Applying IFRS

Impairment of financial instruments under IFRS 9

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What you need to know

- The impairment requirements in the new standard, IFRS 9 Financial Instruments, are based on an expected credit loss model and replace the IAS 39 Financial Instruments: Recognition and Measurement incurred loss model.
- The expected credit loss model applies to debt instruments recorded at amortised cost or at fair value through other comprehensive income, such as loans, debt securities and trade receivables, lease receivables and most loan commitments and financial guarantee contracts.
- Entities are required to recognise an allowance for either 12-month or lifetime expected credit losses (ECLs), depending on whether there has been a significant increase in credit risk since initial recognition.
- The measurement of ECLs reflects a probability-weighted outcome, the time value of money and the best available forward-looking information.
- The need to incorporate forward-looking information means that application of the standard will require considerable judgement as to how changes in macroeconomic factors will affect ECLs. The increased level of judgement required in making the expected credit loss calculation may also mean that it will be more difficult to compare the reported results of different entities. However, entities are required to explain their inputs, assumptions and techniques used in estimating the ECL requirements, which should provide greater transparency over entities' credit risk and provisioning processes.
- The need to assess whether there has been a significant increase in credit risk will also require new data and processes and the exercise of judgement.
- The effect of the new requirements will be to require larger loss allowances for banks and similar financial institutions and for investors in debt securities. On transition, this will reduce equity and have an impact on regulatory capital. The level of allowances will also be more volatile in future, as forecasts change.
- Adopting the expected credit losses requirements will require many entities to make significant changes to their current systems and processes; early impact assessment and planning will be key to managing successful implementation.
- The ECL impairment requirements must be adopted with the other IFRS 9 requirements from 1 January 2018, with early application permitted.

The IASB has sought to address the concern that the incurred loss model in IAS 39 contributes to the delayed recognition of credit losses.

1. Introduction

In July 2014, the International Accounting Standards Board (IASB) issued the final version of IFRS 9 *Financial Instruments (IFRS 9, or the standard)*, bringing together the classification and measurement, impairment and hedge accounting phases of the IASB's project to replace IAS 39 and all previous versions of IFRS 9.

The IASB has sought to address a key concern that arose as a result of the financial crisis, that the incurred loss model in IAS 39 contributed to the delayed recognition of credit losses. As such, it has introduced a forward-looking expected credit loss model. The ECL requirements and application guidance in the standard are accompanied by 14 Illustrative Examples.

This publication discusses the new expected credit loss model as set out in the final version of IFRS 9 and also describes the new credit risk disclosures in relation to the expected credit loss model, as set out in IFRS 7 *Financial Instruments: Disclosures* (see section 12 below).

1.1 Brief history and background of the impairment project

During the financial crisis, the delayed recognition of credit losses that are associated with loans and other financial instruments was identified as a weakness in existing accounting standards. This is primarily due to the fact that the current impairment requirements under IAS 39 are based on an 'incurred loss model', i.e., credit losses are not recognised until a credit loss event occurs. Since losses are rarely incurred evenly over the lives of loans, there is a mismatch in the timing of the recognition of the credit spread inherent in the interest charged on the loans over their lives and any impairment losses that only get recognised at a later date.

In November 2009, the IASB issued an Exposure Draft (ED) *Financial Instruments: Amortised Cost and Impairment*, that proposed an impairment model based on expected losses rather than incurred losses, for all financial assets recorded at amortised cost. In this approach, the initial ECLs were to be recognised over the life of a financial asset, by including them in the computation of the effective interest rate (EIR) when the asset was first recognised. This would build an allowance for credit losses over the life of a financial asset and so 'match' the recognition of credit losses with that of the credit spread implicit in the interest charged. Subsequent changes in credit loss expectations would be reflected in catch-up adjustments to profit or loss based on the original EIR. Comments received on the 2009 ED and during the IASB's outreach activities indicated that constituents were generally supportive of a model that distinguished between the effect of initial estimates of ECLs and subsequent changes in those estimates. However, they were also concerned about the operational difficulties in implementing the proposed model.

To address the operational challenges and, as suggested by the Expert Advisory Panel (EAP), the IASB decided to decouple the measurement and allocation of initial ECLs from the determination of the EIR (except for purchased or originated credit-impaired financial assets). Therefore, the financial asset and the loss allowance would be measured separately, using an original EIR that is not adjusted for initial ECLs. Such an approach would help address the operational challenges raised and allow entities to leverage their existing accounting and credit risk management systems and so reduce the extent of the necessary integration between these systems. However, the IASB acknowledged that discounting ECLs using the original EIR would double-count the ECLs that were priced into the financial asset at initial recognition. Hence, the IASB concluded that it was not appropriate to recognise lifetime ECLs on initial recognition. In order to address the operational challenges while trying to reduce the effect of double-counting, as well as to replicate (approximately) the outcome of the 2009 ED, the IASB decided to pursue a dual-measurement model that would require an entity to recognise:

A portion of the lifetime ECLs from initial recognition as a proxy for recognising the initial ECLs over the life of the financial asset

And

 The lifetime ECLs when credit risk has increased since initial recognition (i.e., when the recognition of only a portion of the lifetime ECLs would no longer be appropriate because the entity has suffered a significant economic loss)

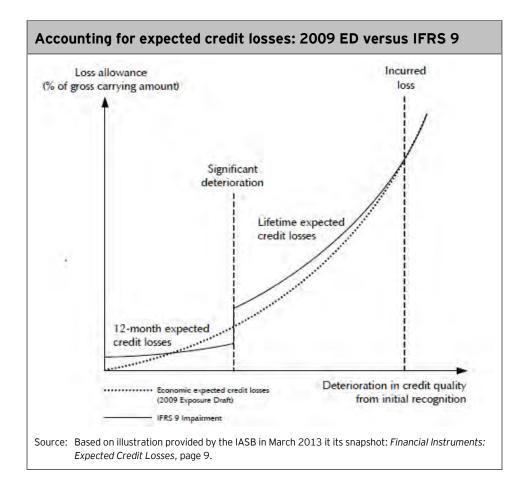
It is worth noting that any approach that seeks to approximate the outcomes of the model in the 2009 ED without the associated operational challenges of a credit-adjusted EIR will include a recognition threshold for lifetime ECLs. This will give rise to what has been referred to as a 'cliff effect' i.e., the significant increase in loss allowance that represents the difference between the portion that was recognised previously and the lifetime ECLs.

Subsequently, the IASB and the Financial Accounting Standards Board (FASB) spent a considerable amount of time and effort developing a converged impairment model but, in January 2011, the FASB decided to develop an alternative expected credit loss model. In December 2012, it issued a proposed accounting standard update, *Financial Instruments Credit Losses (Subtopic 825 15)*, that would require an entity to recognise a loss allowance for ECLs from initial recognition at an amount equal to lifetime ECLs (see section 1.4 below).

In March 2013, the IASB published a new Exposure Draft *Financial Instruments: Expected Credit Losses* (the 2013 ED), based on proposals that grew out of the joint project with the FASB. The 2013 ED proposed that entities should recognise a loss allowance or provision at an amount equal to 12-month ECLs for those financial instruments that had not yet seen a significant increase in credit risk since initial recognition, and lifetime ECLs once there had been a significant increase in credit risk. This new model was designed to:

- Ensure a more timely recognition of ECLs than the existing incurred loss model
- Distinguish between financial instruments that have significantly deteriorated in credit quality and those that have not
- Better approximate the economic ECLs

This two-step model was designed to approximate the build-up of allowance as proposed in the 2009 ED, but involving less operational complexity. The following diagram illustrates the 'stepped profile' of the new model, in solid line, compared to the steady increase shown by the dotted line proposed in the 2009 ED (based on the original expected credit loss assumptions and assuming no subsequent revisions of this estimate). It shows that the two-step model first 'overstates' the allowance (compared to the method set out in the 2009 ED), then understates it as the credit quality deteriorates, and then overstates it once again, as soon as the deterioration is significant.



Since then the IASB re-deliberated particular aspects of the 2013 ED proposals, with the aim of providing further clarifications and additional guidance to help entities implement the proposed requirements. The Board finalised the impairment requirements and issued them in July 2014, as part of the final IFRS 9.

The IASB has also set up an IFRS Transition Resource Group for Impairment of Financial Instruments (ITG) that aims to:

- Provide a public discussion forum to support stakeholders on implementation issues arising from the new IFRS 9 impairment requirements. In particular, the requirements that may be applied in different ways, resulting in possible diversity in practice, and the issues that are expected to be pervasive.
- Inform the IASB about the implementation issues, which will help the IASB determine what action, if any, will be needed to address them.

However, the ITG will not discuss questions about how to measure ECLs nor issue any guidance.

In addition, the Basel Committee has indicated that it will provide guidance to bank regulators on the implementation of the IFRS 9 impairment model by internationally active banks, by revising its guidance on sound credit risk assessment and valuation for loans (SCRAVL). A consulation document is expected to be issued in the first quarter of 2015, with the final guidance due later in the year.

Given these initiatives, the views that we express in this publication must inevitably be regarded as preliminary and tentative.

The IASB issued the impairment requirements in July 2014 as part of the final IFRS 9 and set up an IFRS Transition Resource Group for Impairment of Financial Instruments.

1.2 Overview of IFRS 9 impairment requirements

The new impairment requirements in IFRS 9 are based on an expected credit loss model and replace the IAS 39 incurred loss model. The expected credit loss model applies to debt instruments (such as bank deposits, loans, debt securities and trade receivables) recorded at amortised cost or at fair value through other comprehensive income, plus lease receivables, contract assets and loan commitments and financial guarantee contracts that are not measured at fair value through profit or loss.

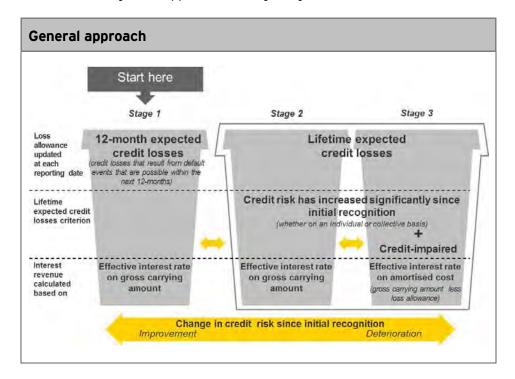
The guiding principle of the expected credit loss model is to reflect the general pattern of deterioration or improvement in the credit quality of financial instruments. The amount of ECLs recognised as a loss allowance or provision depends on the extent of credit deterioration since initial recognition. Under the general approach (see section 3.1 below), there are two measurement bases:

- 12-month ECLs (Stage 1), which applies to all items (from initial recognition) as long as there is no significant deterioration in credit quality
- Lifetime ECLs (Stages 2 and 3), which applies when a significant increase in credit risk has occurred on an individual or collective basis

When assessing significant increases in credit risk, there are a number of operational simplifications available, such as the low credit risk simplification (see section 5 below).

Stages 2 and 3 differ in how interest revenue is recognised. Under Stage 2 (as under Stage 1), there is a full decoupling between interest recognition and impairment and interest revenue is calculated on the gross carrying amount. Under Stage 3 (where a credit event has occurred, defined similarly to an incurred credit loss under IAS 39), interest revenue is calculated on the amortised cost (i.e., the gross carrying amount after deducting the impairment allowance).

Hence, the approach has been commonly referred to as the 'three-bucket' approach, although IFRS 9 does not use this term. The following diagram summarises the general approach in recognising either 12-month or lifetime ECLs.



There are two alternatives to the general approach, the simplified approach and the credit-adjusted effective interest rate approach.

An entity always accounts for ECLs, and updates the loss allowance for changes in ECLs at each reporting date to reflect changes in credit risk since initial recognition. There are two alternatives to the general approach:

- The simplified approach, that is either required or available as a policy choice for trade receivables, contract assets and lease receivables (see section 3.2 below)
- The credit-adjusted EIR approach, for purchased or originated credit-impaired financial assets (see section 3.3 below)

ECLs are an estimate of credit losses over the life of a financial instrument and when measuring ECLs (see section 4 below), an entity needs to take into account:

- The probability-weighted outcome (see section 4.4 below)
- The time value of money (see section 4.5 below) so that ECLs are discounted to the reporting date
- Reasonable and supportable information that is available without undue cost or effort (see section 4.7 below)

The ECL requirements must be adopted with the other IFRS 9 requirements from 1 January 2018, with early application permitted if the other IFRS 9 requirements are adopted at the same time.

1.3 Key changes from the IAS 39 impairment requirements and the impact and implications

The new IFRS 9 impairment requirements eliminate the IAS 39 threshold for the recognition of credit losses, i.e., it is no longer necessary for a credit event to have occurred before credit losses are recognised. Instead, an entity always accounts for ECLs, and updates the loss allowance for changes in these ECLs at each reporting date to reflect changes in credit risk since initial recognition. Consequently, the holder of the financial asset needs to take into account more timely and forward-looking information in order to provide users of financial statements with useful information about the ECLs on financial instruments that are in the scope of these impairment requirements.

How we see it

The main implications of the new ECL model are, as follows:

- The scope of the impairment requirements is now much broader. Previously, under IAS 39, loss allowances were only recorded for impaired exposures. Now, entities are required to record loss allowances for all credit exposures not measured at fair value through profit or loss.
- The new requirements are designed to result in earlier recognition of credit losses, by necessitating a 12-month ECL allowance for all credit exposures. In addition, the recognition of lifetime ECLs is expected to be earlier and larger for all credit exposures that have significantly deteriorated (as compared to the recognition of individual incurred losses under IAS 39 today). While credit exposures in 'Stage 3', as illustrated in the above diagram, are similar to those deemed by IAS 39 to have suffered individual incurred losses, credit exposure in 'Stages 1 and 2' will essentially replace those exposures measured under IAS 39's collective approach.

- The ECL model is more forward looking than the IAS 39 impairment model. This is because holders of financial assets are not only required to consider historical information that is adjusted to reflect the effects of current conditions and information that provides objective evidence that financial assets are impaired in relation to incurred losses, but they are now required to consider reasonable and supportable information that includes forecasts of future economic conditions when calculating ECLs, on an individual and collective basis.
- The application of the new IFRS 9 impairment requirements is expected to increase the credit loss allowances (with a corresponding reduction in equity on first-time adoption) of many entities, particularly banks and similar financial institutions. However, the increase in the loss allowance will vary by entity, depending on its portfolio and current practices. Entities with shorter term and higher quality financial instruments are likely to be less significantly affected. Similarly, financial institutions with unsecured retail loans are more likely to be affected to a greater extent than those with collateralised loans such as mortgages.
- Moreover, the focus on expected losses will possibly result in higher volatility in the ECL amounts charged to profit or loss, especially for financial institutions. The level of loss allowances will increase as economic conditions are forecast to deteriorate and will decrease as economic conditions become more favourable. This may be compounded by the significant increase in loss allowance when financial instruments move between 12-month and lifetime ECLs and vice versa.
- The need to incorporate forward-looking information means that application of the standard will require considerable judgement as to how changes in macroeconomic factors will affect ECLs. Also, the increased level of judgement required in making the ECL calculation may mean that it will be difficult to compare the reported results of different entities. However, the more detailed disclosures (compared with those required to complement IAS 39) that require entities to explain their inputs, assumptions and techniques used in estimating ECLrequirements, should provide greater transparency over entities' credit risk and provisioning processes.
- For corporates, the ECL model will most likely not cause a major increase in allowances for short-term trade receivables because of their short term nature. Moreover, the standard includes practical expedients, in particular the use of a provision matrix, which should help in measuring the loss allowance for short-term trade receivables. However, the model may give rise to challenges for the measurement of long-term trade receivables, bank deposits and debt securities which are measured at amortised cost or at fair value through other comprehensive income. For example, a corporate that has a large portfolio of debt securities that are currently held as available-for-sale under IAS 39, is likely to classify its holdings as measured at fair value through other comprehensive income if the contractual cash flow characteristics and business model test are met. For these securities, the corporate would be required to recognise a loss allowance based on 12-month ECLs even for debt securities that are highly rated (e.g., AAA or AArated bonds).

1.4 Key differences from the FASB's proposals

In December 2012, the FASB issued a proposed Accounting Standard Update, *Financial Instruments - Credit Losses (Subtopic 825-15)*, that aimed to address the same fundamental issue that the IASB's expected credit loss model addresses, namely the delayed recognition of credit losses resulting from the incurred credit loss model. The FASB began re-deliberating its proposal in the summer of 2013, and redeliberations were ongoing as of the time of publication. The most significant differences between the FASB's ED (as updated for decisions made in redeliberations) and the IASB's ECL model in IFRS 9 are, as follows:

- The FASB's proposed ECL loss model would not be applied to debt securities measured at fair value through other comprehensive income (i.e., so-called 'available for sale' securities under US GAAP). Rather, the FASB will modify its existing other-than-temporary impairment model that would continue to be applied to such securities.
- The FASB proposed that ECLs would be calculated based on the current estimate of the contractual cash flows that an entity does not expect to collect. This is similar to the lifetime ECL objective under IFRS 9 (although lifetime ECLs may have to be measured differently under the two models). The FASB's proposed model would not include a 12-month expected loss to be recognised for any assets. As a result, the FASB's proposed model does not require an entity to assess whether there has been a significant deterioration in credit quality, in contrast to the assessment required by IFRS 9.
- For purchased credit-impaired assets, the FASB's proposed model would require an entity to increase the purchase price by the allowance for ECLs upon acquisition. In doing so, the FASB model would effectively gross-up the asset's carrying amount by the ECLs existing upon acquisition, but also recognise a corresponding credit loss allowance, thereby resulting in a net carrying amount equal to the purchase price.
- The FASB's proposed model would continue to allow the use of exisiting non-accrual accounting practices (i.e., ceasing recognition of interest income in certain circumstances) in lieu of specifically requiring a net interest income recognition approach for debt instruments where there is evidence of incurred credit losses.

The FASB is expected to finalise its impairment requirements in 2015.

2. Scope

IFRS 9 requires an entity to recognise a loss allowance for ECLs on:

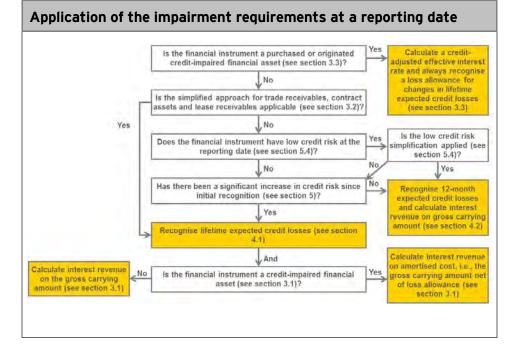
- Financial assets that are debt instruments such as loans, debt securities, bank balances and deposits and trade receivables (see section 8 below) that are measured at amortised cost
- Financial assets that are debt instruments measured at fair value through other comprehensive income (see section 7 below)
- Lease receivables under IAS 17 Leases (see section 8 below)
- Contract assets under IFRS 15 Revenue from Contracts with Customers (see section 8 below). IFRS 15 defines a contract asset as an entity's right to consideration in exchange for goods or services that the entity has transferred to a customer when that right is conditioned on something other than the passage of time (for example, the entity's future performance)
- Loan commitments that are not measured at fair value through profit or loss under IFRS 9 (see sections 9 and 10 below). The scope excludes loan commitments designated as financial liabilities at fair value through profit and loss and loan commitments that can be settled net in cash or by delivering or issuing another financial instrument
- Financial guarantee contracts that are not measured at fair value through profit or loss under IFRS 9 (see section 9 below). The scope excludes financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies

3. Approaches

In applying the IFRS 9 impairment requirements, an entity needs to follow one of the approaches below:

- The general approach (see section 3.1 below)
- The simplified approach (see section 3.2 below)
- The purchased or originated credit-impaired approach (see section 3.3 below)

The following diagram, based on one from the standard, summarises the thought process in recognising and measuring ECLs.



Under the general approach, at each reporting date, an entity recognises a loss allowance based on either 12-month ECLs or lifetime ECLs, depending on whether there has been a significant increase in credit risk on the financial instrument since initial recognition.

3.1 General approach

Under the general approach, at each reporting date, an entity recognises a loss allowance based on either 12-month ECLs or lifetime ECLs, depending on whether there has been a significant increase in credit risk on the financial instrument since initial recognition. The changes in the loss allowance balance are recognised in profit or loss as an impairment gain or loss.

Essentially, an entity must make the following assessment at each reporting date:

- For credit exposures where there have not been significant increases in credit risk since initial recognition, an entity is required to provide for 12-month ECLs, i.e., the portion of lifetime ECLs that represent the ECLs that result from default events that are possible within the 12-months after the reporting date (Stage 1 in the diagram at section 1.2 above).
- For credit exposures where there have been significant increases in credit risk since initial recognition on an individual or collective basis, a loss allowance is required for lifetime ECLs, i.e., ECLs that result from all possible default events over the expected life of a financial instrument (Stages 2 and 3 of the diagram in section 1.2 above).

In subsequent reporting periods, if the credit quality of the financial instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the entity reverts to recognising a loss allowance based on 12-month ECLs (i.e., the approach is symmetrical).

It may not be practical to determine for every financial instrument whether there has been a significant increase in credit risk, because they may be small and many in number and because the evidence may not be available to do so. Consequently, it may be necessary to assess ECLs on a collective basis, to approximate the result of using comprehensive credit risk information that incorporates forward-looking information at an individual instrument level (see section 5.9 below).

To help enable an entity's assessment of significant increases in credit risk, IFRS 9 provides the following operational simplifications:

- A 'low credit risk' threshold equivalent to 'investment grade' (see section 5.4 below)
- A more than 30 days past due rebuttable presumption (see section 5.5 below)
- Use of a change in the 12-month risk of a default as an approximation for change in lifetime risk (see section 5.6 below)

The IFRS 9 Illustrative Examples also provide the following suggestions on how to implement the expected credit loss model:

- Assessment at the counterparty level (see section 5.7 below)
- A set transfer threshold by determining the maximum initial credit risk for a portfolio (see section 5.8 below)

In Stages 1 and 2, there is a complete decoupling of interest recognition and impairment. Therefore, interest revenue is calculated on the gross carrying amount (without deducting the loss allowance). If a financial asset subsequently becomes credit-impaired (Stage 3 in the diagram at section 1.2 above), an entity is required to calculate the interest revenue by applying the EIR in subsequent reporting periods to the amortised cost of the financial asset (i.e., the gross carrying amount net of loss allowance) rather than the gross carrying amount. Financial assets are assessed as credit-impaired using substantially the same criteria as for the impairment assessment of an individual asset under IAS 39 (see section 3.3 below for a list of impairment events).

In subsequent reporting periods, if the credit quality of the financial asset improves so that the financial asset is no longer credit-impaired and the improvement can be related objectively to the occurrence of an event (such as an improvement in the borrower's credit rating), then the entity should once again calculate the interest revenue by applying the EIR to the gross carrying amount of the financial asset.

When the entity has no reasonable expectations of recovering the financial asset, then the gross carrying amount of the financial asset should be directly reduced in its entirety. A write-off constitutes a derecognition event (see section 11.1.1 below).

In Stages 1 and 2, there is a decoupling of interest recognition and impairment. The simplified approach requires recognition of a loss allowance based on lifetime ECLs right from origination.

3.2 Simplified approach

The simplified approach does not require an entity to track the changes in credit risk, but, instead, requires the entity to recognise a loss allowance based on lifetime ECLs at each reporting date, right from origination.¹

An entity is required to apply the simplified approach for trade receivables or contract assets that result from transactions within the scope of IFRS 15 and that do not contain a significant financing component, or when the entity applies the practical expedient for contracts that have a maturity of one year or less, in accordance with IFRS 15.

A contract asset is defined as an entity's right to consideration in exchange for goods or services that the entity has transferred to a customer when that right is conditioned on something other than the passage of time (for example, the entity's future performance). IFRS 15 describes contracts with a significant financing component as those for which the agreed timing of payment provides the customer or the entity with a significant benefit of financing on the transfer of goods or services to the customer and, hence, in determining the transaction price, an entity is required to adjust the promised amount of consideration for the effects of the time value of money.² However, if the entity expects at contract inception, that the period between when the entity transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less, as a practical expedient, an entity need not adjust the promised amount of consideration for the adjust the promised amount of a significant good or service will be one year or less, as a practical expedient, an entity need not adjust the promised amount of consideration for the effects of a significant financing component.

How we see it

Application of the simplified approach to trade receivables and contract assets that do not contain a significant financing component intuitively makes sense. In particular, for trade receivables and contract assets that are due in 12-months or less, the 12-month ECLs are the same as the lifetime ECLs.

However, an entity has a policy choice to apply either the simplified approach or the general approach for the following:

- All trade receivables or contract assets that result from transactions within the scope of IFRS 15 and that contain a significant financing component in accordance with IFRS 15. The policy choice may be applied separately to trade receivables and contract assets (see section 8.1 below)
- All lease receivables that result from transactions that are within the scope of IAS 17. The policy choice may be applied separately to finance and operating lease receivables (see section 8.2 below)

The IASB noted that offering this policy choice would reduce comparability. However, the IASB believes it would alleviate some of the practical concerns of tracking changes in credit risk for entities that do not have sophisticated credit risk management systems.

 $^{^1}$ See paragraph IFRS 9.5.5.15.

² See paragraph IFRS 15.60.

3.3 Purchased or originated credit-impaired financial assets

On initial recognition of a financial asset, an entity is required to determine whether the asset is 'credit-impaired'. $^{\rm 3}$

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset (on purchase or origination) is credit-impaired includes observable data about such events. IFRS 9 provides a list of events that are substantially the same as the IAS 39 'loss events' for an individual asset assessment:⁴

- Significant financial difficulty of the issuer or the borrower
- A breach of contract, such as a default or past due event
- The lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider
- It is becoming probable that the borrower will enter bankruptcy or other financial reorganisation
- The disappearance of an active market for that financial asset because of financial difficulties
- The purchase or origination of a financial asset at a deep discount that reflects the incurred credit losses

It may not be possible for an entity to identify a single discrete event. Instead, the combined effect of several events may have caused the financial asset to become credit-impaired.

