EXPECTED CREDIT LOSSES
- SIMPLIFIED -

BDO

CONTENTS

INTRODUCTION

Credit risk assessment are part of all businesses. All entity has credit risk system based on its credit risk function and the risk it perceives. Under Indian GAAP, credit loss provisioning is mainly based on past trends and judgement of the entity and it is rule based for banks and NBFCs. Implementation of expected credit losses (ECL) under Ind AS 109 "Financial Instruments" will be a significant change to the financial reporting of entities, especially for banks and NBFCs. This may have a significant impact on equity and will certainly increase charge to the profit or loss account. Application of ECL has all pervasive effect as it will influence many stakeholders like investors, regulators, analysts and even audit methodology for auditors.

An expected credit loss approach will depend mainly on the quality and availability of credit risk data. A lack of historical credit risk data will make application of Ind AS 109 more challenging. Entity need to develop the information system which should be capable of getting this information's. This Standard requires classifying its financial assets portfolio into stages based on significant increase in the credit risk. Entities are required to continuously monitor credit risk and accordingly ensure proper classification of financial assets into specified stages, since accrual of interest and provisioning is directly linked with stage movement. Incorrect classification may have significant consequences.

New credit impairment model not only consider historical data but also requires considering the forward looking information. These forward looking information are related to entities own estimate of their customers like expected recovery patterns, probability of default, time of recovery, amount expected to be recovered from collaterals, etc. as well as macro-economic factors like recession, unemployment, etc. Further, judgment is required to decide whether to make the individual assessment or at portfolio level assessment for ECL.

In this publication, efforts are made to simplify all aspect involved in expected credit loss and to facilitate the implementation of ECL in a true spirit. We believe that this publication on ECL would be of real help in implementing ECL to a high standard.

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1. Context

Credit losses are part and parcel of doing any business, however it is important to consider, when to reflect such losses in the financial statement whether it should be recognized, when loss events indicators are visible or whether an entity needs to estimate the probable loss based on history of losses accounted in the financial statement.

This point is contested especially after global crises based on which a new credit loss impairment model is established, called "Expected Credit Loss" ("ECL"). This model is a significant move for entities to recognize the provision (or credit losses) based on expected losses rather than on incurred losses.

2. What is ECL

Credit losses are defined as the difference between the contractual cash flow due to the entity and cash flow that entity expect to receive. This difference is discounted either at original effective interest rate or any other appropriate adjusted discounted rate. Entity can estimate various possible outcome, for the cashflow it expect to receive, wherein entity need to define each probable output with its weight which gives us probability weighted output to assess expected credit loss.

3. Applicability

Credit loss are generally reflected in almost all financial statements. New credit impaired model would cover all entities, given that entities have contractual receivables or recovery from other entities. However, it has a significant impact on financial institutions like banks and NBFCs.

Financial assets on which ECL will apply includes – (1) debtors   (2) loans given to group companies / inter corporate loans (3) any debt investments (4) loan commitments (5) financial guarantee contracts, (6) lease receivables, etc.

4. What was the need of a new credit impaired model

Credit loss provisioning approach has now moved from incurred to expected loss model, which means an entity needs to understand the significance of credit risk and its movement since its initial recognition. Thus, new model will ensure (a) timely recognition of ECLs (b) assessment of significant increase in credit risk which will provide better disclosure (c) ascertainment of better business ratios. The need of expected credit loss model was established post global crises & it provides better advanced information to the investors.

5. Overview of the new impairment model

New expected credit loss model establishes 3 stage impairment model, based on whether there has been a significant increase in the credit risk of a financial asset since its initial recognition. These 3 stages determine the amount of impairment to be recognized as Expected Credit Loss at each reporting date.

Particulars	Stage 1	Stage 2	Stage 3
Also referred as	Performing	Under performing	Non-performing
Credit quality	Not deteriorated significantly since its initial recognition	Deteriorated significantly since its initial recognition	Objective evidence of impairment
Credit riak	Low	Moderate to high	Very High
Recognize	12month ECL	Life time ECL	Life time ECL
ECL	Represents financial asset's life time ECL that are expected to arise from default events that are possible within 12 months	ECL that results from all possible default events over the expected life of an instrument.	
Interest	On gross basis	On gross basis	On net basis (gross carrying value minus loss allowance)
Low credit risk at reporting date	Assumed that risk has not increased significantly, hence apply 12 month ECL		

6. Determining significant increase in credit risk

It is very judgmental to determine the significant increase in credit rise, which enable entities to move from stage 1 to stage 2. i.e. to move from 12 month expected losses to life time expected losses.

