CPA Uganda

INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS OF UGANDA

IFRS 9
IMPLEMENTATION GUIDANCE

JANUARY 2019

TABLE OF CONTENTS

ABOUT ICPAU

The Institute of Certified Public Accountants of Uganda (ICPAU) was established in 1992 by an Act of Parliament now the Accountants Act, 2013. The functions of the Institute, as prescribed by the Act, are:

(i) To regulate and maintain the standard of accountancy in Uganda.
(ii) To prescribe and regulate the conduct of accountants and practicing accountants in Uganda.

Vision

To be a world-class professional accountancy institute.

Mission

To develop, promote and regulate the accountancy profession in Uganda and beyond.

Core Values

1) Professional Excellence.
2) Accountability
3) Integrity.
4) Innovation

International Affiliations

The Institute is a member of the International Federation of Accountants (IFAC), the Pan African Federation of Accountants (PAFA) and the Association of Education Assessment in Africa (AEAA).

PURPOSE

This Guidance has been designed to assist accountants in business and industry comply with the requirements of IFRS 9. The Guidance also intends to give practicing accountants an appreciation of the requirements around IFRS 9 to enable them easily review the business models and assumptions adopted by their respective clients in application of the standard. The Guidance gives an analysis of the requirements around the expected credit loss methodology, particularly on how to measure ECLs, staging assessments and the possible approaches an entity may apply depending on size and complexity of its transactions. Key definitions of such terms like default, parameters that would guide in establishing probability of default, exposure of an entity and the macro economic forecasts, are among other aspects considered in this guidance. A brief assessment of the overall impact IFRS 9 may have on an entity's governance framework is equally assessed in the Guidance.

Whereas every effort has been taken not to design the Guidance with reference to a particular sector, the impact of IFRS 9 is largely to be felt by the banking and insurance sectors. We have incorporated a number of illustrations particularly from the banking sector to enable a better appreciation of the concepts within the standard.

DISCLAIMER

This Guidance is persuasive rather than prescriptive. The Guidance is not intended to be comprehensive or to deal with all situations that might be encountered, i.e. it is supplementary to and not a substitute for the International Financial Reporting Standards (IFRS) and any other directives and Guidelines that may be developed over time by ICPAU, which should be regarded as the primary source of guidance for accountants. Accountants are encouraged to apply professional judgment in complying with the requirements of IFRS 9.

1.0 INTRODUCTION

1.1 Background

On 24 July 2014 the IASB published the complete version of IFRS 9, 'Financial instruments', which replaces most of the guidance in IAS 39. This includes amended guidance for the classification and measurement of financial assets by introducing a Fair Value through Other Comprehensive Income (FVTOCI) category for certain debt instruments. It also contains a new impairment model which will result in earlier recognition of losses. No changes were introduced for the classification and measurement of financial liabilities, except for the recognition of changes in own credit risk in other comprehensive income for liabilities designated at Fair Value through Profit or Loss (FVTPL). It also includes the new hedging guidance that was issued in November 2013. These changes are likely to have a significant impact on entities that have significant financial assets including both financial and non financial institutions.

IFRS 9 is much simpler than its predecessor IAS 39. It is principle-based and logical rather than rule-based. It enables accounting to reflect the nature of the financial asset (determined by its cash flow characteristics), the company's business model (how the assets are managed) and its risk management practice on financial statements. It is forward-looking and ensures a more accurate, and timely assessment of expected losses.

1.2 About IFRS 9

IFRS 9 stands on three main pillars which include:

Classification and measurement: This relates to how a financial asset is accounted for in financial statements and how it is measured on an ongoing basis. It requires an understanding of the characteristic of the financial asset and the purpose of holding it. An entity must take into account whether the cash flows generated from the instrument are solely payments of interest and principal, and whether the entity intends to hold the asset to collect contractual cash flows or both to collect contractual cash flows and for sale.

The standard introduces a cash flow and business model test that are typically qualified by even trade receivables, debt instruments and loans to related parties for a typical non financial institution. As such, these assets will require an impairment assessment and subsequent adjustment to carrying values.

Equity and Derivatives will continue to be accounted for at fair value. Embedded derivatives are no longer required to be separated from the Financial Assets.

Impairment: IFRS 9 replaces the incurred loss model used under IAS 39 with an expected loss model. This significance of this amendment is that, on origination of

a financial asset, an entity must recognise a 12-month expected credit loss and subsequently recognise lifetime expected credit losses, if there has been a significant increase in credit risk since initial recognition. Most important is that, the expected credit loss model includes off-balance sheet items as well as sovereign debt securities previously excluded in IAS 39 impairment computations. The single impairment model is based on a forward-looking expected credit loss (ECL) model that includes forward-looking information, such as macroeconomic forecasts, in the computation of expected credit losses.

Hedge accounting: IFRS 9 allows more exposure to be hedged and provides for principle-based requirements that are simpler than IAS 39 and aligned with an entity's risk management strategy.

2.0 SALIENT MODELLING PRINCIPLES ILLUSTRATED

2.1 Expected credit loss methodology

IFRS 9 introduces new impairment requirements that are based on a forward-looking expected credit loss (ECL) model. In simple terms, it is the present value of probability adjusted estimate of loss that would occur if the asset defaults.

IFRS 9 requires an entity to determine an expected credit loss (ECL) amount on a probability-weighted basis as the difference between the cash flows that are due to the entity in accordance with the contractual terms of a financial instrument and the cash flows that the entity expects to receive. Although IFRS 9 establishes this objective, it generally does not prescribe particular detailed methods or techniques for achieving it.

In determining the cash flows that an entity expects to receive, many entities may wish to adopt a sum of marginal losses approach whereby ECLs are calculated as the sum of the marginal losses occurring in each time period from the balance sheet date. The marginal losses are derived from individual parameters that estimate exposures and losses in the case of default and the marginal probability of default for each period (the probability of a default in time period X conditional upon an exposure having survived to time period X). [1]

ECL should therefore be based on the nature of the financial asset, financial strength and credibility of the debtor, experience in dealing with similar assets, current macroeconomic conditions, expectations of future trends and behavior, forecasts of relevant variables and judgment.

In measurement of ECL, IFRS 9 requires that an entity's ECLs should reflect:
- An unbiased and probability-weighted amount that reflects a range of possible outcomes;
- Time value for money; and

---

[1] GPPC P.21

- Reasonable and supportable information that is available without undue cost or effort about past events, current conditions and forecasts of future conditions. [IFRS 9.5.5.17]

ECLs are a probability-weighted estimate of the present value of cash shortfalls (i.e., the weighted average of credit losses, with the respective risks of a default occurring in a given time period used as the weights). ECL measurements are unbiased (i.e. neutral, not conservative and not biased towards optimism (best case scenario) or pessimism-(worst case scenario)) and are determined by evaluating a range of possible outcomes. [IFRS 9.B5.5.41-43, BC5.86]. A credit loss is the difference 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 discounted at the original effective interest rate. *Because ECL considers the amount and timing of payments, a credit loss arises even if the entity expects to be paid in full but later than when contractually due.*

Four basic components consistent with regulatory and industry best practices will form a basis for calculation of ECL and these include:

- **Probability of Default ("PD")** – This is an estimate of the likelihood of default over a given time horizon.

- **Exposure at Default ("EAD")** – This is an estimate of the exposure at a future default date, taking into account expected changes in the exposure after the reporting date, including repayments of principal and interest, and expected drawdowns on committed facilities. Unlike before, entities like banks now need to make provisions for unutilized lines for example, overdraft limits and bank guarantees which are all off the balance sheet will need to be provided for.

- **Loss Given Default ("LGD")** – This is an estimate of the loss arising on default. It is based on the difference between the contractual cash flows due and those that the lender would expect to receive, including from any collateral. It is usually expressed as a percentage of the EAD. The LGD will always drop where an entity has sufficient collateral and or insurance cover but automatically taking in regard the 'time to realization', impact of legal process in expending the collateral, value of the collateral among others.

- **Discount Rate** – This is used to discount an expected loss to a present value at the reporting date using the effective interest rate (EIR) at initial recognition.

An entity should regularly review their methodology and assumptions to reduce any differences between the estimates and actual credit loss experience. [IFRS 9.B5.5.52]

2.2 Measuring ECLs

ECLs are generally measured based on the risk of default over one of two different time horizons, depending on whether the credit risk of the borrower has increased significantly since the exposure was first recognised. The loss allowance for those exposures that have not increased significantly in credit risk ('stage 1' exposures) is based on 12-month ECLs. The allowance for those exposures that have suffered a significant increase in credit risk ('stage 2' and 'stage 3' exposures) is based on lifetime ECLs.

IFRS outlines a 'three stage' model for provision/impairment based on changes in credit quality since the day the loan was extended.

Change in credit quality since initial recognition

Stage 1	Stage 2	Stage 3
Performing (Initial recognition)	Underperforming (Assets with significant increase in credit risk since initial recognition)	Non-Performing (Credit-impaired assets)

Recognition of expected credit losses

12- Month ECL	Lifetime ECL	Lifetime ECL

Interest revenue

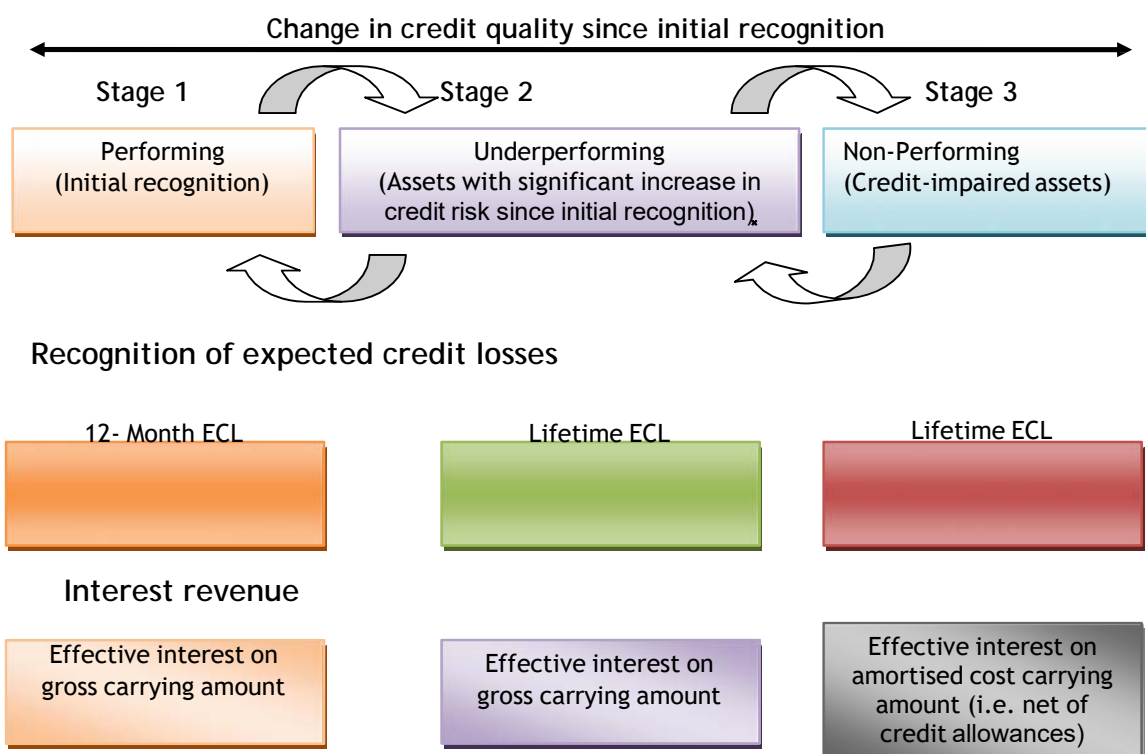| Effective interest on gross carrying amount	Effective interest on gross carrying amount	Effective interest on amortised cost carrying amount (i.e. net of credit allowances)