A purchased credit-impaired asset is likely to be acquired at a deep discount. In other unusual circumstances, it may be possible that an entity originates a credit-impaired financial asset, for example, following a substantial modification of a distressed financial asset that resulted in the derecognition of the original financial asset (see section 6 below).

For financial assets that are considered to be credit-impaired on purchase or origination, the EIR is calculated taking into account the initial lifetime ECLs in the estimated cash flows and there is no additional 12-month ECL allowance. This accounting treatment is the same as under IAS 39.⁵ It should, therefore, be operable without significant development of systems or processes. It is also consistent with the original method for measuring impairment proposed in the 2009 ED.

How we see it

The rationale for not recording a 12-month ECL allowance for these assets is that the losses are already reflected in the fair values at which they are initially recognised. The same logic could be applied to all the other financial assets that are not credit-impaired, arguing that they, too, are initially recognised at a fair value that reflects expectations of future losses. The distinction is made because the double-counting of 12-month ECLs on initial recognition would be too large for assets with such a high credit risk, and the exclusion of initial ECLs from the computation of the EIR would lead to a distortion that would be too significant to be acceptable.

For financial assets that are credit-impaired on purchase or origination, the accounting treatment is the same as under IAS 39.

³ See paragraph IFRS 9.5.5.13.

⁴ See IFRS 9.Appendix A.

⁵ See paragraph IAS 39.AG5.

For financial assets that were credit-impaired on purchase or origination, in subsequent reporting periods an entity is required to recognise:

- The cumulative changes in lifetime ECLs since initial recognition as a loss allowance
- In profit or loss, the amount of any change in lifetime ECLs as an impairment gain or loss. An impairment gain is recognised if favourable changes result in the lifetime ECLs estimate becoming lower than the original estimate that was incorporated in the estimated cash flows on initial recognition when calculating the credit-adjusted EIR

In calculating interest revenue for purchased or originated credit-impaired assets, the holder applies the credit-adjusted EIR to the amortised cost of these financial assets from initial recognition. The credit-adjusted EIR determined at initial recognition, based on the initial expectation of recoveries, is also used to measure changes in the ECLs (see section 4.5 below).

Along with the other credit risk disclosure requirements (see section 12 below), the holder is required to explain how it has determined that assets are credit-impaired (including the inputs, assumptions and estimation techniques used). It is also required to disclose the total amount of undiscounted ECLs at initial recognition for financial assets initially recognised during the reporting period that were purchased or originated credit-impaired.

The accounting treatment for purchased credit-impaired financial asset is illustrated in the following example.

Illustration 3-1 – Calculation of credit-adjusted effective interest rate and recognition of loss allowance for purchased credit-impaired financial asset

On 1 January 2009, Company D issued a bond that required it to pay an annual coupon of CU800 in arrears and to repay the principal of CU10,000 on 31 December 2018. By 2014, Company D was in significant financial difficulties and was unable to pay the coupon due on 31 December 2014. On 1 January 2015, Company V estimates that the holder could expect to receive a single payment of CU4,000 at the end of 2016. It acquires the bond at an arm's length price of CU3,000. Company V determines that the debt instrument is credit-impaired on initial recognition, because of evidence of significant financial difficulty of Company D and because the debt instrument was purchased at a deep discount.

It can be shown that using the contractual cash flows (including the CU800 overdue) gives rise to an EIR of 70.1% (the net present value of CU800 now and annually thereafter until 2018 and CU10,000 receivable at the end of 2018 is CU3,000 when discounted at 70.1%). However, because the bond is credit-impaired, V should calculate the EIR using the estimated cash flows on the instrument. In this case, the EIR is 15.5% (the net present value of CU4,000 receivable in two years is CU3,000 when discounted at 15.5%).

All things being equal, interest income of CU464 (CU3,000 × 15.5%) would be recognised on the instrument during 2015 and its carrying amount at the end of the year would be CU3,464 (CU3,000 + CU464). However, if at the end of the year, based on reasonable and supportable evidence, the cash flow expected to be received on the instrument had increased to, say, CU4,250 (still to be received at the end of 2016), an adjustment would be made to the asset's amortised cost. Accordingly, its carrying amount would be increased to CU3,681 (CU4,250 discounted over one year at 15.5%) and an impairment gain of CU217 would be recognised in profit or loss.

For credit-impaired assets, EIR is credit-adjusted.

4. Measurement of expected credit losses

The standard defines credit loss as the difference between all contractual cash flows that are due to an entity in accordance with the contract and all the cash flows that the entity expects to receive (i.e., all cash shortfalls), discounted at the original EIR (or credit-adjusted EIR for purchased or originated credit-impaired financial assets). When estimating the cash flows, an entity is required to consider:

- All contractual terms of the financial instrument (including prepayment, extension, call and similar options) over the expected life (see section 4.3 below) of the financial instrument. However, in rare cases when the expected life of the financial instrument cannot be estimated reliably, then the entity is required to use the remaining contractual term of the financial instrument
- Cash flows from the sale of collateral held (see section 4.6 below) or other credit enhancements that are integral to the contractual terms

Also, the standard goes on to define ECLs as the weighted average of credit losses with the respective risks of a default occurring as the weights.

The standard does not prescribe specific approaches used to estimate ECLs, but stresses that the approach used must reflect the following: $^{\rm 6}$

- An unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes (see section 4.4 below)
- The time value of money (see section 4.5 below)
- Reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions (see section 4.7 below)

4.1 Lifetime expected credit losses

IFRS 9 defines lifetime ECLs as the ECLs that result from all possible default events over the expected life of a financial instrument (i.e., an entity needs to estimate the risk of a default occurring on the financial instrument during its expected life). They would be estimated based on the present value of all cash shortfalls over the remaining expected life of the financial asset, i.e., the difference between:

> The contractual cash flows that are due to an entity under the contract

And

The cash flows that the holder expects to receive

As ECLs take into account both the amount and the timing of payments, a credit loss arises even if the holder expects to receive all the contractual payments due, but at a later date.

When estimating lifetime ECLs for undrawn loan commitments (see section 9 below), the provider of the commitment needs to:

 Estimate the expected portion of the loan commitment that will be drawn down over the expected life of the loan commitment (see section 4.2 below for 12-month ECLs)

As ECLs take into account both the amount and the timing of payments, a credit loss arises even if the holder expects to receive all the contractual payments due, but at a later date.

⁶ See paragraph IFRS 9.5.5.17.

Calculate the present value of cash shortfalls between the contractual cash flows that are due to the entity if the holder of the loan commitment draws down that expected portion of the loan and the cash flows that the entity expects to receive if that expected portion of the loan is drawn down

For a financial guarantee contract (see section 9 below), the guarantor is required to make payments only in the event of a default by the debtor in accordance with the terms of the instrument that is guaranteed. Accordingly, the estimate of lifetime ECLs would be based on the present value of the expected payments to reimburse the holder for a credit loss that it incurs less any amounts that the guarantor expects to receive from the holder, the debtor or any other party. If the asset is fully guaranteed, the ECL estimate for the financial guarantee contract would be the same as the estimated cash shortfall estimate for the asset subject to the guarantee.

4.2 12-month expected credit losses

12-month ECLs is defined as a portion of the lifetime ECLs that results from default events on a financial instrument that are possible within 12 months after the reporting date. The standard explains further that the 12-month ECLs are a portion of the lifetime ECLs that will result if a default occurs in the 12 months after the reporting date (or a shorter period if the expected life of a financial instrument is less than 12 months), weighted by the probability of that default occurring. The definition of 12-month ECLs is similar to the Basel Committee's definition of expected loss.

Because the calculation is based on the probability of default, the standard emphasises that the 12-month expected loss is not the lifetime expected credit loss that an entity will incur on financial instruments that it predicts will default in the next 12 months (i.e., for which the probability of default over the next 12 months is greater than 50%). For instance, the probability of default might be only 25%, in which case, this should be used to calculate 12-month ECLs, even though it is not probable that the asset will default. Also, the 12-month expected losses are not the cash shortfalls that are predicted over only the next 12 months. For a defaulting asset, the lifetime ECLs will normally be significantly greater than just the cash flows that were contractually due in the next 12 months.

For undrawn loan commitments (see section 9 below), an entity's estimate of 12-month ECLs should be based on its expectations of the portion of the loan commitment that will be drawn down within 12 months of the reporting date (see section 4.1 above).

As already mentioned at section 1.2 above, the IASB believes that the 12-month ECLs serve as a proxy for the recognition of initial ECLs over time, as proposed in the 2009 ED, and they mitigate the systematic overstatement of interest revenue that is recognised under IAS 39. This practical approximation was necessary as a result of the decision to decouple the measurement and allocation of initial ECLs from the determination of the EIR following the re-deliberations of the 2009 ED.

12-month ECLs are the portion of the lifetime ECLs that results from default events that are possible within the next 12 months weighted by the probability of that default ocurring.

How we see it

The 12-month allowance overstates the necessary allowance for each financial instrument after initial recognition, but as the allowance is not further increased (except for changes in the 12-month ECLs) until the instrument's credit risk has significantly increased, for a portfolio of instruments, the overall provision is (very approximately) a similar size as might be achieved using a more conceptually robust approach. Although there is no conceptual justification for an allowance based on 12-month ECLs, it is a pragmatic solution to achieve an appropriate balance between faithfully representing the underlying economics of a transaction and the cost of implementation.

Although the choice of 12 months is somewhat arbitrary, it is the same time horizon as used for more advanced bank regulatory capital calculation under Basel II. However, it should be stressed that the 12-month requirement under IFRS 9 will always differ from that computed for regulatory capital purposes, as the IFRS 9 measure is a 'point-in-time' estimate, reflecting currently forecast economic conditions (see section 4.7.3 below), while the Basel II figure is based on 'through-the-cycle' assumptions of default and conservative estimates of losses given default. However, banks that use an advanced approach to calculate their capital requirements should be able to use their existing systems and methodologies as a starting point and make the necessary adjustments to flex the calculation to comply with IFRS 9.

How 'accurate' a proxy the 12-month and lifetime ECL model is for a more conceptually pure approach will depend on the nature of the portfolio. Also, the effect of recording a 12-month ECL in the first reporting period that a financial instrument is recognised will not have a significant effect on reported income if the portfolio is stable in size from one period to the next. The 12-month ECL allowance will, however, reduce the reported income for entities that are expanding their portfolio.

4.2.1 Definition of default

'Default' is not defined for the purposes of determining the risk of a default occurring in the next 12 months. Because it is defined differently by different institutions (for instance, 30, 90 or 180 days past due), the IASB was concerned that defining default could result in a definition that is inconsistent with that applied internally for credit risk management. Therefore, the standard requires an entity to apply a definition of default that is consistent with how it is defined for its normal credit risk management practices, consistently from one period to another. It follows that an entity might have to use different default definitions for different types of financial instruments. However, the standard stresses that an entity needs to consider qualitative indicators of default when appropriate in addition to days past due, such as breaches of covenant.⁷

ECL calculations were not originally expected by the IASB to change as a result of differences in the definition of default, because of the counterbalancing interaction between the way an entity defines default and the credit losses that arise as a result of that definition of default. (For instance, if an entity uses a shorter delinquency period of 30 days past due instead of 60 days past due, the associated lifetime ECLs will be correspondingly smaller as it is to be expected that more debtors that are 30 days past due will in due course recover).

⁷ See paragraph IFRS 9.B5.5.37.

There is a rebuttable presumption that default does not occur later than when a financial asset is 90 days past due. However, the notion of default is fundamental to the application of the model, particularly because it affects the subset of the population that is subject to the 12-month ECL measure. The standard restricts diversity resulting from this effect by establishing a rebuttable presumption that default does not occur later than when a financial asset is 90 days past due. This presumption may be rebutted only if an entity has reasonable and supportable information to support an alternative default criterion. A 90-day default definition would also be consistent with what is used by banks for the advanced Basel II regulatory capital calculations (with a few exceptions).

4.2.2 Measurement of 12-month expected credit losses based on a loss rate approach

Not every entity calculates a separate probability of default and a loss given default, but instead uses a 'loss rate approach'. Using this approach, the entity develops loss-rate statistics on the basis of the amount written off over the life of the financial assets. It then must adjust these historical credit loss trends for current conditions and expectations about the future. The following example is designed to illustrate how an entity measures 12-month ECLs using a loss rate approach.

Extract from IFRS 9

Example 9 - 12-month expected credit loss measurement based on a loss rate approach (IFRS 9.IE53-IE57)

Bank A originates 2,000 bullet loans with a total gross carrying amount of CU500,000. Bank A segments its portfolio into borrower groups (Groups X and Y) on the basis of shared credit risk characteristics at initial recognition. Group X comprises 1,000 loans with a gross carrying amount per client of CU200, for a total gross carrying amount of CU200,000. Group Y comprises 1,000 loans with a gross carrying amount per client of CU300, for a total gross carrying amount per client of CU300, for a total gross carrying amount per client of CU300, for a total gross carrying amount per client of CU300, for a total gross carrying amount per client of CU300, for a total gross carrying amount of CU300,000. There are no transaction costs and the loan contracts include no options (for example, prepayment or call options), premiums or discounts, points paid, or other fees.

Bank A measures expected credit losses on the basis of a loss rate approach for Groups X and Y. In order to develop its loss rates, Bank A considers samples of its own historical default and loss experience for those types of loans. In addition, Bank A considers forward-looking information, and updates its historical information for current economic conditions as well as reasonable and supportable forecasts of future economic conditions. Historically, for a population of 1,000 loans in each group, Group X's loss rates are 0.3 per cent, based on four defaults, and historical loss rates for Group Y are 0.15 per cent, based on two defaults.

	Number of clients in sample	Estimated per client gross carrying amount at default	Total estimated gross carrying amount at default	Historic per annum average defaults	Estimated total gross carrying amount at default	Present value of observed loss (a)	Loss rate
Group	A	В	C = A × B	D	E = B × D	F	G = F ÷ C
Х	1,000	CU200	CU200,000	4	CU800	CU600	0.3%
		<u>cupoo</u>	<u>cupo 000</u>	2	CU600	CU450	0.15%
Y	1,000	CU300	CU300,000	2	00600	C0450	0.15%

(a) In accordance with paragraph 5.5.17(b) expected credit losses should be discounted using the effective interest rate. However, for purposes of this example, the present value of the observed loss is assumed.

Extract from IFRS 9 (cont'd)

At the reporting date, Bank A expects an increase in defaults over the next 12 months compared to the historical rate. As a result, Bank A estimates five defaults in the next 12 months for loans in Group X and three for loans in Group Y. It estimates that the present value of the observed credit loss per client will remain consistent with the historical loss per client.

On the basis of the expected life of the loans, Bank A determines that the expected increase in defaults does not represent a significant increase in credit risk since initial recognition for the portfolios. On the basis of its forecasts, Bank A measures the loss allowance at an amount equal to 12-month expected credit losses on the 1,000 loans in each group amounting to CU750 and CU675 respectively. This equates to a loss rate in the first year of 0.375 per cent for Group X and 0.225 per cent for Group Y.

	Number of clients in sample	Estimated per client gross carrying amount at default	Total estimated gross carrying amount at default	Expected defaults	Estimated total gross carrying amount at default	Present value of observed loss	Loss rate
Group	A	В	$C = A \times B$	D	E = B × D	F	G = F ÷ C
Х	1,000	CU200	CU200,000	5	CU1,000	CU750	0.375%
Y	1,000	CU300	CU300,000	3	CU900	CU675	0.225%

Bank A uses the loss rates of 0.375 per cent and 0.225 per cent respectively to estimate 12-month expected credit losses on new loans in Group X and Group Y originated during the year and for which credit risk has not increased significantly since initial recognition.

How we see it

The example illustrates that under the loss rate approach, an entity would compute its loss rates by segmenting its portfolio into appropriate groupings (or sub-portfolios) based on shared credit risk characteristics and then updating its historical loss information with more forward-looking information. The loss rate was derived simply by computing the ratio between the present value of observed losses (the numerator) and the gross carrying amount of the loans (the denominator). Although it does not require an explicit probability of default, there has to be an estimate of the number of defaults in order to determine whether there has been a significant increase in credit risk (see section 5 below).

ECLs should be discounted at the EIR. However, in this example, the present value of the observed loss is assumed.

We note that the example does not incorporate the 'top-down' approach of credit deterioration which would be applied when the assessment is made on a collective basis (see section 5.9 below).

ECLs are based on the maximum contractual period over which the entity is exposed to credit risk.

4.3 Expected life versus contractual period

When measuring ECLs, entities must consider the maximum contractual period (including extensions) over which the entity is exposed to credit risk. Such extensions would normally be those at the option of the borrower.

For loan commitments and financial guarantee contracts, the time horizon to measure expected losses is the maximum contractual period over which an entity has a present contractual obligation to extend credit. However, for revolving credit facilities (e.g., credit cards and overdrafts), this period is extended beyond the contractual period and includes the period over which the entity is expected to be exposed to credit risk (see section 10 below). This period is to be calculated based on historical experience.

4.4 Probability-weighted outcome

ECLs are a probability-weighted estimate of credit losses over the expected life of the financial instrument (i.e., the weighted average of credit losses with the respective risks of a default occurring as the weights).

When measuring ECLs, in order to derive an unbiased and probability-weighted amount, an entity needs to evaluate a range of possible outcomes. This involves identifying possible scenarios that specify:

- > The amount and timing of the cash flows for particular outcomes
- The estimated probability of these outcomes

Although an entity does not need to identify every possible scenario, it will need to take into account the possibility that a credit loss occurs, no matter how low that probability is. This is not the same as a single estimate of the worst-case or best-case scenario or the most likely outcome (i.e., when there is a low risk or probability of a default with high loss outcomes, the most likely outcome could be no credit loss even though an allowance would be required based on probability-weighted cash flows).

In practice, calculating a probability-weighted amount may not require a complex analysis or a detailed simulation of a large number of scenarios and the standard suggests that relatively simple modelling may be sufficient. For instance, the average credit losses of a large group of financial instruments with shared risk characteristics may be a reasonable estimate of the probability-weighted amount.

4.5 Time value of money

An entity needs to consider the time value of money when measuring ECLs, by discounting this amount to the reporting date using a rate that approximates the EIR of the asset. This is because the original cost of the asset would have been based on the discounted contractual cash flows, and so not to discount cash flows that are now not expected to be received would overstate the loss.

The discount rate is calculated, as follows:

- For a fixed-rate financial asset, entities are required to determine or approximate the EIR on the initial recognition of the financial asset, while for a floating-rate financial asset, entities are required to use the current EIR.
- For a purchased or originated credit-impaired financial asset (see section 3.3 above), entities are required to measure any changes in ECLs using the credit-adjusted EIR determined on the initial recognition of the financial asset.
- For a loan commitment (see section 9 below), entities are required to use the EIR of the asset that will result once the commitment is drawn down (as described above). This would give rise to a consistent rate for a credit facility that includes both a loan (i.e., a financial asset) and an undrawn commitment (i.e., a loan commitment). If the EIR of the resulting asset is not determinable, then entities are required to use the current risk-free rate (i.e., the discount rate that reflects the current market assessment of the

ECLs are a probabilityweighted estimate of credit losses over the expected life of the financial instrument.

Credit losses must be discounted using an approximation of the effective interest rate. time value of money). This should be adjusted for risks specific to the cash flow, but only if the cash flows have not already been adjusted for these risks, in order to avoid double counting.

- For financial guarantee contracts (see section 9 below) entities are required to use the current risk-free rate adjusted for risks specific to the cash flow.
- For lease receivables (see section 8.2 below), entities are required to discount the ECLs using the same discount rate used in the measurement of the lease receivables in accordance with IAS 17.

The 2013 ED proposed that entities discount ECLs at any rate between the risk free rate and the EIR of the financial asset. This was designed to avoid the operational complexity of determining the EIR, which would require integrating credit risk management and accounting systems. A number of respondents disagreed with this proposal, believing that this gave too much flexibility and that the EIR was, conceptually, the correct rate to use. As a result, the IASB amended the requirement to discount expected losses using 'the EIR or an approximation thereof'. The Basis for Conclusions to the standard acknowledges that entities may have operational challenges determining the EIR (especially for open portfolios), but notes that IAS 39 already has a similar requirement.⁸

How we see it

Discounting ECLs is not necessarily a straightforward exercise, since the effect will vary depending on the default scenario. The standard is silent on how the calculation should be made and none of the Illustrative Examples show how it should be done. In Illustrative Example 9 in the standard, 'the present value of the observed loss is assumed' and in Illustrative Example 8 in the standard, a footnote states that, 'Because the loss given default (LGD) represents a percentage of the present value of the gross carrying amount, this example does not illustrate the time value of money'.

It is rare that customers just fail to pay amounts when due. In most cases, default also involves payments being paid, but late, while default can lead to the acceleration of payment of amounts that are not contractually due until a later date. Therefore, modelling losses also involves modelling the timing of payments, before the expected losses can be discounted.

LGD data available from Basel models should include a discounting factor, but this would only cover the period between default and subsequent recoveries. Also, the discount rate used varies across entities. Therefore, entities will have to come up with ways to adjust their LGDs to reflect the discounting effect required by the standard (i.e., based on a rate that approximates the EIR and over the entire period from recoveries back to the reporting date). This could be achieved either by extracting the expected undiscounted cash flow recoveries from the LGD and discounting them back using the appropriate rate over the entire period, or by directly adjusting the LGD to approximate the correct calculation.

Given the requirement to use an approximation to the EIR, entities will need work out how to determine a rate that is sufficiently accurate. One of the challenges is to interpret how much flexibility is afforded by the term 'approximation'.

⁸ See paragraphs IFRS 9.BC5.267 - 275.

In measuring the ECLs, an entity should include the cash flows from the realisation of collateral and other credit enhancements that are part of the contractual terms.

4.6 Collateral

Although collateral plays a limited role in assessing whether there has been a significant increase in credit risk (see section 5.1 below), it does affect the measurement of ECLs. For example, for a mortgage loan, even if an entity determines that there has been a significant increase in credit risk on the loan since initial recognition because the borrower became unemployed and is expected to be unable to repay further monthly interest and capital repayments, if the expected proceeds from the collateral (i.e., the mortgaged property) exceeds the amount loaned, then the entity may have ECLs, and hence an allowance, of zero.

In measuring the ECLs and hence, the expected cash shortfalls for a collateralised financial instrument, an entity should include the cash flows from the realisation of the collateral and other credit enhancements that are:

- Part of the contractual terms
- Not recognised separately by the entity

How we see it

Applying this guidance, if a loan is guaranteed by a third party as part of its contractual terms, it should carry an allowance for ECLs based on the combined credit risk of the guarantor and the guaranteed party. But, as written, the guidance appears to be quite restrictive and would not include, for instance, any recoveries from credit insurance or guarantees that are purchased separately from the original instrument. This raises the question as to how such collateral and credit enhancements should be separately measured by the holder. IFRS 4 *Insurance Contracts* points to IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors,* which applies to situations where no IFRS specifically applies to a transaction.⁹ It is not entirely clear whether it is possible for the holder to account for such collateral and credit enhancements consistently with either the way they would be measured by the insurer or guarantor, or as a contingent asset under IAS 37 *Provisions, Contingent Liabilities and Contingent Assets.* This issue would usefully be brought to the ITG.

As is the case in IAS 39, the standard specifies that the estimate of cash flows from collateral should include the effect of a foreclosure, regardless of whether foreclosure is probable, and the resulting cash flows from foreclosure on the collateral less the costs of obtaining and selling the collateral, taking into account the amount and timing of these cash flows.

How we see it

This wording does not mean that the entity is required to assume that recovery will be through foreclosure only, but rather that the entity should calculate the cash flows arising from the various ways that the asset may be recovered, only some of which may involve foreclosure, and to probability-weight these different scenarios.

Although the standard does not refer to fair value when determining the valuation of the collateral, in practice, an entity is likely to estimate the cash flows from the realisation of the collateral, based on the fair value of the collateral. In the case of illiquid collateral, such as real estate, adjustments will probably need to be made for expected changes in the fair value, depending on the estimated date of selling the collateral.

 $^{^9\,}$ See paragraphs IFRS 4.IG Example 1.11 and IAS 8.10 - 12.

Also, as in IAS 39, any collateral obtained as a result of foreclosure is not recognised as an asset that is separate from the collateralised financial instrument unless it meets the relevant recognition criteria for an asset in IFRS 9 or other standards.

4.7 Reasonable and supportable information

IFRS 9 requires an entity to consider 'reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions' and 'that is relevant to the estimate of ECLs, including the effect of expected prepayments'.¹⁰

4.7.1 Undue cost or effort

The term 'undue cost or effort' is not defined in the standard, although it is clear from the guidance that information available for financial reporting purposes is considered to be available without undue cost or effort.

How we see it

Beyond that, although the standard tells us that entities are not required to undertake an exhaustive search for information, it does include, as examples of relevant information, data from risk management systems, as described in the next section.

What is available without undue cost or effort would be an area subject to management judgement in assessing the costs and associated benefits. This is consistent with the Q&A (non-mandatory guidance) provided by the SME (small and medium-sized entities) Implementation Group in relation to the application of 'undue cost or effort' when implementing IFRSs for SMEs. The Q&A explains that application of a requirement would result in undue cost or effort if the cost or effort is excessive in comparison to the benefits that the users of the financial statements would receive from having the information. If the reporting entity is a bank, there would presumably be a higher hurdle to determine what credit risk information would require undue cost or effort, compared to a reporter that is not a bank, given that the benefit to users of its financial statements would be also expected to be higher. It is possible that this subject will be discussed further by the ITG and it is an issue on which we expect bank regulators to have a view.

4.7.2 Sources of information

The standard states that the information used should include factors that are specific to the borrower, general economic conditions and an assessment of both the current as well as the forecast direction of conditions at the reporting date. Entities may use various sources of data, both internal (entity-specific) data and external data that includes internal historical credit loss experience, internal ratings, credit loss experience of other entities for comparable financial instruments, and external ratings, reports and statistics.

Although the ECLs reflect an entity's own expectations of credit losses, an entity should also consider observable market information about the credit risk of particular financial instruments.

¹⁰ See paragraph IFRS 9.B5.5.55.