Entities need to assess significant increase in credit risk as compared to its initial recognition level by considering following indicators -
- Changes in general economic or market conditions, for example, adverse policy adoption by overseas companies which may affect IT services offered by Indian companies
- Significant changes in financial position or operating results of a borrower
- Changes in financial support from parent or group companies
- Expected or potential breaches of covenants
- Expected delay in payment

Entities need to be careful, since the assessment is based on expectation and not actual. Entities need to develop clear policies to identify the new point of transition from stage 1 to 2.

Regardless of the method in which an entity would like to assess significant increase in the credit risk, there is a rebuttable presumption that the credit risk of a financial asset has increased significantly since its initial recognition, where contractual payments are more than 30 days past due. The presumption can be rebutted only when an entity has reasonable and sufficient information to support that 30 days past due does not tantamount to significant increase in credit risk. It is a matter of debate and judgement that even after past due 30 days how can there be no significant increase in credit risk. The reasonable and sufficient information can be reflected in a better way by doing an assessment of following -

- Past trends (history) and current situation correlation
- Getting adequate understanding by ensuring liquidity situation of a borrower
- Quick review of borrowers' business condition assessment such as sales, purchase, inventory situation
- Comfort from borrower's banker about its facilities and payment on other borrowings
- Analysis of recent events which may affect borrower's business adversely

Stage 3 is a clear focus on credit impaired financial assets. These are those assets for which one or more events that have a detrimental effect on the estimated future cash flows have already occurred. This is similar to the stages where corporates or banks have recognized full losses in the financial statement. Indicators for lifetime loss recognition includes -

- Actual breach in making payment,
- Granting concession to the borrower due to financial difficulties,
- Probable that borrower will enter bankruptcy or other financial reorganization.

7. Example of movement in stages

The focus of credit impairment model which is based on significant increase in credit risk **is on the change in the risk of default**, and **not the changes in the amount of ECL.**

Example - Bank ABC has provided a loan and accepted borrower's real estate as collateral. As on the reporting date, Bank analyzed that the borrower is expected to be affected by down turn by local economy, hence that entity has moved from stage 1 to stage 2, even though the actual loss suffered may be small because the lender can recover most of the amount due, by selling the collateral. Thus, the important point of determination of stages is not linked with your actual expected loss, which may come down due to high collateral value. But an entity still needs to assess the correct stage for impairment, if there is an increase in the credit risk.
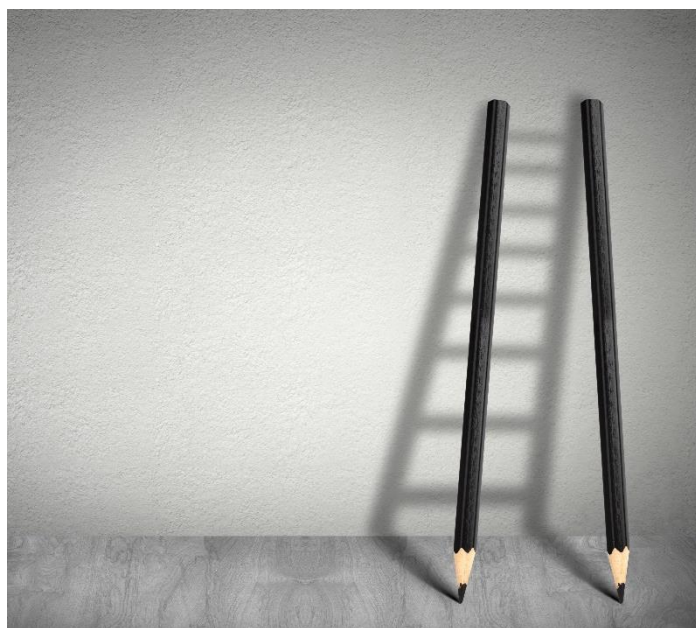
8. Low credit risk exception

As a practical measure, an entity may assume that the credit risk on financial asset has not increased significantly since its initial recognition, if the financial instrument is determined to have low credit risk at the reporting date. This ease out the assessment for entity, since once entity assured of low credit risk, they can continue with 12 month losses. By accepting low risk, the process & assessment becomes much easy.

