

Expected Credit Loss: Forward-looking Information

The COVID-19 outbreak in December 2019, which is now a global pandemic, has affected more than 200 countries and territories and caused immense uncertainty around the world.

One of the most challenging aspects of accounting under IFRS is determining expected credit loss. This difficult area has arguably become even more so in recent times, as the knock-on impacts from the COVID-19 pandemic become more apparent, with high levels of volatility and uncertainty becoming the new norm.

Gazing into the accounting crystal ball has never been more difficult, and yet it is essential to ensure that financial statements prepared under IFRS are fairly stated. This IFRS Briefing provides guidance on incorporating more forward-looking information into the modelling of expected credit losses under IFRS 9, "Financial Instruments" (IFRS 9). It covers the most common sources of information and identifies the most relevant type of information to entities.

It also looks at identifying the mathematical relationship between more forward-looking information and historical loss rates to generate a more predictive tool to calculate expected credit losses.

Introduction

IFRS 9 introduced three separate approaches for measuring and recognising expected credit loss:

- i. The 'simplified approach' which applies to trade receivables and contract assets without a significant finance component, and lease receivables.
- ii. The 'general approach' which applies to all financial assets classified at amortised cost or fair value through other comprehensive income for debt (other than those that fall in (iii) below) as well as issued loan commitments, and financial guarantees that are within the scope of the new requirements.
- iii. The 'purchased or originated credit impaired approach' which applies to financial assets that are credit impaired at initial recognition.

One of the most complex aspects of expected credit loss impairment is the need to incorporate more forward-looking information and, in particular, to consider the effect of multiple forward-looking scenarios.



More forward-looking information

In accordance with B5.5.2 of IFRS 9, lifetime expected credit losses are generally expected to be recognised before a financial instrument becomes past due. Typically, credit risk increases significantly before a financial instrument becomes past due or other lagging borrower-specific factors (for example, a modification or restructuring) are observed. Consequently, when reasonable and supportable information that is more forward-looking than past due information is available without undue cost or effort, it must be used to assess changes in credit risk.

Sources of forward-looking information

Forward-looking information	Example	Source (Link) as examples
General economy and industry conditions (IFRS 9 B5.5.51)	I. Gross Domestic Product (GDP)	Historic GDP:- https://tradingeconomics.com
		Forecast COVID-19 GDP:- https://www.bloomberg.com
	II. Consumer Price Index	https://data.oecd.org/price/inflation- forecast.htm#indicator-chart
	III. Import and Export Statistics	https://wits.worldbank.org/countrystats.aspx ?lang=en
	IV. Purchasing Manager Index (PMI)	https://tradingeconomics.com
	V. Overnight Policy Rate	https://www.focus-economics.com/ economic-indicator/policy-interest-rate
Unemployment rate (IFRS 9 B5.5.52)	Unemployment Rate	Historic unemployment rate:- https://tradingeconomics.com
		Forecast COVID-19 unemployment rate:- https://tradingeconomics.com
Property price (IFRS 9 B5.5.52)	House Price Index	https://data.oecd.org/price/housing- prices.htm
		https://www.imf.org/external/research/housi ng/index.htm
Commodity prices (IFRS 9 B5.5.52)	International Commodity Price	https://tradingeconomics.com

Identifying forward-looking information relevant to the entity

An entity may have different customer or debtor portfolios with different credit risk characteristics. The entity is therefore required to select the relevant indices to be used in the expected credit loss calculation as illustrated in the example below.

Industry	Manufacturing & Retail				
Entity type	Export	Wholesaler	End User		
Forward-looking information	Customer's country Gross Domestic Product growth rate	Unemployment rate	Not applicable as the goods sold to customer are settled on cash terms.		

When incorporating forward-looking information such as a macroeconomic forecast in the calculation of expected credit loss, management should consider the relevance of the information and the availability of the information for each specific financial instrument. This is because forward-looking information that is relevant for one financial instrument may not be relevant, or as relevant, for other financial instruments as it depends on the specific drivers of credit risk.

Forward-looking information – Linear and non-linear relationships

Linear relationship

A linear relationship is a relationship of direct proportionality that, when plotted on a graph, traces a straight line. In linear relationships, any given change in an independent variable will always produce a corresponding change in the dependent variable. For example, a linear relationship between production hours and output in a factory means that a 10 percent increase or decrease in hours will result in a 10 percent increase or decrease in the output.

Based on the example below, the entity may consider the unemployment rate as a source of relevant forward-looking information with linear relationship, where an increase in unemployment rate, resulted in a 5 times increase in historical loss rate proportionately.