How we see it

Although entities with in-house economic teams will inevitably want to use their internal economic forecasts, while loss estimation models will be built based on historical data, they should not ignore external market data.

In the context of assessing if there has been significant deterioration (see section 5 below), the IASB notes that market prices are an important source of information that should be considered in assessing whether credit risk has changed, although market prices themselves cannot solely determine whether significant deterioration has occurred because market prices are also affected by non-credit risk related factors such as changes in interest rates or liquidity risks.¹¹

4.7.3 Information about past events, current conditions and forecasts of future economic conditions

One of the significant changes from the IAS 39 impairment requirements is that entities are not only required to use historical information (e.g., their credit loss experience) that is adjusted to reflect the effects of current conditions, but they are also required to consider how forecasts of future conditions would affect their historical data.

An entity is not required to incorporate detailed forecasts of future conditions over the entire expected life of a financial instrument. The standard notes that as the forecast horizon increases, the availability of detailed information decreases and the degree of judgement required to estimate ECL increases. Therefore, an entity is not required to perform a detailed estimate for periods that are far in the future and may extrapolate projections from available, more detailed information. The degree of judgement that is required to estimate ECLs depends on the availability of detailed information.

How we see it

This wording suggests that entities may often be able to assume that economic conditions 'revert' to their long-term average, beyond a horizon for which they can be reliably forecast. There are at least two versions of how this might be done: either by reverting to the average immediately beyond the forecast horizon or by adjusting the forecast data to the long-term average over a few years. The latter would, perhaps, more effectively make use of all reasonable and supportable information.

Historical information should be used as a starting point from which adjustments are made to estimate ECLs on the basis of reasonable and supportable information that incorporates both current and forward-looking information:

In most cases, adjustments would be needed to incorporate the effects that were not present in the past or to remove the effects that are not relevant for the future

Entities are required to use not only historical information (e.g. their credit loss experience) that is adjusted to reflect the effects of current conditions, but they are also required to consider how forecasts of future conditions would affect their historical data.

¹¹ See paragraph IFRS 9.BC5.123.

In some cases, unadjusted historical information may be the best estimate, depending on the nature of the historical information and when it was calculated, compared to circumstances at the reporting date and the characteristics of the financial instrument being considered

Additionally, when considering how, and to what extent, historical credit losses should be adjusted, an entity will need to consider various items, including:

- The period of time over which its historical data has been captured and the corresponding economic conditions represented in that history. The historical data period may reflect unusually benign or harsh conditions unless it is long enough, while products, customers and lending behaviours all change over time
- Whether the historical data captures ECLs that are through-the-cycle (i.e., estimates based on historical credit loss events and experience over the entire economic cycle) or point-in-time (i.e., estimates based on information, circumstances and events at the reporting date)
- Whether the historical data captures a specific economic cycle and whether that cycle represents the current conditions and forecast of future economic conditions

Historical data may also not be reliable or accurate if it was not previously used for financial reporting purposes.

The estimates of changes in ECLs should be directionally consistent with changes in related observable data from period to period (i.e., consistent with trends observed on payment status and macroeconomic data such as changes in unemployment rates, property prices, or commodity prices). Also, in order to reduce the differences between an entity's estimates and actual credit loss experience, the estimates of ECLs should be back-tested and re-calibrated, i.e., an entity should regularly review its inputs, assumptions, methodology and estimation techniques used, (although back testing will be considerably more challenging for forecasts over several years than may be the case for just 12-month probabilities of default). Also, when using historical credit loss experience, it is important that information about historical credit losses is applied to groups that are defined in a manner that is consistent with the groups for which the historical credit losses were observed.

How we see it

In estimating ECLs, entities must consider how to bridge the gap between historical loss experience and current expectations. In practice, adjusting historical information to reflect current conditions and forecasts of future economic conditions may involve:

- Using an econometric model in which current expectations and expectations about the future are used as a direct input into a forecasting model that relies on historical relationships between loss and macroeconomic factors such as unemployment and gross domestic product (GDP) growth.
- Using a base-case model that is based on historical information and, subsequently, adding a management estimate overlay (including a quantitative overlay outside of the primary model and qualitative adjustments based on management's evaluation of macro-level and portfolio-level factors) to adjust the historical data to reflect current expectations.
- Considering the data used for budgeting and capital planning and determining how this information will affect the expected credit loss estimates.
- Making use of publically available forecasts in order to challenge and validate economic forecasts made by the entity.

Moreover, it is also important for entities to realise that estimating future economic conditions is only the first step of the exercise; having decided what will happen to macroeconomic factors such as interest rates, house prices, unemployment and GDP growth, entities then need to decide how they translate into ECLs. This will need to reflect how such changes in factors affected defaults in the past. However, it is possible that the combination of factors that are forecast may have never been seen historically together.

Many banks will be able to make use of their existing calculation processes and information used for Basel regulatory requirements, but would need to modify this information to comply with IFRS 9 impairment requirements (e.g., adjustments for through-the-cycle versus point-in-time estimates). In addition, banks may use the models and processes they have developed for stress testing, although adjusted to forecast most likely rather than stressed scenarios. However, estimating losses may still be challenging for many entities. They are likely to welcome further guidance; but this would seem to be outside the remit of the ITG (see section 1.1 above). Because a fair value hedge adjustment is a part of the carrying amount of the financial asset that is hedged, the measurement of the loss allowance must take that adjustment into account.

4.8 Interaction between impairment and fair value hedge accounting

Another operational difficulty arises from the interplay between the new impairment model and fair value hedge accounting. For financial assets designated in the hedge, because the fair value hedge adjustment is a part of the carrying amount of the financial asset that is hedged, the measurement of the loss allowance must take that adjustment into account. In other words, the fair value hedge adjustment changes the carrying amount that is assessed for impairment as well as the EIR that is relevant for the measurement of the impairment. This requirement was already illustrated by the implementation guidance of IAS 39.¹²

How we see it

The interplay between fair value hedge accounting and the measurement of impairment logically remains the same under IFRS 9. The main difference compared to IAS 39 in terms of operational complexity is, of course, that under IFRS 9, every debt instrument recorded at amortised cost or at fair value through other comprehensive income has an associated loss allowance. This means, for every fair value hedge in relation to such financial assets, the measurement of the loss allowance requires taking into account the effect of the fair value hedge accounting. In contrast, under IAS 39 an entity can select financial assets without an 'incurred loss' for designation as the hedged item in a fair value hedge, so that this operational complexity does not arise. The complexity of combining the expected credit loss impairment model and hedge accounting is illustrated in Illustration A-1 in the Appendix.

This effect will be amplified for the so-called 'portfolio fair value hedge of interest rate risk' in IAS 39, which is also available under IFRS 9. Entities that avoided the difficulty of applying the impairment loss requirements to their financial assets that are part of such a hedge by selecting the higher quality assets without incurred losses under IAS 39 will not be able to achieve the same reduction in operational complexity under the IFRS 9 impairment model.

¹² See paragraph IAS 39.IG E.4.4.

A major challenge is to track and determine whether there have been significant increases in credit risk since initial recognition.

5. General approach: determining significant increases in credit risk

One of the major challenges in implementing the general approach from the IFRS 9 ECL model is to track and determine whether there have been significant increases in credit risk of an entity's credit exposures since initial recognition. However, a number of operational simplifications and presumptions are available to help entities make this assessment (as described further below).

The assessment of significant deterioration is key in establishing the point of switching between the requirement to measure an allowance based on 12-month ECLs and one that is based on lifetime ECLs. In general, financial assets should be assessed as having increased significantly in credit risk earlier than when they become credit-impaired (see section 3.3 above) or default. The standard is prescriptive that an entity cannot align the timing of significant increases in credit risk and the recognition of lifetime ECLs with when a financial asset is regarded as credit-impaired or to an entity's internal definition of default.

As this area involves significant judgement by management, entities are required to provide both qualitative and quantitative disclosures under IFRS 7 to explain the inputs, assumptions and estimation used to determine significant increases in credit risk of financial instruments and any changes in those assumptions and estimates (see section 12 below).¹³

Similar to measuring ECLs, an entity may use different approaches for different financial instruments when assessing significant increases in credit risk. An approach that does not include probability of default as an explicit input can be consistent with the impairment requirements as long as the entity is able to separate the changes in the risk of a default occurring from changes in other drivers of ECLs (e.g., collateral) and considers the following when making the assessment:

- > The change in the risk of a default occurring since initial recognition
- The expected life of the financial instrument
- Reasonable and supportable information that is available without undue cost or effort that may affect credit risk

In addition, because of the relationship between the expected life and the risk of default occurring, the change in credit risk cannot be assessed simply by comparing the change in the absolute risk of default over time, because the risk of default usually decreases as time passes if the credit risk is unchanged.

How we see it

Entities that do not use probability of loss as an explicit input will have to use other criteria to identify a change in the risk of default occurring. These might include deterioration in a behavioural score or other indicators of a heightened risk of default. A collective approach may also be an appropriate substitute for an assessment at the individual instrument level (see section 5.9 below).

¹³ See paragrpah IFRS 7.35F(a).

5.1 Change in the risk of a default occurring

At each reporting date, an entity is required to assess significant increases in credit risk based on the change in the risk of a default occurring over the expected life of the financial instrument rather than the change in the amount of ECLs. In a departure from the Basel regulatory wording and to avoid suggesting that statistical models are necessarily required (including the probability of a default approach), the IASB changed the terminology from 'probability of a default occurring' to 'risk of a default occurring'.

In order to make the IFRS 9 impairment model operational, the IASB considered a number of alternative methods for determining significant increases in credit risk, but these were rejected for the following reasons:

- Absolute level of credit risk: The IASB considered whether an entity should be required to recognise lifetime ECLs on all financial instruments at, or above, a particular credit risk at the reporting date. Although this approach is operationally simpler to apply (because an entity is not required to track changes in credit risk) such an approach may not provide useful information (including the economic effect of initial and subsequent changes in credit loss expectations) and may result in overstatement or understatement of ECLs, depending on the threshold set for recognising lifetime ECLs. However, the IASB noted that an 'absolute' approach could be used for the assessment of changes in the risk of default occurring, by determining the maximum initial credit risk accepted for portfolios of financial instruments with similar credit risk at initial recognition and then comparing the maximum initial credit risk to the credit risk at the reporting date (see section 5.8 below).¹⁴
- Change in the credit risk management objective: The IASB also considered whether the assessment of significant deterioration should be based on whether an entity's credit risk management objective changes (e.g., monitoring of financial assets on an individual basis, or a change from collecting past due amounts to the recovery of these amounts).¹⁵ This approach is operationally relatively easy to apply. However, it is likely to have a similar effect to the IAS 39 incurred loss model and, hence, may result in the delayed recognition of ECLs.
- Credit underwriting policies: The IASB further considered whether the change in the entity's credit underwriting limit for a particular class of financial instrument at the reporting date (i.e., an entity would not originate new loans on the same terms) should form the basis of assessing significant increase in credit risk. The IASB noted that this approach is similar to the 'absolute' approach above. Moreover, the change in an entity's credit underwriting limits may be driven by other factors that are not related to a change in the credit risk of its borrowers (e.g., the entity may incorporate favourable terms to maintain a good business relationship or to increase lending), or are dependent on circumstances existing at the reporting date that are not relevant to the particular vintages of financial instruments.¹⁶

¹⁴ See paragraphs IFRS 9.BC5.160 - 161.

¹⁵ See paragraph IFRS 9.BC5.162.

¹⁶ See paragraphs IFRS 9.BC5.163 - 165.

The allowance for a fully collateralised asset may need to be based on lifetime expected losses (because there has been a significant increase in the risk of a default occuring) even though no loss is expected to arise. As already stressed, the assessment is based on the change in the lifetime probability of default, not the amount of ECLs. Hence, the allowance for a fully collateralised asset may need to be based on lifetime ECLs (because there has been a significant increase in the risk of a default occuring) even though no loss is expected to arise. In such instances, the fact that the asset is being measured using lifetime ECLs may have more significance for disclosure than for measurement (see section 12 below).

The interaction between collateral, assessment of significant increases in credit risk and measurement of ECLs is illustrated in the following example from the standard.

Extract from IFRS 9

Example 3 - Highly collateralised financial asset (IFRS 9.IE18-IE23)

Company H owns real estate assets which are financed by a five-year loan from Bank Z with a loan-to-value (LTV) ratio of 50 per cent. The loan is secured by a first-ranking security over the real estate assets. At initial recognition of the loan, Bank Z does not consider the loan to be originated credit-impaired as defined in Appendix A of IFRS 9.

Subsequent to initial recognition, the revenues and operating profits of Company H have decreased because of an economic recession. Furthermore, expected increases in regulations have the potential to further negatively affect revenue and operating profit. These negative effects on Company H's operations could be significant and ongoing.

As a result of these recent events and expected adverse economic conditions, Company H's free cash flow is expected to be reduced to the point that the coverage of scheduled loan payments could become tight. Bank Z estimates that a further deterioration in cash flows may result in Company H missing a contractual payment on the loan and becoming past due.

Recent third party appraisals have indicated a decrease in the value of the real estate properties, resulting in a current LTV ratio of 70 per cent.

At the reporting date, the loan to Company H is not considered to have low credit risk in accordance with paragraph 5.5.10 of IFRS 9. Bank Z therefore needs to assess whether there has been a significant increase in credit risk since initial recognition in accordance with paragraph 5.5.3 of IFRS 9, irrespective of the value of the collateral it holds. It notes that the loan is subject to considerable credit risk at the reporting date because even a slight deterioration in cash flows could result in Company H missing a contractual payment on the loan. As a result, Bank Z determines that the credit risk (ie the risk of a default occurring) has increased significantly since initial recognition. Consequently, Bank Z recognises lifetime expected credit losses on the loan to Company H.

Although lifetime expected credit losses should be recognised, the measurement of the expected credit losses will reflect the recovery expected from the collateral (adjusting for the costs of obtaining and selling the collateral) on the property as required by paragraph B5.5.55 of IFRS 9 and may result in the expected credit losses on the loan being very small.

While the value of collateral does not normally affect the assessment of significant increases in credit risk (because that determination is based on the change in the risk of a default occurring rather than the change in ECLs), if significant changes in the value of the collateral supporting the obligation are expected to reduce the borrower's economic incentive to make scheduled contractual payments, then this would have an effect on the risk of a default occurring. The standard provided an example that if the value of collateral declines because house prices decline, borrowers in some jurisdictions have a greater incentive to default on their mortgages.¹⁷

In order to make the assessment of whether there has been significant credit deterioration, an entity should consider reasonable and supportable information that is available without undue cost or effort and compare:

- The risk of a default occurring on the financial instrument as at the reporting date
- The risk of a default occurring on the financial instrument as at the date of initial recognition

For loan commitments, an entity should consider changes in the risk of a default occurring on the 'potential' loan to which a loan commitment relates. For financial guarantee contracts, an entity should consider the changes in the risk that the specified debtor will default.

5.2 Factors or indicators of changes in credit risk

Similar to measuring ECLs (see section 4 above), when assessing significant increases in credit risk, an entity should consider all reasonable and supportable information that is available without undue cost or effort (see section 4.7 above) and that is relevant for an individual financial instrument, a portfolio, portions of a portfolio, and groups of portfolios.

The IASB notes that it did not intend to prescribe a specific or mechanistic approach to assess changes in credit risk and that the appropriate approach will vary for different levels of sophistication of entities, the financial instrument and the availability of data.¹⁸ It is important to stress that the assessment of significant increases in credit risk often involves a multifactor and holistic analysis. The importance and relevance of each specific factor will depend on the type of product, characteristics of the financial instruments and the borrower and the geographical region. The guidance in the standard is clear that, in certain circumstances, qualitative and non-statistical quantitative information may be sufficient to determine that a financial instrument has met the criterion for the recognition of lifetime ECLs. That is, the information does not need to flow through a statistical model or credit ratings process in order to determine whether there has been a significant increase in the credit risk of the financial instrument. In other cases, the assessment may be based on quantitative information or a mixture of quantitative and qualitative information.19

The appropriate approach to assess changes in credit risk will vary, depending on the activities and sophistication and availability of data.

¹⁷ See paragraph IFRS 9.B5.5.17(j).

¹⁸ See paragraph IFRS 9.BC5.157.

¹⁹ See paragraph IFRS 9.B5.5.18.

The standard provides a non-exhaustive list of factors or indicators which an entity should consider when determining whether the recognition of lifetime ECLs is required. This list of factors or indicators is, as follows:²⁰

- Significant changes in internal price indicators of credit risk as a result of a change in credit risk since inception, including, but not limited to, the credit spread that would result if a particular financial instrument, or similar financial instrument with the same terms and the same counterparty were newly originated or issued at the reporting date.
- Other changes in the rates or terms of an existing financial instrument that would be significantly different if the instrument was newly originated or issued at the reporting date (such as more stringent covenants, increased amounts of collateral or guarantees, or higher income coverage) because of changes in the credit risk of the financial instrument since initial recognition.
- Significant changes in external market indicators of credit risk for a particular financial instrument or similar financial instruments with the same expected life. Changes in market indicators of credit risk include, but are not limited to the credit spread, the credit default swap prices for the borrower, the length of time or the extent to which the fair value of a financial asset has been less than its amortised cost, and other market information related to the borrower (such as changes in the price of a borrower's debt and equity instruments).
- An actual or expected significant change in the financial instrument's external credit rating.
- An actual or expected internal credit rating downgrade for the borrower or decrease in behavioural scoring used to assess credit risk internally. Internal credit ratings and internal behavioural scoring are more reliable when they are mapped to external ratings or supported by default studies.
- Existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant change in the borrower's ability to meet its debt obligations, such as an actual or expected increase in interest rates or an actual or expected significant increase in unemployment rates.
- An actual or expected significant change in the operating results of the borrower. Examples include actual or expected declining revenues or margins, increasing operating risks, working capital deficiencies, decreasing asset quality, increased balance sheet leverage, liquidity, management problems or changes in the scope of business or organisational structure (such as the discontinuance of a segment of the business) that results in a significant change in the borrower's ability to meet its debt obligations.
- Significant increases in credit risk on other financial instruments of the same borrower.
- An actual or expected significant adverse change in the regulatory, economic, or technological environment of the borrower that results in a significant change in the borrower's ability to meet its debt obligations, such as a decline in the demand for the borrower's sales product because of a shift in technology.

²⁰ See paragraph IFRS 9.B5.5.17.

- Significant changes in the value of the collateral supporting the obligation or in the quality of third-party guarantees or credit enhancements, which are expected to reduce the borrower's economic incentive to make scheduled contractual payments or to otherwise have an effect on the probability of a default occurring. For example, if the value of collateral declines because house prices decline, borrowers in some jurisdictions have a greater incentive to default on their mortgages.
- A significant change in the quality of the guarantee provided by a shareholder (or an individual's parents) if the shareholder (or parents) have an incentive and financial ability to prevent default by capital or cash infusion.
- Significant changes, such as reductions, in financial support from a parent entity or other affiliate or an actual or expected significant change in the quality of credit enhancement, that are expected to reduce the borrower's economic incentive to make scheduled contractual payments. For example, such a situation could occur if a parent decides to no longer provide financial support to a subsidiary, which, as a result, would face bankruptcy or receivership. This could, in turn, result in the subsidiary prioritising payments for its operational needs (such as payroll and crucial suppliers) and assigning a lower priority to payments on its financial debt, resulting in an increase in the probability of default on those liabilities. Credit quality enhancements or support include the consideration of the financial condition of the guarantor and/or, for interests issued in securitisations, whether subordinated interests are expected to be capable of absorbing ECLs (for example, on the loans underlying the security).
- Expected changes in the loan documentation (i.e., changes in contract terms) including an expected breach of contract that may lead to covenant waivers or amendments, interest payment holidays, interest rate step-ups, requiring additional collateral or guarantees, or other changes to the contractual framework of the instrument.
- Significant changes in the expected performance and behaviour of the borrower, including changes in the payment status of borrowers in the group (for example, an increase in the expected number or extent of delayed contractual payments or significant increases in the number of credit card borrowers who are expected to approach or exceed their credit limit or who are expected to be paying the minimum monthly amount).
- Changes in the entity's credit management approach in relation to the financial instrument, i.e., based on emerging indicators of changes in the credit risk of the financial instrument, the entity's credit risk management practice is expected to become more active or to be focused on managing the instrument, including the instrument becoming more closely monitored or controlled, or the entity specifically intervening with the borrower.
- Past due information, including the more than 30 days past due rebuttable presumption (see section 5.5 below).

This list raises the question as to whether an entity will be required to look at each of these factors or indicators as soon as the information is readily available, even though they may not be fully integrated in the entity's credit risk management systems and processes. This relates to our earlier discussion about which information is available without undue cost or effort (see section 4.7.1 above).

We also make the following observations:

- Many financial institutions should have readily available information about the pricing and terms of various types of loans issued to a specific customer (e.g., overdraft, credit cards, mortgage loan) in their credit risk management systems and processes. However, in practice, it would often be difficult to use such information because changes in pricing and terms on the origination of a similar financial instrument at the reporting date may not be so obviously related to a change in credit risk as other, more commercial, factors come into play (e.g., different risk appetites, change in management approach and underwriting standards). It may be challenging to link the two sets of information (i.e., pricing processes on the one hand and credit risk management on the other).
- Some of the factors or indicators are only relevant for the assessment of significant deterioration on an individual basis but not on a portfolio basis. For example, change in external market indicators of credit risk, including the credit spread, the credit default swap prices of the borrower and the extent of decline in fair value. However, it is worth noting that external market information that is available for a quoted instrument may be useful to help assess another instrument that is not quoted, but which is issued by the same debtor or one who operates in the same sector.
- Also, some of the factors or indicators are very forward-looking, such as forecasts of adverse changes in business, financial or economic conditions that are expected to result in significant future financial difficulty of the borrower in repaying its debt.
- It is important to emphasise that changes in the value of collateral typically affect the measurement of ECLs and not the assessment of significant increases in credit risk. However, as explained in the standard, in certain circumstances, changes in the value of collateral may have an impact on the risk of a default occurring (see section 4.6 above).
- Most lenders of loans to corporate borrowers will possess much of this forward looking information at an individual borrower level and may already be including it in their risk assessments. However, compliance with the standard may require that this information is updated more often than may currently be the case. In contrast, most lenders to retail borrowers will not have this kind of information at the individual borrower level and will much more likely need to make use of a collective assessment (see section 5.9 below).

The consideration of various factors or indicators when assessing significant increases in credit risk since initial recognition is illustrated in the following examples.

Extract from IFRS 9

Example 1 - Significant increase in credit risk (IFRS 9.IE7-IE11)

Company Y has a funding structure that includes a senior secured loan facility with different tranches.³ Bank X provides a tranche of that loan facility to Company Y. At the time of origination of the loan by Bank X, although Company Y's leverage was relatively high compared with other issuers with similar credit risk, it was expected that Company Y would be able to meet the covenants for the life of the instrument. In addition, the generation of revenue and cash flow was expected to be stable in Company Y's industry over the term of the senior facility. However, there was some business risk related to the ability to grow gross margins within its existing businesses.

At initial recognition, because of the considerations outlined in paragraph IE7, Bank X considers that, despite the level of credit risk at initial recognition, the loan is not an originated credit-impaired loan because it does not meet the definition of a credit-impaired financial asset in Appendix A of IFRS 9.

Subsequent to initial recognition, macroeconomic changes have had a negative effect on total sales volume and Company Y has underperformed on its business plan for revenue generation and net cash flow generation. Although spending on inventory has increased, anticipated sales have not materialised. To increase liquidity, Company Y has drawn down more on a separate revolving credit facility, thereby increasing its leverage ratio. Consequently, Company Y is now close to breaching its covenants on the senior secured loan facility with Bank X.

Bank X makes an overall assessment of the credit risk on the loan to Company Y at the reporting date, by taking into consideration all reasonable and supportable information that is available without undue cost or effort and that is relevant for assessing the extent of the increase in credit risk since initial recognition. This may include factors such as:

- (a) Bank X's expectation that the deterioration in the macroeconomic environment may continue in the near future, which is expected to have a further negative impact on Company Y's ability to generate cash flows and to deleverage.
- (b) Company Y is closer to breaching its covenants, which may result in a need to restructure the loan or reset the covenants.
- (c) Bank X's assessment that the trading prices for Company Y's bonds have decreased and that the credit margin on newly originated loans have increased reflecting the increase in credit risk, and that these changes are not explained by changes in the market environment (for example, benchmark interest rates have remained unchanged). A further comparison with the pricing of Company Y's peers shows that reductions in the price of Company Y's bonds and increases in credit margin on its loans have probably been caused by company-specific factors.
- (d) Bank X has reassessed its internal risk grading of the loan on the basis of the information that it has available to reflect the increase in credit risk.

³ The security on the loan affects the loss that would be realised if a default occurs, but does not affect the risk of a default occurring, so it is not considered when determining whether there has been a significant increase in credit risk since initial recognition as required by paragraph 5.5.3 of IFRS 9.

Extract from IFRS 9

Bank X determines that there has been a significant increase in credit risk since initial recognition of the loan in accordance with paragraph 5.5.3 of IFRS 9. Consequently, Bank X recognises lifetime expected credit losses on its senior secured loan to Company Y. Even if Bank X has not yet changed the internal risk grading of the loan it could still reach this conclusion - the absence or presence of a change in risk grading in itself is not determinative of whether credit risk has increased significantly since initial recognition.

Example 2 - No significant increase in credit risk (IFRS 9.IE12-IE17)

Company C, is the holding company of a group that operates in a cyclical production industry. Bank B provided a loan to Company C. At that time, the prospects for the industry were positive, because of expectations of further increases in global demand. However, input prices were volatile and given the point in the cycle, a potential decrease in sales was anticipated.

In addition, in the past Company C has been focused on external growth, acquiring majority stakes in companies in related sectors. As a result, the group structure is complex and has been subject to change, making it difficult for investors to analyse the expected performance of the group and to forecast the cash that will be available at the holding company level. Even though leverage is at a level that is considered acceptable by Company C's creditors at the time that Bank B originates the loan, its creditors are concerned about Company C's ability to refinance its debt because of the short remaining life until the maturity of the current financing. There is also concern about Company C's ability to continue to service interest using the dividends it receives from its operating subsidiaries.