Figure 1: The three-stage model for impairment

Stage 1 includes financial instruments that have not had a significant increase in credit risk since initial recognition or that have low credit risk at the reporting date. Most exposures will initially be in Stage 1. The entity recognises only the credit loss associated with the probability of default within the next 12 months as a provision against the financial asset. At initial recognition, the financial assets have low credit risk. Interest is accrued on the gross carrying amount of the instrument and a 12-month expected credit loss (ECL) is factored into the profit or loss (P/L) calculations.

12-month ECL are the expected credit losses that result from those default events on the financial asset that are possible within 12 months after the reporting date. It is the entire credit loss on the instrument weighted by the

probability that the loss will occur in the next 12 months, <u>not</u> the expected cash shortfalls over the 12-month period.

Stage 2 – includes financial instruments that have had a significant increase in credit risk since initial recognition (unless they have low credit risk at the reporting date) but that do not have objective evidence of impairment. As soon as the exposure has suffered a significant increase in credit risk, the entity recognises an allowance equal to expected credit losses over the lifetime of the financial instrument. Interest is still accrued on the gross carrying amount, but a lifetime ECL is factored into the profit or loss calculations. Lifetime expected credit losses are expected credit losses that result from all possible default events over the life of the financial asset. If for example a mortgage loan has an expected life of loan maturity of 25 years ECL, and it has gone into stage 2, one has to provide for over 25 ECL, instead of 12 months.

An asset moves from 12-month expected credit losses (stage 1) to lifetime expected credit losses (stage 2) when there has been a significant deterioration in credit quality since initial recognition. Hence the 'boundary' between 12-month and lifetime losses is based on the change in credit risk not the absolute level of risk at the reporting date. *The expected loss over the lifetime of a loan for example is likely to be significantly higher than the expected loss for the next 12 months.*

Determining whether a significant increase in credit risk has occurred can require considerable judgment. While the standard provides extensive guidance on factors that should be considered, entities often will have to establish an accounting policy as to when an increase in credit risk is significant within the context of its own internal credit risk management and reporting. The standard does not specify what constitutes a significant increase in credit risk but presumes that there is a significant increase in credit risk since initial recognition if a loan facility for example, is more than 30 days past due.

Stage 3 comprises financial assets that demonstrate evidence of impairment (credit impaired instruments) at the reporting date and for such, interest is accrued on the net carrying amount (net of provisions) and a lifetime ECL is factored into the profit or loss calculations.(IFRS 9.A)

The standard includes a rebuttable presumption that a default does not occur later than when a loan asset is 90 days past due. Entities have to establish their own policies for what they consider as default and apply that definition consistently with that used for internal credit risk management purposes including consideration of qualitative factors such as;

- Breaches of contracts e.g. past due or default
- Significant financial difficulty of the counterparty, etc.

Whereas an entity may place credit exposures without significant increase in credit risk, in the 12 months ECL level irrespective of the counter party[s credit risking rating at origination, if the credit risk increases the relevant credit risk exposures must transition to lifetime ECL.

It is equally possible for an instrument for which lifetime expected credit losses have been recognised to revert to 12-month expected credit losses should the credit risk of the instrument subsequently improve so that the requirement for recognising lifetime expected credit losses is no longer met. There is however, need for supportable evidence that both quantitative and qualitative criteria for categorization under either significant increase in credit risk or default have ceased to exist and this should be accompanied by monitoring of the behavior of a particular credit exposure over a reasonable period of time. The duration to be considered for curing the asset from higher risk stages to lower risk stages should explicitly be provided for in the entity's risk management policies and clearly defined for each type of asset or asset segment.

For Noting:

The ECL model relies on a relative assessment of credit risk. This means that a loan with the same characteristics could be included in Stage 1 for one entity and in Stage 2 for another, depending on the credit risk at initial recognition of the loan for each entity.

Historical information is key in ECL. However, an entity needs to adjust such historical data, like credit loss experience, on the basis on observable data to reflect the effects of the current conditions and its forecasts that did not affect the period on which the historical data is based. Therefore an entity must put in place mechanisms or frameworks to ensure that ECL models are reviewed periodically so that differences between loss estimates and actual losses are minimized. The supervised financial institutions (Banks) are required to review the ECL models at least annually.

Moreover, an entity could have different loans with the same counterparty that are included in different stages of the model, depending on the credit risk that each loan had at origination.

By principle, with the lifetime ECL, 15 year loan term versus a 5 year loan will carry different provisioning with the loan of a longer tenure having a higher provisioning than the one with a shorter tenure.

> *For restructured credit exposures that show evidence of reduction in credit risk, an entity (more so for Banks) should monitor those credit exposures for at least 12 calendar months before upgrading such exposures from higher to lower risk stages.*

2.3 Staging assessment

In order to assess both the staging of exposures and to measure a loss allowance on a collective basis, an entity groups its exposures into segments on the basis of shared credit risk characteristics.

Examples of shared characteristics include: geographical region, type of customer (such as wholesale or retail), industry, product type (such as 'normal' repayment mortgages, interest-only mortgages and mortgages on rented property), customer rating, date of initial recognition, term to maturity, the quality of collateral and the loan to value (LTV) ratio. *The different segments reflect differences in PDs and in recovery rates in the event of default*. To assess the staging of exposures, the grouping of exposures also takes into account the credit quality on origination in order to identify deterioration since initial recognition. [IFRS 9 B5.5.5]

The entity performs procedures to ensure that the groups of exposures continue to share credit characteristics, and to re-segment the portfolio when necessary, in the light of changes in credit characteristics over time. The staging assessment also drives how exposures will be disclosed in the notes to the financial statements.

2.4 Collective calculations and segmentation

ECLs on individually large exposures and credit-impaired loans are generally measured individually. For retail exposures and many exposures to small and medium-sized enterprises, where less borrower-specific information is available, ECLs are measured on a collective basis. This incorporates borrower-specific information, such as delinquency, collective historical experience of losses and forward-looking macroeconomic information.

2.5 Implementation hurdle

When estimating ECL, management should consider information that is reasonably available, including information about past events, current conditions and reasonable and supportable forecasts of future events and economic conditions. Reasonable and supportable information will not generally present itself to management as such – rather management will need to determine what is relevant in the context of the impairment requirements and to actively gather and analyse data and use it to make estimates.[2] The degree of judgement that is required for the estimates will hence depend on the availability of detailed information.

---

[2] Possible sources of data include: internal historical credit loss experience, internal ratings, credit loss experience of other entities, external ratings, reports and statistics. Where an entity does not have sufficient

The information used is required to reflect 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. Information that is available for financial reporting purposes is always considered to be available without undue cost or effort.

For entities like a bank, impairment is an area of high estimation uncertainty that is typically material to the bank's financial statements. Judgments made in applying accounting policies for impairment are typically complex and have a significant effect on amounts recognised in the financial statements. Care is required before determining that the acquisition or development of apparently relevant information is unduly burdensome. Remember application of IFRS 9 is subject to the concept of materiality and it should be applied to all material portfolios. *The materiality of portfolios and exposures and the related risks of material misstatement therefore will also be a factor in management's selection of an approach and the design of related internal controls. However, this should not result in individual exposures or portfolios being considered immaterial if cumulatively they represent a material exposure.*

For periods beyond 'reasonable and supportable forecasts', management should consider how best to reflect its expectations by considering information at the reporting date about the current conditions, as well as forecasts of future events and economic conditions. As the forecast zones increase, the availability of detailed information decreases, and the degree of judgement to estimate ECL increases. The estimate of ECL does not require a detailed estimate for periods that are far in the future – for such periods, management may extrapolate projections from available, detailed information

In determining requirements for a particular portfolio an entity may wish to consider the following factors as guidance:

Entity-level factors
- Extent of systemic risk posed by the entity, as indicated by categorisation or extent of regulatory supervision.
- Listing status and distribution of ownership of issued debt and equity securities
- Status as a public interest entity
- Total size of balance sheet and off-balance sheet credit exposures
- Level and volatility of historical credit losses

Portfolio-level factors
- Size of portfolio, relative to the entity's total balance sheet and credit exposures
- Complexity of products in the portfolio

---

sources of entity-specific data of its own, it may use peer group experience for comparable financial instruments.

- Sophistication of other lending-related modeling methodologies, such as regulatory capital methodology (i.e. Advanced Internal Rating Based (IRB) Model, Foundation IRB or Standardised), stress testing methodology, pricing methodology, etc.
- Extent of relevant data available for the portfolio but not restricted solely to the data the entity currently has.
- Level of historical credit losses experienced on the portfolio.
- Level and volatility of potential future credit losses from the portfolio.

2.6 Suggested Approaches to ECL

Due to expected challenges above, we suggest the following approaches to ECL that will be simpler. See Example 2 in the Appendix for reference.

2.6.1 Term to maturity approach

This approach does not estimate PD, EAD and LGD for separate time intervals over the term of the loan but, instead, uses a single measure of each for the remaining term in order to measure lifetime ECLs. This is easier to apply than a more sophisticated approach, but is more suited to exposures that are non-amortising and cannot be prepaid (so that assumptions about the EAD are a less significant variable) and shorter term (so that assumptions about when during the term a borrower is more likely to default and the effect of discounting are less significant).