Year		2	3	4	5	6
Unemployment Rate (%)	3.20	3.40	3.20	3.10	2.90	2.80
Historical Loss Rate (%)	4.00	5.00	4.00	3.50	2.50	2.00
Difference between Unemployment Rate (A)	0.20	0.20	0.10	0.20	0.10	
Difference between Historical Loss Rate (B)	1.00	1.00	0.50	1.00	0.50	
Difference between Historical Loss Rate / Difference between Employment Rate (B/A)	5.00	5.00	5.00	5.00	5.00	

Unemployment Rate and Historical Loss Rate



Forward-looking information - Linear and non-linear relationships (Cont'd))

Non-linear relationship

Based on the example below, the entity may consider the unemployment rate as a relevant source of forwardlooking information with a non-linear relationship, as historical loss rate increased when the unemployment rate increased. As shown in the calculation below, when the unemployment rate increased from 3.20% to 3.40%, the historical loss rate increased significantly from 4.8% to 8%.

Year	1	2	3	4	5	6
Unemployment Rate (%)	3.20	3.40	3.20	3.10	3.00	2.80
Historical Loss Rate (%)	4.80	8.00	4.80	3.80	3.00	2.00
Difference between Unemployment Rate (A)	(0.20)	0.20	0.10	0.10	0.20	
Difference between Historical Loss Rate (B)	(3.20)	3.20	1.00	0.80	1.00	
Difference between Historical Loss Rate / Difference between Employment Rate (B/A)	16.00	16.00	10.00	8.00	5.00	



Non-relevant forward-looking information

Based on the example below, the entity is not advised to incorporate this forward-looking information into the expected credit loss calculation as the information has **no co-relationship**.

Year	1	2	3	4	5
Unemployment Rate	3.40%	3.36%	3.44%	3.10%	2.88%
Historical Loss Rate	25	20	15	10	5



Measuring expected credit loss - Single scenario or multiple scenarios

According to the <u>Webcast</u> on IFRS 9 (July 2019, available at IFRS.org), the IFRS Transition Resource Group for Impairment of Financial Instruments (ITG) stated that multiple scenarios are relevant when there is a non-linear relationship between forward-looking scenarios and credit losses when measuring expected credit loss.

As the diagram shows, when there is a non-linear relationship between forward looking information and credit losses, multiple scenarios are relevant.



Management may consider the points below to determine the number of scenarios:



When there are many possible outcomes, an entity can use a representative sample of the complete distribution (para. BC5.265, IFRS 9)

Measuring expected credit loss - Single scenario or multiple scenarios (Cont'd)

According to the same Webcast on IFRS 9, the ITG also clarified the points below:



How to determine the weighting for multiple macro-economic factors

IFRS 9 did not prescribe the mechanism in determining how to weight the probability of different scenarios. Therefore, Management should apply judgement based on various facts and circumstances and needs to periodically re-assess the judgement made.

Management may consider the points below when considering weighting the scenarios:



Example for measuring expected credit loss by incorporating forward-looking information: Single scenario

Entity A, a manufacturer, has a portfolio of trade receivables of \$30 million in 2019 and operates only in one jurisdiction. The customer base consists of a large number of small clients and the trade receivables are categorised by common risk characteristics that are representative of the customers' abilities to pay all amounts due in accordance with the contractual terms. The trade receivables do not have a significant financing component in accordance with IFRS 15, "Revenue from Contracts with Customers".

Entity A uses a provision matrix to determine the expected credit loss for the portfolio. The provision matrix is based on its historical observed loss rates over the expected life of the trade receivables and is adjusted for forward-looking estimates. In this case study, the unemployment rate is expected to rise because of a sudden economic downturn over the next year.

Below is the historical rate of unemployment in Entity A's jurisdiction and the loss rate of Entity A from 2014-2019. It expects that the unemployment rate will increase from 3.20% to 4.20%.