Credit risk on a financial asset is assumed to be low if: -
- Financial asset has a low credit risk of default
- Borrower has a strong capacity to meet its obligation
- Adverse economic and business condition will not reduce the ability to fulfil the obligation

9. Business combination

When financial assets are acquired in a business combination, the calculation of ECL on these financial assets are to be assessed by considering initial level of credit risk **to the date of business combination**. Hence any significant increase in credit risk is from the date of business combination assessed risk and not from the original date of the instrument.

10. Default

Default is actually not defined; however, each entity should define their own definition of default which should be consistent with the definition used for internal credit risk management purpose for the relevant asset and consider other qualitative indicators while doing an assessment.

There is a rebuttable presumption that default does not occur later than when a financial asset is 90 days past due. However, an entity may provide reasonable and sufficient data to support that default has not occurred even after 90 days past due.

11. Forward looking working

ECL is based on history of financial asset and includes forward-looking statement; however, an entity is not required to forecast about future conditions over the entire expected life of a financial instrument. In fact, they may extrapolate projections from available, detailed information which includes -
- Internal historical credit loss experience, and the period of time over which its historical data has been captured and the corresponding economic conditions represented in the past
- Internal ratings
- Effects that were not present in the past or to remove the effects that are not relevant for the future
- Credit loss experience of other peer companies
- External ratings
- Macroeconomic factors such as interest rates, house prices, unemployment and GDP growth
- Review all inputs, assumptions, methodology and estimation techniques regularly

Starting point	+	Forward looking
Historical Information		Adjustments to be made to estimate ECL
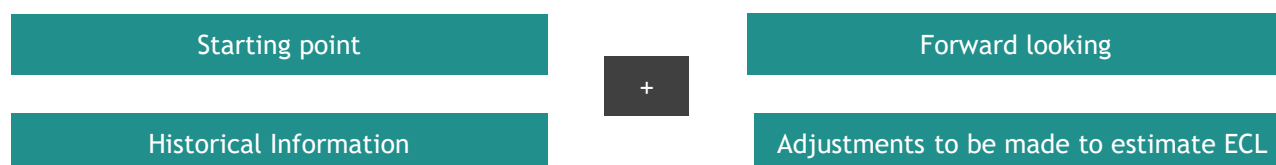
12. Measurement of ECL

There are no particular methods prescribed for measurement of ECL. Instead measurement might vary based on type of instrument, information, level of business scale etc.

However, an ECL model should have three primary factors –

Unbiased probability weighted amount	Evaluation of range of possible outcomes and consider risk of credit loss even if probability is very low
Present Value	Generally calculated using original EIR or an approximation as discount rate
Cash shortfall	Difference between contractual cash flow and an entity expect it to receive

In general, we understand following concepts while doing practical calculations –

Term	Description
Probability of default	Estimate of the likelihood of default over a given time horizon
Exposure at default	Estimate of an exposure at a future default date – expected changes in exposure after the reporting date, including repayment of principal and interest, and expected drawdowns on committed facilities
Loss Given Default	Estimate of the loss arising on default. It is based on the difference between contractual cash flows that are due and expected to receive including from collateral. It is generally referred as a percentage of exposure at default
Discount rate	Used to discount an expected loss to a present value at the reporting date using the effective interest rate at initial recognition

13. 12-month and life time ECL measurement

12-month ECL is defined as a portion of the lifetime ECLs that results from default events on a financial instrument that are possible within 12 months after the reporting date. The calculation is based on the probability of default. 12-month allowance does not further increase, except for changes in the 12 month ECLs, until the instrument's credit risk has increased significantly. In India, banks and NBFC[1]s do provide standard asset provision, which is a rule based guidance. Now banks and NBFCs need to calculate the 12-month ECL which may be more than rule based guidance, hence initial application of ECL model will affect the financial institutions financial results.

Lifetime ECLs are defined as ECLs that results from all possible default events over the expected life of a financial instruments, which means that an entity needs to estimate the risk of a default occurring on the financial instruments during its expected life. ECL model directs application of time value of money, hence entity needs to calculate the present value of the difference between contractual cash flows due and cash flows expect it to receive ("cash shortfall").

