

Expected Credit Loss-IFRS 9

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Abstract

IFRS 9 requires recognizing impairment of all financial assets held at amortized cost and at fair value through other comprehensive income, in the amount of expected credit loss. For this purpose two approaches followed they are general approach and simplified approach. My paper presents the model of application of expected credit loss. A detailed study and analysis is performed for the purpose of application of ECL model, Punjab National Bank Annual report 2018-19 is used.

Key words- *impairment, financial assets, amortized cost, general and simplified approach.*

Introduction

The stakeholders of Banking and Finance industry realized the need for complete readjustment of existing loan loss provisioning norms and practice because of the financial crisis of 2007-08. The international accounting standard board (IASB) in 2014, published “Expected Credit Loss”. It is a proactive standard for loan loss provisioning under IFRS – 9 . The standards of ECL are expected to come into effect between 2018 and 2021 across the major economies of the world including India. Incurred loss based approach model is being used for delayed recognition of credit losses. It takes into consideration the credit losses that have been already incurred as on the balance sheet date. It ignored probable future losses, as it required expert judge along with observable evidence. To overcome this, standard of “expected credit loss” is being introduced which is more forward-looking approach that focus on probability of future credit losses, irrespective of triggering events. As opposed to IAS 39 which required a best estimate approach, IFRS 9 requires multiple forward-looking macro-economic and workout scenarios for the estimation of expected credit losses. Input data in the model are based on information from Annual report-2018-19 (PNB)

Literature review

- The emphatic mandate as posed by IND AS surely would pose further stress on the already beleaguered Banking System, however envisaged in the challenges is the glory of stable, reliable and transparent system. The extension of one year can prudently be utilized by entities to ensure implementation of needed systems and processes which would make Indian reporting at par with international reporting. CA.Rajeev Joshi - a partner with YSP & Co LLP
- It is well known that IFRS 9 ECL guidance leaves room for judgment on key concepts such as whether there has been a significant increase in credit risk, measurement of lifetime expected credit losses and forward-looking assumptions-IFRS 9 expected credit loss Making sense of the transition impact
- For the purpose of developing a new ECL internal model authors suggest use
- of multi-criteria decision making model which is based on Analytic Hierarchy

- Process (AHP) method. Thomas L. Saaty has introduced and developed in 1980
- the AHP method in his book “The Analytic Hierarchy Process: Planning, Priority
- Setting, Resource Allocation”. Also, he analyzed AHP method in detail in 1990
- in an article “How to make a decision: The Analytic Hierarchy Process” and
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- Process”. AHP is a technique for organizing and analyzing complex decisions
- based on mathematics and psychology. The main objective of implemented in-
- ternal model will be creation of descending ranking of the selected companies
- according to the obtained score what is a prerequisite for Probability of Default
- (PD) calculation
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Objective

Implementation of new impairment model for financial instrument which is measurable through EXPECTED CREDIT LOSSES (ECL)It refers to financial assets that are measured at amortized cost, includes accounting, loans, debts securities, bank balances and deposits, etc. Financial assets that are debt instruments measured at fair value through other comprehensive income and loan commitments that are not measured at fair value through profit or loss under IFRS 9, lease receivables and contract assets.For the purpose of prudent decision making, adequate disclosures of increase in credit risk must be facilitated. As there were financial crisis in the past, and it revealed the need of being proactive in reckoning the potential deterioration in the credit quality of the financial assets. Corrective measures also to be initiated.The need to incorporate forward-looking information means that application of the standard will require considerable judgment as to how changes in macroeconomic factors will affect ECLs.



Expected Credit Losses Calculation.

1. Identifying scenarios in which a loan or receivable defaults.
2. Estimating the cash shortfall that would be incurred in each scenario if a default were to happen
3. Multiplying that loss by the probability of default happening
4. Summing the results of all such possible default events.

Since every loan and receivable has at least some probability of defaulting in the future, every loan or receivable has at least some probability of defaulting in the future, every loan or receivable has an expected credit loss associated with it-from the moment of its origination or acquisition.

Expected credit loss comprises 12 month and lifetime ECL. The 12 month ECL consists of low risk performing items with interest on gross basis. Life time ECL consists of underperforming and non- performing items with moderate risk and very high risk with interest on Net basis.

