to identify potential limitations of a model, lead to prompt remediation and offer insights into how improvements could potentially be achieved in future models.
- The scope for validation should include a review of model inputs, model design and model outputs/performance.

[21] These include, but are not limited to, significant changes made to the models used and delays in model validation.

[22] If the external auditor performing the independent review of the model validation process also audits the bank's financial statements, the external auditor should ensure that the performance of this non-audit service does not impair the external auditor's independence under the independence requirements applicable to the external auditor.

*(i) Model inputs*

– Model inputs consist of information and data that are used to develop and subsequently to operate the model. The quality of the data used has a decisive influence on the predictive ability of a developed model. Validation should ensure that the data used for model development meet internally established quality and reliability standards. Furthermore, the data should be representative of the portfolio from both a current and a forward-looking perspective.

*(ii) Model design*

– For model design, there is a need to ensure that the underlying assumptions of the models are relevant. This entails close monitoring of key model assumptions against actual portfolio behaviour to ensure that the model serves its intended purpose, and that key model changes over time are documented with comprehensive explanations and justification. Validation should demonstrate that the underlying theory of the model is conceptually sound, recognised and generally accepted. 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 accept plausible stresses in the economic environment and/or possible changes to portfolio business profile or strategy without significantly reducing model robustness.

*(iii) Model output/performance*

– The model should be validated in accordance with internally established standards for acceptable performance. This includes the level of acceptable discriminatory power, stress-testing thresholds, backtesting thresholds and any other relevant validation standards. All means to assess model performance, such as stress testing, backtesting and benchmarking, should be evaluated with the most appropriate measures selected. Where performance thresholds are significantly breached, remedial actions to the extent of model re-development or re-calibration should be considered.

(d) Documentation

- Banks should ensure that the model validation process is comprehensively documented. Such documentation should include:

  (i) a description of the model, model assumptions, applications and limitations;

  (ii) an identification of key staff involved in model validation;

  (iii) a description of the validation procedures and results as well as remedial actions taken where necessary; and

  (iv) a description of any changes in validation methodology and tools, and data used, including data sources and periods covered.

- Banks should ensure that the documentation is regularly (at least annually) reviewed for appropriateness and updated.

(e) Independent review of model validation process

- Banks should appoint independent parties (eg internal or external auditors) to conduct regular reviews of the model validation process. The reviews should include:

  (i) conducting checks to attest to the depth, scope and quality of the validation of the models to ensure that the validation processes are implemented as designed and are effective;

  (ii) checking that the validation of the models is independent of the model development process; and

(iii) reporting the findings of the review process in a prompt and timely manner to the appropriate level of authority (eg senior management, audit committee).

## Principle 6

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

59. 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 be limited or not fully relevant to lending exposures currently held by the bank or expectations of future conditions. In that context, a bank must use its experienced credit judgment to thoroughly incorporate the expected impact of all reasonably available forward-looking information and macroeconomic factors on its estimates of ECL. A bank's use of its experienced credit judgment must be documented in the bank's credit risk methodology.

60. The Committee understands that it is challenging and costly to incorporate forward-looking information and macroeconomic factors into the estimate of ECL and that ECL estimates will inherently have a significant degree of unavoidable subjectivity. Nevertheless, in the Committee's view, consideration of forward-looking information and macroeconomic factors is essential to the proper implementation of an ECL accounting model, and therefore these costs should not be avoided on the basis that a bank considers them to be excessive or unnecessary.

61. Banks must demonstrate that the forward-looking (as well as past and current) information selected has a link to the credit risk of particular loans or portfolios. For a variety of reasons, it may not always be possible to demonstrate a strong link in formal statistical terms between individual types of information, or even the information set as a whole, and the credit risk of some exposures or portfolios. Particularly in such circumstances, a bank's experienced credit judgment will be crucial in establishing an appropriate level for the individual or collective allowance.

62. 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 between jurisdictions, and how this should affect allowances.

63. In estimating ECL, banks may determine either a single amount or a range of possible amounts. In the latter case, the Committee expects that banks will exercise prudence, defined as exercising appropriate care and caution when determining the level of ECL and the allowances to be recognised for accounting purposes to ensure that the resulting estimate is appropriate (ie consistent with neutrality and neither understated nor overstated).

64. 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 such information and the processes followed to obtain it, for accounting purposes.