2.6.2 Loss rate approach

Using a 'loss rate' approach, the PD and LGD are assessed as a single combined measure, based on past losses, adjusted for current conditions and forecasts of future conditions. It may be easier to use when there is insufficient data to measure the separate components. This approach is, as with the term to maturity approach, more suited to exposures that are non-amortising and shorter term. Although an adjusted loss rate approach may be used to measure ECLs, an entity needs to be able to separate the changes in the risk of a default occurring from changes in other drivers of ECLs for the purpose of the staging assessment. [IFRS 9.B5.5.12]

2.6.3 Segment parameters

Whereas, in a sophisticated approach, individual exposures within a group of exposures used for measurement of ECLs will each be assigned an individual PD, it is possible that a single PD and LGD might be applied to all exposures in the segment. This is likely to be appropriate only when segments are sufficiently granular that there is no reason to believe, based on reasonable and supportable evidence, that the individual exposures do not share a similar PD or LGD.

A simpler approach is not necessarily a lower quality approach if it is applied to an appropriate portfolio of credit exposures. Irrespective of where a portfolio is positioned overall on the sophistication spectrum, the approach must comply with IFRS 9, and therefore not be designed or implemented to introduce material bias. It may not be necessary for every single component of the ECL approach (for

example, probability of default (PD) model, staging assessment, segmentation, etc.) to be at the same level of sophistication as indicated for the portfolio overall.

However, management would be expected to provide particular justification for the use of any individual components with a much lower level of sophistication than is indicated for the portfolio overall. Management will also need to consider how disclosures will adequately describe the use of different approaches to users of the financial statements.

An entity will need to monitor whether its approaches continue to be appropriate in light of changes in circumstances after transition and have internal controls to ensure that this objective is achieved.

In particular, there may be improvements in the availability of data or in understanding the relationship between data and credit losses that may allow the adoption of more sophisticated modeling. Our expectation is that over time, entities will make enhancements to better implement the requirements of IFRS 9 as the availability of data improves.

### 2.6.4 Exception from the 'three stage' general model

We refer to the model described above as the 'general approach'. However, there are circumstances to which this general may not apply:

- a simplified approach for trade receivables, contract assets and lease receivables;
- an approach for purchased or originated credit-impaired financial assets; and
- financial instruments with low credit risk.

2.7 Simplified approach for trade and lease receivables

The model includes some operational simplifications for trade receivables, contract assets and lease receivables, because they are often held by entities that do not have sophisticated credit risk management systems. For trade receivables or contract assets that do not contain a significant financing component, the loss allowance should be measured at initial recognition and throughout the life of the receivable at an amount equal to lifetime ECL.

A key advantage of this simplified approach is that an entity is not required to determine whether credit risk has increased significantly since initial recognition. Instead a loss allowance is recognised based on lifetime expected credit losses at each reporting date. As a practical expedient, a provision matrix may be used to estimate ECL for these financial instruments. See Example 1 in the Appendix for reference.
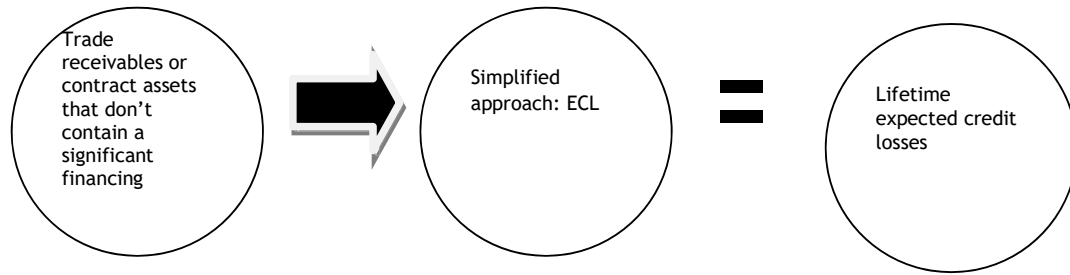
For trade receivables or contract assets which contain a significant financing component in accordance with IFRS 15 and lease receivables, an entity has an accounting policy choice: either it can apply the simplified approach (that is, to measure the loss allowance at an amount equal to lifetime ECL at initial recognition and throughout its life), or it can apply the general model.
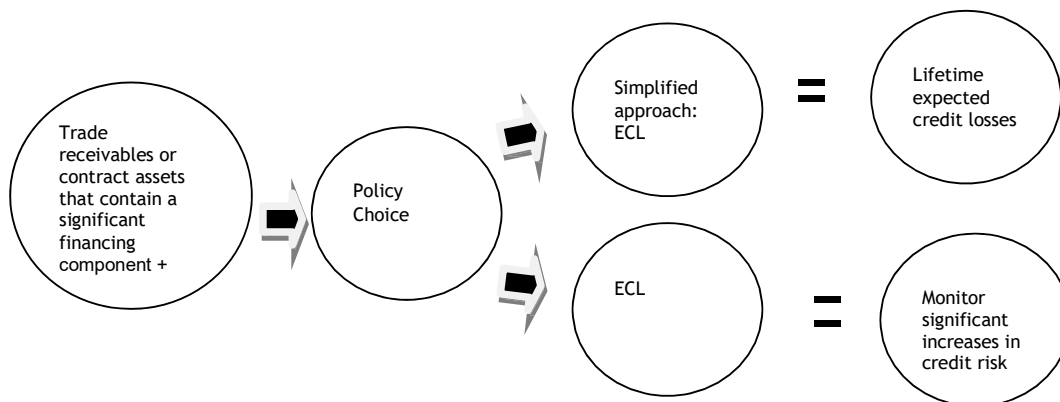
2.8 Purchased or originated credit-impaired assets

A financial asset is considered credit-impaired on purchase or origination if there is evidence of impairment (IFRS 9 Appendix A) at the point of initial recognition. Evidence that a financial asset is credit-impaired includes observable data about the following events:

- significant financial difficulty of the issuer or the borrower.
- a breach of contract, such as a default or past due event.
- the lender(s), 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 reorganization.
- the disappearance of an active market for the financial asset because of financial difficulties.
- the purchase or origination of a financial asset at a deep discount that reflects the incurred credit losses.

Under this specific approach, an entity is required to apply the credit-adjusted effective interest rate to the amortised cost of the financial asset from initial

recognition. Thereafter it only recognizes the cumulative changes in lifetime expected credit losses since initial recognition as a loss allowance that is impairment is determined based on full lifetime ECL on initial recognition. The amount of the change in lifetime expected credit losses is recognized in profit or loss as an impairment gain or loss.

Unlike other financial assets, gains on purchased or originated credit-impaired assets are not limited to the reversal of previously recognised impairment losses. Instead an improvement in credit quality beyond that which was estimated at the time of initial recognition, results in impairment gains being recognised in profit or loss.

2.9 Financial Instruments with low credit risk

As an exception to the general model, if the credit risk of a financial instrument is low at the reporting date, management can measure impairment using 12-month ECL, and so it does not have to assess whether a significant increase in credit risk has occurred. In order for this operational simplification to apply, the financial instrument has to meet the following requirements:

(a) it has a low risk of default;
(b) the borrower is considered, in the short term, to have a strong capacity to meet its obligations; and
(c) the lender expects, in the longer term, that adverse changes in economic and business conditions might, but will not necessarily; reduce the ability of the borrower to fulfil its obligations. [IFRS 9.B5.5.22]

The credit risk of the instrument needs to be evaluated without consideration of collateral. *This means that financial instruments are not considered to have low credit risk simply because that risk is mitigated by collateral.* Financial instruments are also not considered to have low credit risk simply because they have a lower risk of default than the entity's other financial instruments or relative to the credit risk of the jurisdiction within which the entity operates. [IFRS 9.B5.5.22]

Financial instruments are not required to be externally rated. An entity can use internal credit ratings that are consistent with a global credit rating definition of 'investment grade'. [IFRS 9.B5.5.23]

The low credit risk simplification is not meant to be a bright-line trigger for the recognition of lifetime ECL. Instead, when credit risk is no longer low, management should assess whether there has been a significant increase in credit risk to determine whether lifetime ECL should be recognized. *This means that just because an instrument's credit risk has increased such that it no longer qualifies as low credit risk, it is not automatically included in Stage 2, Management needs to assess if a significant increase in credit risk has occurred before calculating lifetime ECL for the instrument.* [IFRS 9.B5.5.24]

> For Noting:
> - The use of the practical expedient for financial assets with low credit risk is optional. That is, management can choose to apply the general model for those assets.
> - It is expected that this operational simplification will provide relief to entities especially financial institutions, such as insurers, who hold large portfolios of securities with high credit ratings. This expedient will avoid having to assess whether there are significant increases in credit risk for financial assets with low credit risk.

What is not Compliant?

(a) Using fair value models to estimate ECLs without appropriately adjusting for changes in market rates of interest and yields that should not be reflected in ECLs. [IFRS 9.A (definition of credit loss), IFRS 9.BC5.123]

(b) Using expected losses as calculated for regulatory purposes without assessing whether any adjustments are required to reflect the requirements of IFRS 9. [IFRS 9.5.5.17(c), B5.5.49-54, BC5.283]

(c) Groupings of exposures for collective assessment and measurement that result in segments that do not share credit risk characteristics such that changes in credit risk in a part of the portfolio may be masked by the performance of other parts of the portfolio. [IFRS 9.B5.5.5, GCRAECL.A11-12]

(d) Excluding the effects of contractual repayments and expected prepayments on loans, and of expected drawdowns on committed facilities. [IFRS 9.B5.5.30-31, 51]

3.0 DEFAULT

IFRS 9 explains that changes in credit risk are assessed based on changes in the risk of a default occurring over the expected life of the financial instrument (the assessment is not based on the amount of expected losses). 'Default' is not itself actually defined in IFRS 9 however, the standard seems to indicate that default takes place no later than 90 days past due. (Global Public Policy Committee, 2016). Whereas an entity must instead reach their own definition of default, the Standard provides that the definition must be consistent with the following:

(a) the entity's internal definitions of default based on its internal risk management guidelines e.g. as contained in credit policies or board approved guidelines.

(b) Regulator definitions of default.

(c) Credit impaired financial assets definition.

Once determined, the definition shall be applied consistently to all financial instruments unless information becomes available that shows another definition is more appropriate for a particular financial instrument. Under IFRS 9 (Appendix A),

a financial asset is credit-impaired when one or more events have occurred and have a significant impact on the expected future cash flows of the financial asset. It includes observable data that has come to the attention of the holder of a financial asset that could indicate impairment.