[1]Non-Banking Financial Company

14. Time Value

When an entity estimates possible events of default which means that the borrower will not pay the contractual due amount on time. Therefore, an ECL model should also involve modelling the timing of payments, before the expected losses can be discounted.

Instruments	Discount rate to be used
Fixed rate assets	Effective interest rate determined at initial recognition
Variable rate assets	Current effective interest rate
Purchased or original credit impaired financial assets	Credit adjusted effective interest rate determined at initial recognition
Lease receivables	Same discount rate used in the measurement of the lease receivables in accordance with lease standard
Financial guarantee	Current risk-free rate adjusted for risks specific to the cash flows
Loan commitments	Effective interest rate of the asset that will result once the commitment is drawn down[2]
Loan commitment for which rate is not determinable	Current risk-free rate adjusted for risks specific to the cash flows provided cash flows are not adjusted for these risks to avoid double counting

15. Collateral

Collateral has not much to contribute for assessment of significant increase in the credit risk, however it is very important to consider it for the measurement of ECL. While considering estimate of expected cash shortfalls, entities need to reflect the cash flows expected from collateral and other credit enhancements that are part of the contractual terms.

16. Individual Vs collective assessment

ECL on individual large exposures and credit impaired loans are generally measured individually. For retail exposures and exposures where less borrower specific information is available, ECLs are measured on a collective basis.

To assess the staging of exposures and to measure a loss allowance on a collective basis, the entity may group its exposures into segments on the basis of shared credit risk characteristic such as –
- Customer type
- Customer rating
- Collateral quality
- Product
- Industry
- Geographic region
- Term to maturity, etc

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[2]This would give consistent rate for a credit facility that includes both a loan and an undrawn commitment

17. Simplified Approach

For receivables with no significant financing component, which means generally in less than 12 months life, an entity can directly calculates life time expected losses. This means entities does not calculate 12-month expected credit losses, but simply recognize lifetime expected loses. Entity may use provision matrix to calculate ECL, however they need to update the historical rate with current and forward-looking estimates.

For other long-term receivables and lease receivables, entities have an accounting policy choice to apply either general three stage approach or the simplified approach. Applying the simplified model may lead to higher debt provision than the general three step model, because under simplified approach all expected credit losses would be provided for at the time of first reporting date.

18. Off balance sheet financial items

The scope of three stage impairment model is extended to apply the accounting for (1) loan commitments and (2) financial guarantee contracts.

Loan Commitments

Loan commitments arise, when an entity grants a commitment to provide a loan to another party. At the end of each reporting period, 12-month expected credit losses are provided for such loan commitments. Where there has been a significant increase in the risk of a default occurring on the loan to which a loan commitment relates, lifetime expected losses are recognized.

Stage	Risk status	Apply to	Recognize
Stage 1	No significant increase in credit risk	Expected portion to be drawn down within the next 12 months	12-month ECL
Stage 2	Significant increase in credit risk	Expected portion to be drawn down over the remining life of the facility	Lifetime ECL

For loan commitments, ECL would be P.V. of the difference between
- contractual cash flows if the holder draws down the loan; and
- the cash flow that the entity expects to receive if the loan is drawn down.

Financial Guarantee

Financial guarantee contracts are recognized as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value.

The fair value of the financial guarantee is the P.V. of the difference between
- the contractual cash flows required under a debt instrument, and
- the net contractual cash flows that would have been required without the guarantee.

At the end of each subsequent period financial guarantees are measured at the higher of –
- amount initially recognized less cumulative amortization
- amount of loss allowance

The amount of loss allowance at each subsequent reporting period equals to 12-month ECL, however where there has been a significant increase in the risk that the specified debtor will default on the contract, the calculation moves for lifetime ECL.

ECL for financial guarantee contract are the cash shortfalls adjusted by the risks that are specific to the cash flows. Cash shortfall are the difference between –
- the expected payments to reimburse the holder for a credit loss that it incurs; and
- any amount that an entity expects to receive from the holder, the debtor or any other party

19. Maximum ECL measurement period

Entities are required to estimate cash flow by considering all contractual terms such as prepayment, extension, call, etc. for the calculation of ECL. It is specified that the maximum period to consider is the maximum contractual period over which the entity is exposed to credit risk.