## 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 and price credit risk and account for expected credit losses.***

65. 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 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.

66. A bank's credit risk practices should meet fundamental requirements and procedures, including having the appropriate tools to identify, assess and price credit risk appropriately. 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.

67. 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 credit-impaired.

68. 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.

69. When assessing the adequacy of credit risk systems, a bank must consider the required elements of an ECL accounting model. ECL accounting models require a bank to consider forward-looking information and macroeconomic factors, along with current conditions and historical data. As explained in paragraph 64, because banks are increasingly considering forward-looking information and macroeconomic factors for risk management and capital adequacy purposes, the Committee expects banks to leverage and integrate these processes to the extent possible when developing their processes for estimating ECL for accounting purposes. Nevertheless, for banks that calculate expected losses under the Basel capital framework, the Committee acknowledges that adjustments will be needed to these expected loss calculations when estimating ECL for accounting purposes and expects that these adjustments will be well documented.

70. 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 include credit risk rating systems, estimated PDs (with adjustment), 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, along with information of a forward-looking nature.

71. Estimates of ECL allowances may differ from jurisdiction to jurisdiction for various reasons, including that there are differences in ECL accounting standards internationally, 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 guidance seeks to narrow different interpretations and practices in these areas of the accounting requirements, to the extent possible, through the application of consistent and sound credit risk practices.

## Principle 8

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

72. The objective of public disclosures is to provide decision-useful information, on the financial position, performance and changes in the financial position of an entity, to a wide range of users in a clear and understandable manner. The 2007–09 financial crisis highlighted the importance of high-quality disclosures, 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 disclosures 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.

73. 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 not only required financial statement disclosures, but also any additional 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.

74. Management will need to apply judgment to determine the appropriate level of aggregation versus disaggregation of data disclosed, such that disclosures continue to adhere to accounting requirements, and provide insights into the entity's exposure to credit risk for users to perform relevant peer group comparisons.

75. The development of ECL estimates is a process that is influenced by many factors. Given that management and users have differing objectives, it is imperative that the inputs to management's credit risk assessments and ECL estimates are well articulated and understood. The Committee expects quantitative and qualitative disclosures, taken together, to provide a clear picture to users of the main assumptions used to develop ECL estimates, and the sensitivity of ECL estimates to changes in those assumptions. 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, which the Committee expects to be guided by the definition used for regulatory purposes), factors that influence changes in ECL estimates, and how the process incorporates management`s experienced credit judgment.

76. The move to an ECL model requires that forward-looking information and macroeconomic factors be incorporated into estimates of ECL. The Committee expects banks to provide qualitative disclosures on how these have been incorporated into the estimation process and quantitative information on how changes in forward-looking information and macroeconomic factors have affected ECL estimates.

77. Integral to the process of credit risk assessment and measurement is the process by which lending exposures are grouped into portfolios with shared credit risk characteristics as the basis for collective assessments of ECL on these portfolios. The Committee expects a bank to have a documented process by which to group lending exposures on the basis of shared credit risk characteristics. Portfolios can be further segmented for ECL purposes, taking into account a detailed analysis of the determinants of credit risk, for example on a product, borrower, geographical or other basis. Final grouping decisions will normally reflect a combination of factors. The Committee expects disclosures in this area to clearly communicate how management satisfies itself that lending exposures are properly grouped, such that collective assessments of allowances for these groups continue to be appropriate. Furthermore, changes to the way in which lending exposures are grouped and the corresponding impacts on ECL estimates should be disclosed.

78. The Committee expects banks to disclose similarities and differences in the methodology, data and assumptions used in measuring ECL for accounting purposes and expected losses for regulatory capital adequacy purposes.

79. For exposures on which ECL are measured on an individual basis, the Committee expects a bank to disclose how forward-looking information and macroeconomic factors have been factored into and have affected these ECL measurements.

80. 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, and should distinguish between changes due to updates in a bank's modelling methodology and changes in

assumptions or portfolio composition. Quantitative disclosures should include a reconciliation of the opening and closing balances of the allowance account in a tabular format, and the Committee expects that this will be provided separately for collective and individual allowances. The Committee believes that it would be best practice for this reconciliation to provide the following quantitative information: current period provisions, current period write-offs, recoveries of amounts previously written off, reductions due to disposals, and other changes.