3.1 Challenges

a. There are likely to be differences in the definition of default for regulatory purposes and per the IFRS resulting in some assets that may be considered by the regulator to be in default but not in default as per the IFRS 9 and vice versa. (Global Public Policy Committee, 2016). Under the Financial Institutions Act (FIA), 2014, Banks are required to write off loss assets against accumulated provisions within 90 days of being identified as loss, unless approval of the central bank to defer write-off has been obtained. Contrary to this, the IFRS 9 allows for assets to remain on the books if the institution deems the asset still recoverable. This partly explains why in the Central Bank's assessment of reports submitted by Banks as at June 2018, the industry provisions computed under IFRS 9 were USh.683.5 billion while required provisions under FIA were USh.461.9 billion, giving a difference of Ush.221.5 billion. [3]

b. For banks, the regulator has a provision for statutory reserves to account for the differences. However, more disputes with tax authorities are expected since the regulators definition of default does not factor expected default but only considers default when it has occurred. The tax authority may be required to advise.

c. Data to determine whether an asset is likely to be credit impaired /predict future may not be easily available eg a borrower may be in financial difficulties which becomes evident only on default.

d. Determining the probability/likelihood of impairment for particular portfolios or individual loans may be difficult due to data unavailability or data inaccuracy.

e. Before the models become well refined as the IFRS 9 is better understood, impairment provisions may fluctuate significantly year to year thus making financial performance difficult to measure for individual institutions and also making it difficult to compare peer institutions since each institution may have its own definition of default.

f. For entities with diverse and more complex credit products, their models need to be more sophisticated and will require expertise to develop and refine later so as to more accurately reflect differing characteristics of the financial instruments. This is at a financial cost if there are no in house skills. Smaller

---

[3] Bank of Uganda, Financial Stability Report, June 2018

institutions may find it even hard to develop models to determine impairment as per the IFRS 9.

g. Institutions may have to invest more in their systems to cater for increased customer/portfolio data capture and retention requirements.

3.2 Suggested approach

(d) Entities can opt to use either the sophisticated or simpler models (Global Public Policy Committee, 2016).

(e) For entities using the sophisticated approach, they should analyse both definitions of default by the IFRS and the regulator and apply a consistent single definition of default for both regulatory and financial reporting purposes and if not, document the reasons. (Global Public Policy Committee, 2016)

(f) Entities may opt to use simple models developed for regulatory purposes using the definition of default used in the models but however adjust the model for the effect of the differences between the regulatory and accounting definitions. If differences are believed to result in immaterial outcomes, the entity should be able to support this view. (Global Public Policy Committee, 2016)

(g) IFRS 9 paragraph 5.5.1 requires that the same impairment model apply to all of the financial assets measured at amortised cost and at Fair value through Other comprehensive income (FVTOCI) and Loan commitments when there is a present obligation to extend credit (except where these are measured at Fair value through profit or loss (FVTPL). (Deloitte, 2017)

(h) In summary Impairment of financial assets is recognised in 3 stages as follows (IFRS Foundation, 2017):

Stage 1—as soon as a financial instrument is originated or purchased, 12-month expected credit losses are recognised in profit or loss and a loss allowance is established. This serves as a proxy for the initial expectations of credit losses. For financial assets, interest revenue is calculated on the gross carrying amount (i.e. without deduction for expected credit losses).

Stage 2—if the credit risk increases significantly and is not considered low, full lifetime expected credit losses are recognised in profit or loss. The calculation of interest revenue is the same as for Stage 1.

Stage 3—if the credit risk of a financial asset increases to the point that it is considered credit-impaired, interest revenue is calculated based on the amortised cost (i.e. the gross carrying amount less the loss allowance). Financial assets in this stage will generally be assessed individually. Lifetime expected credit losses are recognised on these financial assets.

3.3 General approach (IFRS 9 paragraphs 5.5.3 and 5.5.5)

With the exception of purchased or originated credit impaired financial assets expected credit losses are required to be measured through a loss allowance at an amount equal to:

- the 12-month expected credit losses (expected credit losses that result from those default events on the financial instrument that are possible within 12 months after the reporting date); or
- full lifetime expected credit losses (expected credit losses that result from all possible default events over the life of the financial instrument).
- A loss allowance for full lifetime expected credit losses is required for a financial instrument if the credit risk of that financial instrument has increased significantly since initial recognition, as well as to contract assets or trade receivables that do not constitute a financing transaction in accordance with IFRS 15. [IFRS 9 paragraphs 5.5.3 and 5.5.15]
- Additionally, entities can elect an accounting policy to recognise full lifetime expected losses for all contract assets and/or all trade receivables that do constitute a financing transaction in accordance with IFRS 15. The same election is also separately permitted for lease receivables. [IFRS 9 paragraph 5.5.16]
- For all other financial instruments, expected credit losses are measured at an amount equal to the 12-month expected credit losses. [IFRS 9 paragraph 5.5.5]

3.4 Exceptions

3.4.1 Purchased or originated credit-impaired financial assets (IFRS 9 paragraphs 5.5.13 – 5.5.14)

For these assets, an entity would recognise changes in lifetime expected losses since initial recognition as a loss allowance with any changes recognised in profit or loss. Under the requirements, any favourable changes for such assets are an impairment gain even if the resulting expected cash flows of a financial asset exceed the estimated cash flows on initial recognition.

> **For Noting**
>
> Not every entity needs to define 'default'. For example, an entity whose credit exposures are limited to trade receivables and contract assets (with no significant financing component) would apply the simplified model as described earlier.
>
> However, 'default' is a key building block when applying the general (three-stage) model because:
>
> a) movement between the three stages is driven by changes in the risk of default
>
> b) some entities estimate credit losses as the product of the probabilities of various defaults (PDs) and the losses that would arise if those defaults occur ('loss given default' or LGD)

Definitions of default used in practice fall into two very broad categories:

a) definitions based on contractual breaches such as failure to make a payment when due or breaches of a covenant

b) more judgmental definitions based on qualitative factors. The most important point is that the definition should be appropriate to the instrument. The illustrations below give guidance on the various approaches to the definition of default.

Illustration 1 – Installment loan

Lender A makes a 7 year amortising loan with payments of principal and interest payable in regular monthly instalments. The borrower is also subject to six-month financial covenants. For this loan a definition of default based on missed payments and covenant breaches could be suitable.

Illustration 2 – term loan

Lender B makes a 7 year loan with interest payable monthly and principal all due on maturity. In this case it is unlikely that a definition of default that is based solely on missed payments will be sufficient. This is because the main repayment is not due until maturity and hence a definition based on late payment would not capture the possibility that events take place before maturity that result in the borrower becoming unlikely to repay.

Illustration 3 – Interaction with regulatory definitions of default

Some entities such as financial institutions may be the subject of regulation which is designed to gauge their solvency.

The regulations affecting such entities will often contain a definition of default. This leads to the question of whether the regulatory definition can be used for IFRS 9 purposes. The simple answer to this question is that regulatory definitions of default can be used in so far as they do not conflict with the principles set out in IFRS 9.

For supervised financial institutions, the BoU requires them to have documented their quantitative and qualitative triggers based on forward looking information that and the 30 days and 90 days past due presumption provided for in the standard to be only applied as backstops when determining default.[4] However, a more stringent measure is preferred in instances where there is a n apparent contradiction between the backstops in the standard and the credit classification criteria stipulated in the various laws regulating the banking sector.

---

[4] BoU December 2018

Illustration 4

An entity might wish to use a local regulator's definition of 'non-performing loans' for determining when it needs to transfer assets into and out of Stage 3 of IFRS 9's impairment model. Under the local regulator's rules, a loan cannot be transferred back to the portfolio of performing loans until at least 12 months have elapsed from the point it was categorised as nonperforming.

On whether the regulator's definition of non-performing loans be used as the basis for making transfers into and out of Stage 3 of IFRS 9's impairment model or not, it is important to note that the regulator's definition of non-performing loans may not be appropriate for IFRS 9 purposes. IFRS 9 would require the asset to be transferred out of stage 3 if the credit risk on the financial instrument improves so that the financial asset is no longer credit-impaired. There is nothing in IFRS 9 to prohibit the transfer out of stage 3 occurring sooner than 12 months after the transfer into stage 3. The regulatory definition of non-performing loans may be a useful starting point in arriving at a definition of default, but will probably need to be amended to comply with IFRS 9.

What is not compliant?

i. When models used to estimate default result in fewer default events than the actual result of what is observed and monitored in the credit risk management by the entity.

ii. Using information meant for regulatory purposes without making adjustments as to whether the information is fit for use under IFRS 9.

iii. Not applying the 90 days past due back stop unless the entity has documented reasonable and supportable information to justify a more lagging default criterion (greater than 90 days) is appropriate.

4.0 PROBABILITY OF DEFAULT

Probability of default is an estimate of the likelihood of default of a financial instrument over a given time horizon.

A number of entities tend to use PD's as a key component both in calculating ECL's and in assessing whether a significant increase in credit risk has occurred. A PD used for IFRS 9 should reflect management's current view of the future and should be unbiased. (I.e. it should not include any conservatism or optimism).

Two types of PD's are used for calculating ECL's:

(a) 12-month PD's -This is the estimated probability of default occurring within the next 12 months (or over the remaining life of the financial instrument if that is less than 12 months). This is used to calculate 12 month ECL's

(b) Life time PD's-this is the estimated probability of default occurring over the remaining life of the financial instrument. This is used to calculate life time ECL's for stage 2 and 3 exposures.

PD's may be broken down further into marginal probabilities for sub periods within the remaining life.

4.1 Suggested approach and challenges

4.1.1 A sophisticated approach

PD's are limited to the maximum period of exposure required by IFRS 9.

(a)   12-month PD's

If an entity uses IRB models for regulatory purposes, the entity may use the outputs from its IRB models as a starting point for calculating IFRS 9 PDs. However, the PDs from these IRB models may in some organisations be determined using a through the cycle (TTC) rating philosophy (or hybrid point- in-time approach) or may include certain conservative adjustments (such as floors). Therefore, these PDs are appropriately adjusted if they are to be used for IFRS 9 purposes. Examples of adjustments include:

- Conversion to an unbiased (rather than conservative) estimate.
- Removal of any bias towards historical data (for example, TTC) that does not reflect management's current view of the future.
- Aligning the definition of default used in the model with that used for IFRS 9 purposes.
- Incorporating forward-looking information.