At the time of the origination of the loan by Bank B, Company C's leverage was in line with that of other customers with similar credit risk and based on projections over the expected life of the loan, the available capacity (ie headroom) on its coverage ratios before triggering a default event, was high. Bank B applies its own internal rating methods to determine credit risk and allocates a specific internal rating score to its loans. Bank B's internal rating categories are based on historical, current and forward-looking information and reflect the credit risk for the tenor of the loans. On initial recognition, Bank B determines that the loan is subject to considerable credit risk, has speculative elements and that the uncertainties affecting Company C, including the group's uncertain prospects for cash generation, could lead to default. However, Bank B does not consider the loan to be originated credit-impaired because it does not meet the definition of a purchased or originated credit-impaired financial asset in Appendix A of IFRS 9.

Subsequent to initial recognition, Company C has announced that three of its five key subsidiaries had a significant reduction in sales volume because of deteriorated market conditions but sales volumes are expected to improve in line with the anticipated cycle for the industry in the following months. The sales of the other two subsidiaries were stable. Company C has also announced a corporate restructure to streamline its operating subsidiaries. This restructuring will increase the flexibility to refinance existing debt and the ability of the operating subsidiaries to pay dividends to Company C.

Despite the expected continuing deterioration in market conditions, Bank B determines, in accordance with paragraph 5.5.3 of IFRS 9, that there has not been a significant increase in the credit risk on the loan to Company C since initial recognition. This is demonstrated by factors that include:

Whether credit risk has significantly increased depends on what is 'significant'.

Extract from IFRS 9 (cont'd)

- (a) Although current sale volumes have fallen, this was as anticipated by Bank B at initial recognition. Furthermore, sales volumes are expected to improve, in the following months.
- (b) Given the increased flexibility to refinance the existing debt at the operating subsidiary level and the increased availability of dividends to Company C, Bank B views the corporate restructure as being credit enhancing. This is despite some continued concern about the ability to refinance the existing debt at the holding company level.
- (c) Bank B's credit risk department, which monitors Company C, has determined that the latest developments are not significant enough to justify a change in its internal credit risk rating.

As a consequence, Bank B does not recognise a loss allowance at an amount equal to lifetime expected credit losses on the loan. However, it updates its measurement of the 12-month expected credit losses for the increased risk of a default occurring in the next 12 months and for current expectations of the credit losses that would arise if a default were to occur.

5.3 What is significant?

The assessment of whether credit risk has significantly increased depends, critically, on the interpretation of the word 'significant'. Some constituents who commented on the 2013 ED requested the IASB to quantify the term 'significant'. However, the IASB decided not to do so, for the following reasons:²¹

- Specifying a fixed percentage change in the probability of default would require all entities to use the probability of default approach. As not all entities (apart from regulated financial institutions) use probability of default as an explicit input, this would have increased the costs and effort for those entities that do not use such an approach.
- Defining the amount of change in the risk of a default occurring would be arbitrary and this would depend on the type of products, maturities and initial credit risk.

The standard emphasises that the determination of the significance of the change in the risk of a default occurring depends on:²²

- The original credit risk at initial recognition: the same absolute change in probability of default for a financial instrument with a lower initial credit risk will be more significant than for those with a higher initial credit risk (see section 5.8 below).
- The expected life or term structure: the risk of a default occurring for financial instruments with similar credit risk increases the longer the expected life of the financial instruments. Due to the relationship between the expected life and the risk of a default occurring, an entity cannot simply compare the absolute risk of a default occurring over time. For example, if the risk of a default occurring for a financial instrument with an expected life of 10 years at initial recognition is the same after five years, then this indicates that the credit risk has increased. The standard also states that, for financial instruments that have significant payment obligations close to the maturity of the financial instrument (e.g., those where the principal is only repaid at maturity), the risk of a default occurring may not necessarily decrease as time passes. In such cases, an entity needs to consider other qualitative factors.

²¹ See paragraphs IFRS 9.BC5.171 - BC5.172.

²² See paragraphs IFRS 9.B5.5.9 - B5.5.10.

While the risk of default may decrease less quickly for a financial instrument with payment obligations close to maturity than for an instrument with payment obligations throughout its contractual life, normally, the risk of default will still decrease as maturity approaches.

5.3.1 External credit ratings

Examining the historical levels of default associated with the credit ratings of agencies, such as Standard & Poor's, it is apparent that the probabilitys of default (PD) increases at a more than linear rate as the credit rating declines. Hence, the absolute increase in the PD between two relatively low risk credit ratings is considerably less than between two relatively higher risk ratings. The relative increase in PD between each of these ratings might be considered 'significant', since most involve a doubling or trebling of the PD. In contrast, because credit rating is an art rather than a science, the smaller changes in credit risk associated with the plus or minus 'notches' in the grading system are less likely to be viewed as 'significant'. In addition, as the time horizon increases, the PD also increases across all credit ratings (i.e., the PD increases with a longer maturity).

How we see it

The majority of credit exposures that are assessed for significant credit deterioration will not have been rated by a credit rating agency. However, the same logic will apply when entities have developed their own probability of default models and are able to classify their exposure by probability of default levels. It is important to stress that the approach required by the standard is more holistic and qualitative than is necessarily captured by external credit ratings, which are adjusted for discrete events and do not reflect gradual degradations in credit quality. External credit ratings should not, therefore, be used on their own but only in conjunction with other qualitative information. The same point can of course be made about the use of internal credit ratings, especially if they are only reassessed on an annual basis.

5.4 Low credit risk operational simplification

The standard contains an important simplification that, if a financial instrument has low credit risk, then an entity is allowed to assume at the reporting date that no significant increases in credit risk have occurred. The low credit risk concept was intended, by the IASB, to provide relief for entities from tracking changes in the credit risk of high quality financial instruments. Therefore, this simplification is only optional and the low credit risk simplification can be elected on an instrument-by-instrument basis.

This is a change from the 2013 ED, in which a low risk exposure was deemed not to have suffered significant deterioration in credit risk. The amendment to make the simplification optional was made in response to requests from constituents, including regulators. It is expected that the Basel Committee SCRAVL consultation document (see 1.1) will propose that sophisticated banks should only usethis simplification rarely for their loan portfolios.

If a financial instrument has low credit risk, an entity is allowed to assume that no significant increases in credit risk have occurred. For low risk instruments, the entity would recognise an allowance based on 12-month ECLs. However, if a financial instrument is not considered to have low credit risk at the reporting date, it does not follow that the entity is required to recognise lifetime ECLs. In such instances, the entity has to assess whether there has been a significant increase in credit risk since initial recognition that requires the recognition of lifetime ECLs.

The standard states that a financial instrument is considered to have low credit risk if: $^{\rm 23}$

- > The financial instrument has a low risk of default
- The borrower has a strong capacity to meet its contractual cash flow obligations in the near term
- 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

A financial instrument is not considered to have low credit risk simply because it has a low risk of loss (e.g., for a collateralised loan, if the value of the collateral is more than the amount lent (see section 4.6 above)) or it has lower risk of default compared with the entity's other financial instruments or relative to the credit risk of the jurisdiction within which the entity operates.

The description of low credit risk is broadly equivalent to 'investment grade' quality assets, equivalent to a Standard and Poor's rating of BBB- or better, Moody's rating of Baa3 or better and Fitch's rating of BBB- or better. When applying the low credit risk simplification, financial instruments are not required to be externally rated. However, the IASB's intention was to use a globally comparable notion of low credit risk instead of a level of risk determined, for example, by an entity or jurisdiction's view of risk based on entity-specific or jurisdictional factors.²⁴ Therefore, an entity may use its internal credit ratings to assess what is low credit risk as long as this is consistent with the globally understood definition of low credit risk (i.e., investment grade) or the market's expectations of what is deemed to be low credit risk. Also, ratings should be adjusted to take into consideration the specific risks of the financial instruments being assessed.

In practice, entities with internal credit ratings may seek to map their internal rating to the external credit ratings and definitions, such as Standard & Poor's, Moody's and Fitch. The description of the credit quality ratings by these major rating agencies are illustrated below.²⁵

²³ See paragraph IFRS 9.B5.5.22.

²⁴ See paragraph IFRS 9.BC5.188.

²⁵ IASB Agenda paper 5B, Financial Instruments: Impairment, Operational simplifications -30dpd and low credit risk, 28 October - 1 November 2013.

External credit ratings and definitions from the 3 major rating agencies

Standard & Poor's	Moody's	Fitch
Investment grade would usually refer to categories AAA to BBB (with BBB- being lowest investment grade considered by market participants).	Investment grade would usually refer to categories Aaa to Baa (with Baa3 being lowest investment grade considered by market participants).	Investment grade would usually refer to categories AAA to BBB (with BBB- being lowest investment grade considered by market participants).
BBB	Ваа	BBB: Good credit quality
Adequate capacity to meet financial commitments, but more subject to adverse economic conditions.	Obligations rated Baa are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics.	Indicates that expectations of default risk are currently low . The capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity.
Distinction line b	etween investment grade and s	speculative grade
ВВ	Ba	BB: Speculative
Less vulnerable in the near-term but faces major on-going uncertainties to adverse business, financial and economic conditions.	Obligations rated Ba are judged to be speculative and are subject to substantial credit risk.	Indicates an elevated vulnerability to default risk, particularly in the event of adverse changes in business or economic conditions over time. However, business or financial flexibility exists which supports the servicing of financial commitments.

Examining the historical levels of default associated with the credit ratings of agencies such as Standard & Poor's, the PD of a BBB-rated loan is approximately treble that of one that is rated A. Hence, some entities may wish not to use the low risk simplification and to treat the credit risk of an asset that is downgraded from A to BBB as significant, even though it is still investment grade.

The low credit risk simplification will not be relevant if an entity originates or purchases a financial instrument with a credit risk which is already higher than that of an investment grade asset. Similarly, this simplification will also have limited use when the financial instrument is originated or purchased with a credit quality that is marginally better than a non-investment grade (i.e., at the bottom of the investment grade rating), because any credit deterioration to the non-investment grade rating would require the entity to assess whether the increase in credit risk has been significant.

It is yet to be seen whether banks will use this operational simplification widely for their loan portfolios. Investors that hold externally rated debt instruments are more likely to rely on external rating agencies data and use the low credit risk simplification. However, it is important to emphasise that:

- The default rates provided by external rating agencies are historical information. Entities need to understand the sources of these historical default rates and update the data for current and forward-looking information (see section 4.7 above) when measuring ECLs or assessing credit deterioration, as illustrated by the extract from IFRS 9 below.
- Although ratings are forward-looking, it is sometimes suggested that changes in credit ratings may not be reflected in a timely manner. Therefore, entities may have to take account of expected changes in ratings in assessing whether there has been a significant increase in risk and to adjust their assumed default rates.

Nevertheless, the choice of whether to apply the low credit risk simplification will likely create diversity in practice.

The following example illustrates the application of the low credit risk simplification.

Extract from IFRS 9

Example 4 - Public investment-grade bond (IFRS 9.IE24-IE28)

Company A is a large listed national logistics company. The only debt in the capital structure is a five-year public bond with a restriction on further borrowing as the only bond covenant. Company A reports quarterly to its shareholders. Entity B is one of many investors in the bond. Entity B considers the bond to have low credit risk at initial recognition in accordance with paragraph 5.5.10 of IFRS 9. This is because the bond has a low risk of default and Company A is considered to have a strong capacity to meet its obligations in the near term. Entity B's expectations for the longer term are that adverse changes in economic and business conditions may, but will not necessarily, reduce Company A's ability to fulfil its obligations on the bond. In addition, at initial recognition the bond had an internal credit rating that is correlated to a global external credit rating of investment grade.

At the reporting date, Entity B's main credit risk concern is the continuing pressure on the total volume of sales that has caused Company A's operating cash flows to decrease.

Because Entity B relies only on quarterly public information and does not have access to private credit risk information (because it is a bond investor), its assessment of changes in credit risk is tied to public announcements and information, including updates on credit perspectives in press releases from rating agencies.

Extract from IFRS 9 (cont'd)

Entity B applies the low credit risk simplification in paragraph 5.5.10 of IFRS 9. Accordingly, at the reporting date, Entity B evaluates whether the bond is considered to have low credit risk using all reasonable and supportable information that is available without undue cost or effort. In making that evaluation, Entity B reassesses the internal credit rating of the bond and concludes that the bond is no longer equivalent to an investment grade rating because:

- (a) The latest quarterly report of Company A revealed a quarter-on-quarter decline in revenues of 20 per cent and in operating profit by 12 per cent.
- (b) Rating agencies have reacted negatively to a profit warning by Company A and put the credit rating under review for possible downgrade from investment grade to non-investment grade. However, at the reporting date the external credit risk rating was unchanged.
- (c) The bond price has also declined significantly, which has resulted in a higher yield to maturity. Entity B assesses that the bond prices have been declining as a result of increases in Company A's credit risk. This is because the market environment has not changed (for example, benchmark interest rates, liquidity etc are unchanged) and comparison with the bond prices of peers shows that the reductions are probably company specific (instead of being, for example, changes in benchmark interest rates that are not indicative of company-specific credit risk).

While Company A currently has the capacity to meet its commitments, the large uncertainties arising from its exposure to adverse business and economic conditions have increased the risk of a default occurring on the bond. As a result of the factors described in paragraph IE27, Entity B determines that the bond does not have low credit risk at the reporting date. As a result, Entity B needs to determine whether the increase in credit risk since initial recognition has been significant. On the basis of its assessment, Company B determines that the credit risk has increased significantly since initial recognition and that a loss allowance at an amount equal to lifetime expected credit losses should be recognised in accordance with paragraph 5.5.3 of IFRS 9.

Some of the challenges in assessing whether there has been a significant increase in credit risk (including the use of the low credit risk simplification) and estimating the expected losses, are illustrated in the following example. It illustrates different ways of identifying a significant change in credit quality and different input parameters for calculating expected losses for a European government bond, which result in very different outcomes and volatility of the IFRS 9 expected loss allowance.

Illustration 5-1 – Use of credit ratings and/or CDS spreads to determine whether there have been significant increases in credit risk and to estimate expected credit losses

Introduction

A significant challenge in applying the IFRS 9 impairment requirements to quoted bonds is that the credit ratings assigned by agencies such as Standard & Poor's (S&P), and the historical experience of losses by rating grade, can differ significantly with the view of the market, as reflected in, for instance, credit default swap (CDS) spreads and bond spreads.

To illustrate the challenges of applying IFRS 9 to debt securities, we have examined how the expected loss could be determined for a real bond issued by a European government on 16 September 2008 and due to mature in 2024. For three dates, we applied the IFRS 9 calculations to this bond, which is assumed to have been acquired at inception. In January 2009, the Standard & Poor's credit rating of the government was AA+, but by January 2012, its rating was downgraded to A. The bond was further downgraded to BBB- in March 2014 before recovering to BBB in May 2014.

Three approaches

Shown below are three approaches:

- Approach 1: Use of S&P credit ratings both to determine whether the bond has significantly increased in credit risk and to estimate ECLs
- Approach 2: Use of S&P credit ratings to determine whether the bond has significantly increased in credit risk and CDS spreads to estimate ECLs
- Approach 3: Use of CDS spreads both to determine whether the bond has significantly increased in credit risk and to estimate ECLs

Based on the historical corporate probability of default (PDs) from S&P for each assessed credit rating (approach 1) and based on the CDS spreads (approach 2 and 3), the loan loss percentages were calculated below. For the calculations, an often used loss given default of 60% was applied. To calculate 12-month PDs, the 12-month maturity point was chosen on the CDS curve and for lifetime PDs the maturity point was chosen.

The percentage loss allowances were, as follows:

	Credit ratings	Approach 1	Approach 2	Approach 3
31 January 2009	AA+	0.01	1.10	18.29
31 January 2012	А	0.04	2.98	30.89
31 March 2014	BBB-	0.18	0.34	13.81

Illustration 5-1 – Use of credit ratings and/or CDS spreads to determine whether there have been significant increases in credit risk and to estimate expected credit losses (cont'd)

Approach 1

According to the credit ratings, the bond was 'investment grade' throughout this period. Hence, using the 'low risk' simplification, the loss allowance would have been based on 12-month ECLs. Using the corporate historical default rates implied by the credit ratings and an assumption of 60% LGD to calculate the ECLs, the 12-month allowance would have increased from 0.01% on 31 January 2009 to 0.04% three years later, increasing to 0.18% by 31 March 2014. It should be stressed that the historical default rates implied by credit ratings are historical rates for corporate debt and so they would not, without adjustment, satisfy the requirements of the standard. IFRS 9 requires the calculation of ECLs, based on current conditions and forecasts of future conditions, based on 'reasonable and supportable information'. This is likely to include market indicators such as CDS and bond spreads, as illustrated by Approach 2.

Approach 2

In contrast to Approach 1, using credit default swap spreads to calculate the ECLs and the same assumption of 60% LGD to calculate the ECLs, the 12-month allowance would have increased from 1.1% on 31 January 2009 to 2.98% three years later, declining to 0.34% by 31 March 2014. The default rates implied by the CDSs are significantly higher than would have been expected given the ratings of these bonds. The loss allowances are, correspondingly, very much higher and very volatile. It might be argued that CDS spreads are too responsive to short-term market sentiment to calculate long term ECLs, but it would appear difficult to find other 'reasonable and supportable information' to adjust these rates so as to dampen the effects of market volatility.

Approach 3

Credit ratings are often viewed by the market as lagging indicators. For these bonds, the ratings are difficult to reconcile with the default probabilities as assessed by the markets. It might be argued that it is not sufficient to focus only on credit ratings when assessing whether assets are 'low risk' since, according to CDS spreads, the bond was not 'low risk' at any time in the period covered in this example, as it showed a significant increase in 1 year PD after inception (based on CDS spreads). The 1 year PD increased from 0.44% on issue to 1.84% by 31 January 2009. Assessing the bond as requiring a lifetime expected loss at all three dates, based on CDS spreads, would have given much higher loss allowances of 18.29%, 30.89% and 13.81%.

The counter-view might be that CDS spreads are too volatile to provide a sound basis for determining significant deterioration. Perhaps the best way to make the assessment of whether a bond has increased significantly in credit risk is to use more than one source of data and to take account of the qualitative indicators as described in the standard.

Similar results to that obtained in Approach 3 would have been obtained if the investor had used Approach 2, but decided not to use the low risk simplification.

The 30 days past due simplification permits the use of delinquency together with other more forward-looking information, to identify a significant increase in credit risk.

How we see it

The calculated ECL figures in Illustration 5-1 differ significantly depending on the approach taken as to how to determine a significant change in credit quality and the parameters used for the calculation. Those based on CDS spreads are both large and very volatile, reflecting the investor uncertainty during the period, when the possibility of default depended as much on the political will of the European Union to maintain the integrity of the Eurozone than the economic forecasts for this particular country. As a result, the disparity between the effect of the use of credit grades and CDSs is probably more marked than for most other security investments. Nevertheless, the same challenges will be found with other securities, albeit on a smaller scale.

5.5 Past due status and more than 30 days past due rebuttable presumption

The second simplification available in IFRS 9 sets out a rebuttable presumption that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due.²⁶ This 30 days past due simplification permits the use of delinquency or past due status, together with other more forward-looking information, to identify a significant increase in credit risk. The IASB decided that this simplification should be required as a rebuttable presumption to ensure that its application does not result in an entity reverting to an incurred loss model.²⁷

The IASB is concerned that past due information is a lagging indicator. Typically, credit risk increases significantly before a financial instrument becomes past due or other lagging borrower-specific factors (for example, a modification or restructuring) are observed. Consequently, when reasonable and supportable information that is more forward-looking than past due information is available without undue cost or effort, it must be used to assess changes in credit risk and an entity cannot rely solely on past due information. However, if more forward-looking information (either on an individual or collective basis) is not available without undue cost or effort, an entity may use past due information to assess changes in credit risks.

This presumption does not apply if significant increases in credit risk have already occurred before contractual payments are more than 30 days past due. On the other hand, an entity can rebut the presumption if it has information that demonstrates that credit risk has not increased significantly even though contractual payments are more than 30 days past due. Such evidence may include knowledge that a missed non-payment is because of administrative oversight rather than financial difficulty of the borrower, or historical information suggests significant increases in credit risk only occur when payments are more than 60 days past due.²⁸

²⁶ See paragraph IFRS 9.5.5.11.

²⁷ See paragraph IFRS 9.BC5.190.

 $^{^{28}\,}$ See paragraphs IFRS 9.5.5.15 and IFRS 9.85.5.19 - B5.5.24.

The more than 30 days past due rebuttable presumption serves as a backstop, even when forward-looking information is used. The more than 30 days past due rebuttable presumption is intended to serve as a backstop even when forward-looking information is used (e.g., macroeconomic factors on a portfolio level). Moreover, as stated earlier, the standard is clear that an entity may not align the definition and criteria used to identify significant increases in credit risk (and the resulting recognition of lifetime ECLs) to when a financial asset is regarded as credit-impaired or to an entity's internal definition of default. An entity should normally identify significant increases in credit risk and recognise lifetime ECLs before default occurs or the financial asset becomes credit-impaired, either on an individual or collective basis (see section 5.9 below for the 'top-down' approach).

How we see it

It is likely that less sophisticated entities which do not have, or are unable to use, more forward-looking indicators to supplement past due status will consider fewer credit exposures that significantly deteriorate. Hence, there is a risk that more sophisticated entities may carry larger allowances, unless the less sophisticated entities make more use of the top down approach.

5.6 12-month risk as an approximation for change in lifetime risk

If the likely pattern of default is not concentrated at a specific point during the expected life of the financial instrument, the change in risk of a default occurring over the next 12-months may often be a reasonable approximation for the change in risk of a default occurring over the expected remaining life. In these circumstances, the standard permits the use of a 12-month risk of a default occurring when determining whether credit risk has increased significantly since initial recognition, unless circumstances indicate that a lifetime assessment is necessary.²⁹

In using the changes in risk of a default occurring over the next 12 months, the standard suggests that an entity need not prove that the outcome of a 12-month assessment would differ from that of a lifetime assessment. This is slightly less demanding than the 2013 ED which stated that 'an entity may use the 12-month probability of a default occurring to determine whether credit risk has increased significantly since initial recognition *if the information considered does not suggest that the outcome would differ'*. The IASB noted that some entities use a 12-month probability of default measure for prudential regulatory requirements and these entities can continue to use their existing systems and methodologies as a starting point for determining significant increases in credit risk, thus reducing the costs of implementation.³⁰

However, for some financial instruments, or in some circumstances, the use of changes in the risk of default occurring over the next 12 months may not be appropriate to determine whether lifetime ECLs should be recognised. For a financial instrument with a maturity longer than 12 months, the standard gives the following examples:³¹

The financial instrument only has significant payment obligations beyond the next 12 months

²⁹ See paragraph IFRS 9.B5.5.13.

³⁰ See paragraphs IFRS 9.BC5.177 - BC5.178.

³¹ See paragraph IFRS 9.B5.5.14.

- Changes in relevant macroeconomic or other credit-related factors occur that are not adequately reflected in the risk of a default occurring in the next 12 months
- Changes in credit-related factors only have an impact on the credit risk of the financial instrument (or have a more pronounced effect) beyond 12 months

This guidance implies that it is less appropriate to use changes in the 12-month risk of default for non-amortising debt instruments such as most bonds and interest-only mortgages.

5.7 Assessment at the counterparty level

As indicated by Illustrative Example 7 in the Implementation Guidance for IFRS 9, the assessment of significant deterioration in credit risk can be made at the level of the counterparty rather than the individual financial instrument. Such assessment at the counterparty level is only allowed if it is consistent with the requirements for recognising lifetime ECLs and the outcome would not differ from the outcome if the financial instruments had been individually assessed.³² In certain circumstances, assessment at the counterparty level would not be consistent with the impairment requirements. Both these situations are illustrated below.

Extract from IFRS 9

Example 7 - Counterparty assessment of credit risk (IFRS 9.IE43-IE47) Scenario 1

In 20X0 Bank A granted a loan of CU10,000 with a contractual term of 15 years to Company Q when the company had an internal credit risk rating of 4 on a scale of 1 (lowest credit risk) to 10 (highest credit risk). The risk of a default occurring increases exponentially as the credit risk rating deteriorates so, for example, the difference between credit risk rating grades 1 and 2 is smaller than the difference between credit risk rating grades 2 and 3. In 20X5, when Company Q had an internal credit risk rating of 6, Bank A issued another loan to Company Q for CU5,000 with a contractual term of 10 years. In 20X7 Company Q fails to retain its contract with a major customer and correspondingly experiences a large decline in its revenue. Bank A considers that as a result of losing the contract, Company Q will have a significantly reduced ability to meet its loan obligations and changes its internal credit risk rating to 8.

Bank A assesses credit risk on a counterparty level for credit risk management purposes and determines that the increase in Company Q's credit risk is significant. Although Bank A did not perform an individual assessment of changes in the credit risk on each loan since its initial recognition, assessing the credit risk on a counterparty level and recognising lifetime expected credit losses on all loans granted to Company Q, meets the objective of the impairment requirements as stated in paragraph 5.5.4 of IFRS 9. This is because, even since the most recent loan was originated (in 20X7) when Company Q had the highest credit risk at loan origination, its credit risk has increased significantly. The counterparty assessment would therefore achieve the same result as assessing the change in credit risk for each loan individually.

³² See paragraph IFRS 9.BC5.168.

Extract from IFRS 9 (cont'd)

Scenario 2

Bank A granted a loan of CU150,000 with a contractual term of 20 years to Company X in 20X0 when the company had an internal credit risk rating of 4. During 20X5 economic conditions deteriorate and demand for Company X's products has declined significantly. As a result of the reduced cash flows from lower sales, Company X could not make full payment of its loan instalment to Bank A. Bank A re-assesses Company X's internal credit risk rating, and determines it to be 7 at the reporting date. Bank A considered the change in credit risk on the loan, including considering the change in the internal credit risk rating, and determines that there has been a significant increase in credit risk and recognises lifetime expected credit losses on the loan of CU150,000.