81. 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 are consistent over time and facilitate comparisons with its peers. Such disclosures will enable users to monitor changes to the bank's ECL estimates each reporting period and allow users to perform meaningful analyses across national and international peer groups.

## 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.***

82. Banking supervisors have policies that call for the prudential review of a bank's lending and credit risk assessment functions on a periodic basis and for recommending improvements where necessary. Supervisors should be satisfied that:

(a) the bank's internal credit risk review function is robust and appropriately comprehensive in scope;

(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 forward-looking information and macroeconomic factors are appropriately considered;

(c) the bank's processes reflect the risk appetite of the bank in a way that riskier lending exposures are identified on a timely basis and monitored, and ECL allowance estimates are adjusted accordingly;

(d) the bank's evaluation process when originating or purchasing lending exposures results in an appropriate pricing of credit risk;

(e) appropriate information about the credit quality of lending exposures and the related allowance is provided to the board and senior management on a regular and timely basis;

(f) management judgment has been exercised in a robust manner and is well documented; and

(g) forecasts included in credit risk assessments and measurements are consistent with forecasts used for other purposes by the bank and provided to regulators.

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

## Principle 10

***Banking supervisors should be satisfied that the methods employed by a bank to determine allowances for accounting purposes produce a robust measurement of expected credit losses under the applicable accounting framework.***

84. 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 those outlined in this paper, with emphasis on the following:

(a) the procedures used by a bank to measure ECL are robust and timely and take into account criteria such as cash flow estimates based on assessments of current and future macroeconomic conditions, and other forward-looking information and updated valuations of credit risk mitigants (and, in particular, collateral);

(b) the framework and methodology for establishing collectively assessed allowances on lending exposures are robust;

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

(d) uncollectabilty is recognised in a timely and appropriate manner through allowances or write-offs; and

(e) regardless of the method used to determine ECL, the bank's internal processes for measuring ECL take full account of the risks that the bank has taken on.

85. 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)[23] and the Internal Audit Function in Banks (June 2012).[24]

## Principle 11

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

86. 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 related processes, methodology and underlying assumptions require 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 high degree of subjectivity due to the wide range of factors that must be considered. Further, the ability to estimate ECL on lending exposures (whether individually or collectively) improves over time as substantive information accumulates regarding the factors affecting repayment prospects, and may therefore be subject to limitations in the earlier part of a loan's term. Therefore, supervisors should be especially vigilant when reviewing management's estimate of ECL in the earlier part of a loan's term.

87. In performing their risk assessments, supervisors should consider whether management has: (i) maintained effective systems and controls for identifying, measuring, monitoring and controlling the

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

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

level of credit risk, significant increases in credit risk and asset quality problems in a timely manner; (ii) analysed all significant relevant factors that affect credit risk and the collectability of the portfolio; and (iii) established an acceptable allowance estimation process that, at a minimum, meets the fundamental requirements previously described.

88. 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 correction by management in a timely manner. The supervisory response should be commensurate with the severity of the deficiencies, the impact on the 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 actions (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.

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

90. To the extent that credit risk assessment or 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, when deficiencies exist, the supervisor should discuss this with the bank and take further appropriate actions when necessary.

# Appendix

## Supervisory requirements specific to jurisdictions applying IFRS

This Appendix outlines supervisory requirements 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 irrespective of whether the allowance is based on 12-month or lifetime expected losses, is provided in the main section of this paper.

This Appendix provides additional supervisory requirements 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".[25] The Committee expects that a bank will always measure ECL for all lending exposures, and that a nil allowance will be rare[26] because ECL estimates are a probability-weighted amount that should always reflect the possibility that a loss will occur.[27]

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 on a timely basis. 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 take into account the range of possible future scenarios. The methodology used to estimate 12-month ECL should be robust at all times and should allow for the timely build-up of allowances.

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".[28] 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

[25] See IFRS 9 paragraph 5.5.5.

[26] 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.

[27] See IFRS 9, paragraph 5.5.17.