If an entity does not have IRB models, new models are developed to produce 12-month PDs for IFRS 9 purposes. All key risk drivers and their predictive power are identified and calibrated based on historical data over a suitable time period. This could take the form of a scorecard approach. A scorecard approach uses a set of loan-specific or borrower-specific factors which are weighted to produce an assessment of credit risk.

(b)   Lifetime PD's

To determine lifetime PD's, an entity either builds from the 12-month PD model or develops a lifetime PD model separately.

If the entity builds from the 12-month PD model, it develops lifetime PD curves or term structures to reflect expected movements in default risk over the lifetime of the exposure.
This involves:
- Sourcing historical default data for the portfolio.
- Performing vintage analysis (performance comparisons between portfolio segments where data is grouped based on the origination month) to understand how default rates change over time.
- Extrapolating trends to longer periods where default data are not available for the maximum period of exposure.

- Performing analysis at an appropriately segmented level, such that groups of loans with historically different lifetime default profiles are modelled using different lifetime default curves.

If an entity is able to incorporate detailed forecasts of future conditions in developing PD estimates only for a period that is shorter than the entire expected life, it applies a documented policy for determining the longer-term trend in rates of default based on historical and other available reasonable and supportable information. [IFRS 9.B.5.50, 52]

If an entity develops a new model to produce lifetime PD's, it will be necessary to ensure all key risk drivers and their predictive power are identified and calibrated based on historical data over a suitable time period. This could take the form of a scorecard approach.

4.1.2 Considerations for a simpler approach

(a) 12-month PD's

Where there is insufficient default history for a particular portfolio (e.g. a portfolio of new products), the entity uses internal benchmarking to a similar risk portfolio, or a reduced level of risk segmentation (i.e. grouping similar risks / portfolios to increase data credibility), and where relevant, uses external ratings and external benchmarking.

There may be simpler alternatives to a scorecard approach available to the entity. For example, adaptations of collective methodologies such as roll/transition rates may be possible. Roll/transition rate methods are commonly used under IAS39 to assess credit losses by analysing the movement of exposures between different risk buckets (e.g. delinquency states) over time. Such methods use historical observed rates to estimate the amounts of exposure that are expected to roll into default over a specified period.

When an entity relies on external ratings, internal benchmarking or grouping risks together, the entity should perform adequate analysis to justify this approach, and consider and document its limitations. For example, grouping risks together may mask underlying credit losses or increases in credit risks, if the segments are not sufficiently homogeneous. Therefore, the entity should support the suitability of any groupings of risks with sufficient evidence.

(b) Lifetime PD's

An entity applies simpler extrapolation techniques to the 12-month PD. For example, the entity may assume that the default rate does not change during the lifetime of the loan or use less segmentation than under a more sophisticated approach. This may be more common for shorter-term products.

The entity should justify this approach with analysis evidencing that the PD profiles are appropriately similar.

If an entity uses an extrapolation approach to determine lifetime PDs, then it may combine different risk segments if they are considered to have similar lifetime PD profiles.

This will simplify the modelling required and reduce the number of explicit PD profiles to be calculated at each reporting date. The bank should justify this approach with analysis supporting the assertion that the underlying PD profiles are appropriately similar.

4.2 Challenges

(a) Limited use of effective interest rate

In Uganda, most entities particularly banks may lack the data capacity to evaluate the effective interest rate of a loan. Most may not have a system in place to monitor direct costs and costs that are attributable to credit risk, in order to determine which costs should be amortized over the lifetime of the loan. The entity would also need to model the costs of a loan for the period of the loan to maturity in order to determine the effective interest rate.

A simplified approach that can be used may include making certain reasonable assumptions e.g. management may assume the interest rate applied on a loan approximates the effective interest rate and this is then used as the discount factor. Over the lifetime of a loan, the most significant cost is the interest expense so the effective interest rate would not be expected to differ significantly from the interest rate of the loan instrument.

(b) Source of data for PD

The determination of the probability of default is largely determined by the entity's determination of "significant increase in credit risk", based on both qualitative and quantitative parameters. This then drives the staging criteria of the loan which then flows into the PD calculation. The standard advocates for the entity to determine the loan classification at the origination of the loan and then review its loan classification at the reporting period. The movement noted would then determine whether there has been a significant increase in credit risk. The most significant limitation expected for local entities is that they may not have developed an internal risk rating model that is applied to the loan portfolio. It may therefore not be possible to determine what the original risk rating was for a loan or the risk rating at the reporting date. For local Banks, the classification being used is the Central Bank ratings of "Normal", "Watch", "Substandard", "Doubtful" and "Loss". This rating is however, largely based on "days past due", which is the number of days a loan

repayment has been due for payment and the migration between buckets is largely determined by the days past due. While this is an acceptable approach for the standard, it is also very punitive.

The calculation of PD also requires loan classification data for the last two to three years in order to determine the transition of the loan book between different loan classifications. While most Banks may use the days past due approach to calculate their PD's currently, there are a few who do not have the historical data required for modelling. This may poses a challenge as various assumptions would need to be discussed to come up with a reliable probability of default for different sectors of the portfolio.

(c)   Lack of general models

IFRS 9 requires entities to now develop impairment models that not only consider past and current events, but also future macro-economic information. Most entities may not have an internal process in place to monitor future macroeconomic information and how it affects the various portfolios the entity has. This may require entities to put in place such processes internally, in the absence of regular information from external sources.

The complexity of the IFRS 9 methodology may also require entities to consider automation of the impairment process as this has largely been run manually in some entities. The calculation of PD requires statistical modelling which may be easier implemented in a more advanced system than manually (excel worksheets). Data governance will also need to change in order to be able to implement this standard with the least amount of effort on the entity. The data that is captured at origination of a loan will need to be input in specific templates and the entity for example Banks need to ensure there is a database in place to store historical data for use in the impairment model.

For Banks, in the absence of historical data, the Banks may need to use proxy information that is available publicly from the Central Bank until they can build enough historical information to model internally. Examples of historical data required are historical migration of loans between different classification buckets, loan recoveries from the non-performing book in the past three to five years and history of write-offs and any recoveries from the same.

What is not compliant?

- Leveraging existing models without, based on reasonable and supportable information, validating that these models are fit for purpose under IFRS 9 and/or making and documenting appropriate adjustments. [IFRS 9.5.5.17(c), B5.5.49-54, BC5.283]

- Assuming a constant marginal rate of default over the remaining lifetime of a product without appropriate supporting analysis. [IFRS 9.5.5.17(c), B5.5.49-54]
- Grouping together exposures that are not sufficiently similar. [IFRS 9.B5.5.5]

5.0 EXPOSURE – (I) PERIOD OF EXPOSURE AND (II) EXPOSURE AT DEFAULT

Exposure at Default (EAD) – an estimate of the loan exposure amount at a future default date, taking into account expected changes in the exposure after the reporting date. In practice, the estimation of EAD relates to contractual payment terms including repayments of principal and payments of interest, any prepayments or liquidations, expected drawdowns on committed facilities or any other term or condition in favour of the obligor that may alter the cash flow characteristics of the loan. It is an estimation of the entity's exposure to its counterparty at the time of default.

EAD is a key component of ECL calculations and understanding how loan exposures are expected to change over time is crucial to an unbiased measurement of ECLs. This is particularly important for 'stage 2' loans, where the point of default may be several years in the future. While the relevance of EAD in assessing ECL is obvious, estimating it is less so. *For defaulted accounts, EAD is usually just the amount outstanding at the point of default. However, for performing accounts, the following elements are needed for computation of EAD under IFRS 9 at the instrument/facility level*:

- The exposure's expected life
- Contractual payments of cash flows
- Prepayment or refinancing options and for revolving facilities an estimation of credit conversion factors (CCFs). A CCF is a modeled assumption which represents the proportion of any undrawn exposure that is expected to be drawn prior to a default event occurring.

The EAD model therefore needs to consider forward looking information to determine what the EAD would be at the time of a default and taking into account the lifetime perspective (*whole life*) of a *facility*

It is also necessary to determine the period of exposure that is considered for IFRS 9 purposes. The period of exposure limits the period over which possible defaults are considered and thus affects the determination of PDs and measurement of ECLs. The discussion that follows here below illustrates how the period of exposure may be determined and EAD may be calculated for IFRS 9 purposes.

Challenges

(a) Period of exposure

Period of exposure may be difficult to determine for revolving facilities as this is based on the behavioural life that could be longer than the contractual term.

(b) Exposure at default

The main challenge for an entity regarding EAD would be the limitation on historical data to estimate assumptions e.g. on prepayments and refinancing.

5.1 Possible approaches

5.1.1 Period of Exposure

Expected life or period of exposure is equal to the maximum contractual period over which the entity is exposed to credit risk. This maximum contractual period is determined in accordance with the terms of the contract, including the entity's ability to demand repayment or cancellation, and the customer's ability to require extension.

Revolving facilities

IFRS 9 expects lifetime expected loss modelling to extend beyond contractual maturity for all revolving facilities. The period of exposure for these facilities is based on their behavioural life.

For such facilities within the scope of IFRS 9.5.5.20 (i.e. that include both a loan and an undrawn commitment component, and the entity's contractual ability to demand repayment and cancel the undrawn commitment does not limit the entity's exposure to credit losses to the contractual notice period), the period of exposure is determined by considering the entity's expected credit risk management actions that serve to mitigate credit risk, including terminating or limiting credit exposure.

In doing this, the entity
- Considers how it mitigates credit risk, its past practice and future intentions and expected credit risk mitigation actions.
- Analyses what happens in practice as a result of each of these types of actions and demonstrates that there is sufficient historical evidence that such actions are executed and impact the lifetime of the exposure. The analysis should consider historical information and experience about the period over which the entity was exposed to credit risk on similar instruments and the length of time for defaults to occur on similar instruments following a significant increase in credit risk. [IFRS 9.5.5.20, B.5.5.40]

A Practical approach to determining expected life could be the time taken for a significant portion, e.g. 90% or 95%, of the loans to have defaulted, closed or otherwise been derecognised. However, the remaining portion of the loans needs

to be tested to show that it is not material.

