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SLFRS 9, LKAS 32
Financial Instruments
Part 2

Chartered Accountancy
Strategic Level
Advanced Business Reporting (ABR)

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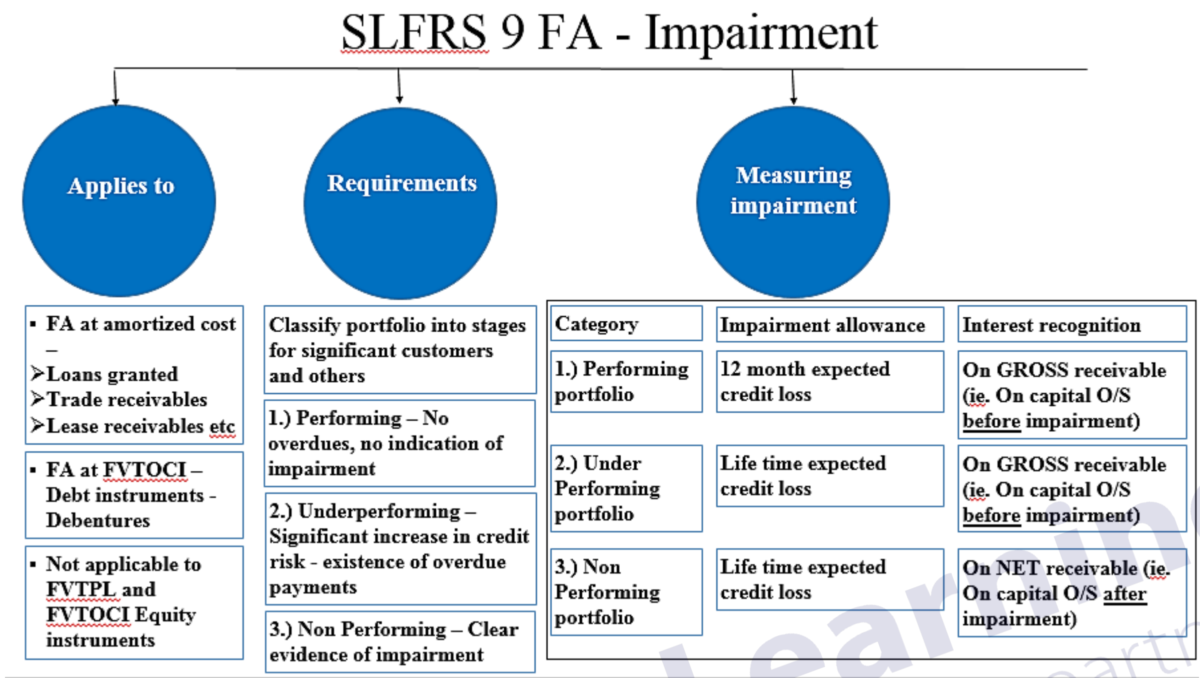
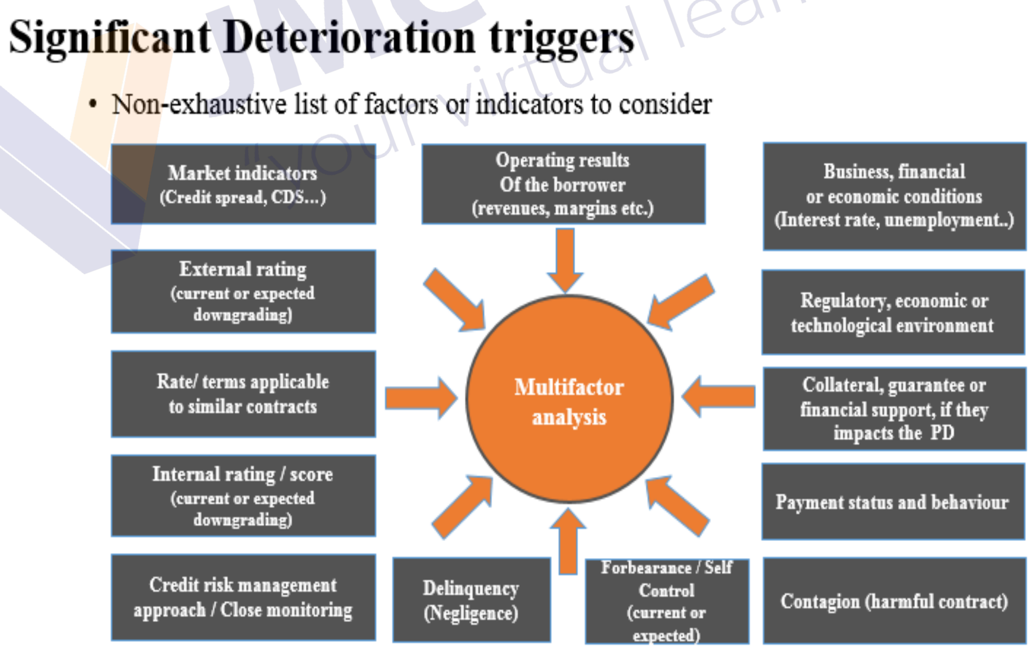
SLFRS 9 – Impairment / Derivatives / Hedge accounting