For loan commitments and financial guarantee contracts, the maximum contractual period over which an entity has a present contractual obligation to extend credit is to be considered

However, for revolving credit facilities, such as credit cards and overdraft facilities, which can be contractually withdrawn by the lender with as little as one day's notice. However, in practice lenders continue to extend credit for a longer period and may only withdraw the facility after the credit risk of the borrower increases, which could be too late to prevent some or all of the expected credit losses.

Fore example, the issuer of credit cards typically manages accounts on a collective basis, and will only take an action when a particular account displays certain characteristics, such as being over its credit limit or consistently receiving only minimum repayments. In those cases only, when estimating expected credit losses, the lender will look forward beyond the contractual date on which it could demand repayment.

Hence, it should be noted that the time horizon for removing facilities are not the period over which the lender expects the facility to be used, but it is the period over which the lender is, in practice and exposed to credit risk.

In contrast, certain mortgage products are extended by lenders on a rolling six-month basis; although the contractual maturity is no more than six months, in practice the loans may "roll forward" for periods of 20-30 years. However, because there is no undrawn component these loans do not qualify for the exception and, instead expected losses are calculated based on the short term contractual maturity, and not the longer expected maturity.

20. Disclosures

To enable users to understand the effect of credit risk on the amount, timing and uncertainty of future cash flows
- information about entity's credit risk management practices
- how above policies are relating to the recognition and measurement of ECLs
- method, assumptions and information used to measure ECLs
- quantitative and qualitative information about ECL amount so that user can evaluate such data
- significant credit risk concentration
- information about entity's credit risk exposures
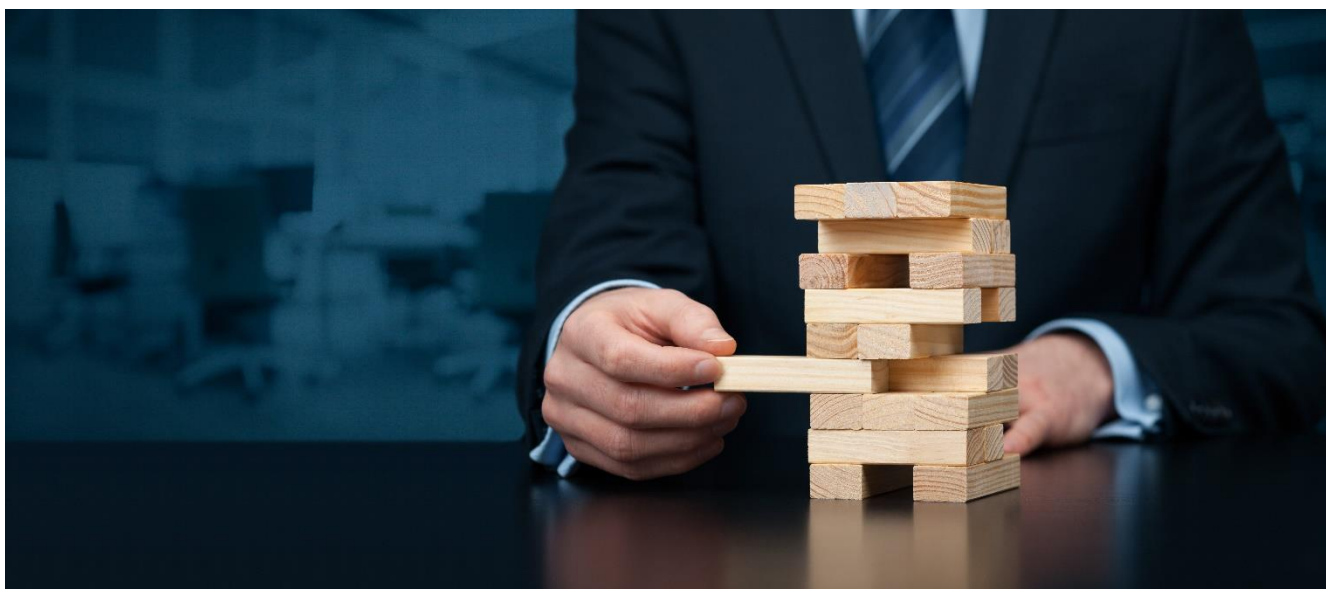
ILLUSTRATIVE EXAMPLES

Example 1

Applying the new impairment model to trade receivables

Company M has trade receivables of INR 30 million at 31 December 20X4. The customer base consists of large number of small clients. In order to determine the expected credit losses for the portfolio, company M uses a provision matrix. The provision matrix is based on its historical observed default rates, adjusted for forward looking estimates. At every reporting date, the historical observed default rates are updated.