For Noting

Defining the period of exposure to be:
(a) Shorter or longer than the maximum contractual period over which the entity is exposed to credit risk (except for certain revolving credit facilities). [IFRS 9.5.5.19-20, B5.5.38]
(b) Equal to the historical average life of loans without checking consistency with forward-looking expectations based on reasonable and supportable information. [IFRS 9.5.5.17(c), B5.5.52]

For revolving credit facilities within the scope of IFRS 9.5.5.20:

(a) Using the legally enforceable contractual period unless analysis of historical information shows that, in practice, management limits the period of exposure to the contractual period. [IFRS 9.5.5.20, B5.5.39-40]
(b) Failing to consider all relevant historical information that is readily available with minimal cost and effort when determining the exposure period [IFRS 9.5.5.17(c), B5.5.40]

5.1.2 Exposure at default

The modeling approach for EAD reflects changes that are expected in the balance outstanding over the life of the loan exposure that are permitted by the current contractual terms, including:

- Required repayments/amortisation schedule.
- Full early repayment (e.g. early refinancing).
- Monthly overpayments (i.e. payments over and above required repayments but not for the full amount of the loan).
- Changes in utilisation of an undrawn commitment within agreed credit limits in advance of default.
- Credit mitigation actions taken prior to default.

Non revolving credit facilities

The common approaches for such facilities include;
(a) Estimating repayment patterns from historical actual repayments. This approach is very data dependent.
(b) Building loan amortisation models until contractual maturity, taking into account unique characteristics of each facility, e.g. payment waiver for first 6 months. Additional assumptions are normally required for average arrears age by Stage of loan e.g.

- All Stage 1 loans can be assumed to be up-to-date and the EAD used in the ECL calculation lagged by three months with three months interest added. A Stage 1 loan is assumed to default after three contractual payments have been missed.

- Stage 2 loans can be assumed to be 1 month in arrears on average. The EAD used in the ECL calculation is thus lagged by two months with two months interest added. A Stage 2 loan is assumed to default after two additional contractual payments have been missed.

(c) Back-testing results with the actual outstanding balances and making necessary adjustments, e.g. for loan prepayments

The key considerations in this approach are:

- Loan level characteristics (product type, borrower income level, loan-to-value)
- Linking PDs and LGDs to macroeconomic variable (interest rates, unemployment rates, GDP, inflation)
- Additional loan features such as refinancing Revolving facilities:

The common approach for these facilities includes;

(1) Credit Conversion Factors where 12-month ECLs are calculated based on the portion of the loan commitment that is expected to be drawn within 12 months of the reporting date while lifetime ECL is calculated based on the portion of the loan commitment that is expected to be drawn over the expected life of the loan commitment.

The key considerations in this approach are:

- Aggregation of data into homogenous risk groups
- Stability of development patterns and representativeness of historical experience

EAD models are differentiated to reflect the different risk characteristics of different portfolios. The entity considers these different underlying drivers in determining the different inputs to EAD models. The inputs into the EAD model are also reviewed to assess their suitability for IFRS 9 and adjusted, where required, to ensure an unbiased ECL calculation reflecting current expectations and forward-looking information.

5.2   Simplified approach

5.2.1 Period of exposure

If the period of exposure is taken to be less than the full period specified by IFRS 9, the entity should provide reasonable and supportable evidence that the impact on ECLs of selecting this shorter period for the remaining balance is not material.

All other principles detailed in the suggested approach also apply for simpler implementations, although the level of detail required in addressing each principle may be reduced.

5.2.2 Exposure at default

If an entity decides to use an approximation of the current 12-month EAD as a proxy for the EAD over the remaining life, the entity should provide reasonable and supportable evidence that this is appropriate for the specific product or portfolio.

This is because a proxy may hold only for certain portfolios where the balance is not anticipated to change significantly in the future.

Using segmented credit conversion factor (CCF) models could be appropriate if the approach is justifiable with analysis showing that exposures within each CCF segment are expected to behave similarly.

Under a simpler approach, an entity may use fewer levels of risk segmentation, if it provides reasonable and supportable information evidencing that this is appropriate.

> **For Noting**
>
> Using new or existing EAD models developed for other purposes such as regulatory capital without demonstrating that these models are fit for purpose under IFRS 9, including justifying and documenting the completeness and basis for inputs and adjustments to inputs. [IFRS 9.5.5.17(c), B5.5.49-54, BC5.283]
>
> Using 12-month EADs as a proxy for lifetime EADs without justification. [IFRS 9.B5.5.13-14, IFRS 9.5.5.17(c), B5.5.49-54]

6.0 LOSS GIVEN DEFAULT

This refers to the portion of asset(s) that's lost when a borrower defaults. The **guiding principle of the expected loss given default model is to reflect the general pattern of deterioration or improvement in the credit quality of financial instruments**.

The standard provides the basis upon which the model can be applied upon consideration of portfolio coverage, underlying data, and establishment of discounting factor among others. The principle is consistent with Basel core principles on credit risk rating is developed as it considers all relevant and forward looking information and macro-economic factors in assessing and measuring default.

IFRS-9 requires LGD's to be lifetime (stage 2) upon significant increase in credit risk.

6.1   Challenges

Likely challenges to be encountered in the implementation are listed as follows
- Unavailability of past data and forward looking information
- Training to the regulators, practicing accountants and reporting entities on requirements of IFRS-9
- Non-Compliance with key regulatory ratios e.g. capital ratios due to increased provisions. The BoU (June 2018) report notes that after accounting for changes under IFRS 9, the industry core capital adequacy ratio at June 2018 was 20.3 percent, compared to 19.9 percent under FIA. The report further notes that the implication of the above impact should only be taken as preliminary till a clearer picture on the impact of IFRS 9 on capital and profitability will emerge once banks' IFRS 9 accounts are audited for compliance with reporting standards.
- Varying results where data applied is different, i.e. one institution may use its specific data while another may adopt macro-economic data
- Significant increase in loan provisioning
- Inadequate disclosures hence compromising standardization and quality of reports
- Dual provisioning framework on loans (performing, watch, substandard, doubtful and loss)

6.2   Suggested approach

6.2.1 A sophisticated approach

The modelling approach for LGD (but not necessarily the actual LGD estimates) generally does not vary depending on which stage the exposure is in, i.e. there is a common LGD methodology that is applied consistently.

The modelling methodology for LGD is designed, where appropriate, at a component level, whereby the calculation of LGD is broken down into a series of drivers. This could be for example due to appreciation of various loans issued by a financial institutions, i.e. collateralized and non-collateralized.

For secured (collateralized) exposures, the approach considers at a minimum the following components:
- forecasts of future collateral valuations, including expected sale discounts;
- time to realisation of collateral (and other recoveries);
- allocation of collateral across exposures where there are a number of exposures to the same counterparty (cross-collateralisation);
- cure rates (including consideration of how the entity has looked at re-defaults within the lifetime calculation); and
- external costs of realisation of collateral including legal fees.

For unsecured exposures the approach considers at a minimum the following components:

- time to recovery;
- recovery rates; and
- cure rates (including consideration of how the entity has looked at re-defaults within the lifetime calculation).

The estimation of the components should consider;
- the range of relevant drivers, including: geography (location of the counterparty and the collateral) and seniority of the credit exposure.
- expected changes in the exposure (consistent with assumptions used in modelling the EAD)
- whether component values are dependent on macro-economic factors
- whether there is any correlation or interdependency between components of LGD so that the entity reflects that correlation in the estimation of LGD.
- That the data history that supports the modelling of LGD and its components covers a suitable period to support the relevance and reliability of the modelling (e.g. over a full economic cycle).
- the estimation of the component values within LGD reflects available historical data
- whether there have been or are expected to be any changes in economic conditions, or changes to internal policies or procedures, that should impact the calculation of LGD but which are not otherwise reflected in the modelling.

6.2.2 Considerations for a simpler approach

It may be possible to use portfolio averages for some components of LGD (e.g. if a separate value for the component cannot be estimated for each exposure) as opposed to applying a more granular estimation for all components of LGD. In other cases, estimation may only be possible based on portfolio-level averages. An entity determines whether a particular approach is acceptable by considering data availability and the risk of error, including ensuring information is unbiased (e.g. if conservative averages were used or if data reflected only good or bad times).

The estimation still considers any macro-economic dependency although the depth of the analysis carried out may be less.

The data histories used to support the analysis may be shorter or not cover the full range of variables used in the LGD analysis

While appreciating that the two modelling approaches are not affected by staging, more specific data is preferred to model the LGD. Key factors should be considered before adopting a particular model. This is so in appreciation of various loans issued by the financial institutions, i.e. collateralized and non-collateralized.

It is however recommended that simpler approach is adopted due to unavailability of data. The sophisticated approach should be applied where data is available and risk of error is minimal.

For Noting

Full adoption and implementation is expected as regards;
- Failure to perform analysis
- Failure to make adjustments to comply with regulatory requirements
- Failing to update collateral values when modelling the term structure of LGD. [IFRS 9.B5.5.55]

7.0 DISCOUNTING

An entity shall measure expected credit losses in a way that reflects the time value of money. For financial assets, a credit loss is the present value of the difference between:
a) The contractual cash flows that are due to an entity under the contract; and
b) The cash flows that the entity expects to receive.

IFRS 9 requires expected credit losses (ECL) to be discounted to the reporting date using the effective interest rate (EIR) determined at initial recognition or an approximation of it. This is because the original carrying amount 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. If the instrument has a variable interest rate, the ECL should be discounted using the current EIR.

The table sets out the discount rates to be used for different types of financial instrument.

Discount rates to be used for different types of financial instrument

Instrument	Discount rate to be used
Fixed rate assets	▪ effective interest rate determined at initial recognition
Variable rate assets	▪ current effective interest rate
Purchased or originated credit impaired financial assets	▪ credit-adjusted effective interest rate determined at initial recognition
Lease receivables	▪ same discount rate as used in the measurement of the lease receivable
Loan commitments	▪ effective interest rate, or an approximation of it, that will be applied when recognising the financial asset resulting from the loan commitment
Loan commitments for which the effective interest rate cannot be determined	▪ a rate that reflects the current market assessment of the time value of money and the risks specific to the cash flows (unless adjustment has instead been made to the

	cash shortfalls)
Financial guarantee contracts	▪ a rate that reflects the current market assessment of the time value of money and the risks specific to the cash flows (unless adjustment has instead been made to the cash shortfalls)

The effect of discounting may be significant because default events and/or associated cash shortfalls may occur a long time into the future. Although the determination of the EIR has not changed from IAS 39, focus on its interaction with the impairment requirements of IFRS 9 is now of great consideration. In implementation of IFRS 9, an entity needs to consider whether approximations used in determining EIRs under IAS 39 remain appropriate given the more significant role that discounting has in measuring impairment under IFRS 9 (e.g. discounting of cash shortfalls that may occur a number of years into the future).