Despite the recent downgrade of the internal credit risk rating, Bank A grants another loan of CU50,000 to Company X in 20X6 with a contractual term of 5 years, taking into consideration the higher credit risk at that date.

The fact that Company X's credit risk (assessed on a counterparty basis) has previously been assessed to have increased significantly, does not result in lifetime expected credit losses being recognised on the new loan. This is because the credit risk on the new loan has not increased significantly since the loan was initially recognised. If Bank A only assessed credit risk on a counterparty level, without considering whether the conclusion about changes in credit risk applies to all individual financial instruments provided to the same customer, the objective in paragraph 5.5.4 of IFRS 9 would not be met.

5.8 Determining maximum initial credit risk for a portfolio

The IFRS 9 credit risk assessment that determines whether a financial instrument should attract a lifetime ECL allowance, or only a 12-month ECL allowance, is based on whether there has been a relative increase in credit risk. One of the challenges identified by some constituents in responding to the 2013 ED is that many credit risk systems monitor absolute levels of risk, without tracking the history of individual loans (see section 5.1 above). To help address this concern, the standard contains an approach that turns a relative system into an absolute one by segmenting the portfolio sufficiently by loan quality.

As indicated by Illustrative Example 6 in the Implementation Guidance for IFRS 9 below, an entity can determine the maximum initial credit risk accepted for portfolios with similar credit risks on initial recognition. Thereby, an entity may be able to establish an 'absolute' threshold for recognising lifetime ECLs.

Extract from IFRS 9

Example 6 - Comparison to maximum initial credit risk (IFRS 9.IE40-IE42)

Bank A has two portfolios of automobile loans with similar terms and conditions in Region W. Bank A's policy on financing decisions for each loan is based on an internal credit rating system that considers a customer's credit history, payment behaviour on other products with Bank A and other factors, and assigns an internal credit risk rating from 1 (lowest credit risk) to 10 (highest credit risk) to each loan on origination. The risk of a default occurring increases exponentially as the credit risk rating deteriorates so, for example, the difference between credit risk rating grades 1 and 2 is smaller than the difference between credit risk rating grades 2 and 3. Loans in Portfolio 1 were only offered to existing customers with a similar internal credit risk rating and

By determining the maximum initial credit risk accepted for portfolios with similar credit risks on initial recognition, it may be possible to establish an 'absolute' threshold for recognising lifetime expected credit losses.

Extract from IFRS 9 (cont'd)

at initial recognition all loans were rated 3 or 4 on the internal rating scale. Bank A determines that the maximum initial credit risk rating at initial recognition it would accept for Portfolio 1 is an internal rating of 4. Loans in Portfolio 2 were offered to customers that responded to an advertisement for automobile loans and the internal credit risk ratings of these customers range between 4 and 7 on the internal rating scale. Bank A never originates an automobile loan with an internal credit risk rating worse than 7 (ie with an internal rating of 8-10).

For the purposes of assessing whether there have been significant increases in credit risk, Bank A determines that all loans in Portfolio 1 had a similar initial credit risk. It determines that given the risk of default reflected in its internal risk rating grades, a change in internal rating from 3 to 4 would not represent a significant increase in credit risk but that there has been a significant increase in credit risk on any loan in this portfolio that has an internal rating worse than 5. This means that Bank A does not have to know the initial credit rating of each loan in the portfolio to assess the change in credit risk since initial recognition. It only has to determine whether the credit risk is worse than 5 at the reporting date to determine whether lifetime expected credit losses should be recognised in accordance with paragraph 5.5.3 of IFRS 9.

However, determining the maximum initial credit risk accepted at initial recognition for Portfolio 2 at an internal credit risk rating of 7, would not meet the objective of the requirements as stated in paragraph 5.5.4 of IFRS 9. This is because Bank A determines that significant increases in credit risk arise not only when credit risk increases above the level at which an entity would originate new financial assets (ie when the internal rating is worse than 7). Although Bank A never originates an automobile loan with an internal credit rating worse than 7, the initial credit risk on loans in Portfolio 2 is not of sufficiently similar credit risk at initial recognition to apply the approach used for Portfolio 1. This means that Bank A cannot simply compare the credit risk at the reporting date with the lowest credit guality at initial recognition (for example, by comparing the internal credit risk rating of loans in Portfolio 2 with an internal credit risk rating of 7) to determine whether credit risk has increased significantly because the initial credit guality of loans in the portfolio is too diverse. For example, if a loan initially had a credit risk rating of 4 the credit risk on the loan may have increased significantly if its internal credit risk rating changes to 6.

5.9 Collective assessment

Banks have hundreds of thousands, or even millions, of small exposures to retail customers and small businesses, for which they do not receive sufficient information to monitor the individual credit quality, beyond whether any payments are past due, and for which it would be impractical to reassess individually even if they possessed more data. Instead, they manage these exposures on an aggregated basis, combining past due data with historical statistical experience and sometimes macroeconomic indicators, such as interest rates and unemployment levels, that tend to correlate with future defaults. The IASB has sought to make it clear that financial assets can (and should) be assessed collectively for significant credit risk deterioration if the assessment cannot be made on an individual instrument basis. Although the 2013 ED was developed, in part, to respond to this issue, some respondents were of the view that the proposals would not require (or even permit) lifetime ECLs to be recognised until there was evidence of a significant increase in credit risk at an individual instrument level. In finalising the standard, the Board has, therefore, sought to make it clear that financial assets can (and should) be assessed collectively for significant credit risk deterioration, if the entity cannot make the assessment on an individual instrument basis. But then that raises a second concern, once significant deterioration has been identified for a portfolio, whether the entire portfolio would have to be measured using lifetime ECLs. This outcome would result in sudden, massive increases in provisions as soon as conditions begin to decline. Consequently, the Board, in finalising the standard, also had to devise a method by which only a segment or portion of the portfolio would be changed to lifetime ECLs.

Illustrative Example 5 in the Implementation Guidance for the standard demonstrates how an entity should assess whether its individual assessment should be complemented with a collective one when the information at individual level is not sufficiently comprehensive and updated.³³ As a benchmark, Scenario 1 ('individual assessment') illustrates a situation where a bank has sufficient information at individual level to identify a significant deterioration.

Illustration 5-2 – Individual assessment in relation to responsiveness to changes in credit risk (adapted from Example 5 – Responsiveness to changes in credit risk, of the Implementation Guidance)

The bank assesses each of its mortgage loans on a monthly basis by means of an automated behavioural scoring process based on current and historical past due statuses, levels of customer indebtedness, loan-to-value (LTV) measures, customer behaviour on other financial instruments with the bank, the loan size and the time since the origination of the loan. It is said that historical data indicates a strong correlation between the value of residential property and the default rates for mortgages.

The bank updates the LTV measures on a regular basis through an automated process that re-estimates property values using recent sales in each post code area and reasonable and supportable forward-looking information that is available without undue cost or effort. Therefore, an increased risk of a default occurring due to an expected decline in residential property value adjusts the behavioural scores and the bank is therefore able to identify significant increases in credit risk of individual customers before a mortgage becomes past due if there has been a deterioration in the behavioural score.

The example concludes that if the bank was unable to update behavioural scores to reflect the expected declines in property prices, it would use reasonable and supportable information that is available without undue cost or effort to undertake a collective assessment to determine the loans on which there has been a significant increase in credit risk since initial recognition and recognize lifetime ECLs for those loans.

³³ See IFRS 9.IG Example 5, paragraphs IE32 - IE36.

It should be noted that, in this example, the main source of forward looking information is expected future property prices. No account would appear to be taken of other economic data such as future levels of employment or interest rates. We assume that the Board took this approach to make the example simple, but it implies that future property prices are considered to provide a sufficient guide to future defaults that it is not necessary to take account of other data as well.

The standard first specifies that, if an entity does not have reasonable and supportable information that is available without undue cost or effort to measure lifetime expected losses on an individual instrument basis, it must assess lifetime losses on a collective basis. This exercise must consider comprehensive information that incorporates not only past due data, but other relevant credit information, such as forward looking macro-economic information. The objective is to approximate the result of using comprehensive credit information that incorporates forward-looking information at an individual instrument level.³⁴

Next, the standard sets out how financial instruments may be grouped together in order to determine whether there has been a significant increase in credit risk.³⁵ Any instruments assessed collectively must possess shared credit risk characteristics. It is not permitted to aggregate exposures that have different risks and, in so doing, obscure significant increases in risk that may arise on a subset of the portfolio. Examples of shared credit risk characteristics given in the standard include, but are not limited to:

- Instrument type
- Credit risk ratings
- Collateral type
- Date of initial recognition
- Remaining term to maturity
- Industry
- Geographical location of the borrower
- The value of collateral relative to the asset (the loan-to-value or LTV ratio), if this would have an impact on the probability of a default occurring

The standard also states that the basis of aggregation of financial instruments to assess whether there have been changes in credit risk on a collective basis may have to change over time, as new information on groups of, or individual, financial instruments becomes available.³⁶

³⁴ See paragraph IFRS 9.B5.5.4.

³⁵ See paragraph IFRS 9.B5.5.5.

³⁶ See paragraph IFRS 9.B5.5.6.

We make the following observations:

- By 'date of original recognition', we assume that the Board did not intend that loans should be assessed in separate groups for each year of origination, but that vintages may be aggregated into groups that share similar credit risk characteristics. Loan products and lending practices, including the extent of due diligence and key ratios (such as the LTV and loan-to-income) change over time, often reflecting the economic conditions at the time of origination. The consequence is that loans from particular years are inherently more risky than others. For some banks, this would mean isolating those loans advanced in the heady days just prior to the financial crisis from those originated earlier or in the subsequent, more careful lending environment. Also, there is a phenomenon termed 'seasoning', which describes how loans that been serviced adequately for a number of years, over a business cycle, are statistically less likely to default in future, suggesting that older loans might be assessed separately.
- As has been stressed earlier, the assessment of significant deterioration is intended to reflect the risk of default, not the risk of loss, hence, collateral should normally be ignored for the assessment. The standard explains that the value of collateral relative to the financial asset would be relevant to the collective assessment if it has an impact on the risk of a default occurring. It cites, as an example, non-recourse loans in certain jurisdictions. The question of when such an arrangement would meet the IFRS 9 classification and measurement 'characteristics of the asset' test is beyond the scope of this publication. However, the standard also gives an example of LTV ratios, without explaining why these are likely to have an impact on the risk of a default occurring.³⁷ LTV or a house price index may be a useful indicator of significant collective deterioration in a wider range of circumstances than just where the loans are non-recourse. First, house prices are themselves a useful barometer of the economy and so higher LTVs and lower indices correlate with declining economic conditions. Second, loans that were originally advanced at higher LTVs may reflect more aggressive lending practices, with the consequence that such loans may exhibit a higher risk of a default occurring if economic conditions decline.
- Although the examples in the standard refer to 'regions', as the geographical location of borrowers, the groupings could be much larger, such as by country, or much smaller, if there are particular issues associated with certain parts of a town. Hence, the choice of geographical groupings will depend very much on the environment in which a bank operates.
- The requirement that financial instruments assessed together must share similar credit risk characteristics means that a bank may have a substantial number of portfolios. Even a relatively small bank might have six different products (taking into account terms to maturity and types of collateral), three regions and three different vintage groups which, multiplied out, would give fifty four different assessment groups. A larger, global bank might need to monitor many more different portfolios.

³⁷ See paragraph IFRS 9.B5.5.5.

- Other ways that loans might be grouped according to shared credit risk characteristics could include payment history, whether previously restructured or subject to forbearance but subsequently restored to a 12-month expected credit loss allowance, and manner of employment (as featured in Illustrative Example 5 in the Implementation Guidance for the standard under the 'bottom up' assessment discussed below).
- The requirement that groupings may have to be amended over time means that there must be put in place processes to reassess whether loans continue to share similar credit risk characteristics.

There is one other piece of guidance in the main part of the standard on how to assess financial instruments collectively.³⁸ This states that, 'if an entity is not able to group financial instruments for which the credit risk is considered to have increased significantly since original recognition based on shared credit risk characteristics, the entity should recognise lifetime expected losses on a portion of the financial assets for which credit risk is deemed to have increased significantly.' This is designed to deal with situations in which the lender cannot distinguish between the different exposures, and so is unable to determine which have suffered a significant increase in credit risk. Also, faced with significant deterioration identified at portfolio level based on macroeconomic indicators, a bank would, but for this guidance, need to measure lifetime ECLs for the whole portfolio.

The main standard does not expand on this point, but Illustrative Example 5 in the Implementation Guidance of IFRS 9 provides two scenarios that explore this concept.³⁹ Both were devised subsequent to the publication of the 2013 ED. The IASB developed these illustrations as a response to comments received on the ED. As such, they have not received the same level of review and feedback as most of the rest of the standard.

Illustration 5-3 – Collective assessment in relation to responsiveness to changes in credit risk ('bottom up' approach)

Region Two of Illustrative Example 5 in the Implementation Guidance for the Standard introduces the so-called 'bottom up' method. It deals with a mining community within a region that faces unemployment risk due to a decline in coal exports and, consequently, anticipates future mine closures. Although most of the loans are not yet 30 days past due and the borrowers are not yet unemployed, the bank re-segments its mortgage portfolio so as to separate loans to customers employed in the mining industry (based on information in the original mortgage application form).

For these loans (plus any others that are more than 30 days past due), Bank ABC recognises lifetime ECLs, while it continues to recognise 12-month ECLs for the other mortgage loans in the region. Any new loans to borrowers who rely on the coal industry would also attract only a 12-month allowance, until they also demonstrate a significant increase in credit risk.

³⁸ See paragraph IFRS 9.B5.5.6.

³⁹ See IFRS 9.IG Example 5, paragraphs IE29 - IE39.

The bottom up method is described as an example of how to assess credit deterioration by using information that is more forward looking than past due status. But this example also illustrates that collectively assessed groups may need to change over time, to ensure that they share similar credit risk characteristics. Once the coal mining industry begins to decline, those loans connected with it would no longer share the same risk characteristics as other loans to borrowers in the region, and so would need to be assessed separately.

As already described above (possible criteria for grouping of financial assets with similar credit risk characteristics), the bottom up approach could be applied to sub-portfolios differentiated by type of instrument, risk rating, type of collateral, date of initial recognition, remaining term to maturity, industry, geographical location of the borrower, or the LTV ratio. A good example of this approach might be for exposures to borrowers in countries that are expected to suffer major economic difficulties due to war or political upheaval. In addition, as underwriting standards may vary or change, the portfolio might be sub-divided so as to reflect this. The more information a lender possesses, the more likely it is that it will apply the bottom up approach.

Note that the coal mines closures are, as yet, only anticipated, hence this example helps show how the standard is intended to look much further forward than the consequent unemployment that would probably trigger an IAS 39 impairment provision. The need to look forward is also illustrated in the next example.

Illustration 5-4 – Collective assessment in relation to responsiveness to changes in credit risk ('top down' approach)

For Region Three of illustrative Example 5 in the Implementation Guidance for the standard, Bank ABC anticipates an increase in defaults following an expected rise in interest rates. We are told that, historically, an increase in interest rates has been a lead indicator of future defaults on floating rate mortgages in the region. The bank regards the portfolio of variable rate mortgage loans in that region to be homogenous and it is incapable of identifying particular sub portfolios on the basis of shared credit risk characteristics. Hence, it uses what is described as a 'top down' approach.

Based on historical data, the bank estimates that a 200 basis points rise in interest rates will cause a significant increase in credit risk on 20 per cent of the mortgages. As a result, presumably because the bank expects a 200 basis points rise in rates, it recognises lifetime ECLs on 20 per cent of the portfolio (along with those loans that are more than 30 days past due) and 12-month ECLs on the remainder of mortgages in the region.

The challenge posed by the top down approach is how to calculate the percentage of loans that have significantly deteriorated. The example in the standard bases the percentage on historical experience, but it is more than 20 years since most developed countries last saw a 200 basis points rise in interest rates, and products and lending practices were then very different, as were the levels of interest rates before they began to rise and the extent of the increases. Hence, the past may not be a reliable guide to the future.

Also, this example, like those in all of the Illustrative Examples, simplifies the fact pattern to focus on just one driver of credit losses, whereas in reality there are many, and it may not be possible to find a historical precedent for the combination of economic indicators that may now be present. Further, to delve into the past to predict the future requires a level of data that banks may lack.

Banks have been developing techniques to assess the impact of changes in macroeconomic indicators on impairment losses. But these techniques do not necessarily lend themselves to determining what proportion of a portfolio should be measured using lifetime expected losses. One method that might provide this information is to determine the expected migration of loans through a bank's risk classification system, based on the forward looking information. This could be used to forecast how many additional loans will get downgraded as well as the associated expected losses.

The effect that different assumptions have on the overall loss allowance is illustrated in this next example. In each case, the bank assumes the same probabilities of default, but in each scenario, it makes a different assumption as to what proportion of the portfolio should be measured using lifetime expected losses.

Illustration 5-5 - Determination using the top down approach

Bank A has a CU100 million portfolio of floating rate mortgages in region 1 that it considers share similar risk characteristics. It has assessed the lifetime expected probability of default as 4%, the 12-month PD as 1% and the LGD as 10%. (For this very simple example, the LGD is kept unchanged and the time value of money is ignored). The loss allowance based on the 12-month PD is, therefore, CU100,000. The bank forecasts that interest rates will increase by 2% and determines that a 2% increase in interest rates will increase the lifetime PD to 5% and the 12-month PD to 1.2%. It applies the top down approach to assess the proportion of the portfolio that should now be measured on a lifetime expected loss basis.

Scenario 1

The bank determines that 50% of the portfolio would continue to have a lifetime PD of 4% and a 12-month PD of 1% and the other 50% would now have a 6% lifetime PD and a 12-month PD of 1.4% (so that the overall portfolio has an average lifetime PD of 5% and 12 month PD of 1.2%). It does not regard an increase in PD for the more stressed 50%, from 4% to 6%, as significant, and so it concludes that the entire portfolio should still be measured using 12-month expected losses, giving a loss allowance of CU120,000.

Illustration 5-5 - Determination using the top down approach *(cont'd)*

Scenario 2

The bank determines that 80% of the portfolio continues to have a lifetime PD of 4% and a 12-month PD of 1%. It calculates that the lifetime PD of the other 20% of the portfolio has now increased to 9% while the 12-month PD is now 2% (so that, again, the average lifetime PD of the entire portfolio is now 5% while the 12-month PD is 1.2%). It considers the increase in lifetime PD for the 20% of the portfolio, from 4% to 9%, as significant and so measures the 20% using lifetime expected losses. The loss allowance is €80,000 for the 80% proportion (measured at 1%) and CU180,000 for the 20% (measured at 9%), totalling CU260,000.

Scenario 3

The bank determines that 90% of the portfolio continues to have a lifetime PD of 4% (and a 12-month PD of 1%). Therefore the other 10% of the portfolio must have a lifetime PD of 14%, for the overall PD to average 5%. The credit risk on the 10% has clearly increased significantly. The loss allowance is CU90,000 for the 90% and CU140,000 for the 10%, totalling CU230,000.

How we see it

There is large difference in the calculated loss allowance in Scenario 1 of Illustration 5-5 compared with the other two scenarios. The first scenario probably does not achieve what the Board intended, given that the standard says that the objective of a collective assessment is to approximate the result of using comprehensive credit information that incorporates forward-looking information at an individual instrument level.⁴⁰ Since it would be expected that the credit risk on *some* financial instruments would have increased significantly, presumably it is not right to conclude that, collectively, there has been no significant increase. Note that, in contrast, the difference in the result of the calculations in Scenarios 2 and 3 is not so large.

That a rise in interest rates will likely lead to a significant deterioration in credit risk for some floating rate borrowers, is not controversial. But working out whether they make up 5 per cent, 20 per cent or 35 per cent of the portfolio would appear to be more of an art than science, and no two banks are likely to arrive at the same figure. This is an area that could usefully be explored by the ITG, to work out whether there are ways that the top down approach can be applied without requiring arbitrary decisions, or creating considerable diversity in application.

The example of an anticipated increase in interest rates is very topical, given that rates in many countries can be expected to rise in future from the all-time low levels that have been experienced since the financial crisis. This gives rise to an observation that is relevant to any expected credit loss model: banks and (hopefully) borrowers have presumably known that new variable loans made since the crisis would likely increase in rate as the economy improves. If the increase was anticipated at the time of origination, expectation of a rise in interest rate should not be viewed as a significant deterioration in credit risk. Yet, at least in the UK, there is a concern that rising rates will bring difficulty for many borrowers who have over-stretched themselves, implying that the inevitable rise was not fully factored into lending decisions.

⁴⁰ See paragraph IFRS 9.B5.5.4.

It is worth stressing that entities do not have a choice of whether to apply a collective assessment such as the top down or a bottom up approach. As we have already said, any portfolio assessed collectively should share similar credit risk characteristics, so that any financial assets that begin to show different risk characteristics should be assessed as a separate portfolio. Meanwhile, the standard states that the top down approach is designed for when 'an entity is *not able* to group financial instruments for which the credit risk is considered to have increased significantly since original recognition based on shared credit risk characteristics'.⁴¹

How we see it

It is unclear to what extent a lender can use a combination of the bottom up and top down approaches. In the bottom up example, all the borrowers connected to the coal industry are deemed to have increased significantly in credit risk. Presumably, a lender might argue that, once the coal-related borrowers are assessed separately, only a portion needs to measured using lifetime expected losses, using a top down approach. This probably provides a better approximation to the result of using comprehensive credit information that incorporates forward-looking information at an individual instrument level.

A further issue with the top down approach is the question of what the lender should do if it subsequently finds that differences in risk characteristics emerge within the portfolio, such that certain assets need to be measured using lifetime expected losses using the bottom up approach. A similar question arises if individual assets subsequently need to be measured using lifetime expected losses, for instance, because they become 30 days past due. Presumably, in each case, the lender will need to reallocate part of the portion of the portfolio already measured using lifetime losses based on the top down approach, but just how much? For example, if 20% of the portfolio had been assessed using the top down approach and now a further 15% must be measured using lifetime losses due to the bottom up approach, should the lender assume that the entire 15% were already 'covered' by the top down lifetime loss allowance, or would this apply to only 20% of the 15%, or what?

Presumably a portion of the loans that are measured using lifetime ECLs can be measured once again using 12-month expected losses if economic conditions are expected to improve. However, the standard seem to make it clear that it is not possible to rebut the 30 days past due presumption just because of a favourable economic outlook.⁴²

Furthermore, the use of a top down approach to determine whether there should be an allowance for lifetime ECLs becomes yet more complex if some of the financial assets in the collective assessment are designated in a fair value hedge relationship, as it may be necessary to measure a portion of the hedge adjustment using lifetime ECLs.

Moreover, the standard is clear that significant deterioration must be assessed using information that is forward looking. The assessment would be made on an individual basis if the entity has information that is sufficiently forward looking at that level, or on collective basis if it does not. This would suggest that, even if a financial asset is normally managed on an

⁴¹ See paragraph IFRS 9.B5.5.6.

⁴² See paragraph IFRS 9.B5.5.19.

individual basis, it should also be assessed collectively (i.e., based on macro-economic indicators), if the entity does not have sufficient forward looking information at the individual level to make the determination. The way that this might work is not very different from the IAS 39 requirement to assess an asset collectively for impairment if it has already been assessed individually and found not to be impaired. It is possible that individual financial instruments cannot be grouped together with other assets that share similar credit risk characteristics, in which the standard would seem to require the entity to apply the top down approach to the individual asset.⁴³ This could even mean that a proportion of a single asset might be measured using lifetime ECLs.

The Application Guidance does not appear to consider the possibility of an entity not having access to forward looking information at all (without undue cost or effort). Although the standard is clear that ECLs are generally expected to be recognised before a financial instrument becomes past due, the 30 days past due rebuttable presumption, is not well aligned with most of the Guidance.⁴⁴ It addresses the circumstances when forward looking information is not available (either on an individual or a collective basis) and states that an entity may rely in these circumstances on just past due information. This would appear to create the possibility that a less sophisticated lender might rely just on delinquency and so would have a lower level of loss allowances than a lender that is more sophisticated.

The top down and bottom up approaches are only examples of how a collective assessment might be made and so we would expect that they would be applied flexibly, to suit the circumstances. However, all these matters would usefully be discussed by the ITG.

5.10 Loss rate approach

Under the loss rate approach, introduced in section 4.2.2 above, an entity develops loss-rate statistics on the basis of the amount written off over the life of the financial assets rather than using separate probability of default and loss given default statistics. Entities then must adjust these historical credit loss trends for current conditions and expectations about the future.

The standard is clear that although a loss rate approach may be applied, an entity needs to be able to separate the changes in the risk of a default occurring from changes in other drivers of ECLs.⁴⁵ Under the loss rate approach, the entity does not distinguish between a risk of a default occurring and the loss incurred following a default. This is not so much of an issue for measuring 12-month or lifetime ECLs. However, under the loss rate approach, an entity would not be able to implement the assessment of significant increases in credit risk that is based on the change in the risk of a default. Therefore, entities using the loss rate approach would need an overlay of measuring and forecasting the level of defaults, as illustrated in the extract of Example 9 from the Implementation Guidance (see section 4.2.2 above). For entities that currently use only expected loss rates, it may be easier to develop a probability of default approach.

⁴³ See paragraph IFRS 9.B5.5.6.

⁴⁴ See paragraphs IFRS 9.B5.5.2 and B5.5.11.

⁴⁵ See paragraph IFRS 9.B5.5.12.

If the contractual cash flows on a financial asset are renegotiated or modified, the holder needs to assess whether the financial asset should be derecognised.