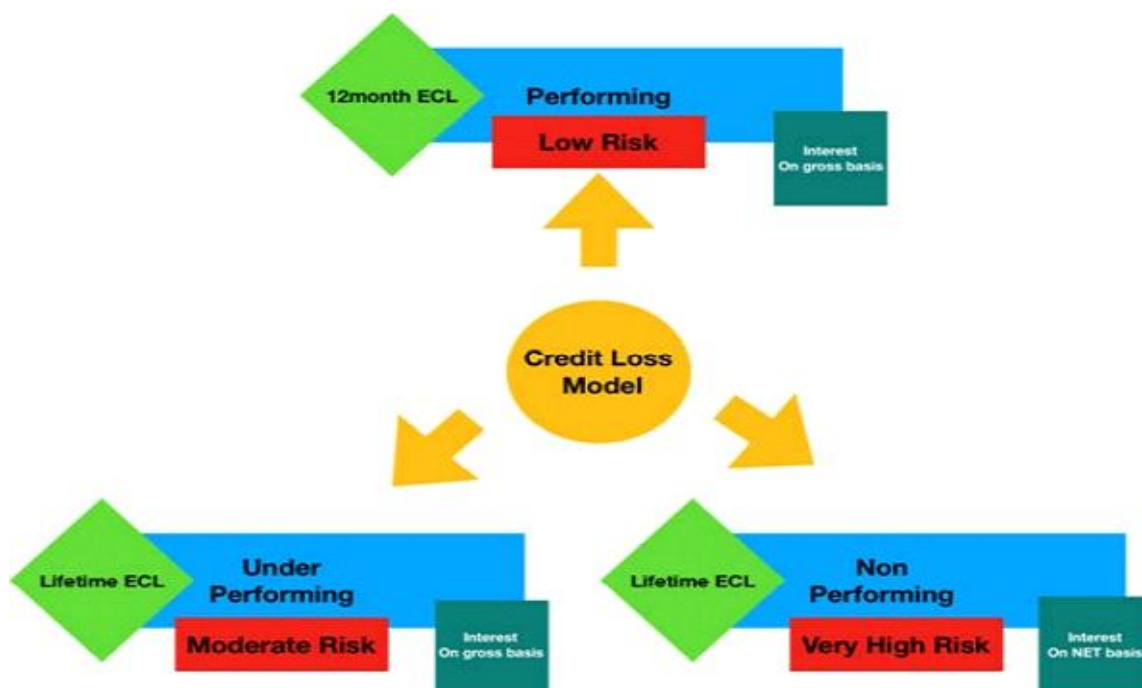


Figure no. 1

Implementation of new impairment model for financial instrument which is measurable through EXPECTED CREDIT LOSSES (ECL).

IFRS 9 requires you to recognize the impairment of financial assets in the amount of expected credit loss.

In fact, there are 2 approaches for doing so:

GENERAL APPROACH

If there has been a significant increase in credit risk since initial recognition of the financial asset, then general approach is used. Under this, a loss allowance for lifetime expected credit losses is recognized for a financial instrument. If there is no increase in financial instrument significantly since its initial recognition, a loss allowance for 12-month ECL is recognized. Thus the general approach has two bases on which to measure expected credit losses i.e. 12-month expected credit losses and lifetime expected credit losses.

Under the general approach, in order to determine the amount of ECL to recognize as well as how interest income should be recognized. The following stages followed

1. When credit risk has not increased significantly since initial recognition, entities are required to recognize 12 month ECL and recognize interest income on gross basis i.e. interest will be calculated on the gross carrying amount of the financial asset before adjusting for ECL.
2. When credit risk has increased significantly since initial recognition. When a financial asset transfers to stage 2 entities are required to recognize lifetime ECL but interest income will continue to recognized on a gross basis.
3. When the financial asset is credit impaired, this is effectively the point at which there has been an incurred loss event under the IAS 39 model .in this stage 3, entities will continue to recognize lifetime ECL but they will now recognize interest income on a net basis. This means that interest income will be calculated based on the gross carrying amount on the financial asset less ECL.
4. The model developed by Abad and Suárez (2017) shows that impairment charges, in comparison with the ECL approach in IFRS 9, are larger under a lifetime credit losses approach in the steady state but less severe at the onset of a crisis.
5. Grünberger (2012) uses a rating migration model to demonstrate that lifetime expected credit losses and the ECL approach in IFRS 9 do not remove cyclicity of accounting income or credit supply.
6. Lastly, Chae et al. (2018) show how different modelling decisions can significantly change the recognition of credit losses over the cycle.

Simplified Approach.

• **General approach**

In general approach, there are 3 stages of a financial asset and you should recognize the impairment loss depending on the stage of a financial asset in question.

Thus, the impairment loss is either in the amount of a 12-month expected credit loss (ECL) or a lifetime expected credit loss (ECL)

Measure of expected credit loss can make a choice for:

- Trade receivables WITH significant financing component,
- Contract assets under IFRS 15 WITH significant financing component, and
- Lease receivables (IAS 17 or IFRS 16)

For these three types of financial assets, you can apply either simplified approach or general approach.