Likely Challenges

- There may be a challenge in generating original EIR across all or some portfolios.
- Also, the discount rate used varies across entities. Therefore, entities will have to come up with ways to adjust their Loss Given Defaults (LGDs) to reflect the discounting effect required by the standard (i.e., based on a rate that approximates the original 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 to 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'.

7.1 Suggested Approaches

7.1.1 Sophisticated Approach

ECLs are calculated by estimating the timing of the expected cash shortfalls (taking into consideration realisation of collateral) associated with defaults and discounting them.

The discount rate is the EIR. For a financial guarantee contract, the discount rate reflects the current market assessment of the time value of money and the risks specific to the cash flows. Discount rates may be based on portfolio averages if this represents a reasonable approximation of the EIR.

For variable rate assets, the benchmark interest rate used to calculate the EIR may be either the current benchmark interest rate or a projected rate based on forward yield curves.

Assumptions about prepayments, extensions and utilisation during the period of exposure (and within contractual credit limits) used in the ECL calculation are updated to reflect currently available information and are consistent with those used in estimating interest income.

The unwind of the time value of money (as the ECL is recalculated from period-to-period) is separately tracked, such that appropriate adjustments can be made to the interest income amount for credit-impaired assets if this is otherwise calculated on the gross carrying amount of the financial asset.

7.1.2 Considerations for a simpler approach

The time value of money is reflected in ECL calculations using estimated portfolio average collection periods (provided this is demonstrated to be a reasonable approximation).

> For Noting
>
> The following are not compliant:
> - Using the discount rate employed for regulatory purposes in the calculation of ECL / LGD without making appropriate adjustments or evidencing that the impact of such adjustments would not be material.
> - Continuing to use IAS 39 EIR approximations without assessing whether their use is appropriate for the purposes of IFRS 9, particularly given the longer time horizons over which amounts may be discounted under IFRS 9.
> - Not reflecting the effect of the time value of money in ECL, or using discount rates which do not suitably approximate the EIR of the instrument or portfolio (e.g. current funding rates or risk-free rates).

8.0 MACRO-ECONOMIC FORECASTS AND FORWARD-LOOKING INFORMATION

8.1 Principle

The standard establishes that management should measure expected credit losses over the remaining life of a financial instrument in a way that reflects:
- an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- the time value of money; and
- reasonable and supportable information about past events, current conditions and reasonable and supportable forecasts of future events and economic conditions at the reporting date.

A measure of ECL is an unbiased probability-weighted amount that is determined by evaluating a range of possible outcomes and using 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. [IFRS 9.5.5.17]

The Standard requires expected credit losses to be discounted to the reporting date using the effective interest rate determined at initial recognition or an approximation of it.

Reasonable and supportable information is that which is reasonably available at the reporting date without undue cost or effort, including information about past events, current conditions and forecasts of future economic conditions. The information used is required to reflect 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. Information that is available for financial reporting purposes is always considered to be available without undue cost or effort.

When incorporating future information, an entity should consider information from a variety of sources in order to ensure that the information used is reasonable and supportable. Further, the information considered can vary depending on the facts and circumstances, including the level of sophistication of the entity and the particular features of the portfolio of financial assets.

While IFRS 9.5.5.18 and [IFRS 9.B5.5.42] do not expect an entity to consider every possible forward-looking economic scenario, the scenarios considered should reflect a representative sample of possible outcomes. This is noted in [IFRS 9.BC5.265,] which states that the calculation of an expected value need not be a rigorous mathematical exercise whereby an entity identifies every single possible outcome and its probability but, when there are many possible outcomes, an entity may use a representative sample of the complete distribution for determining the expected value.

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

When there is a non-linear relationship between the different forward-looking scenarios and their associated credit losses, more than one forward-looking scenario would need to be incorporated into the measurement of expected credit losses to meet the above objective. Macroeconomic forecasts and other relevant information should be applied consistently across portfolios, where the credit risk drivers of the portfolios are affected by these forecasts/assumptions in the same way.

8.1.1 Possible data sources may include:

- internal historical credit loss experience
- internal ratings
- credit loss experience of other entities
- external ratings, reports and statistics.

Where an entity does not have sufficient sources of entity-specific data of its own, it may use peer group experience for comparable financial instruments.

8.1.2 Challenges

- Entities are required to evaluate the impact of forward-looking economic changes on their expected credit losses under a range of unbiased possible economic outcomes. Their process is required to consider both possibilities: that credit loss occurs, or not. Many entities have difficulty in developing credible economic scenarios to measure expected credit losses that reflect an unbiased, probability-weighted outcome.
- Availability and relevance of forward looking (macro-economic) data points in the Ugandan Market. To find accurate forward looking factors, entities may rely on historical information to identify correlations between different (macro-economic) factors and eventual credit losses. These factors are then mapped and monitored going forward.

8.2 Suggested approach

The overall approach to calculating ECL involves either to:

- Take the weighted average of the credit loss determined for each of the multiple scenarios selected, weighted by the likelihood of occurrence of each scenario *plus/minus* a separate adjustment for 'additional' factors; or
- Take the credit loss determined for the base scenario *plus/minus* a separate modelled adjustment to reflect the impact of other less likely scenarios and the resulting non-linear impacts (as a proxy for the above method*) plus/minus* a separate adjustment for 'additional' factors.

Additional factors are alternative economic scenarios or events not taken into account in the scenarios used in the main calculation (e.g. more extreme or idiosyncratic events not otherwise reflected in historical or forecast information such as impact of elections or terrorist attack).

The following principles are applied within the approach adopted:

▪ **Number of economic scenarios:** Representative scenarios that capture material non-linearities are modelled (e.g. a base scenario, an upside scenario and a downside scenario). Different numbers of scenarios may be appropriate depending on the facts and circumstances - e.g. in periods of expected increased volatility. [IFRS 9.BC5.265]

▪ **Determining alternative economic scenarios:** Scenarios may be internally developed or, for less sophisticated entities like banks, may be vendor-defined. For internally developed scenarios, an entity should have a variety of experts, such as risk experts, economists, business managers and senior management, assist in the selection of scenarios that are relevant to the entity`s credit risk exposure profile. When developing and using internal forecasts, an entity considers third party data and views and justifies differences from external forecasts, but this does not mean it must replicate them. For vendor-defined scenarios, a bank should ensure that the vendor tailors the scenarios to reflect its own business and credit risk exposure profile, as the bank remains responsible for those scenarios.

▪ **Representative scenarios:** upside and downside scenarios used are not biased to extreme scenarios such that the range and weighting of scenarios used is not representative.

▪ **Base scenario:** the base scenario is consistent with relevant inputs to other estimates in the financial statements (e.g. deferred tax recoverability and goodwill impairment assessments), budgets, strategic and capital plans, and other information used in managing and reporting by the bank. However, these inputs should not be lagging or biased.

▪ **Sensitivities and asymmetries:** scenarios selected are representative and take account of key drivers of ECL, particularly non-linear and asymmetric sensitivities within portfolios. The sensitivity of ECL to each individual forward economic parameter is monitored to identify key drivers and to estimate effects of changes in parameters on ECL.

▪ **Parameter coherence:** in developing the detail of a specific economic scenario (e.g. a scenario with individual point estimates of future GDP, unemployment, interest rates, etc.), any expected correlation or other interrelationship between parameters (e.g. an increase in unemployment is expected to result in a decrease in interest rates) is considered in the development of the scenario so that it is realistic.

8.2.1 Considerations for a simpler approach

The level of detail used in addressing each principle may be proportionately less for a simpler approach. A bank may be able to perform a simpler analysis of historical relationships between observed defaults / credit losses and the overall position within the economic cycle at the time, which can then be used to estimate ECLs at different future estimated points in the economic cycle.

Where a bank does not have its own data to do this, it makes use of available external data sources such as industry data. This approach would involve three steps firstly obtaining historical macroeconomic variables, determine the macroeconomic variables that affect impairment parameters and lastly obtain or project future macroeconomic variables under various scenarios and assign probability to them.

8.2.2 Data sources

One of the challenges identified availability and relevance of forward looking (macroeconomic) data points in the Ugandan Market. The following table illustrates data sources that may be used for macroeconomic information.

Data source	Type of data
Local established agencies such as Uganda National Bureau of statistics and Central Bank of Uganda	GDP, Industry performance , demographics, Inflation , credit spreads, interest rates, exchange rates, bond yields, real estate prices, national debt repayment capacity etc.
International rating agencies such as: Moody and Standard & Poor, World Bank, IMF, World Economic Forum	Country ratings, forecast macroeconomic information.
Financial data vendors terminal such as: Bloomberg, Thomson Reuters, BMI Research	GDP, Industry performance , demographics, Inflation , interest rates, exchange rates etc.

> **For Noting**
> - Considering only a single future economic scenario for a portfolio with no separate adjustments to take account of non-linear impacts, unless the portfolio has no potentially material asymmetric exposures to ECL and this is evidenced by appropriate analysis. [IFRS 9.5.5.17, B5.5.42, BC5.263].
>
> - Forecasts that are only developed internally or that only reference a single external source. Although a bank does not need to consult all available sources, it should consider information from a variety of sources and understand whether it supports or contradicts the bank's own forecasts of the future, in order to ensure that the information used is reasonable and supportable. [IFRS 9.5.5.17, B5.5.51].

9.0 IFRS 9 - ORGANISATION IMPLEMENTATION PLAN

9.1 IFRS 9 and Cross Functional Governance

With the emergence of IFRS 9 and the antecedent requirement for an entity to make appropriate provisions in anticipation of future potential losses, rather than the current practice of providing only when losses are incurred, there are far reaching implications as this should likely hike the provisioning and hence hurting the earnings and exert pressure on the capital resources of an entity particularly for Banks. Early simulation indicted that under the banking industry, provisions computed under IFRS 9 were Ush. 221.5 billion higher than the required provisions under the Financial Institutions Act. This was a preliminary result with expectation of the figure increasing in the full assessment of the Banks' performance for the year.