Year	2019	2018	2017	2016	2015	2014
Unemployment Rate (%)		3.40	3.20	3.10	2.90	2.80
Historical Loss Rate (%)		5.00	4.00	3.50	2.50	2.00
Difference between Unemployment Rate (A)	0.20	0.20	0.10	0.20	0.10	
Difference between Historical Loss Rate (B)	1.00	1.00	0.50	1.00	0.50	
Difference between Historical Loss Rate / Difference between Employment Rate (B/A)		5.00	5.00	5.00	5.00	

Entity A believes a higher unemployment rate will drive a higher loss rate over the life of the receivables proportionately. To adjust the historical loss rates to reflect the effects of the differences in current conditions and reasonable and supportable forecasts, Entity A estimates that the loss rate will increase by 5% point in each ageing bucket, based on its past experience when there were similar increases in unemployment. On that basis, Entity A estimates the following expected credit loss rate:

	Current	1-30 days past due	31-60 days past due	61-90 days past due	More than 90 days past due
Expected credit loss rate based on past 3 years average historical data	1.00%	2.00%	5.00%	9.00%	19.00%
Adjusted for Forward- Looking Information *	Increase in unemployment rate of 1% point will drive a 5% point increa the loss rate				
Adjusted expected credit loss rate	6.00%	7.00%	10.00%	14.00%	24.00%

* Management will need to assess the correlation of the macroeconomic factors to the expected loss rates.

Based on the analysis above, the calculation shows that for every 0.2% point increase in unemployment rate there is corresponding 1% point increase in historical loss rate.

Example for measuring expected credit loss by incorporating forward-looking information: Single scenario (Cont'd)

The trade receivables from the large number of small customers amount to \$30 million and are measured using the provision matrix.

	Gross carrying amount (\$)	Credit loss rate	Expected credit loss (\$)
Current	15,000,000	6.00%	900,000
1-30 days past due	7,500,000	7.00%	525,000
31-60 days past due	4,000,000	10.00%	400,000
61-90 days past due	2,500,000	14.00%	350,000
More than 90 days past due	1,000,000	24.00%	240,000
Total	30,000,000		2,415,000

Example for measuring expected credit loss by incorporating forward-looking information: Multiple scenarios

Entity B (based in the same jurisdiction as Entity A), a retailer, sells goods to customers which consist of a large number of small clients. Entity B has a portfolio of trade receivables of \$6 million in 2019.

Due to the COVID-19 pandemic, the entity identified that the domestic economy will be impacted by the necessary global and domestic actions taken to contain the outbreak. Based on the information collected, jurisdictional GDP growth is projected to be between -2.0% to 0.5% in 2020 against this highly challenging global economic outlook.

Based on the historical trend, the entity's historical loss rate and GDP do not have a linear relationship. Hence, Entity B develops two scenarios to reflect the possible effect of the GDP on the expected credit loss for its portfolio of receivables, as shown below:

Ageing bracket	Scenario	GDP growth rate *	Probability of scenario	Expected credit loss rate based on past 3 years average historical data		FLI adjustment	Expected credit loss rate (after incorporating FLI adjustment)		
	A	0.50%	35%	4%		8%	4.32%		
Current	В	-2.0%	65%	4%		17%	4.68%		
Current	Weight	ted average	expected credit	loss rate =	(35% x 4	5% x 4.32%) + (65% x 4.68%)			
				=	4.55%				
	A	0.50%	35%	7%	7%		7.56%		
1-30 davs	В	-2.0%	65%	7%		17%	8.19%		
past due	lue Weighted average expected credit loss rate =				(35% x 7	7.56%) + (65% :	x 8.19%)		
				=	7.97%				

Example for measuring expected credit loss by incorporating forward-looking information: Multiple scenarios (Cont'd)

	Gross carrying amount (\$)	Credit loss rate	Expected credit loss (\$)
Current	3,000,000	4.55%	136,620
1-30 days past due	2,000,000	7.97%	159,400
31-60 days past due	500,000	Xx%	Ххх
61-90 days past due	400,000	Xx%	Ххх
More than 90 days past due	100,000	Xx%	Ххх
Total	6,000,000		Ххх

To repeat the calculation for the remaining ageing bracket:

* Scenarios are developed based on the information obtained from Bank Negara Malaysia's Economy and Monetary Review 2019 (Source: <u>https://www.bnm.gov.my/ar2019/files/emr2019_en_full.pdf</u>)

Note: All the numbers in the examples are for illustrative purposes only and hence may not be realistic. The number of forward-looking information scenarios that an entity would use in practice may differ from the illustrative examples.





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Accounting for expected credit loss is likely to be a significant issue for many entities during the COVID-19 pandemic.

For further information on accounting for expected credit loss under IFRS 9, please contact your normal business advisor or Nigel MacPhail at Baker Tilly (BVI) Limited.

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Disclaimer

This IFRS Briefing is not intended to provide accounting or auditing advice and is not a comprehensive analysis of the subject matter. All relevant facts and circumstances need to be considered in making accounting and audit decisions.

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