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

events that could occur in the next 12 months. In other words, if using a probability of default/loss-given-default (PD/LGD) measurement approach, PD is assessed over a 12-month time horizon while LGD is assessed over the life of the lending exposure. 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 occurring *over the expected life* of the financial instrument must be considered. In some circumstances, IFRS 9 allows 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 expects that the definition of default adopted for accounting purposes will be guided by the definition used for regulatory purposes. The default definition provided in the Basel capital framework includes both:

(a) a qualitative criterion that requires a bank to identify credit deterioration before the exposure becomes delinquent ("unlikeliness to pay" events); and

(b) an objective indicator based on a material delinquency status equivalent to the rebuttable presumption in IFRS 9, paragraph B5.5.37 (the obligor being past due more than 90 days).

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 is regarded as a primary indicator, while the 90-days-past-due criterion is a backstop. Furthermore, the list of elements provided in the Basel framework as indications of unlikeliness to pay should be supplemented with other elements that affect the borrower's ability or willingness to meet the contractual obligations, as identified on either an individual or a collective basis, and adjusted to incorporate current conditions and forward-looking information. The inclusion of those other elements is aimed at capturing indicators of credit risk that precipitate eventual cash shortfalls.[29]

A6. In formulating the estimate of the amount equal to 12-month ECL, it is important to consider all reasonably available information that affects credit risk, especially forward-looking information and macroeconomic factors. A bank should exercise its experienced credit judgment to consider both qualitative and quantitative information that may affect the bank's expectations 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 information that is reasonably available. The Committee expects that a bank will consider all information that is reasonably available, without bias, and is known to affect the assessment and measurement of credit risk. In particular, for the measurement of an amount equal to 12-month ECL to be sufficiently sensitive to all relevant sources of credit risk, it is necessary that forward-looking information that is reasonably available and macroeconomic factors are considered in the estimate. This will permit allowances to build over time in response to changes in credit risk and better reflect the inherent credit risk associated with lending.

A7. IFRS 9 expects a bank to monitor and measure significant increases in credit risk for all financial instruments measured at 12-month ECL. IFRS 9 includes a choice to make assumptions about low credit risk exposures, the application of which is addressed in paragraphs A50–A58 below. The measurement of an amount equal to 12-month ECL must be updated each reporting period, and all changes in this

[29] The concept of default applies to other aspects of the IFRS 9 ECL model, including the assessment of significant increases in credit risk.

amount are to be monitored and recorded through the allowance account. In addition, a bank must be able to demonstrate that these exposures have not experienced a significant increase in credit risk since initial recognition.

A8. The Committee understands that banks will only rarely originate exposures that are high credit risk.[30] Indeed, where high-credit-risk exposures are originated and their allowances are initially measured at 12-month ECL, the Committee expects the bank to monitor these exposures closely for increases in credit risk that would result in the exposure moving quickly to LEL measurement. That is because high-risk exposures are likely to exhibit greater volatility and to more readily rapidly decline in credit quality. Where a bank has a policy that allows it to extend high-risk lending exposures, the Committee expects that the rationale for extending these exposures and associated governance process will be well documented and disclosed, 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 share similar credit risk characteristics. Banks may use different methods to group exposures for the purpose of collectively assessing credit risk and measuring ECL, and more sophisticated credit risk assessment models may combine several characteristics. Banks must be able to demonstrate that their methodology for grouping exposures is sound, that the individual exposures within a group are expected to respond to changes in the credit risk drivers relevant to the group in a consistent way, and that the grouping of financial instruments does not obscure information.

A12. 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.

A13. Lending exposures should *not* be grouped in such a way that higher-credit-quality exposures are able to mask changes in credit risk for lower-credit-quality exposures within the same group. See also principle 4 in the main section of this guidance for additional requirements regarding collective assessments of ECL.

## 2. Assessment of significant increases in credit risk

A14. IFRS 9, paragraph 5.5.4, states: "The objective of the impairment requirements is to recognise lifetime expected credit losses 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."

[30] 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.

A15. The Committee believes that the rationale for this approach is that ECL anticipated upon initial recognition will be taken into account in the pricing of credit at that time.[31] It follows, then, that any post-origination increase in credit risk is unlikely to be fully 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. If so, the lending exposure would be subject to LEL measurement.

A16. Particularly for banks, the measurement of allowances for financial reporting purposes is an important facet of credit risk management. Accordingly, the Committee expects processes for both credit risk practices and financial reporting to be integrated, and for improvements in one area to facilitate improvements in the other.