Company M estimates the following provision matrix at 31 December 20X4:

Amount in Million

	Expected default rate	Gross carrying amount in INR	Credit loss allowance (default rate x Gross carrying amount)
Current	0.3%	15,000,000	45,000
1-30 days past due	1.6%	7,500,000	120,000
31-60 days past due	3.6%	4,000,000	144,000
61-90 days past due	6.6%	2,500,000	165,000
More than 90 days past due	10.6%	1,000,000	106,000
		30,000,000	580,000

One year later, ie. 31 December 20X5, Company M revises its forward looking estimates, which incorporate a deterioration in general economic conditions. Company M has a portfolio of trade receivables of INR 34 million in 20X5.

	Expected default rate	Gross carrying amount in INR	Credit loss allowance (default rate x Gross carrying amount)
Current	0.5%	16,000,000	80,000
1-30 days past due	1.8%	8,000,000	144,000
31-60 days past due	3.8%	5,000,000	190,000
61-90 days past due	7.0%	3,500,000	245,000
More than 90 days past due	11.0%	1,500,000	165,000
		34,000,000	824,000

The credit loss allowance is increased by INR 244,000 from INR 580,000 at 31 December 20X4 to INR 824,000 as at 31December 20X5. The journal entry for 31 December 20X5 would be:

31 December 20X5		
Dr.	Expected Credit losses	INR 244,000
Cr.	Credit loss allowance	INR 244,000

Example 2

Applying the three-stage model to a related party loan

Mr. A is a director of Company A and is also the sole shareholder of Company C. Company C is therefore a related party to Company A.

On 1 January 20X1, Company A provided INR 100 million loan to Company C for four years at an annual interest rate of 10%
On 31 December 20X2, Company C is expected to have cash flow problems due to a deterioration in economic conditions
On 31 December 20X3, the loan is extended for another three years because Company C does not have enough cash to repay the loan.

Question: How should the loan be accounted for under the three-stage expected loss model?

Answer:

Amount in Million

31 December 20X1

- Loan is in Stage 1
- Estimate the probability that the loan will default over the next 12 months
- Assume there is a 1% probability of the loan defaulting in the next 12 months and Company A will not get any amount back (100% loss)
- Recognize provision of INR 1 (1% X INR 100)
- Recognize interest on the gross carrying amount of the loan (INR 100 x 10%).

31 December 20X2

- Loan is in Stage 2
- It is considered that credit risk has increased significantly as Company C is expected to have cash flow problems due to a deterioration in economic conditions
- The probability that the loan will default over the remaining life of the loan is estimated at 35%
- Recognize a provision of INR 35 (35% X INR 100)
- Recognize interest on the gross carrying amount of the loan (INR 100 x 10%)

31 December 20X3

- Loan is in Stage 3
- Due to liquidity problems, Company A is not able to repay the loan and relies on an extension of the loan by three years. The loan is therefore credit impaired
- Company A estimates that the probability of default over the remaining life of the loan is 60%
- Recognize a provision of CU60 (60% X INR 100)
- Recognize interest on the net carrying amount of the loan (INR 40 x 10%) from the point at which the loan moves to Stage 3

	Stage	Gross amount	Loss allowance	Interest
31/12/20X1	Stage 1	INR 100	INR 1	INR 10 (INR 100 x 10%)
31/12/20X2	Stage 2	INR 100	INR 35	INR 10 (INR 100 x 10%) (Loan was still in Stage 1 throughout the year)
31/12/20X3	Stage 3	INR 100	INR 60	INR 10 (INR 100 x 10%) (Loan was still in Stage 2 throughout the year)
31/12/20X4	Stage 4	INR 100	INR 60	INR 4 (INR 40 x 10%)

Example 3

Loan to sister subsidiary guaranteed by the parent

Parent A has two wholly owned subsidiaries B and C. Subsidiary C owns four of the five major and well-known consumer brands of the group. Parent A is in a strong financial position and is expected to inject cash into Subsidiary C to cover Subsidiary C's cash outflows over the next years.