Under the general approach, an entity must determine whether the financial asset is in one of the three stages in order to determine :

- The amount of Expected Credit Loss to recognise &
- The manner in which interest income should be recognised.

The financial assets are categorized into 3 states for this purpose

- Performing assets
- Underperforming assets
- Non-performing assets

Performing stages comprises asset quality and provisioning and income recognition.

The financial instruments which have low credit risk at the reporting date are included in asset quality. Provisioning and income recognition assets includes 12-month ECL, means the portion of lifetime expected credit losses that represent the expected credit losses that result from default events on a financial instrument that are possible within the 12 months after the reporting date. Interest revenue is calculated on the gross carrying amount of the asset.

Under performing stage include that financial instrument for whom there is significant increase in credit risk since initial recognition but which do not have objective evidence of impairment and are called assets quality. For provisioning and income recognition assets, interest revenue is calculated on the gross carrying amount of the asset which are recognized as lifetime expected credit loss. It result from all possible default events over the expected life of the financial instrument. Expected credit losses are the weighted average credit losses with the probability of default ('PD') as the weight.

Non performing stage asset quality include those financial assets for whom there are objective evidence of impairment at reporting date. Provisioning and income recognition assets, ECL are recognized and interest revenue is calculated on the net carrying amount.

The expected credit losses that results from all possible events over the expected life of a financial instrument is the **lifetime expected credit loss**. The portion of the lifetime expected credit losses that result from default events on a financial instrument that are possible within the 12 monts after the reporting date, represents 12-month expected credit losses.

Maturity Pattern of certain item of Assets and Liabilities

(₹ in Crore)

Maturity Pattern	Deposits	Advances	Investments (gross)	Borrowings	Foreign Currency Assets	Foreign Currency Liabilities
Day 1	15581.42	5522.96	0.00	1620.41	1877.75	337.25
	(14207.46)	(9619.30)	(0.00)	(2316.81)	(3431.72)	(3061.41)
2 days-7days	27254.65	4389.73	199.94	5712.86	1830.98	1915.32
	(19163.92)	(10154.16)	(231.65)	(10362.70)	(4263.89)	(1450.91)
8-14 days	19277.53	1818.32	49.90	3228.37	1094.98	626.87
	(17149.67)	(4275.03)	(670.79)	(6930.39)	(1993.59)	(2957.41)
15-30 days	34291.99	14050.62	159.75	3549.54	6453.23	3708.88
	(35559.87)	(20234.87)	(1906.76)	(1304.66)	(7845.40)	(8293.40)

31 days to 2 months	62444.16	8668.91	1535.79	2687.69	2508.72	5832.44
	(57258.55)	(9050.87)	(1323.04)	(5486.21)	(7341.91)	(11452.35)
Over 2 to 3 months	41374.17	6042.03	1277.16	1906.39	3000.66	5035.75
	(33803.33)	(20676.52)	(2682.28)	(4406.70)	(7741.63)	(10907.08)
Over 3 Months to 6 months	44521.01	15309.47	4061.04	414.30	3343.97	8346.82
	(48177.58)	(12592.39)	(3816.03)	(6071.39)	(19158.68)	(25555.34)
Over 6 Months to 1 year	35847.97	22610.19	6193.80	755.63	7794.66	5083.94
	(53347.30)	(24390.51)	(6595.63)	(642.86)	(12729.48)	(5191.60)
Over 1 Year to 3 Years	102881.25	236703.77	19143.70	1990.43	5347.21	4096.57
	(102147.91)	(189915.58)	(27603.42)	(3372.72)	(5457.09)	(2317.92)
Over 3 Years to 5 Years	159324.86	54993.80	15234.47	2534.37	6834.52	5428.26
	(150145.81)	(43548.51)	(29102.42)	(1322.23)	(6209.62)	(4118.26)
Over 5 Years	133231.13	88139.40	158269.81	14925.93	1958.62	1633.20
	(111264.79)	(89276.98)	(129478.07)	(18634.08)	(2284.06)	(3151.39)
Total	676030.14	458249.20	206125.36	39325.92	42045.30	42045.30
	(642226.19)	(433734.72)	(203410.09)	(60850.75)	(78457.07)	(78457.07)

Annual report-2018-19 (PNB) (Rs.In crores)

Determine the expected credit loss	0 days past due	1-30 days past due	31-60 days past due	61-90 days past due	Total
Balances outstanding at reporting date	5522.96	4389.73	1818.32	14050.62	
Expected credit loss rate	1.2%	2.4%	6%	10.8%	
Expected credit loss allowances	66.27552	105.35352	109.0992	1517.46696	1798.1952

Following formula is used to describe the general approach

- Probability of default

X

- Loss given default

X

- Exposure at Default

For each forward looking scenario an entity will effectively develop an ECL using the above formula and probability weigh the outcome

Thus the estimate of expected credit losses should reflect

- An unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes.
- The time value of money
- Reasonable and supportable information about past event, current conditions and forecasts of future economic conditions that is available without undue cost or effort at the reporting date.