A17. 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 an increase in credit risk and the measurement of required 12-month and lifetime ECL. Strong governance, systems and controls must be placed around these processes. 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 group is important. For example, processes should be in place within a bank 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 are consistent across the entity (ie at the jurisdictional level and the group level).

A18. 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.

A19. 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 includes 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. A critical feature is the required use of reasonable and supportable forward-looking information, in addition to information about current conditions and historical data.

A20. The Committee strongly endorses the IASB's view that "[l]ifetime expected credit losses are generally expected to be recognised before a financial instrument becomes past due" and that "[t]ypically, 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".[32]

A21. In order to recognise allowances on a timely basis in line with the IFRS 9 requirements, banks will need to:

[31] See, for example, IASB Snapshot on IFRS 9, 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 and other terms and conditions" and that "[a] true economic loss arises when expected credit losses exceed initial expectations (i.e. when the lender is not receiving compensation for the level of credit risk to which it is now exposed)".

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

- assemble data and forward projections for the key drivers of credit risk in their portfolios; and
- 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.

A22. 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 be appropriate in the implementation of an ECL approach by banks.

A23. For example, within retail portfolios adverse developments in macroeconomic factors and borrower attributes (such as the sector from which they earn their primary income) will generally lead to an increase in the objective 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 have a clear view – supported by persuasive analysis – of the linkages from macroeconomic factors and borrower attributes to the level of credit risk in a portfolio. This will be obtained through analysis of data for the past, adjusted using experienced credit judgment for differences between historic, current and forward-looking information and macroeconomic factors.

A24. The Committee expects analyses of this kind to be also performed for large, individually managed exposures. For example, for a large commercial property loan, banks must take account of the considerable sensitivity of the commercial property market in many jurisdictions to the general macroeconomic environment, and use information such as levels of interest rates or vacancy rates to determine whether there has been a significant increase in credit risk.

A25. Banks must have a clear policy, including well developed definitions, of what constitutes a "significant" increase in credit risk for different types of lending exposures. Such definitions and the reasons why they 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 before consideration of the effects of credit risk mitigants such as collateral or guarantees.

A26. In developing their definitions, the Committee expects banks to consider each of the 16 classes of indicators in IFRS 9, paragraphs B5.5.17 (a)–(p), and in addition to consider whether there is further information that should be taken into account.

A27. While it is neither possible nor desirable for universally applicable criteria to be developed, the Committee emphasises that the presence of any of conditions (a)–(f) below would suggest that there has potentially been a significant increase in credit risk. 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 forming their assessments, banks should pay particular attention to the factors listed below:

(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 higher than it was when the loan was actually originated as a result of the change in credit risk since inception;[33]

(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 indicator that is weaker than upon initial recognition;

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

(f) expectation of forbearance or restructuring.

A28. In addition, the assessment of whether there has been a significant increase in credit risk of a lending exposure should take full 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 for forward-looking information and macroeconomic factors; and

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

A29. Accurate measurement of the drivers of credit risk, and reliable calibration of the linkages between those drivers and the level of credit risk, are both critical, as small changes in credit quality can be associated with a large increase in the probability of default. IFRS 9 requires banks to look beyond the change in the absolute credit risk and when determining whether there is a significant increase in credit risk to consider the change in probability of default since initial recognition relative to the probability of default occurring as assessed upon initial recognition. A given change in the probability of a default occurring has a different significance depending on the risk of a default occurring as measured upon initial recognition. It is also necessary to look beyond how many "notches" a rating downgrade entails because the change in PD for a one-notch movement is not 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). It is possible that a significant increase in credit risk could occur before lending exposures experience even a one-notch downgrade.

A30. There are some circumstances in which an adverse movement in the factors listed in paragraphs A27–A28 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 high credit quality – and, as illustrated in paragraph A29, the sensitivity of default probability to rating grade increases strongly as rating quality declines.

[33] Where management is unable to distinguish this element of pricing from others, such as the general price of credit risk or changes in gross margins charged due to other factors such as changing capital requirements, the Committee expects banks to adopt a rebuttable presumption that any increase in the credit spread that would be charged for a particular loan is due to an increase in the bank's assessment of the credit risk of that exposure.

A31. There could also be circumstances in which the deterioration in a particular factor is statistically very small (judged in relation to past data on it), or where 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.