- On 1 January 20X8, Subsidiary B provides a loan of INR 1,000 million to Subsidiary C for three years.
- The loan is guaranteed by Parent A.
- On 31 December 20X9, Subsidiary C is expected to have cash flow problems due to deterioration in economic conditions and decreasing profits arising from reductions in consumer spending.

Question: Do the facts on 31 December 20X9 give rise to a significant increase in credit risk and therefore require the recognition of lifetime ECL?

Answer:

Standard clarifies that one factor that should be assessed in determining whether there has been a significant increase in credit risk is the change in the quality of the guarantee provided by a parent, if the parent has an incentive and the financial ability to prevent a default by capital or cash infusion.

It appears that Parent A is in a strong financial position and has an incentive to prevent Subsidiary C from default by providing it with additional funds. It is therefore considered that there has been no significant increase in credit risk and the loan should remain in Stage 1.

However, Subsidiary B needs to monitor Parent A's financial position and also whether there has been any change in circumstances that would lessen or reduce the incentive for Parent A to prevent default by Subsidiary C.

Example 4

Financial guarantee contract

On 1 January 20X8, Company A guarantees a INR 1,000 million loan of Subsidiary B which Bank XYZ has provided to Subsidiary B for three years at 7%.
If Company A has not issued a guarantee Bank XYZ would have charged Subsidiary B an interest rate of 10%
On 31 December 20X8, there is a 1% probability that Subsidiary B will default on the loan in the next 12 months
On 31 December 20X9, there is a 3% probability that Subsidiary B will default on the loan in the next 12 months.

Question: How should Company A account for the financial guarantee contract under Ind AS 109?

Answer:

Amount in Million

1 January 20X8

The financial guarantee contract is initially measured at fair value. The fair value of the guarantee is INR 75, being the present value of the difference between: –

- The net contractual cash flows that would have been required without the guarantee = INR 1,000 (INR 100/1.1 + INR 100/1.1² + INR 1,100/1.1³), and
- The net contractual cash flows required under the loan = INR 925 (INR 70/1.1 + INR 70/1.1² + INR 1,070/1.1³).

1 January 20X8		
Dr.	Investment in subsidiary	INR 75
Cr.	Liability	INR 75
	Being the fair value of the guarantee on initial recognition.	

31 December 20X8

Assume that there is 3% probability that Subsidiary B will default on the loan in the next 12 months. If Subsidiary B does default, Company A does not expect to recover any amount from Subsidiary B.

The 12-month expected credit losses are therefore INR 30 (CU1,000 X 3%).

The initial amount recognized less amortization is INR 52.50 (INR 75 – INR 22.50 (being INR 30/1.1³)), which is higher than the 12-month expected credit losses (INR 10).

The liability is adjusted to INR 52.50[3] as follows:

31 December 20X8		
Dr.	Liability	INR 22.50
Cr.	Profit or loss	INR 22.50
	Being amortization of the liability recognized for the financial guarantee.	

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[3]At the end of each subsequent period financial guarantees are measured at the higher of –
- amount initially recognized less cumulative amortization
- amount of loss allowance

31 December 20X9

Assume that there is still a 3% probability that Subsidiary B will default on the loan in the next 12 months.

If Subsidiary B does default, Company A does not expect to recover any amount from Subsidiary B. Company A determines that, overall, there has not been a significant increase in credit risk and therefore continues to recognize 12-month expected losses of INR 30 (INR 1,000 X 3%).

The initial amount recognized less amortization is INR 27 (INR 52.50 - (INR 30/1.12)). The 12-month expected credit losses (INR 30) are higher than the initial amount (INR 27), the liability is adjusted as follows:

31 December 20X9		
Dr.	Liability	INR 22.50
Cr.	Profit or loss	INR 22.50
	To record the liability at the amount of the loan loss allowance (CU52.50-CU30).	

Example 5

Financial guarantee contract

Same facts as example 4 above, except that on 31 December 20X8, there is a significant increase in the risk that Subsidiary B will default on the loan.

The probability of default over the remaining life of the loan (two years) is 60%.

Question: How should Company A account for the financial guarantee contract on 31 December 20X8?