9.2 IFRS 9 and Organisation Strategy

As a result in trying to deal with the potentially higher provisioning, an entity, for example a bank will likely need to revise their business strategy by for example thinking twice about extending certain types of loan facilities if they are deemed risky or no longer profitable, reduce the limit of undrawn facilities like overdrafts

IFRS 9 also introduces a three stage model for provisioning based on changes in credit quality since the loan was extended. In a typical banking setup, stage 1 loans would be considered the performing loan account with stage 2 and 3 as the underperforming and non performing accounts respectively. Since for facilities that fall under stage 1, the Bank will have to provide for 12 months forward looking expected credit losses, for stage 2 and 3, the Bank will have to provide lifetime ECL. The implication of this provisioning on the Banks' strategy and approach to business is that, the Banks will need to choose the clientele a little carefully between individuals and corporate or even SMEs. The expected maturity of the loan facility will also matter, since mortgage loan with an expected maturity of 20 years will carry a different provisioning from a mortgage facility of 50 years. The Banks' collection Department would now be put on notice as it would play a key role in avoid facilities move from stage 1 to stage 2 ot 3 with heavier provisioning.

Transition from stage 1 to stage 2 would also require the Bank's legal team to for example advise whether based on the running contract between the Bank and the borrower, there is a possibility for the Bank to ask for additional interest or collateral to minimise the extent of default.

9.3 IFRS 9 and an entity's Internal Processes and Controls

Unlike with IAS 39, IFRS 9 requires provisioning for unutilised lines of credit for example overdraft limits and Bank guarantees, which are all off the balance sheet items. Banks will equally provide for Uganda Government debt instruments such as treasury bills and bonds that they invest in as well as all lending to Bank of Uganda. Bank of Uganda in its December 2018 circular to all supervised financial

institutions requires banks to classify the securities as low credit risk and not subject such securities to an assessment of significant increase in credit risk. The impact arising out of the above analysis is the role that the treasury department will have to play in managing these investments between the stages.

9.4 IFRS 9 and the Board of Directors

Making sure that the bank has effective controls over compliance with the new financial reporting requirements – and guarding against the reputational, regulatory and financial damage that may result from material control failures – will be key concerns for those charged with governance (GPPC, 2016)

A bank's board of directors and senior management are responsible for ensuring that the bank has appropriate credit risk practices, including an effective system of internal control, to determine adequate expected credit loss (ECL) allowances in accordance with IFRS 9 as well as the bank's stated policies and relevant supervisory guidance.

The key concerns for those charged with governance would include:

(a) Who develops and ensures compliance with accounting and risk policy?
(b) Is there appropriate governance and control to ensure transparency between accounting interpretations and risk interpretations?
(c) What existing governance framework is there over model design, development and maintenance?
(d) Is there an existing forum to challenge, review and approve impairment?
(e) What is the policy and who has responsibility for approving adjustments/overlays made to the impairment figures and models?
(f) Who is responsible for the business model review? Is there input/guidance/review from finance?

BOU, 2018, requires Banks' Board of Directors to put in place adequate and robust policies and procedures, information technology systems, internal control process and also devote sufficient financial and human resources for IFRS 9 implementation. The governance structure must be aligned to the risk management framework, appropriately reflect the size and complexity of the institutions and must be reviewed annually.

Therefore as a basic minimum, there is need for early involvement with auditors and interaction with regulators on key decisions, frequent interaction with senior governance forums, such as the Board of Directors and Audit Committee and clear Governance protocols, including clear decision-making criteria, within project steering committees and other governance forums. BOU, 2018 requires Banks to constitute an IFRS 9 implementation project steering committee.

9.5 Human Resources and IFRS 9 Implementation

IFRS 9 introduces new roles and skill set required for effective implementation. An entity is required to build capacity for its human resources particularly in credit risk modelling, model validation, statistical analysis among others. Where an entity may not have the requisite skill set among its staff, it may consider engaging external consultants to provide the required technical support. However, such an entity should establish a clear framework to enable knowledge transfer to the entity's staff.

10.0 IMPACT OF TRANSITION WITHIN THE BANKING SECTOR

The Basel Committee on Banking Supervision (BCBS) published guidance[5] in December 2015 on credit risk and accounting for expected credit losses.[6] The guidance sets out supervisory expectations for banks relating to sound credit risk practices associated with implementing an expected credit loss framework. It also highlights three IFRS 9-specific requirements banks should consider when designing and operationalizing their implementation plan. With respect to defining and measuring significant deterioration in credit risk, the BCBS is of the view that delinquency data should only be used in rare circumstances and lifetime expected credit losses are generally anticipated to be recognized before a missed payment occurs.

BCBS guidance provides that banks should "have processes in place that enable them to determine [significant credit risk] on a timely and holistic basis so that an individual exposure, or a group of exposures with similar credit risk characteristics, is transferred to [lifetime expected credit losses] measurement as soon as credit risk has increased significantly, in accordance with the IFRS 9 impairment accounting requirements."7

The BCBS guidance also recommends that banks establish policies and specific criteria for what constitutes a "significant" increase in credit risk for different types of lending exposures.

As a practical expedient, IFRS 9 provides an exception for low credit risk exposures, where "entities have the option not to assess whether credit risk has increased significantly since initial recognition. [The low credit risk exemption]

---

[5] Basel Committee on Banking Supervision, Guidance on credit risk and accounting for expected credit losses," Bank for International Settlements, December 2015. http://www.bis.org/bcbs/ publ/d350.pdf .

[6] The purpose of this document is to provide supervisory guidance on accounting for expected credit losses that does not contradict with accounting guidance

[7] Basel Committee on Banking Supervision, Guidance on credit risk and accounting for expected credit losses," Paragraph A16.

was included to reduce operational costs."[8] However, it is the BCBS's expectation "that use of this exemption should be limited." In addition, the BCBS expects banks to assess significant increases in credit risk for all lending exposures in a timely manner.

---

[8] Basel Committee on Banking Supervision, Guidance on credit risk and accounting for expected credit losses," Paragraph A48.

APPENDIX: ILLUSTRATIVE CALCULATIONS FOR ECL

Example 1: Lifetime ECL for Trade Receivables Using a Provision Matrix

XYZ Limited is a company that deals in installation and maintenance of accounting software. The company usually transacts with its customers on credit, therefore, it has a significant balance of trade receivables outstanding at each reporting date. XYZ Limited recognises lifetime ECL for all its trade receivables since there is no significant financing component on them.

i) Using the information provided in the table below, the loss rate of XYZ will be as indicated.

Details	Payments	Receivables outstanding	Receivables ageing	Loss Rate
Sales at 1/1/20X9		500,000	Not overdue	2%
Cleared on time	250,000	250,000	overdue 1-30 days	4%
paid 1-30 days after due date	120,000	130,000	overdue 31-60 days	8%
paid 31-60 days after due date	80,000	50,000	overdue 61-90 days	20%
paid 61-90 days after due date	40,000	10,000	overdue 91+ days (not paid at all)	100%

Note:

⸰ For the purpose of this example, the loss rate is calculated based on sales made as at 1/1/20X9. In real life, however, the loss rate computation should be based on data from several months, but it should not be too old as this would yield to outdated results.

⸰ Additionally, we assume that XYZ Limited analysed forward-looking information (GDP forecasts, changes in unemployment rate, inflation) and concluded that there is no indication that the above historical loss rate should be adjusted (see IFRS 9.B5.5.52-53).

⸰ Loss rate = (amount unpaid/receivables outstanding for the month)*100%

ii) XYZ Limited prepared an ageing of its receivables as at 31/12/20X9 as seen below.

Trade receivables	700,000	400,000	180,000	110,000	70,000
Ageing	not overdue	overdue 1-30 days	overdue 31-60 days	overdue 61-90 days	Overdue 91+ days

Using the loss rates obtained in (i) above, XYZ Limited's lifetime ECL will be as follows.

ECL = loss rate X trade receivables amount

Trade receivables	Ageing	Loss rate	ECL allowance
700,000	Not overdue	2.0%	14,000
400,000	overdue 1-30 days	4.0%	16,000
180,000	overdue 31-60 days	7.7%	13,860
110,000	overdue 61-90 days	20.0%	22,000
70,000	overdue 91+ days (not paid at all)	100.0%	70,000
Total ECL Allowance			135,860

Therefore, the total ECL allowance for XYZ Limited as at 31/12/20X9 will be 135,860/-

Example 2: Illustrative calculation of lifetime ECL and 12-month ECL for a loan

Money House Limited is an established banking institution in Uganda with a financial year ending 30 June. On 30 June 20X4, Money House Limited lent Shs.10 million to Kaka & Co repayable over 5 years at a rate of 25% p.a, compounded. Money House Limited's Finance Manager has informed you that the probability of default (PD) in the first three years will be 3% and 4% in the last two years.

Calculation of both 12-month ECL and lifetime ECL is based on the following:

PD – probability of default (which should be assessed by the lender, who in this case is, Money House Limited)

EAD – exposure at default (which is equal to the amortised cost of the loan)

LGD – loss given default (i.e. what percentage of EAD will not be recovered at default). For purposes of this example, let us assume that LGD=70%

Step 1: Determine the expected annual cash flows over the loan repayment period.

Financial year end	Expected annual cash flows
30/06/20X4	(10,000,000)
30/06/20X5	2,500,000
30/06/20X6	2,500,000
30/06/20X7	2,500,000
30/06/20X8	2,500,000

30/06/20X9	2,500,000

Step 2: Determine the effective interest rate (EIR)

This will be calculated using the formula below:

EIR = ((1 + (1/n)) ^n)-1

Where n = number of compounding periods

<u>EIR= 7.9%</u>

Step 3: amortise the cash flows receivable

year	opening balance 1 Jan	interest in P/L	cash flow	closing balance 31 Dec
2004	10,000,000	792,801	(2,500,000)	8,292,801
2005	8,292,801	657,455	(2,500,000)	6,450,256
2006	6,450,256	511,377	(2,500,000)	4,461,633
2007	4,461,633	354,726	(2,500,000)	2,316,359
2008	2,316,359	183,641	(2,500,000)	0

Step 4: Determine ECL

Reporting Date	EAD	PD (marginal)	PD (cumulative)	LGD	EIR	Marginal ECL
30/06/2004	10,000,000	3%	3%	70%	7.9%	194,574
30/06/2005	8,292,801	3%	6%	70%	7.9%	149,504
30/06/2006	6,450,256	3%	9%	70%	7.9%	107,744
30/06/2007	4,461,633	4%	13%	70%	7.9%	92,069
30/06/2008	2,316,359	4%	17%	70%	7.9%	44,289

12-month ECL (ECL_{12M}) = PD_{12M} X LGD_{12M} X EAD_{12M} X D_{12M}

ECL_{12M} = Shs. 194,574

Lifetime ECL (ECL_{LT}) = Σ (PD_t X LGD_t X EAD_t X D_t)

ECL_{LT} = 194,574 + 149,504 + 107,744 + 92,069 + 44,289

ECL_{LT} = Shs. 588,180