6. Modified financial assets

If the contractual cash flows on a financial asset are renegotiated or modified, the holder needs to assess whether the financial asset should be derecognised. While IAS 39 contains guidance on when financial liabilities that have been renegotiated or modified should be derecognised, it does not do so for financial assets. Similarly, as the derecognition literature in IAS 39 has been carried forward to IFRS 9, the IASB has still not established criteria for analysing when a modification of a financial asset constitutes a derecognition event. However, an entity may refer to the decision made by the IFRS Interpretations Committee in May 2012. The Interpretations Committee was asked to consider the accounting treatment of Greek government bonds (GGBs). The principal issue raised was whether the portion of the old GGBs to be exchanged for new bonds with different maturities and interest rates should result in derecognition of the whole asset, or only part of it, in accordance with IAS 39 or, conversely, be accounted for as a modification that would not require derecognition. The IFRS Interpretations Committee concluded that this assessment can be made, either on the basis of:

 The extinguishment of the contractual rights to the cash flows from the assets⁴⁶

Or

 By analogising to the notion of a substantial change of the terms of financial liabilities to these assets⁴⁷

IFRS 9 acknowledges that in, some circumstances, the renegotiation or modification of the contractual cash flows of a financial asset can lead to the derecognition of the existing financial asset and subsequently, the recognition of a 'new' financial asset.⁴⁸ This means that the entity is starting afresh and the date of the modification will also be the date of initial recognition of the new financial asset. Typically, the entity will recognise a loss allowance based on 12-month ECLs at each reporting date until the requirements for the recognition of lifetime ECLs are met. However, in some unusual circumstances following a modification that results in derecognition of the original financial asset, there may be evidence that the new financial asset is credit-impaired on initial recognition (see section 3.3 above), and thus, the financial asset should be recognised as an originated credit-impaired financial asset. An example may be the restructuring of Greek government bonds in 2012 (see discussion above); the IFRS Interpretations Committee noted that the new bonds may be recognised with incurred losses on initial recognition, depending on the entity's assessment of the whether the new bonds were credit-impaired at initial recognition.

In other circumstances, the renegotiation or modification of the contractual cash flows of a financial asset does not lead to the derecognition of the existing financial asset as per IFRS 9. In such situations, the entity will:

 Continue with its current accounting treatment for the existing asset that has been modified

⁴⁶ See paragraph IAS 39.17(a) (now under paragraph IFRS 9.3.2.3).

 $^{^{47}\,}$ See paragraph IAS 39.40 (now under paragraph IFRS 9.3.3.2).

⁴⁸ See paragrpah IFRS 9.B5.5.25.

- Record a modification gain or loss by recalculating the gross carrying amount of the financial asset as the present value of the renegotiated or modified contractual cash flows, discounted at the financial asset's original EIR (or the credit-adjusted EIR for purchased or originated credit-impaired financial assets (see section 4.5 above)
- Assess whether there has been a significant increase in the credit risk of the financial instrument, by comparing the risk of a default occurring at the reporting date (based on the modified contractual terms) and the risk of a default occurring at initial recognition (based on the original, unmodified contractual terms). A financial asset that has been renegotiated or modified is not automatically considered to have lower credit risk. The assessment should consider the credit risk over the expected life of the asset based on historical and forward-looking information, including information about the circumstances that led to the modification. Evidence that the criteria for the recognition of lifetime ECLs are subsequently no longer met may include a history of up-to-date and timely payment in subsequent periods. This means a minimum period of observation will often be necessary before a financial asset may qualify to return to a 12-month expected credit loss measurement
- Make the appropriate quantitative and qualitative disclosures required for renegotiated or modified assets to enable users of financial statements to understand the nature and effect of such modifications (including the effect on the measurement of ECLs) and how the entity monitors its assets that have been modified (see section 12 below).

The following example has been adapted from one in the standard to illustrate the accounting treatment of a loan that is modified.⁴⁹

Illustration 6-1 – Modification of contractual cash flows (adapted from Example 11 of the Implementation Guidance)

Bank A originates a five-year loan that requires the repayment of the outstanding contractual amount in full at maturity. Its contractual par amount is CU1,000 with an interest rate of 5 per cent, payable annually. The EIR is 5 per cent. At the end of the first reporting period in Year 1, Bank A recognises a loss allowance at an amount equal to 12-month ECLs because there has not been a significant increase in credit risk since initial recognition. A loss allowance balance of CU20 is recognised. In Year 2, Bank A determines that the credit risk on the loan has increased significantly since initial recognition. As a result, Bank A recognising lifetime ECLs on the loan. The loss allowance balance is CU150.

At the end of Year 3, following significant financial difficulty of the borrower, Bank A modifies the contractual cash flows on the loan. It forgoes interest payments and extends the contractual term of the loan by one year so that the remaining term at the date of the modification is three years. The modification does not result in the derecognition of the loan by Bank A.

As a result of that modification, Bank A recalculates the gross carrying amount of the financial asset as the present value of the modified contractual cash flows discounted at the loan's original EIR of 5 per cent. The difference between this recalculated gross carrying amount and the gross carrying amount before the modification is recognised as a modification gain or loss. Bank A recognises the modification loss (calculated as ≤ 136) against the gross carrying amount of the loan, reducing it to CU864, and a modification loss of CU136 in profit or loss.

⁴⁹ See IFRS 9.IG Example 11, paragraphs IE66 - IE73.

Illustration 6-1 – Modification of contractual cash flows (adapted from Example 11 of the Implementation Guidance)

Bank A also remeasures the loss allowance, taking into account the modified contractual cash flows and evaluates whether the loss allowance for the loan should continue to be measured at an amount equal to lifetime ECLs. Bank A compares the current credit risk (taking into consideration the modified cash flows) to the credit risk (on the original unmodified cash flows) at initial recognition. Bank A determines that the loan is not credit-impaired at the reporting date but that credit risk has still significantly increased compared to the credit risk at initial recognition. It continues to measure the loss allowance at an amount equal to lifetime ECLs, which are CU110 at the reporting date.

At each subsequent reporting date, Bank A continues to evaluate whether there has been a significant increase in credit risk by comparing the loan's credit risk at initial recognition (based on the original, unmodified cash flows) with the credit risk at the reporting date (based on the modified cash flows).

Two reporting periods after the loan modification (Year 5), the borrower has outperformed its business plan significantly compared with the expectations at the modification date. In addition, the outlook for the business is more positive than previously envisaged. An assessment of all reasonable and supportable information that is available without undue cost or effort indicates that the overall credit risk on the loan has decreased and that the risk of a default occurring over the expected life of the loan has decreased, so Bank A adjusts the borrower's internal credit rating at the end of the reporting period.

Given the positive overall development, Bank A re-assesses the situation and concludes that the credit risk of the loan has decreased and there is no longer a significant increase in credit risk since initial recognition. As a result, Bank A once again measures the loss allowance at an amount equal to 12-month ECLs.

Year		(loss)/gain	Modification (loss)/gain	Interest revenue	Cash flows	Ending gross carrying amount	Loss allowance	Ending amortised cost amount
	А	В	С	D Gross: A × 5%	E	F = A + C + D - E	G	H = F - G
1	CU1,000	(CU20)		CU50	CU50	CU1,000	CU20	CU980
2	CU1,000	(CU130)		CU50	CU50	CU1,000	CU150	CU850
3	CU1,000	CU40	(CU136)	CU50	CU50	CU864	CU110	CU754
4	CU864	CU24		CU43		CU907	CU86	CU821
5	CU907	CU72		CU45		CU953	CU14	CU939
6	CU953	CU14		CU48	CU1,000	CU0	CU0	CUO

7. Financial assets measured at fair value through other comprehensive income (FVOCI)

For financial assets that are debt instruments measured at FVOCI, the IASB decided that both amortised cost and fair value information are relevant because debt instruments held by entities in this measurement category are held for both the collection of contractual cash flows and the realisation of fair values.⁵⁰ Therefore, debt instruments measured at fair value through other comprehensive income are measured at fair value in the statement of financial position and the following amortised cost information is presented in profit or loss:

- Interest revenue is calculated using the effective interest method that is applied to financial assets measured at amortised cost
- Foreign exchange gains and losses on the amortised cost are recognised in profit or loss
- Impairment gains and losses are derived using the same methodology that is applied to financial assets measured at amortised cost

The fair value gains and losses on these financial assets are recognised in other comprehensive income. Consequently, the difference between the total change in fair value and the amounts recognised in profit or loss are presented in other comprehensive income. When these financial assets are derecognised, the cumulative gains and losses previously recognised in other comprehensive income are reclassified (i.e., 'recycled') from equity to profit or loss as a reclassification adjustment.

Based on the accounting treatment described above, the ECLs do not reduce the carrying amount of the financial assets in the statement of financial position, which remains at fair value. Instead, an amount equal to the ECL allowance that would arise if the asset were measured at amortised cost is recognised in other comprehensive income as the 'accumulated impairment amount'.

The accounting treatment and journal entries for debt instruments measured at fair value through other comprehensive income are illustrated in the following example, based on Illustrative Example 13 in the Implementation Guidance for the standard.⁵¹

For debt instruments measured at FVOCI, the expected credit losses do not reduce the carrying amount in the statement of financial position, which remains at fair value. Instead, an amount equal to the allowance that would arise if the asset was measured at amortised cost is recognised in other comprehensive income as the 'accumulated impairment amount'.

 $^{^{50}\,}$ See paragraphs IFRS 9.4.1.2A and IFRS 9.BC4.150.

⁵¹ See IFRS 9.IG Example 13, paragraphs IE78 - IE81.

Extract from IFRS 9

Example 13 - Debt instrument measured at fair value through other comprehensive income (IFRS 9.IE78-IE81)

An entity purchases a debt instrument with a fair value of CU1,000 on 15 December 20X0 and measures the debt instrument at fair value through other comprehensive income. The instrument has an interest rate of 5 per cent over the contractual term of 10 years, and has a 5 per cent effective interest rate. At initial recognition the entity determines that the asset is not purchased or originated credit-impaired.

	Debit	Credit
Financial asset - FVOCI ^(a)	CU1,000	
Cash		CU1,000

(To recognise the debt instrument measured at its fair value) (a) FVOCI means fair value through other comprehensive income.

On 31 December 20X0 (the reporting date), the fair value of the debt instrument has decreased to CU950 as a result of changes in market interest rates. The entity determines that there has not been a significant increase in credit risk since initial recognition and that expected credit losses should be measured at an amount equal to 12-month expected credit losses, which amounts to CU30. For simplicity, journal entries for the receipt of interest revenue are not provided.

	Debit	Credit
Impairment loss (profit or loss)	CU30	
Other comprehensive income ^(a)	CU20	
Financial asset - FVOCI		CU50

(To recognise 12-month expected credit losses and other fair value changes on the debt instrument)

(a) The cumulative loss in other comprehensive income at the reporting date was CU20. That amount consists of the total fair value change of CU50 (ie CU1,000 - CU950) offset by the change in the accumulated impairment amount representing 12-month expected credit losses that was recognised (CU30).

Disclosure would be provided about the accumulated impairment amount of CU30.

On 1 January 20X1, the entity decides to sell the debt instrument for CU950, which is its fair value at that date.

	Debit	Credit
Cash	CU950	
Financial asset - FVOCI		CU950
Loss (profit or loss)	CU20	
Other comprehensive income	· · ·	CU20

(To derecognise the fair value through other comprehensive income asset and recycle amounts accumulated in other comprehensive income to profit or loss)

This means that in contrast to financial assets measured at amortised cost, there is no separate allowance but, instead, impairment gains or losses are accounted for as an adjustment of the revaluation reserve in accumulated other comprehensive income, with a corresponding charge to profit or loss (which is then reflected in retained earnings).

Conceptually, this means ECLs are treated as if they were a realised fair value change, whereas otherwise fair value changes are generally treated as realised only when the financial asset is derecognised.

Practically, for financial assets measured at fair value through other comprehensive income, the manner of accounting for impairment gains or losses required by the standard means that it becomes a matter of a disaggregation of accumulated other comprehensive income into impairment-related and other amounts. The above example is relatively straightforward. A more complicated one, based on a foreign currency denominated financial asset which is also the subject of an interest rate hedge, is provided in Appendix 1. The standard provides some operational simplifications for trade receivables, contract assets and lease receivables.

8. Trade receivables, contract assets and lease receivables

The standard provides some operational simplifications for trade receivables, contract assets and lease receivables. This includes the requirement or policy choice to apply the simplified approach that does not require entities to track changes in credit risk (see section 3.2 above) and the practical expedient to calculate ECLs on trade receivables using a provision matrix (see section 8.1 below).

8.1 Trade receivables and contract assets

It is a requirement for entities to apply the simplified approach for trade receivables or contract assets that do not contain a significant financing component.⁵² However, entities have a policy choice to apply either the general approach (see section 3.1 above) or the simplified approach separately to trade receivables and contract assets that do contain a significant financing component (see section 3.2 above).

Also, entities are allowed to use practical expedients when measuring ECLs, as long as the approach reflects a probability-weighted outcome, the time value of money and reasonable and supportable information that is available, without undue cost or effort at the reporting date, about past events, current conditions and forecasts of future economic conditions.

One of the approaches suggested in the standard is the use of a provision matrix as a practical expedient for measuring ECLs on trade receivables.⁵³ For instance, the provision rates might be based on days past due (e.g., 1 per cent if not past due, 2 per cent if less than 30 days past due, etc.) for groupings of various customer segments that have similar loss patterns. The grouping may be based on geographical region, product type, customer rating, the type of collateral or whether covered by trade credit insurance and the type of customer (such as wholesale or retail). To calibrate the matrix, the entity would adjust its historical credit loss experience with forward-looking information.

How we see it

In practice, many corporates use a provision matrix to calculate their current impairment allowances. However, in order to comply with the requirements of IFRS 9, corporates would need to consider how current and forward-looking information might affect their customers' historical default rates and, consequently, how the information would affect their current expectations and estimates of ECLs.

 $^{^{52}}$ See paragraph IFRS 9.5.5.15.

⁵³ See paragraph IFRS 9.B5.5.35.

The use of the provision matrix is illustrated in the following example.

Extract from IFRS 9

Example 12 - Provision matrix (IFRS 9.IE74-IE77)

Company M, a manufacturer, has a portfolio of trade receivables of CU30 million in 20X1 and operates only in one geographical region. The customer base consists of a large number of small clients and the trade receivables are categorised by common risk characteristics that are representative of the customers' abilities to pay all amounts due in accordance with the contractual terms. The trade receivables do not have a significant financing component in accordance with IFRS 15 *Revenue from Contracts with Customers*. In accordance with paragraph 5.5.15 of IFRS 9 the loss allowance for such trade receivables is always measured at an amount equal to lifetime time expected credit losses.

To determine the expected credit losses for the portfolio, Company M uses a provision matrix. The provision matrix is based on its historical observed default rates over the expected life of the trade receivables and is adjusted for forward-looking estimates. At every reporting date the historical observed default rates are updated and changes in the forward-looking estimates are analysed. In this case it is forecast that economic conditions will deteriorate over the next year.

On that basis, Company M estimates the following provision matrix:

	Current	1-30 days past due	31-60 days past due	61-90 days past due	More than 90 days past due
Default rate	0.3%	1.6%	3.6%	6.6%	10.6%

The trade receivables from the large number of small customers amount to CU30 million and are measured using the provision matrix.

	Gross carrying amount	Lifetime expected credit loss allowance (Gross carrying amount × lifetime expected credit loss rate)
Current	CU15,000,000	CU45,000
1-30 days past due	CU7,500,000	CU120,000
31-60 days past due	CU4,000,000	CU144,000
61-90 days past due	CU2,500,000	CU165,000
More than 90 days past due	CU1,000,000	CU106,000
	CU30,000,000	CU580,000

It should be noted that this example like many in the standard, ignores the need to consider explicitly the time value of money, probably in this case, because the effect is considered immaterial.

For lease receivables, entities have a policy choice to apply either the general approach or the simplified approach.

8.2 Lease receivables

For lease receivables, entities have a policy choice to apply either the general approach (see section 3.1 above) or the simplified approach (see section 3.2 above) separately to finance and operating lease receivables.

In addition, when measuring ECLs for lease receivables, an entity should:

- Use the cash flows that are used to measure the lease receivables in accordance with IAS 17⁵⁴
- Discount the ECLs using the same discount rate used to measure the lease receivables in accordance with IAS 17⁵⁵

How we see it

The leasing project, designed to replace IAS 17, eliminates the distinction between finance and operating leases. Consequently, lessees will record a substantial liability for their commitments for what are currently classed as operating leases. Only recently the IASB decided not to require a similar treatment for lessors, so that they will not need to book correspondingly large lease assets. With this change, the effect of the IFRS 9 impairment requirements for many lessors has been significantly reduced. As the requirement is to take into account only those cash flows used to measure the receivable, there is no need to make a provision against future cash flows that are not yet recognised in the statement of financial position.

The new impairment requirement will have a greater impact on lessors of what are currently classed as finance leases. Especially if they opt to apply the simplified approach, the effect would be to recognise a potentially significant allowance on initial recognition of the lease. However, the lessor's 'loan' is in substance collateralised by the leased asset, which reduces the ECLs.

 $^{^{54}\,}$ See paragraphs IFRS 9.B5.5.34 and IAS 17.36 - 38.

 $^{^{55}\,}$ See paragraphs IFRS 9.B5.5.46 and IAS 17.4.

9. Loan commitments and financial guarantee contracts

The description of 'loan commitment' and the definition of 'financial guarantee contract' remain unchanged from IAS 39. Loan commitments are described in IFRS 9 as firm commitments to provide credit under specified terms and conditions, while a financial guarantee contract is defined as 'a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument'.

The IFRS 9 impairment requirements apply to loan commitments and financial guarantee contracts that are not measured at fair value through profit or loss under IFRS 9, with some exceptions (see section 2 above). The application of the model to financial guarantees and loan commitments, however, warrants some further specification regarding some of the key elements, such as the determination of the credit quality on initial recognition and cash shortfalls and the EIR to be used in the ECLs calculations. These specifications are summarised in the table below, which also highlights the differences in recognising and measuring ECLs for financial assets measured at amortised cost or at fair value through other comprehensive income, loan commitments and financial guarantee contracts.

	Financial assets measured at amortised cost or at fair value through other comprehensive income	Loan commitments	Financial guarantee contracts
Date of initial recognition in applying the impairment requirements (see sections 11.4 and 13.3.1 below)	Trade date	Date that an entity becomes a party to the irrevocable commitment	Date that an entity becomes a party to the irrevocable commitment
Period over which to estimate ECLs (see section 4.3 above)	The maximum contractual period (including extension options) over which the entity is exposed to credit risk and not a longer period.	The maximum contractual period over which an entity has a present contractual obligation to extend credit However, for revolving credit facilities (see 10 below), this period extends beyond the contractual period over which the entity is exposed to credit risk and the ECLs would not be mitigated by credit risk management actions	The maximum contractual period over which an entity has a present contractual obligation to extend credit

The IFRS 9 impairment requirements apply to loan commitments and financial guarantee contracts that are not measured at fair value through profit or loss under IFRS 9.

	Financial assets measured at amortised cost or at fair value through other comprehensive income	Loan commitments	Financial guarantee contracts
Cash shortfalls in measuring ECLs (see section 4.1 above)	Cash shortfalls between the cash flows that are due to an entity in accordance with the contract and the cash flows that the entity expects to receive	Cash shortfalls between the contractual cash flows that are due to the entity if the holder of the loan commitment draws down the loan and the cash flows that the entity expects to receive if the loan is drawn down	Cash shortfalls are the expected payments to reimburse the holder for a credit loss that it incurs less any amounts that the entity (issuer) expects to receive from the holder, the debtor or any other party
EIR used in discounting ECLs (see section 4.5 above)	The EIR is determined or approximated at initial recognition of the financial instrument	The EIR of the resulting asset will be applied and if this is not determinable, then the current rate representing the risk of the cash flows is used	The current rate representing the risk of the cash flows is used
Assessment of significant increases in credit risk (see section 5 above)	An entity considers changes in the risk of a default occurring on the financial asset	An entity considers changes in the risk of a default occurring on the loan to which a loan commitment relates	An entity considers the changes in the risk that the specified debtor will default on the contract

10. Revolving credit facilities

The 2013 ED specified that the maximum period over which ECLs are to be calculated should be limited to the contractual period over which the entity is exposed to credit risk. This would mean that the allowance for commitments that can be withdrawn at short notice by a lender, such as overdrafts and credit card facilities, would be limited to the ECLs that would arise over the notice period, which might be only one day. However, banks will not normally exercise their right to cancel the commitment until there is already evidence of significant deterioration, which exposes them to risk over a considerably longer period. The IASB responded to the concerns of respondents by setting out further guidance and an illustrative example, addressing such arrangements.⁵⁶

The guidance relates to financial instruments that 'include both a loan and an undrawn commitment component and the entity's contractual ability to demand repayment and cancel the commitment does not limit the entity's exposure to credit losses to the contractual notice period.' It goes on to describe three characteristics generally associated with such instruments:

- They usually have no fixed term or repayment structure and usually have a short contractual cancellation period
- The contractual ability to cancel the contract is not enforced in day-to-day management, but only when the lender is aware of an increase in credit risk at the facility level
- They are managed on a collective basis

In order to calculate the period for which ECLs are assessed, "an entity should consider factors such as historical information and experience about:⁵⁷

- (a) the period over which the entity was exposed to credit risk on similar financial instruments;
- (b) the length of time for related defaults to occur on similar financial instruments following a significant increase in credit risk; and
- (c) the credit risk management actions that an entity expects to take once the credit risk on the financial instrument has increased, such as the reduction or removal of undrawn limits."

It should be noted that the time horizon is not the period over which the lender expects the facility to be used, but the period over which the lender is, in practice, exposed to credit risk. It is possible that the lender may fully 'refresh' its credit lines once a year, assessing them as if they are new, in which case, it would be appopriate to use only the period to this next reassessment. But most credit cards have a longer life and until the facility is next 'refreshed' it will only be withdrawn if there is negative information.

This following example illustrates the calculation of impairment for revolving credit facilities, based on Illustrative Example 10 in the Implementation Guidance for the standard.⁵⁸ For the sake of clarity, the assumptions and calculations have been adapted from the IASB example as it is not explicit on the source of the parameters and how they are computed. The example has also been expanded to show the calculation of the loss allowances. However, to simplify the example, we have ignored the need to discount expected losses.

⁵⁶ See paragraphs IFRS 9.B5.5.39 - B5.5.40.

⁵⁷ See paragraph IFRS 9.B5.5.40.

⁵⁸ See IFRS 9.IG Example 10, paragraphs IE58 - IE65.

Illustration 10-1 - Revolving credit facilities

Bank A provides credit cards with a one day cancellation right and manages the drawn and undrawn commitment on each card together, as a facility. Bank A sub-divides the credit card portfolio by segregating those amounts for which a significant increase in credit risk was identified at the individual facility level from the remainder of the portfolio. The remainder of this example only illustrates the calculation of ECLs for the sub-portfolio for which a significant increase in credit risk was not identified at the individual facility level. At the reporting date, the outstanding balance on the sub-portfolio is CU6,000,000 and the undrawn facility is CU4,000,000. Bank A determines the sub-portfolio's expected life as 30 months (using the guidance set out above) and that the credit risk on 25 per cent of the sub-portfolio has increased significantly since initial origination, making up CU1,500,000 of the outstanding balance and CU1,000,000 of the undrawn commitment (see the calculation of the exposure in the table below).

To calculate its exposure at default, Bank A uses an approach whereby it adds the amounts that are drawn down at the reporting date and additional draw-downs that are expected in the case that a customer defaults. For those expected additional draw-downs, Bank A uses a credit conversion factor that represents the estimate of which percentage of that part of the committed credit facilities that is unused at the reporting date would be drawn by a customer before he defaults. Using its credit models, the bank determines this credit conversion factor as 95 per cent. The exposure at default on the portion of facilities measured on a lifetime expected credit loss basis is therefore CU2,450,000, made up of the drawn balance of CU1,500,000 and CU950,000 of expected further draw-downs before the customers default. For the remainder of the facilities, the exposure at default, that is measured on a 12-month expected credit loss basis is CU7,350,000, being the remaining drawn balance of CU4,500,000 plus additional expected draw-downs for customers defaulting over the next 12 months of CU2,850,000 (see the calculation for the exposure at default in the table below).

Bank A has estimated that the probability of default for the next 12 months is 5 per cent, and 30 per cent for the next 30 months. The estimate for the loss given default on the credit cards in the sub-portfolio is 90 per cent. That results in lifetime ECLs of CU661,500 and 12-month ECLs of CU330,750 (see calculation for ECLs in the table below).

For the presentation in the statement of financial position, the ECLs against the drawn amount of CU607,500 would be recognised as an allowance against the credit card receivables and the remainder of the ECLs that relates to the undrawn facilities of CU384,750 would be recognised as a liability (see the table below).

Illustration 10-1 - Revolving credit facilities (cont'd)						
Determination made facility level	e at	Drawn		Undrawn	Total	
Facility		CU6,000,000	C	:U4,000,000	CU10,000,000	
Exposure						
Subject to lifetime ECLs (25% of the facility has been determined to have significantly increased in credit risk)	25% CU1,500,000)	CU1,000,000		CU2,500,000	
Subject to 12-month ECLs (the remaining 75% of the facility)	75%	CU4,500,000	(CU3,000,000	CU7,500,000	
Credit conversion factor (CCF) ⁵⁹	95%					
Exposure at default (EAD) ⁶⁰						
Subject to lifetime ECLs	CU1,500,000)	CU950,000		CU2,450,000	
Subject to 12-month ECLs		CU4,500,000	(CU2,850,000	CU7,350,000	
Probability of a default (PD)						
Exposures subject to lifetime ECLs	30%					
Exposures subject to 12-month ECLs	5%					
Loss given default (LGD)	90%					
ECLs (EAD × PD × LGD)						
Exposures subject to lifetime ECLs	CU405,000)	CU256,500		CU661,500	
Exposures subject to 12-month ECLs		CU202,500		CU128,250	CU330,750	
		CU607,500 sented as loss against assets		CU384,750 presented as provision	CU992,250	

⁵⁹ A uniform CCF is used irrespective of deterioration, which reflects that the CCF is contingent on 'default' which is the same reference point for a 12-month and lifetime expected credit loss calculation

 $^{^{60}~}$ EAD for undrawn balances is calculated as exposure $\times\,{\rm CCF}$

How we see it

We make the following observations:

- In Example 10 of the standard (on which our Illustration 10-1 is based), we assume that the 25 per cent has been calculated using the top down approach described at section 5.9 above, which also sets out various challenges in its application. This means that the bank does not know which of the facilities are deemed to have significantly deteriorated. It might, alternatively, be calculated using a bottom up approach.
- Example 10 in the standard does not show how the 30 month period was calculated. The calculation of the period is likely to be challenging and require the use of judgement.
- We use the same credit conversion factor for calculating the exposure at default irrespective of whether it is an input for 12-month or lifetime ECLs. This is based on an assumption that the extent of future draw-downs in the event that the customer defaults, does not differ depending on whether, at the reporting date, there had been a significant increase in credit risk. This reflects that, in practice, for many credit cards, the exposure in case of a default reaches close to the limit of the total facility (credit limit). In this context, it is important to be aware that the use of a conventional credit conversion factor model for estimating the exposure at default creates some problems. Such a model is only an indirect estimate that combines drawn amounts with expectations for the conversion of unused amounts (that are the difference between the credit limit and the amount already drawn). One problem is that, in practice, the credit limit is often exceeded when the customer reaches the state of default, in which case, the credit conversion factor would be greater than 1.0.
- One reason why we used a credit conversion factor that is smaller than 1.0 is that IFRS 9 generally limits the relevant credit risk exposures to the contractual exposures at the reporting date, i.e., the then existing claims and commitments or obligations. For particular revolving credit facilities, IFRS 9 provides an exception to that principle by expanding the relevant time horizon beyond the contractual maturity of the instrument that gives rise to the credit exposure. However, there is no similar exception that expands the contractual exposure at the reporting date also by including amounts that exceed the maximum contractual amount of the credit risk exposure. It is unclear whether it was intended that the estimate of the credit exposure from revolving credit facilities should only be expanded regarding the time horizon, or whether the intention was that facilities that tend to be overdrawn by the time of the customer's default would be taken into account, even if that would exceed the contractual credit limit. This may be an issue that will be raised at the ITG.