Answer:

Assume that if Subsidiary B does default, Company A does not expect to recover any amount from Subsidiary B. The lifetime expected credit losses are INR 600 (INR 1,000 x 60%), and the carrying amount of the liability is adjusted as follows:

31 December 20X8		
Dr.	Profit or loss	INR 525
Cr.	Liability	INR 525
	To record the liability at the amount of the loan loss allowance (CU600–CU75).	

Example 6

ECL on a retail portfolio of a Bank

Bank X segments its retail loan portfolio into two groups, for example Business loans and Agricultural loans on the basis of common risk characteristics that are indicative of borrower's ability to pay all amounts that are contractually due.

Groups Business loans and Agricultural loans make up INR 200 million and INR 300 million of the carrying amount respectively.

The Principal per client is INR 200,000 for group Business loans and INR 600,000 for group Agricultural loans. Historically, for a sample of 50 loans in each group, group of business loans annual average was 4 defaults in the first year, and group of Agricultural loans per annum average was 2 defaults in the first year.

The historical loss rates for the first year are determined as follows –

Group	No. of client in a sample	Estimated per client gross carrying amount at default	Total estimated gross carrying amount (sample size) at default	Historic p.a. average default	Estimated total gross carrying amount at default[4]	P.V. of observed loss[5]	Loss rate
	A	B	C = A * B	D	E = B * D	F	G = F / C
		INR '000	INR '000		INR '000	INR '000	
Business Loans	50	200	10,000	4	800	750	7.50%
Agricultural Loans	50	600	30,000	2	1200	1130	3.77%

At the end of the current year Bank X expects an increase in defaults over the next 12 months compared to the historical rate. As a result, Bank X estimates 5 defaults in the next 12 months for 50 loans in group of Business loans and 3 for 50 loans in group of Agricultural loans.

Group	No. of client in a sample	Estimated per client gross carrying amount at default	Total estimated gross carrying amount (sample size) at default	Expected defaults over next 12 months	Estimated total gross carrying amount at default	P.V. of observed loss	Loss rate
	A	B	C = A * B	D	E = B * D	F	G = F / C
		INR '000	INR '000		INR '000	INR '000	
Business Loans	50	200	10,000	5	1000	938	9.38%
Agricultural Loans	50	600	30,000	3	1800	1695	5.65%

Bank X Uses the revised expected loss rates of 9.38% and 5.65% to estimate 12-months expected credit losses on other loans in group of Business loans and group of Agricultural loans respectively, which Bank originated during the year.

[4]it is assumed that default is for the whole loan amount
[5]Present value assumed

About US

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One member firm per Country

1	165+	85,000+	US $9.6 bn
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About BDO in India

BDO in India offers Strategic, Operational, Accounting and Tax & Regulatory advisory & assistance for both domestic and international organisations across a range of industries.

BDO India is led by more than 150 Partners & Directors with a team of over 2800 professionals operating across strategic cities.

Our Services

Assurance
- Accounting Advisory Services
- Assurance Services

Advisory
- Business Restructuring Services
- Corporate Finance
- Cyber Security and IT Governance
- Digital Transformation Services
- Due Diligence
- Emerging Technologies
- Enterprise Resource Planning (ERP) and Technology Consulting
- Forensic Services
- Government Advisory
- Management Consulting
- Risk and Advisory Services
- Valuations
- Virtual Analytics

Business Services & Outsourcing
- Human Resource Outsourcing
- International Business
- Learning Solutions
- Outsourcing
- Revenue Cycle Management
- Technology Services

Tax
- Base Erosion & Profit Shifting (BEPS) Advisory
- BDO Enable GST – Tax Tech
- Cross Border Taxation
- Customs & International Trade
- ESOP Advisory & Implementation
- Exchange Control Advisory & Compliance
- Family Business Advisory & Succession Planning
- Fund Structuring & Compliance

- Global Expatriate Services
- Global Tax & Transfer Pricing Services
- Goods & Services Tax (GST)
- Information Exchange Compliances
- Non-GST Indirect Tax Services
- Pre-GST Indirect Tax Assessment & Litigation Assistance
- Regulatory Advisory & Compliance
- Representation & Litigation Support
- Tax Advisory & Compliance
- Tax Function Outsourcing
- Tax Policy Advocacy
- Tax Risk Assessment & Certainty Solutions
- Transactions Advisory & Support
- Transfer Pricing Advisory & Compliance

Contact Us

For any content related queries, you may get in touch with

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