A32. The Committee stresses that thorough consideration and full weight must be given to factors which change only on the basis of a discretionary decision. For example, if a decision is made to lower the internal credit rating for an exposure, it is unlikely that such action would have been taken by the decision-maker had the deterioration not been perceived as significant.

A33. 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 seniority of individual exposures or differences in the timing of when lending was provided – particular care should be taken in this situation to ensure that all exposures where there has been a significant increase in credit risk are identified.

A34. For exposures managed on a portfolio basis (such as retail), the definitions of portfolios must be reviewed regularly to ensure that the exposures within them remain homogeneous in terms of their response to factors affecting credit risk. Changing economic conditions may require re-grouping. Exposures must not be grouped in such a way that an increase in the credit risk of some individual exposures could be masked by the performance of the portfolio as a whole.

A35. IFRS 9, paragraph B5.5.1, requires that, in order to meet the objective of recognising lifetime expected losses for significant increases in credit risk since initial recognition, assessment 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 one or more exposures in a group have experienced a significant increase in credit risk, the relevant group or subgroup will transfer to LEL measurement of ECL even though it is not possible to identify this on an individual exposure basis.

A36. Consistent with IFRS 9, paragraph IE39, the proportion of the group that has increased significantly in credit risk should be subject to LEL measurement.

A37. "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 utilise formal statistical techniques. However, for other exposures, that may not be feasible.

A38. The IASB ECL model is a relative model. This means that 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. Where credit risk has increased significantly, exposures are required to move to LEL measurement. IFRS 9, paragraph BC 5.161, suggests 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, in which changes in the risk of default need to be assessed relative to that upon initial recognition rather than as 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.

A39. The Committee expects banks to develop ways of robustly reviewing the quality of their approach to assessing whether credit risk has increased significantly. This could involve some form of tracking of the treatment of exposures through time. For example, it may be possible to glean insight into the quality of implementation by tracking the extent to which the subsequent performance of exposures suggests that there had, in fact, been a significant increase in credit risk earlier than when a transfer from 12-month to lifetime ECL provisioning occurred. In these instances, management should consider whether there are additional factors that should be taken into account in the assessment of significant increases in credit risk that would have resulted in more timely transfer.

A40. Banks should be alert to any possibility of bias being introduced which 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 rarely be used 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.

A41. In cases where banks believe that their approach to implementation is likely to have introduced bias of this kind, they should pay particular attention to the need to consider the assessment of significant increases in credit risk on a collective basis to correct 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).

A42. IFRS 9, 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 terms and resulting 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.

A43. Modifications or renegotiations can mask increases in credit risk, resulting in ECL being underestimated, and delaying the transfer to LEL for obligors whose credit quality has significantly deteriorated, or can inappropriately result in a move from LEL measurement back to 12-month ECL measurement.

A44. When determining if 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 relevant forward-looking implications of the modifications for the credit quality of the exposure (taking into consideration the credit quality of the obligor). 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 expectation on 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.

A45. 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 higher credit quality where 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 lifetime expected credit losses 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

A46. 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 regards many of these practical expedients as inappropriate for use by internationally active banks and those banks more sophisticated in the business of lending, 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".

A47. 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.

A48. 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 and disclosed. They will be subject to increased scrutiny by supervisors to determine appropriateness.

### The information set

A49. 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".[34] The Committee expects that banks will not read these statements restrictively. Since 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 to use all reasonable and supportable information 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.

[34] IFRS 9, paragraph B5.5.15.

## "Low credit risk" exemption[35]

A50. IFRS 9 introduces an exception to the general model in that, for "low credit risk" exposures, entities have an option not to assess whether credit risk has increased significantly since initial recognition. It was included as a practical expedient to provide relief from tracking credit risk for high-quality financial instruments such as highly rated debt securities. Although use of the low-credit-risk exemption is provided as an option in IFRS 9, in the Committee's judgment use of this exemption by banks would reflect a low-quality implementation of the ECL model in IFRS 9. The Committee expects that it would be used by banks only in rare and appropriate circumstances, since the Committee views lending activities as the core of the bank's business.

A51. The Committee regards the low-credit-risk exemption as merely an operational simplification that should be used by banks only in cases where it is evident that its use would have a minimal effect on the timing of ECL recognition and the measurement of ECL, as compared with when the expedient is not used. Nonetheless, some banks may consider that certain classes of exposures exist that are of such high credit quality that they will not exhibit significant increases in credit risk.