Simplified Approach.

apply simplified approach for:

- Trade receivables WITHOUT significant financing component, and
- Contract assets under IFRS 15 WITHOUT significant financing component

For these two types of assets you have no choice – just apply simplified approach.

Stage of a financial asset need not be determined in simplified approach because the impairment loss is measured at lifetime ECL for all assets.

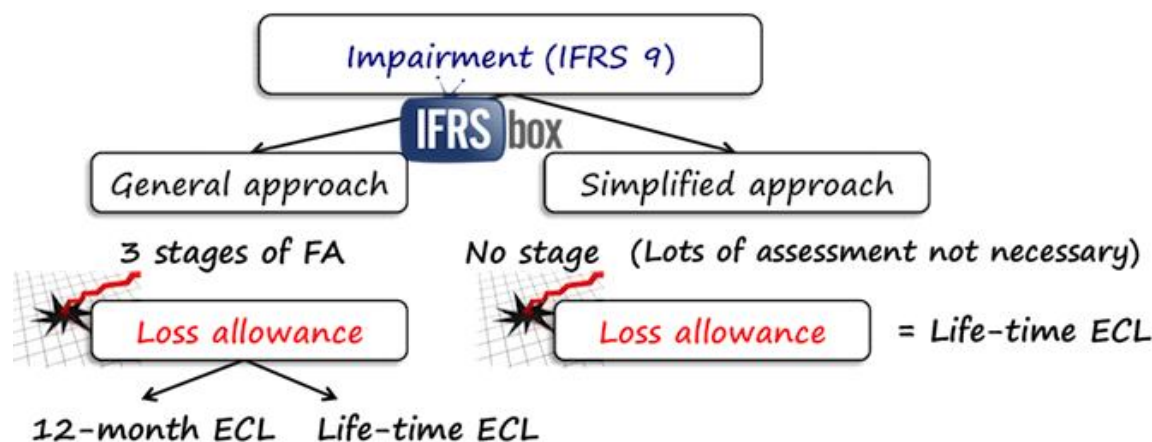


Figure no-2

IFRS-9 allows entities to apply a simplified approach for trade receivable, contract assets and lease receivable.

A provision matrix is to be applied when simplified approach is used for trade receivable. It refers to application of relevant loss rates to trade receivable balances outstanding.

The following steps are followed when provision matrix is followed.

Step 1- determine the appropriate groupings of receivables into categories of shared credit risk characteristics.

Receivable to be grouped appropriately based on geographical region, product type, customer rating, collateral or trade credit insurance and type of customer such as whole sale or retail. The population of individual trade receivables should be aggregated into groups of receivables that share similar credit risk characteristics.

To be able to apply a provision matrix to trade receivables, the population of individual trade receivables should first be aggregated into groups of receivables that share similar credit risk characteristics. When grouping items for the purposes of shared credit characteristics, it is important to understand and identify what most significantly drives each different group's credit risk.

Step 2- determine the period over which historical loss rates are obtained to develop estimates of expected future loss rates.

Once the sub-groups are identified, historical loss data need to be collected for each sub-group. Judgment is needed to determine the period over which reliable historical data can be obtained that is relevant to the future period over which the trade receivables will be

collected. In general, the period should be reasonable – not an unrealistically short or long period of time. In practice, the period could span two to five years.

Step 3 – Determine historical loss rates.

Now the entity determines the expected loss rates for each sub-group subdivided into past-due categories i.e. a loss rate for balances that are

0 days past due,

a loss rate for 1-30 days past due,

a loss rate for 31-60 days past due and so on.

For the above, the entities should determine the historical loss rates of each group or sub-group by obtaining observable data from the determined period.

Step 4- consider forward looking macro-economic factors and adjust historical loss rates to reflect relevant future economic conditions.

Consider forward looking macro-economic factors and conclude on appropriate loss rates. It should be determined whether the historical loss rates were incurred under economic conditions that are representative of those expected to exist during the exposure period for the portfolio at the balance sheet date.

Step – 5 calculate the expected credit losses.