11. Presentation of expected credit losses in the statement of financial position

IFRS 9 uses the term 'loss allowance' throughout the standard as an umbrella term for ECLs that are recognised in the statement of financial position. However, that umbrella term leaves open how those ECLs should be presented in that statement. Their presentation differs by the type of the credit risk exposures that are in scope of the impairment requirements. This section explains how presentation applies in the different situations.

Any adjustment to the 'oss allowance balance due to an increase or decrease of the amount of ECLs recognised in accordance with IFRS 9, is reflected in profit or loss in a separate line as an impairment gain or loss.

11.1 Allowance for financial assets measured at amortised cost, contract assets and lease receivables

ECLs on financial assets measured at amortised cost, lease receivables and contract assets are presented as an allowance, i.e., as an integral part of the measurement of those assets in the statement of financial position. The allowance reduces the net carrying amount (which is why an allowance is sometimes referred to as a 'contra asset account').

IFRS 9 also provides guidance on when the allowance should be 'used', i.e., when it should be applied against the gross carrying amount of a financial asset. This occurs when there is a write-off on a financial asset (see section 11.1.1 below). This represents a change from IAS 39 where no similar guidance is provided and its derecognition guidance does not refer to write-offs.

11.1.1 Write-off

An entity is required to reduce the gross carrying amount of a financial asset when the entity has no reasonable expectations of recovering the contractual cash flows on a financial asset in its entirety or a portion thereof. A write-off is considered a derecognition event.

For example, a lender plans to enforce the collateral on a loan and expects to recover no more than 30 per cent of the value of the loan from selling the collateral. If the lender has no reasonable prospects of recovering any further cash flows from the loan, it should write off the remaining 70 per cent. This example, given in the standard, demonstrates that write-offs can be for only a partial amount instead of the entire gross carrying amount.⁶¹

If the amount of loss on write-off is greater than the accumulated loss allowance, the differences will be an additional impairment loss. In situations where a further impairment loss occurs, the question arises as to how it should be presented: simply as a loss in profit or loss with a credit directly to the gross carrying amount or, first, as an addition to the allowance that is then applied against the gross carrying amount. The difference between those alternatives is whether the additional impairment loss 'flows through' the allowance, showing up in a reconciliation of the allowance as an addition and a use (i.e., a write-off), or whether such additional impairment amounts 'bypass' the allowance. The IASB's original 2009 ED (see section 1.1 above) explicitly mandated that all write-offs could only be debited against the allowance, meaning that any 'direct' write-offs against profit or loss without flowing through the allowance were prohibited. IFRS 9 does not include any similar explicit guidance.

⁶¹ See paragraph IFRS 9.B5.4.9.

In addition, IFRS 7 requires an entity to disclose its policies in relation to write-offs and also to, the amounts written off during the period that are still subject to enforcement activity (see section 12 below).⁶²

How we see it

It should be noted that there is a tension between the IFRS 7 disclosure requirement and the criteria in IFRS 9 for write-offs, since it may be difficult to argue that there is no reasonable expectations of recovering the contractual cash flows if the loan is still subject to enforcement activity.

11.2 Provisions for loan commitments and financial guarantee contracts

In contrast to the presentation of impairment of assets, ECLs on loan commitments and financial guarantee contracts are presented as a provision in the statement of financial position, i.e., as a liability.

For financial institutions that offer credit facilities, commitments may often be partially drawn down, i.e., an entity may have a facility that includes both a loan (i.e., a financial asset) and an undrawn commitment (i.e., a loan commitment). If the entity cannot separately identify the ECLs attributable to the drawn and the undrawn commitment, IFRS 7 requires an entity to present the provision for ECLs on the loan commitment together with the allowance for the financial asset. Furthermore, IFRS 7 states that if the combined ECLs exceed the gross carrying amount of the financial asset, then the ECLs should be recognised as a provision.⁶³

11.3 Accumulated impairment amount for debt instruments measured at fair value through other comprehensive income

Rather than presenting ECLs on financial assets measured at fair value through other comprehensive income as an allowance, this amount is presented as the 'accumulated impairment amount' in other comprehensive income. This is because financial assets measured at fair value through other comprehensive income are measured at fair value in the statement of financial position and the 'accumulated impairment amount' cannot reduce the carrying amount of these assets (see section 7 above for further details).

11.4 Trade date and settlement date accounting

For financial assets measured at amortised cost or at fair value through other comprehensive income, the standard requires entities to use the trade date as the date of initial recognition for the purposes of applying the impairment requirements.⁶⁴ This means that entities that use settlement date accounting may have to recognise a loss allowance for financial assets which they have purchased but not yet recognised and, correspondingly, no loss allowance for assets that they have sold but not yet derecognised.

⁶² See paragraphs IFRS 7.35F and 35L.

⁶³ See paragraph IFRS 7.B8E.

⁶⁴ See paragraph IFRS 9.5.7.4.

How we see it

The recognition of the loss allowance on trade date ensures that entities recognise the loss allowance at the same time, irrespective of their accounting policy choice for trade date accounting versus settlement date accounting; otherwise entities could choose settlement date accounting to delay recognising the loss allowance until the settlement date. The effect of this is similar to accounting for fair value changes in financial assets measured at fair value through other comprehensive income and those measured at fair value through profit or loss when settlement date accounting is applied (i.e., a measurement change needs to be recognised in profit or loss and the statement of financial position even if the related assets that are being measured are only recognised slightly later).

For settlement date accounting, the recognition of a loss allowance for an asset that has not yet been recognised raises the question of how that loss allowance should be presented in the statement of financial position. The time between the trade date and the settlement date is somewhat similar to a loan commitment in that the accounting is 'off balance sheet', which suggests presentation as a provision.

In practice, many entities tend to opt for settlement date accounting because they do not need additional systems capabilities to account for the financial assets on trade date (i.e., there is nothing to account for financial assets that will be measured at amortised cost until settlement date). The change from the IAS 39 incurred loss model to the IFRS 9 expected credit loss model means that the settlement date accounting simplification for financial assets measured at amortised cost would lose much of its benefit from an operational perspective. This will affect more significantly entities that report on a half-yearly or quarterly basis (rather than annually) and entities that have many transactions around the reporting date. The new credit risk disclosure requirements have been expanded significantly.

12. Disclosures

The new credit risk disclosure requirements are less onerous than were proposed in the 2013 ED. Nevertheless, they have been expanded significantly when compared to those currently in IFRS 7 and are supplemented by some detailed implementation guidance.

12.1 Scope and objectives

The objective of these new credit risk disclosures is to enable users to understand the effect of credit risk on the amount, timing and uncertainty of future cash flows. To achieve this objective, the disclosures should provide:

- Information about the entity's credit risk management practices and how they relate to the recognition and measurement of ECLs, including the methods, assumptions and information used to measure those losses (see section 12.2 below).
- Quantitative and qualitative information that allows users of financial statements to evaluate the amounts in the financial statements arising from ECLs, including changes in the amount of those losses and the reasons for those changes (see section 12.3 below).
- Information about the entity's credit risk exposure, i.e., the credit risk inherent in its financial assets and commitments to extend credit, including significant credit risk concentrations (see section 12.4 below).

An entity will need to determine how much detail to disclose, how much emphasis to place on different aspects of the disclosure requirements, the appropriate level of aggregation or disaggregation and additional explanations or information necessary to evaluate the quantitative information disclosed and meet the objectives above.

To avoid duplication, IFRS 7 allows this information to be incorporated by cross-reference from the financial statements to some other statement that is available to users of the financial statements on the same terms and at the same time, such as a management commentary or risk report. Without the information incorporated by cross-reference, the financial statements are incomplete.

A number of the disclosures about credit risk are required to be given by classes of financial instruments. In determining these classes, financial instruments in the same class should reflect shared economic characteristics with respect to credit risk. A lender, for example, might determine that residential mortgages, unsecured consumer loans and commercial loans each have different economic characteristics.

Unless otherwise stated, the disclosure requirements set out at sections 12.2 to 12.4 below are applicable only to financial instruments to which the impairment requirements in IFRS 9 are applied.

12.2 Credit risk management practices

An entity should explain its credit risk management practices and how they relate to the recognition and measurement of ECLs. To meet this objective, it should disclose information that enables users to understand and evaluate:

- How it has determined whether the credit risk of financial instruments has increased significantly since initial recognition, including if and how:
 - Financial instruments are considered to have low credit risk (see section 5.4 above)
 - The presumption that there have been significant increases in credit risk since initial recognition when financial assets are more than 30 days past due has been rebutted (see section 5.5 above)
- Its definitions of default, including the reasons for selecting those definitions (see section 4.2.1 above). This may include:
 - The qualitative and quantitative factors considered in defining default
 - Whether different definitions have been applied to different types of financial instruments
 - Assumptions about the cure rate, i.e., the number of financial assets that return to a performing status, after a default has occurred on the financial asset
- How the instruments were grouped if ECLs were measured on a collective basis (see section 5.9 above)
- How it has determined that financial assets are credit-impaired (see section 3.3 above)
- Its write-off policy, including the indicators that there is no reasonable expectation of recovery and information about the policy for financial assets that are written-off, but are still subject to enforcement activity (see section 11.1.1 above)
- How the requirements for the modification of contractual cash flows of financial instruments have been applied, including how the entity (see section 6 above):
 - Determines whether the credit risk on a financial asset that has been modified while the loss allowance was measured at an amount equal to lifetime ECLs has improved to the extent that the loss allowance reverts to being measured at an amount equal to 12-month ECLs
 - Monitors the extent to which the loss allowance on financial assets meeting the criteria in the previous bullet is subsequently remeasured at an amount equal to lifetime ECLs. Quantitative information that will assist users in understanding the subsequent increase in credit risk of modified financial assets may include information for which the loss allowance has reverted to being measured at an amount equal to lifetime ECLs, i.e., a deterioration rate

An entity should also explain the inputs, assumptions and estimation techniques used to apply the impairment requirements of IFRS 9. For this purpose, it should disclose:

- The basis of inputs and assumptions and the estimation techniques used to:
 - Measure 12-month and lifetime ECLs (see section 4.1 and 4.2 above)
 - Determine whether the credit risk of financial instruments has increased significantly since initial recognition (see section 5 above)
 - Determine whether a financial asset is credit-impaired (see section 3.3 above)

This may include information obtained from internal historical information or rating reports and assumptions about the expected life of financial instruments and the timing of the sale of collateral

- How forward-looking information has been incorporated into the determination of ECLs, including the use of macroeconomic information (see section 4.7.3 above)
- Changes in estimation techniques or significant assumptions made during the reporting period and the reasons for those changes

12.3 Quantitative and qualitative information about amounts arising from expected credit losses

An entity should explain the changes in the loss allowance and reasons for those changes by presenting a reconciliation of the opening balance to the closing balance. This should be given in a table for each relevant class of financial instruments, showing separately the changes during the period for (see Illustration 12-1 below):⁶⁵

- > The loss allowance measured at an amount equal to 12-month ECLs
- > The loss allowance measured at an amount equal to lifetime ECLs for:
 - Financial instruments for which credit risk has increased significantly since initial recognition but that are not credit-impaired financial assets
 - Financial assets that are credit-impaired at the reporting date (but were not credit-impaired when purchased or originated)
 - Trade receivables, contract assets or lease receivables for which the loss allowance is measured using a simplified approach based on lifetime ECLs
- Financial assets that were credit-impaired when purchased or originated. The total amount of undiscounted ECLs on initial recognition of any such assets during the reporting period should also be disclosed

In addition, it may be necessary to provide a narrative explanation of the changes in the loss allowance during the period. This narrative explanation may include an analysis of the reasons for changes in the loss allowance during the period, including:

- The portfolio composition
- > The volume of financial instruments purchased or originated
- ▶ The severity of the ECLs

⁶⁵ See paragraph IFRS 7.35H.

Illustration 12-1 – Reconciliation of the loss allowance						
Loss allowance on [asset class]	12-month ECLs CU million	Lifetime ECLs - not credit- impaired Ioans CU million	Lifetime ECLs- credit- impaired Ioans CU million	Lifetime ECLs - simplified approach applied to trade receivables, contract assets and lease receivables CU million	Purchased or originated credit impaired loans CU million	Total CU million
As at 1 January 2018	56.3	247.4	36.7	13.2	3.4	357.0
Exchange and other adjustments ⁽³⁾	2.4	9.3	1.8	(0.4)	(0.7)	12.4
Amounts written off	(2.8)	(9.6)	(13.5)	(0.6)	(1.2)	(27.7)
Unwinding of Discount ⁽¹⁾	0.5	7.4	1.7	0.5	0.1	9.7
New financial assets originated or purchased ⁽¹⁾	12.7	-	-	3.7	-	16.4
Transfers ⁽¹⁾ to 12-month						
ECLs	4.3	(12.7)	(0.4)			(8.8)
to Lifetime ECLs - not credit- impaired loans to Lifetime ECLs - credit- impaired	(5.2)	22.8	(3.4)			14.2
loans	(2.4)	(14.7)	23.3	(0.5)		6.2
Financial assets derecognised during period (not written off) i.e., repayments, modifications, sales, etc. ⁽²⁾	(14.6)	(23.8)	2.4)	(4.2)	(3.7)	(46.3)
Changes in models/risk	24	0.1	<u>л</u> т	0.2	1 (16.0
parameters ⁽¹⁾ As at 31	3.4	8.1	2.7	0.2	1.6	16.0
December 2018	54.1	234.2	48.9	12.4	(0.5)	348.6

⁽¹⁾ Charge to profit or loss. The amount relating to the unwind of discount will be recorded in the impairment charge for columns one, two and four, but will be an implicit part of interest revenue for columns three and five.

Note that for the transfers, the amounts differ by column, as the figures in columns two, three and four are lifetime ECLs and those in column one are only 12-month ECLs. The net effect across the columns will be the net impact on profit or loss.

It will also be apparent that the numbers shown in the table will depend on the order in which these various items are applied, e.g., whether the transfers between columns are calculated before the changes in risk parameters. Similarly, while we have shown a 'nil' number for columns two and three for new assets recognised in the period, strictly there could be something to record, if impairment is only assessed at the end of the period; an asset may have already significantly increased in credit risk before it is first assessed for impairment, in which case, it would not be transferred from column one.

⁽²⁾ None of these amounts will be reflected in the impairment charge in profit or loss. Any difference between the amortised cost and the consideration received on derecognition is recorded in profit or loss would be presented in the new mandatory line 'gains and losses arising from the derecognition of finanical assets measured at amortised cost'.

⁽³⁾ Part of this amount may be recorded in pofit or loss as foreign currency revaluation and part through other comprehensive income if it relates to the retranslation of an overseas subsidiary.

An explanation should also be provided of how significant changes in the gross carrying amount of financial instruments during the period contributed to changes in the loss allowance. This information should be provided separately for financial instruments that represent the loss allowance as listed in the first paragraph of section 12.3 above. Examples of changes in the gross carrying amount of financial instruments that contribute to changes in the loss allowance may include:⁶⁶

- Changes because of financial instruments originated or acquired during the reporting period
- The modification of contractual cash flows on financial assets that do not result in a derecognition of those financial assets
- Changes because of financial instruments that were derecognised, including those that were written-off during the reporting period
- Changes arising from the measurement of the loss allowance moving from 12-month ECLs to lifetime losses (or vice versa)

How we see it

Initially, the 2013 ED required a reconciliation of the gross carrying amounts but the final standard only requires an explanation of how significant changes in the gross carrying amounts during the period contributed to the changes in the loss allowance. Given that Implementation Guidance for the standard shows a reconciliation of the gross carrying amounts, use of a reconciliation may become viewed as 'best practice' and the clearest way to show the information.⁶⁷

In addition, the information disclosed should provide an understanding of the nature and effect of modifications of contractual cash flows on financial assets that have not resulted in derecognition as well as the effect of such modifications on the measurement of ECLs (see section 6 above). The following information should therefore be given:

- The amortised cost before the modification and the net modification gain or loss recognised for financial assets for which the contractual cash flows have been modified during the reporting period while they had a loss allowance based on lifetime ECLs
- The gross carrying amount at the end of the reporting period of financial assets that have been modified since initial recognition at a time when the loss allowance was based on lifetime ECLs and for which the loss allowance has changed during the reporting period to an amount equal to 12-month ECLs

Where the loss allowance for trade receivables or lease receivables is measured using a simplified approach based on lifetime ECLs, the information about modifications need be given only if those financial assets are modified while more than 30 days past due.

⁶⁶ See paragraph IFRS 7.35I.

⁶⁷ See paragraph IFRS 7.IG20B.

To provide an understanding of the effect of collateral and other credit enhancements on the amounts arising from ECLs, the following should be disclosed by class of financial instrument (see section 4.6 above):⁶⁸

- The amount that best represents the maximum exposure to credit risk at the end of the reporting period without taking account of any collateral held or other credit enhancements (e.g., netting agreements that do not qualify for offset in accordance with IAS 32 Financial Instruments: Presentation)
- A narrative description of collateral held as security and other credit enhancements (these requirements do not apply to lease receivables), including:
 - A description of the nature and quality of the collateral held
 - An explanation of any significant changes in the quality of that collateral or credit enhancements as a result of deterioration or changes in the entity's collateral policies during the reporting period
 - Information about financial instruments for which a loss allowance has not been recognised because of the collateral

This might include information about:⁶⁹

- The main types of collateral held as security and other credit enhancements, examples of the latter being guarantees, credit derivatives and netting agreements that do not qualify for offset in accordance with IAS 32
- The volume of collateral held and other credit enhancements and their significance in terms of the loss allowance
- The policies and processes for valuing and managing collateral and other credit enhancements
- The main types of counterparties to collateral and other credit enhancements and their creditworthiness
- Information about risk concentrations within the collateral and other credit enhancements
- Quantitative information about the collateral held as security and other credit enhancements, e.g., quantification of the extent to which collateral and other credit enhancements mitigate credit risk, on financial assets that are credit-impaired at the reporting date

Disclosure of information about the fair value of collateral and other credit enhancements is not required, nor is a quantification of the exact value of the collateral included in the calculation of ECLs (i.e., the loss given default).

For a financial asset, the maximum exposure to credit risk is typically the gross carrying amount, net of any amounts offset in accordance with IAS 32 and any impairment losses recognised in accordance with IFRS 9. Activities that give rise to credit risk and the associated maximum exposure to credit risk include, but are not limited to:

 Granting loans to customers and placing deposits with other entities. In these cases, the maximum exposure to credit risk is the carrying amount of the related financial assets

⁶⁸ See paragraph IFRS 7.35K.

⁶⁹ See paragraph IFRS 7.B8G.

- Entering into derivative contracts, e.g., foreign exchange contracts, interest rate swaps and purchased credit derivatives. When the resulting asset is measured at fair value, the maximum exposure to credit risk at the reporting date will equal the carrying amount
- Granting financial guarantees. In this case, the maximum exposure to credit risk is the maximum amount the entity would have to pay if the guarantee is called on, which may be significantly greater than the amount recognised as a liability
- Making a loan commitment that is either irrevocable over the life of the facility or is revocable only in response to a material adverse change. If the issuer cannot settle the loan commitment net in cash or another financial instrument, the maximum credit exposure is the full amount of the commitment. This is because it is uncertain whether the amount of any undrawn portion may be drawn upon in the future. This may be significantly greater than the amount recognised as a liability

Also, the contractual amount outstanding on financial assets that were written off during the reporting period and which are still subject to enforcement activity should be disclosed (see section 11.1.1 above).

12.4 Credit risk exposure

Users should be able to assess an entity's credit risk exposure and understand its significant credit risk concentrations. Therefore, an entity should disclose, by 'credit risk rating grades' (see Illustration A-1 below), the gross carrying amount of financial assets and the exposure to credit risk on loan commitments and financial guarantee contracts. This information should be provided separately for financial instruments for which the loss allowance is measured at an amount equal to:⁷⁰

- ▶ 12-month ECLs
- Lifetime ECLs and that are:
 - Financial instruments for which credit risk has increased significantly since initial recognition but are not credit-impaired financial assets
 - Financial assets that are credit-impaired at the reporting date (but were not credit-impaired when purchased or originated)
 - Trade receivables, contract assets or lease receivables for which the loss allowances are measured using a simplified approach based on lifetime ECLs. Information for these assets may be based on a provision matrix
- > Financial assets that were credit-impaired when purchased or originated

Credit risk rating grades are defined as ratings of credit risk based on the risk of a default occurring on the financial instrument. The number of credit risk rating grades used to disclose the information above should be consistent with the number that the entity reports to key management personnel for credit risk management purposes. If past due information is the only borrower-specific information available and past due information is used to assess whether credit risk has increased significantly since initial recognition, an analysis by past due status should be provided for that class of financial assets.

⁷⁰ See paragraph IFRS 7.35M.

When ECLs are measured on a collective basis, it may not be possible to allocate the gross carrying amount of individual financial assets, or the exposure to credit risk on loan commitments and financial guarantee contracts, to the credit risk rating grades for which lifetime ECLs are recognised. In that case, the disclosure requirement above should be applied to those financial instruments that can be directly allocated to a credit risk rating grade and separate disclosure should be given of the gross carrying amount of financial instruments for which lifetime ECLs have been measured on a collective basis.

A concentration of credit risk exists when a number of counterparties are located in a geographical region or are engaged in similar activities and have similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions. Information should be provided to enable users to understand whether there are groups or portfolios of financial instruments with particular features that could affect a large portion of that group of financial instruments, such as concentration of exposure to particular risks. This could include, for example, loan-to-value groupings, geographical, industry or issuer-type concentrations.

For financial instruments within the scope of IFRS 7 to which the impairment requirements in IFRS 9 are not applied, disclosure should be given by class of instrument of the amount that best represents the entity's maximum exposure to credit risk at the reporting date (see section 12.3 above). The amount disclosed should not take account of any collateral held or other credit enhancements (e.g., netting agreements that do not qualify for offset in accordance with IAS 32). This disclosure is not required for financial instruments whose carrying amount best represents this amount.

Entities should also provide, by class of financial instrument to which the impairment requirements in IFRS 9 are not applied, a description of collateral held as security and other credit enhancements, and their financial effect (e.g., a quantification of the extent to which collateral and other credit enhancements mitigate credit risk) in respect of the amount that best represents the maximum exposure to credit risk. This applies irrespective of whether the maximum exposure to credit risk is disclosed separately or is represented by the carrying amount of a financial instrument. The requirement may be met by disclosing:

- The policies and processes for valuing and managing collateral and other credit enhancements obtained
- A description of the main types of collateral and other credit enhancements (examples of the latter being guarantees and credit derivatives, as well as netting agreements that do not qualify for offset in accordance with IAS 32)
- The main types of counterparties to collateral and other credit enhancements and their creditworthiness
- Information about risk concentrations within the collateral or other credit enhancements

12.5 Collateral and other credit enhancements obtained

When an entity obtains financial or non-financial assets during the period by taking possession of collateral it holds as security, or calling on other credit enhancements such as guarantees, and these assets meet the recognition criteria in other standards, it should disclose for such assets held at the reporting date:

- The nature and carrying amount of the assets
- When the assets are not readily convertible into cash, its policies for disposing of such assets or for using them in its operations

This disclosure is intended to provide information about the frequency of such activities and the entity's ability to obtain and realise the value of the collateral.

How we see it

It is critical for entities to align their credit risk management and financial reporting systems and processes, not only to estimate the loss allowance for ECLs, but also to produce sufficiently detailed information to meet the disclosure requirements in IFRS 7.

IFRS 9 is effective for annual periods beginning on or after 1 January 2018.

13. Effective date and transition

This section covers the requirements that are applicable when an entity applies the final version of IFRS 9 that was issued in July 2014 and had not applied the earlier versions of IFRS 9.

13.1 Effective date

IFRS 9 is effective for annual periods beginning on or after 1 January 2018. Entities are permitted to apply the standard earlier, although if they do, this fact should be disclosed and all of the requirements (including the classification and measurement, impairment and hedge accounting requirements) in the standard must be applied at the same time.

Previously, the IASB has moved the mandatory effective date of IFRS 9 from annual periods beginning on or after 1 January 2013 to 1 January 2015. Its later decision to defer the mandatory effective date to annual periods beginning on or after 1 January 2018 was intended to allow sufficient time for entities to develop systems and processes and to gather historical data in order to make the calculations.