A52. In that context, the Committee expects that a significant increase in credit risk will always result in an exposure moving to LEL measurement, and for good-quality implementation of IFRS 9 any rare use of the low-credit-risk exemption must be accompanied by clear evidence that credit risk as of the reporting date is so low that a significant increase in credit risk since initial recognition could not have occurred. Accordingly, despite the exemption that exists in IFRS 9 for low-credit-risk exposures, the Committee expects that, even when a bank assigns a low credit risk rating to an exposure (or group of exposures), management should still assess whether credit risk has increased significantly. Even when a bank concludes that credit risk has not increased significantly for an individual exposure or group of exposures, it must continue to assess those exposures for changes in credit risk and recognise changes in 12-month ECL through the allowance.

A53. 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.

A54. IFRS 9 does not provide definitions of "near" and "longer" term; thus, in those rare situations where a bank uses this practical expedient, a bank should establish its own internal definitions of "near" and "longer" term. The border between "near term" and "longer term" should be determined in a way that does not limit the weight of the evaluation on the "strong capacity" to meet the contractual cash flow obligations criterion (point (b) in paragraph A53) in the overall assessment of the borrower's credit risk.

A55. The notion of low credit risk does not refer to an entity's assessment of low credit risk in the context of its own risk appetite and the strategy of the business. Rather, the credit quality of lending

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

exposure should be assessed on the basis of a global market perspective which takes account of all terms and conditions of the contractual relationship.[36]

A56. The Committee expects banks' public disclosures to provide full information on the criteria applied in order to identify low-credit-risk exposures and classes of financial instruments to which it applies, and in particular the Committee recommends that information be provided on the internal definitions adopted for "near" and "longer" term.

A57. 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 cannot automatically be considered low credit risk. The "investment grade" category defined by the rating agencies is not homogeneous and cannot be uniformly regarded as "low credit risk", as the term "investment grade" is a market convention and is not an exact measure of the probability of a default occurring, but rather expresses the credit rating agencies' (CRAs') assessment of the debtor's creditworthiness, from strongest to weakest, within a universe of 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 CRAs (where the latter are available). Nevertheless, optimistic internal credit ratings, as compared with external ratings, would require additional analysis and justification by management.

A58. When external ratings are used substantively in a bank's evaluation of credit risk, in order to avoid inconsistencies the composition of the panel of CRAs used as a benchmark should be stable over time. In addition, entities should continuously monitor the relationship between PDs for the internal rating class threshold for "low" credit risk and the external grade rating class used as the threshold (taking into account the maturity of the exposures). When considering the boundary between low-credit-risk and higher-risk exposures, a bank may choose an external rating grade that has a lower PD than that generally accepted by market participants as representing the boundary of "investment grade" for a particular maturity but it may not use one with a higher PD. Where the default rates experienced for the internal threshold systematically differ from the external benchmark, banks shall reconsider if that relationship remains appropriate for the purpose of the application of the low-credit-risk exception, and if necessary should adjust the internal threshold for low credit risk in a timely manner.

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

A59. 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 in place that are sufficiently robust to ensure that credit risk increases are detected well ahead of exposures becoming past due or delinquent. The Committee would view significant reliance on past-due information (such as using the more-than-30-days-past-due rebuttable presumption as a primary indicator of transfer to LEL) as a very low-quality implementation of an ECL model.

A60. In this regard, the Committee expects a bank to use forward-looking information that is reasonably available and analyse whether there is any substantive relationship between these factors and indicators of credit risk. In this perspective, the Committee has a strong expectation that a bank will not fall back on the 30-days rebuttable presumption unless it has demonstrated that all forward-looking

[36] For example, some banks' target market is high-risk individuals or businesses. For those banks, their highest credit quality customers will often be considered high-risk customers by other market participants even if the banks themselves consider them to be low credit risk in relation to the full range of their borrowing customers.

information that was considered potentially relevant had no substantive relationship with the level of credit losses.

A61. 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. For example, in some jurisdictions it is common practice for borrowers to delay repayments for certain exposures, but history shows that those missed payments are fully recouped in the succeeding months (often referred to as a technical default).[37] The analysis should consider both current, forward-looking information, and macroeconomic factors that may cause future cash shortfalls to differ from historical experience.

A62. 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 particular attention to be paid 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.

[37] 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.