The expected credit loss of each sub-group determined in step-1 should be calculated by multiplying the current gross receivable balance by loss rate. For example, the specific adjusted loss rate should be applied to the balance of each age-band for the receivables in each group. Once the expected credit losses of each age-band for the receivables have been calculated, then simply add all the expected credit losses of each age-band for the total expected credit loss of the portfolio. The table below illustrates how the ultimate expected credit loss allowance would be calculated using the loss rates calculated in Step 4

Close to reality is required for provision matrix usage. Group the financial assets first before applying any loss rates, the reason is that all trade receivables do not necessarily share the same characteristics and therefore, it would not be reasonable to put them into same pocket. The default rates must be derived from own historical credit loss experience, then adjust them for forward-looking information.

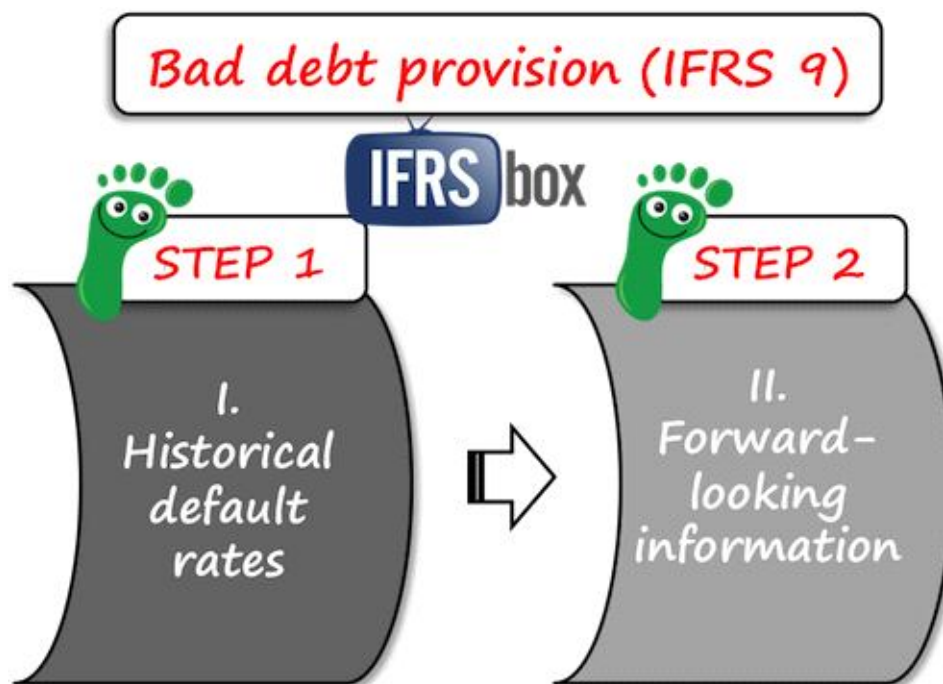


Figure no-3

As per IFRS 9 financial instruments ECL are used as the basis for calculating the impairment allowance and the risk adjusted interest. As the probabilities of collection and recoveries changes at each balance sheet date hence after initial recognition the impairment allowance is adjusted up or down. Fully collectible loans expected losses would be zero as the probability of non-payment declines impairment gains would be recognized in profit and loss. The ECL will increase if the loans grown more risky, and the probability that a default will occur. The ECL will be equal the shortfall when default happens and the lender suffers an actual cash shortfall.

Limitation

1. In a situation where two different entities have Recivable from a common entity , yet if credit risk at initial recognition stage is starkly different from the other two respectively, then it would lead to difference in categorization for those two entities respectively inspite of the fact that rest characteristics of the assets are same.
2. To arrive at provisions and interest accruals, entities will have to develop, examine, test and maintain complex models and thereafter make significant estimates.
3. Information system to be formulated to indicate the changes like deterioration in financial position of borrower, withdrawal of support by parent companies, adverse policy, probability of default, recovery pattern and macro-economic factors like recession etc.

Finding and suggestions

1. Major impact of the new ECL model will be felt by financial institutions with large lending portfolios.
2. ECL also affects both the timing of recognition and the measurement of bad debt provisions by corporate entities.
3. Differences in key judgments and estimates between banks undeniably explain some of the differences observed. More detailed disclosures and sensitivity analyses would be helpful to financial statements users in these areas.

CONCLUSIONS

A different way of looking at credit risk is introduced due to ECL requirement. Alignment between accounting for credit losses and credit risk management activities help users relate ECL information to other data points, both current and historical. New policies and methodologies are to be developed to measure ECL. The firm should explain in their reporting the use of new and existing terminology, definitions and data points.

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