How we see it

Finance and credit risk management systems and processes will have to be better connected than today because of the necessary alignment between risk and accounting in the new model. Risk models and data will have to be more extensively used to make the assessments and calculations required for accounting purposes, which represent both a major difference from IAS 39 and a key challenge. It is likely that systems and processes will be based on those used for credit risk management and so application of the standard will require a much closer alignment of credit risk management and financial reporting functions than may currently be the case.

Banks will, where feasible, seek to make use of existing credit risk management and regulatory reporting systems. But most banks will need, at least in part, to build new systems and processes in order to comply with the standard.

Many banks are seeking to run the new processes in parallel with the old for at least a year, during 2017, which means that they have only two years to design, build and test the new systems and processes.

An advantage of a 2017 parallel run is that such banks would be able to communicate the effect of transition to stakeholders, such as shareholders and regulators, in advance of the effective date.

In addition, financial institutions will need to fully understand the complex interactions between the IFRS 9 and regulatory capital requirements in relation to credit losses. In many cases, it is expected that the new IFRS 9 ECL requirements will result in a reduction in the regulatory capital of financial institutions.

If impairment is adopted at the same date as classification and measurement, there is no need to restate comparative periods.

13.2 Transition (retrospective application)

IFRS 9 contains a general requirement that it should be applied retrospectively, including the impairment requirements, in accordance with IAS 8. However, the standard does specify a number of exceptions in relation to the impairment requirements including (if impairment is adopted at the same date as classification and measurement), that there is no need to restate comparative periods (see section 13.3 below).

13.3 Transition reliefs

Retrospective application is required when an entity applies the impairment requirements, however, transition reliefs are provided (see further details in the sections below).

13.3.1 Date of initial application

A number of the transition provisions refer to the 'date of initial application'. This is the beginning of the first reporting period in which the entity adopts IFRS 9 (and not the beginning of the first restated comparative period presented). It must be the beginning of a reporting period after the issue of the standard.

How we see it

It appears that adoption could theoretically be at the beginning of an interim reporting period although, from a practical point of view, we would encourage entities to apply IFRS 9 at the beginning of an annual reporting period.

13.3.2 Initial credit risk and significant increases in credit risk on transition

At the date of initial application, in order to determine the loss allowance that would be recognised under the IFRS 9 impairment requirements, an entity is required to determine whether there has been a significant increase in credit risk since initial recognition, by comparing:

The credit risk at the date on which a financial instrument was initially recognised (or for loan commitments and financial guarantee contracts, at the date on which the entity became a party to the irrevocable commitment)

And

The credit risk at the date of initial application of IFRS 9

On transition, the standard allows an entity to *approximate* the credit risk on initial recognition of the financial instrument (or, for loan commitments and financial guarantee contracts, the date that the entity became a party to the irrevocable commitment), by considering all reasonable and supportable information that is available without undue cost or effort (see section 4.7.1 above). An entity may consider internal and external information, including information used for collective assessment (see section 5.9 above) and information about similar products or peer group experience for comparable financial instruments. When determining whether there have been significant increases in credit risk since initial recognition, an entity is not required to undertake an exhaustive search for information.

In addition, when determining whether there has been a significant increase in credit risk since initial recognition, an entity may use the low credit risk operational simplification (see section 5.4 above), or the more than 30 days past due rebuttable presumption if significant deterioration is assessed solely based on delinquency (see section 5.5 above). The IASB also noted that an entity can assess the change in the credit risk of a financial instrument on a portfolio basis if the initial credit risk is not determinable for an individual financial instrument (see section 5.9 above).

How we see it

As with the approximation of EIRs (see section 4.5 above), entities will be faced with the challenge of interpreting how much flexibility is afforded by the term 'to approximate'. Also, the standard is unclear to what extent entities would need to search for information that is available 'without undue cost or effort'. This may be an area that would be usefully addressed by the ITG.

If an entity is unable to determine whether there have been significant increases in credit risk since initial recognition without undue cost or effort, then the entity must recognise a loss allowance based on lifetime ECLs at each reporting date until the financial instrument is derecognised. However, if at subsequent reporting dates, the entity is able to determine that the financial instrument has low credit risk at the reporting date, then it would recognise a loss allowance based only on 12-month ECLs.

The requirement to recognise lifetime ECLs may encourage entities to look for and use information about the initial credit risk and, hence, will enhance comparability and the quality of the information provided. On the other hand, some entities may be discouraged from using such information if they are able to absorb lifetime ECLs on transition. While such an approach may result in inconsistency between entities, the IASB believes that the transition requirements and reliefs are the best way to balance the provision of useful and relevant information with the associated cost of providing it.⁷¹

13.3.3 Restatement of comparatives

Notwithstanding the general requirement to apply the standard retrospectively, IFRS 9 does not require restatement of prior periods. Indeed, an entity is permitted to restate prior periods only if it is able to do so without the use of hindsight. The IASB noted that, as entities were not required to recognise or disclose ECLs for accounting purposes in the past, there was a risk that hindsight would be needed to recognise and measure the amount of ECLs in prior periods.⁷² This applies to situations where it is impracticable to calculate the period-specific effect or the cumulative effect of the change. Therefore, it is impossible for entities to objectively distinguish the historical information that is relevant for estimating ECLs from the information that would not have been available at that earlier date.

In addition, IFRS 9 should also not be applied to financial instruments that have already been derecognised at the date of initial application. This is because, if comparative information is restated, to the extent financial assets were held during any prior periods, but were sold before the date of initial application, their impairment will be measured under IAS 39.

⁷¹ See paragraph IFRS 9.BC7.79.

⁷² See paragraph IFRS 9.BC7.75(b).

When prior periods are not restated, any difference between the previously reported carrying amounts and the new carrying amounts of financial instruments at the beginning of the annual reporting period that includes the date of initial application must be recognised in the opening retained earnings (or other component of equity, as appropriate) of the annual reporting period that includes the date of initial application. For impairment purposes, the cumulative impairment loss allowance is recognised in the opening retained earnings for all credit exposures.

Where interim financial reports are prepared in accordance with IAS 34 *Interim Financial Reporting*, the requirements in IFRS 9 need not be applied to interim periods prior to the date of initial application if it is impracticable (as defined in IAS 8).

Appendix 1: Interaction between the fair value through other comprehensive income measurement category and foreign currency denomination, fair value hedge accounting and impairment

The following example illustrates the complexity that arises from the interaction between fair value (FV) hedge accounting and the new impairment model. The implementation guidance for IAS 39 already pointed out that a portfolio hedge of interest rate risk creates the need to 'allocate the change in the fair value of the hedged portfolio to the loans (or groups of loans) being assessed for impairment on a systematic and rational basis.⁷³ This is necessary, and equally true for micro hedges, because a fair value hedge changes the carrying amount of items and impairment is part of the subsequent measurement of items, representing losses in relation to their carrying amounts. Consequently, the fair value hedge adjustment must be included in the carrying amount that is subject to the impairment requirements. Otherwise, for an asset in the scope of the impairment requirements, a part of its carrying amount would not have a loss allowance or the loss allowance would be overstated (in the case of a negative fair value hedge adjustment).

However, this interaction between fair value hedge accounting and impairment will be more complex under the new impairment model of IFRS 9 because:

- Under IAS 39, an entity can often avoid the difficulty of measuring impairment losses on the financial assets it includes in the designation of the portfolio fair value hedge by selecting higher quality assets, which do not have any associated incurred losses under IAS 39.
- In contrast, under the new impairment model of IFRS 9, all financial assets in the scope of the impairment requirements require the measurement of a loss allowance, even if they are high quality assets and have not deteriorated. Consequently, the complexity of the interaction between fair value hedge accounting and impairment that is illustrated in this example will affect a much larger number of items than under IAS 39 in the past.

Without being able to allocate portfolio hedge adjustments to individual assets, it will be necessary for entities to determine a basis of allocation of such hedges to those assets subject to a 12-month loss allowance and those for which lifetime expected losses are provided. This is likely to be feasible only for groups of assets with similar credit characteristics, including maturities and EIRs. Even for 'micro' hedges of individual assets, it may be difficult to link the hedge accounting and impairment processes to calculate the consequences of hedge accounting for impairment.

The example below is based on Illustrative Example 14 provided in the standard, but extended so as to illustrate better these various themes.

⁷³ See paragraph IAS 39.IG E.4.4.

The example assumes the following fact pattern:

- An entity purchases a bond denominated in a foreign currency (FC) for its fair value of FC100,000 on 1 January 2015.
- The bond is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and has contractual cash flows which are solely payments of principal and interest on the principal amount outstanding. Therefore, the entity classifies the bond as measured at fair value through other comprehensive income.
- The bond has five years remaining to maturity and a fixed coupon of 5 per cent over its contractual life on the contractual par amount of FC100,000.
- The entity hedges the bond for its interest rate related fair value risk. The fair value of the corresponding interest rate swap at the date of initial recognition is nil.
- On initial recognition, the bond has a 5 per cent EIR which results in a gross carrying amount that equals the fair value at initial recognition.
- The entity's functional currency is its local currency (LC).
- As at 1 January 2015, the exchange rate is FC1 to LC1.
- At initial recognition, the entity determines that the bond is not purchased or originated credit-impaired. The entity applies a 12-month probability of default for its impairment calculation and assumes that payment default occurs at the end of the reporting period (i.e., after 12 months). In particular, the entity estimates the probability of default over the next 12 months at 2 per cent and the loss given default at FC60,000, resulting in an (undiscounted) expected cash shortfall of FC1,200.
- For simplicity, amounts for interest revenue are not provided. It is assumed that interest accrued is received in the period. Differences of 1 in the calculations and reconciliations are due to rounding.

The entity hedges its risk exposures using the following risk management strategy:

- (a) For fixed interest rate risk (in FC), the entity decides to link its interest receipts in FC to current variable interest rates in FC. Consequently, the entity uses interest rate swaps denominated in FC under which it pays fixed interest and receives variable interest in FC.
- (b) For foreign exchange (FX) risk, the entity decides not to hedge against any variability in LC arising from changes in foreign exchange rates.

The entity designates the following hedging relationship: a fair value hedge of the bond in FC as the hedged item, with changes in benchmark interest rate risk in FC as the hedged risk. The entity enters into a swap that pays fixed interest and receives variable interest in FC on the same day and designates the swap as the hedging instrument. The tenor of the swap matches that of the hedged item (i.e., five years). This example assumes that all qualifying criteria for hedge accounting are met.⁷⁴ The description of the designation is solely for the purpose of understanding this example (i.e., it is not an example of the complete formal documentation required by IFRS 9.⁷⁵

⁷⁴ See paragraph IFRS 9.6.4.1.

⁷⁵ See paragraph IFRS 9.6.4.1.

This example assumes that no hedge ineffectiveness arises in the hedging relationship. This assumption is made in order to better focus on illustrating the accounting mechanics in a situation that entails measurement at fair value through other comprehensive income of a foreign currency financial instrument that is designated in a fair value hedge relationship, and also to focus on the recognition of impairment gains or losses on such an instrument.

Situation as per 1 January 2015

The table below illustrates the amounts recognised in the financial statements as per 1 January 2015, as well as the shadow amortised cost calculation for the bond, based on the fact pattern described above (debits are shown as positive numbers and credits as negative numbers):

	Financial s	statements		Shadow	calculation
	FC	LC		FC	LC
	Ba	lance sheet	_		
Bond (FV)	100,000	100,000	Gross carrying amount	100,000	100,000
Swap (FV)	_	-	Loss allowance	(1,143)	(1,143)
			Amortised cost	98,857	98,857
	Income	statement			
Impairment	1,143	1,143	FV hedge adjustment	-	_
FV hedge (bond)	_	_	Adjusted gross carrying amount	100,000	100,000
FX gain/loss (bond)	_	-	Adjusted amortised cost	98,857	98,857
FV hedge (swap)	-	-			
	Stater	nent of OCI			
FV changes	-	-			
Impairment offset	(1,143)	(1,143)			
FV hedge recycling	_	_			

As per 1 January 2015, the entity recognises the bond and the swap at their initial fair values of LC100,000 and nil, respectively. The loss allowance of FC1,143 is recognised in profit or loss. The amount is calculated as the difference between all contractual cash flows that are due to the entity in accordance with the contract and all the cash flows that the entity expects to receive (i.e., all cash shortfalls), discounted at the original effective interest of 5 per cent, and weighted by the probability of the scenario occurring. To keep the example simple, it is assumed that default on the bond occurs one year after the date of the initial recognition, at which point, the recoverable amount of the bond is received. This means that, in the case of a default, the entity expects cash flows of FC45,000 (which is the principal of FC100,000 plus one year of interest of FC5,000 less the loss given default of FC60,000). The latter loss is discounted by the 5 per cent EIR and weighted by the 2 per cent probability of default to arrive at the loss allowance. The table below shows the calculation:

1 January 2015		Year 1	Year 2	Year 3	Year 4	Year 5
Contractual cash flows		5,000	5,000	5,000	5,000	105,000
Gross carrying amount	100,000					
EIR	5%					
Expected cash flows		45,000				
Amortised cost (NPV ¹ at 5%)	42,857					
Expected cash shortfalls		40,000	(5,000)	(5,000)	(5,000)	(105,000)
NPV at 5%	(57,143)					
Probability of default	2%					
Net present value (probability weighted) - this is the expected credit loss	(1,143)					

¹ Stands for net present value

The table above shows how the expected credit loss is calculated as the net present value of the cash shortfalls, i.e., the difference between contractual and expected cash flows on each relevant date. An alternative is to calculate the probability-weighted present value for the two scenarios [FC100,000 \times 98% plus FC42,857 \times 2% = FC98,857] and determine the difference to the gross carrying amount [FC98,857 - FC100,000 = (FC1,143)].

In accordance with IFRS 7, the loss allowance for financial assets measured at fair value through other comprehensive income is not presented separately as a reduction of the carrying amount of the financial asset. As a consequence, the offsetting entry to the impairment loss of LC1,143 is recorded in other comprehensive income (OCI) in the same period.⁷⁶

⁷⁶ See paragraph IFRS 7.16A.

Situation as at 31 December 2015

As of 31 December 2015 (the reporting date), the entity observes the following facts:

- The fair value of the bond has decreased from FC100,000 to FC96,370, mainly because of an increase in market interest rates.
- ▶ The fair value of the swap has increased to FC1,837.
- In addition, as at 31 December 2015, the entity determines that there has been no change to the credit risk on the bond since initial recognition. The entity still estimates the probability of default over the next 12 months at 2 per cent and the loss given default at FC60,000, resulting in an (undiscounted) expected shortfall of FC1,200.
- As at 31 December 2015, the exchange rate is FC1 to LC1.4.

The table below illustrates the amounts recognised in the financial statements between 1 January 2015 (after the entries for the impairment loss of FC1,143 at 1 January, shown above) and 31 December 2015, as well as the shadow amortised cost calculation for the bond (debits are shown as positive numbers and credits as negative numbers):

	Financial	statements		Shadow	calculation
	FC	LC		FC	LC
	Balance	sheet	-		
Bond (FV)	96,370	134,918	Gross carrying amount	100,000	140,000
Swap (FV)	1,837	2,572	Loss allowance Amortised	(1,110)	(1,555)
			cost	98,890	138,445
	Income sta	tement			
Impairment	(32)	(45)	,	(1,837)	(2,572)
FV hedge (bond)	1,837	2,572	Adjusted gross carrying amount	98,163	137,428
			Adjusted amortised		
FX gain/loss (bond)		(39,543)	cost	97,053	135,874
t/o Gross		(())))))))))))))))))			
carrying amount t/o Loss		(40,000)			
allowance t/o FV hedge		457			
FV hedge (swap)	(1,837)	(2,572)			
FX gain/loss (swap)	(1,001)	(2,312)			
(3wap)	Statement				
FV changes	3,630	4,625			
Impairment	5,050	7,023			
offset	32	45			
FV hedge					
recycling	(1,837)	(2,572)			

At this point, the example reveals the operational complexity of the fact pattern. As highlighted in the introduction to this example, it is important to understand that the hedging relationship adjusts the gross carrying amount and the amortised cost of the bond which leads to an adjusted EIR. This follows from the definition of the EIR as "the rate that exactly discounts the estimated future cash payments or receipts through the expected life of the financial asset or the financial liability to the gross carrying amount of a financial asset or to the amortised cost of a financial liability" and the effect of a fair value hedge, that is, the hedging gain/loss adjusts the carrying amount of the hedged item. The table below outlines the calculation:

31 December 2015		Year 2	Year 3	Year 4	Year 5
Contractual cash flows		5,000	5,000	5,000	105,000
Adjusted gross carrying amount ¹	98,163				
Updated EIR ²	5.5%				
Expected cash flows		45,000			
Adjusted amortised cost (NPV at 5.5%)	42,644				
Expected cash shortfalls		40,000	(5,000)	(5,000)	(105,000)
NPV at 5.5%	(55,519)				
Probability of default	2%				
Net present value (probability weighted) – this is the expected credit loss	(1,110)				

¹ The adjusted gross carrying amount equals the gross carrying amount adjusted for the fair value hedge adjustment and forms the new basis of the EIR calculation.

² The updated EIR is the interest rate that exactly discounts the contractual cash flows to the adjusted gross carrying amount.

Again, the table above shows how the expected credit loss is calculated as the net present value of the cash shortfalls, i.e., the difference between contractual and expected cash flows on each relevant date. The alternative calculation based on the probability-weighted present value for the two scenarios [FC98,163 × 98% + FC42,644 × 2% = FC97,053] and then determining the difference to the gross carrying amount (including the fair value hedge adjustment) gives the same result [FC97,053 - FC98,163 = (FC1,110)].

This calculation means that there is an impairment gain recognised in profit or loss of FC32 (or LC45, respectively). This is because, to show more clearly how the accounting works, we have maintained the same expected cash flows as one year earlier, even though interest rates have now increased by 0.5 per cent. With a higher EIR, the expected losses are discounted at a higher rate. There are three effects that influence the impairment loss: the unwinding of the discount, the adjustment of the EIR and the change in the estimate of the timing of the payment default, which has moved 12 months into the future (i.e., from 31 December 2015 to 31 December 2016). The table below provides a reconciliation of those amounts:

31 December 2015 (values in FC)	
Loss allowance at the end of 1 January 2015 (1,143)	
Previous loss allowance rolled forward to reporting date (at 5% (1,200) EIR)	
Unwinding of discount	(57)
Effect of adjusting the EIR	32
Effect of changes in estimate	57
Total change in loss allowance	32

Because we have maintained the expected cash shortfall pattern and its probability of occurring, the change in estimate is just the effect of deferral by a year of the expected date of default, which exactly offsets the unwinding of the discount.

In accordance IFRS 7, the loss allowance for financial assets measured at fair value through other comprehensive income is not presented separately as a reduction of the carrying amount of the financial asset.⁷⁷ As a consequence, the offsetting entry of the impairment gain FC32 (LC45) is recorded as a debit to OCI in the same period.

The bond is a monetary asset. Consequently, the entity recognises the changes arising from movements in foreign exchange rates in profit or loss in accordance with IAS 21 *The Effects of Changes in Foreign Exchange Rates* and recognises other changes in accordance with IFRS 9.⁷⁸ The asset is treated as an asset measured at amortised cost in the foreign currency.⁷⁹

The change in the fair value of the bond since 1 January 2015 amounts to LC34,918 and is recognised as a fair value adjustment to the carrying amount of the bond on the entity's balance sheet.

The gain of LC39,543 due to the changes in foreign exchange rates is recognised in profit or loss. It consists of the impact of the change in the exchange rates during 2015:

- On the original gross carrying amount of the bond, amounting to LC40,000.
- Offset by the loss allowance of the bond, amounting to LC457.

The difference between the change in fair value (LC34,918) and the gain recognised in profit or loss that is due to the changes in foreign exchange rates (LC39,543), is recognised in OCI. That difference amounts to LC4,625.

A gain of LC2,572 (FC1,837) on the swap is recognised in profit or loss and, because it is assumed that there is no hedge ineffectiveness, this amount coincides with the loss on the hedged item (as an absolute amount). Because this is a fair value hedge of a debt instrument at fair value through other comprehensive income ,this loss is recycled from other comprehensive income in the same period.

 $^{^{77}\,}$ See paragraph IFRS 7.16A.

 $^{^{78}\,}$ See paragraph IAS 21.23(a) and 28.

⁷⁹ See paragraph IAS 21.28.

Situation as at 31 December 2016

As of 31 December 2016 (the reporting date), the entity observes the following facts:

- The fair value of the bond has further decreased from FC96,370 to FC87,114.
- The fair value of the swap has increased to FC2,092.
- Based on adverse macroeconomic developments in the industry in which the bond issuer operates, the entity assumes a significant increase in credit risk since initial recognition, and recognises the lifetime expected loss for the bond.
- The entity updates its impairment estimate and now estimates the lifetime probability of default at 20 per cent and the loss given default at FC48,500, resulting in (undiscounted) expected cash shortfalls of FC9,700. (For simplicity, this example assumes that payment default will happen on maturity when the entire face value becomes due).

As at 31 December 2016, the exchange rate is FC1 to LC1.25.

The table below illustrates the amounts recognised in the financial statements between 31 December 2015 and 31 December 2016, as well as the shadow amortised cost calculation for the bond (debits are shown as positive numbers and credits as negative numbers):

	Financial	statements		Shadow	calculation
	FC	LC		FC	LC
	Balance	sheet	-		
Bond (FV)	87,114	108,893	Gross carrying amount Loss	100,000	125,000
Swap (FV)	2,092	2,615	allowance	(8,195)	(10,244)
			Amortised cost	91,805	114,756
	Income sta	tement			
Impairment	7,085	8,856	FV hedge adjustment	(2,092)	(2,615)
FV hedge (bond)	255	319	Adjusted gross carrying amount	97,908	122,385
FX gain/loss (bond)		14,558	Adjusted amortised cost	89,713	112,141
t/o Gross carrying amount t/o Loan		15,000			
allowance		(167)			
t∕o FV hedge		(276)			
FV hedge (swap)	(255)	(319)			
FX gain/loss (swap)		276			
	Statement	of OCI			
FV changes	9,256	11,468			
Impairment offset	(7,085)	(8,856)			
FV hedge recycling	(255)	(319)			

Similar to the situation as at 31 December 2015, the fair value hedge adjustment leads to an adjusted EIR. The table below illustrates the calculation:

31 December 2016 (values in FC)		Year 3	Year 4	Year 5
Contractual cash flows		5,000	5,000	105,000
Adjusted gross carrying amount ¹	97,908			
Updated EIR ²	5.8%			
Expected cash flows		5,000	5,000	56,500
Adjusted amortised cost (NPV at 5.8%)	56,931			
Expected cash shortfalls		-	-	(48,500)
NPV at 5.8%	(40,977)			
Probability of default	20%			
Net present value (probability weighted) - this is the expected credit loss	(8,195)			

¹The adjusted gross carrying amount equals the gross carrying amount adjusted for the fair value hedge adjustment and forms the new basis of the EIR calculation.

² The updated EIR is the interest rate that exactly discounts the contractual cash flows to the adjusted gross carrying amount.

Again, the table above shows how the expected credit loss is calculated as the net present value of the cash shortfalls, i.e., the difference between contractual and expected cash flows on each relevant date. The alternative calculation based on the probability-weighted present value for the two scenarios [FC97,908 × 80% plus FC56,931 × 20% = FC89,713] and then determining the difference to the gross carrying amount (including the fair value hedge adjustment) gives the same result [FC89,713 - FC97,908 = (FC8,195)].

As at 31 December 2016, there are three effects that influence the impairment loss of FC8,398 (LC10,498) recognised in profit or loss: the unwinding of the discount, the adjustment of the EIR and the increase in credit risk (change in estimate). The table below provides a reconciliation of those amounts:

31 December 2016 (values in FC)		
Loss allowance at the beginning of the period	(1,110)	
Previous loss allowance rolled forward to reporting date (at 5.5% EIR)	(1,172)	
Unwinding of discount	(61))
Effect of adjusting the EIR	60	I
Effect of changes in estimate	(7,083))
Total change in loss allowance	(7,085))

The offsetting entry of the impairment loss FC7,085 (LC8,856) is recorded in other comprehensive income in the same period.

The change in the fair value of the bond since 31 December 2015 amounts to decrease of LC26,026 and is recognised as a fair value adjustment to the carrying amount of the bond on the entity's balance sheet.

The loss of LC14,558 due to the changes in foreign exchange rates is recognised in profit or loss. It consists of the impact of the change in the exchange rates during 2015:

- On the original gross carrying amount of the bond, amounting to a loss of LC15,000
- Offset by the loss allowance of the bond, amounting to LC167
- Offset by the fair value hedge adjustment, amounting to LC276

The difference between the change in fair value (decrease of LC26,026) and the loss recognised in profit or loss that is due to the changes in foreign exchange rates of (LC14,558) is recognised in OCI. That difference amounts to LC11,468.

A gain of LC319 (FC255) on the swap is recognised in profit or loss and, because it is assumed that there is no hedge ineffectiveness, this amount coincides with the loss on the hedged item (as an absolute amount). Because this is a fair value hedge of a debt instrument at fair value through other comprehensive income, this loss is recycled from other comprehensive income in the same period.

Situation as at 1 January 2017

On 1 January 2017, the entity decides to sell the bond for FC87,114, which is its fair value at that date and also closes out the swap at its fair value. For simplicity, all amounts, including the foreign exchange rate, are assumed to be the same as at 31 December 2016.

Upon derecognition, the entity reclassifies the cumulative amount recognised in OCI of (LC3,248) ((FC2,599)) to profit or loss. This amount is equal to the difference between the fair value and the adjusted amortised cost amount of the bond at the time of its derecognition. The table below presents a reconciliation of those amounts.

Reconciliation of loss on derecognition (values in LC) to cumulative OCI

Total OCI to be reclassified	2,599			
FV hedge recycling	(2,092)	-	(1,837)	(255)
Impairment	(8,195)	(1,143)	32	(7,085)
FV changes	12,886	-	3,630	9,256
	Cum. OCI	1/1/2015	31/12/2015	31/12/2016
Loss	(2,599)			
Adjusted amortised cost per 1/1/2017	89,713			
Fair value per 1/1/2017	87,114		-	

This table presents the amount that has not yet been recycled. Therefore, it must be reclassified to profit or loss on derecognition.

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