LKAS 32 – FI Presentation





SLFRS 9 FA - Impairment

Expected credit loss (ECL) measurement

- Use best available information
  - About past events
  - About current conditions
  - Reasonable and supportable forecasts
- Use unbiased and probability weighted estimate
- Consider time value of money

Calculation of ECL – using PD's

ECL = EAD x PD x LGD x DF

EAD = Exposure at default ie. Amount outstanding at the time of default taking place

PD = Probability of Default ie. The chance of default taking place

LGD = Loss Given Default ie. When default takes place the actual loss that occurs

DF = Discounting Factor ie. To bring the loss to present value

Illustration 1

Debtors owes a total of Rs. 100,000 to A Ltd and is due for payment in 1 year from now. Based on historical experience A Ltd estimates 15% of debtors will go bankrupt and by selling the assets they have A Ltd can recover 80% of the balance outstanding. Applicable discount rate is 10%

ECL = 100,000 x 15% x 20% x [1/(1+10%)^1]
= 2,727

Illustration 2 – Impairment of loan carried at amortized cost

Scenario – A Ltd granted a loan of 1,000 to B which is to be repaid in annual installments of 230 each over 6 years. The effective interest rate is 10%p.a.

	Description	Amount (Rs')
Year 1	Opening balance	1000
	Interest at 10%	100
	Repayments	(230)
	Closing balance	**870**

End of Year 1 – A Ltd concludes that there's NO significant increase in credit risk and categorizes the loan as Stage 1 – Performing. Therefore it measures expected credit losses based on 12 month ECL.
The 12 month PD is estimated at 2% while the lifetime PD is 5% and LGD is estimated at 90%.
At end of Year 1 A Ltd grants new loans at a rate of 12%p.a and the Treasury bill rate is 8%p.a.

ECL = (870 x 1.1) x 2% x 9% x [1/1.1]
= 15.66

Discount using Original Effective Rate (O/E/R)

Gross carrying amount loan = 870
Impairment provision = (15.66)
Net carrying amount of loan = 854.34

	Description	Amount (Rs')
Year 2	Opening balance	870
	Interest at 10%	87
	Repayments	(230)
	Closing balance	**727**

Interest calculated on gross carrying amount

End of Year 2 – A Ltd concludes that there IS a significant increase in credit risk and categorizes the loan as Stage 2 – Under Performing. Therefore it measures expected credit losses based on life time ECL.
The PD is estimated at 6% and LGD is estimated at 90%.

ECL = 727 x 6% x 90%
= 39.26

Gross carrying amount loan = 727
Impairment provision = (39.26)
Net carrying amount of loan = 687.74

	Description	Amount (Rs')
Year 3	Opening balance	727
	Interest at 10%	72.7
	Repayments	(150)
	Closing balance	**649.7**

Interest calculated on gross carrying amount

End of Year 3 – A Ltd concludes that there IS a significant increase in credit risk and there is objective evidence of impairment and categorizes the loan as Stage 3 – Non Performing. Therefore it measures expected credit losses based on life time ECL.
The PD is estimated at 70% and LGD is estimated at 90%.

ECL = 649.7 x 70% x 90%
= 409.31

Gross carrying amount loan = 649.7
Impairment provision = (409.31)
Net carrying amount of loan = 240.39

	Description	Amount (Rs')
Year 4	Opening balance	240.39
	Interest at 10%	24.04
	Repayments	(50)
	Closing balance	**214.43**

Interest calculated on NET carrying amount

End of Year 4 – A Ltd concludes that there still IS a significant increase in credit risk and there is objective evidence of impairment and continues to categorize the loan as Stage 3 – Non Performing. Therefore it measures expected credit losses based on life time ECL.
The PD is estimated at 70% and LGD is estimated at 90%.

Gross carrying amount = 649.7 + 24.04 + (50) = 623.74
ECL = 623.74 x 70% x 90%
= 392.96

Gross carrying amount loan = 623.74
Impairment provision = (392.96)
Net carrying amount of loan = 230.78

Summary of Financial statements

S/F/P Item	Year 0	Year 1	Year 2	Year 3	Year 4
Gross amount	1000	870	727	649.70	623.74
Impairment provision	-	(15.66)	(39.26)	(409.31)	(392.96)
Net carrying amount	1,000	854.34	687.74	240.39	230.78

S/P&L Item		Year 1	Year 2	Year 3	Year 4
Interest income		100	87	72.70	24.04
Impairment (provision) / reversal		(15.66)	(23.60)	(370.05)	16.36
Net effect to Profit		84.34	63.40	(297.35)	40.39

Illustration 3 – Impairment of Debt instrument carried at FVTOCI

Scenario – X Ltd purchased debentures DEF PLC at a price of 5,000. the coupon rate was 10% and the effective rate was 13%. The face value was 6,000

	Description	Amount (Rs')
Year 1	Opening balance	5,000
	Interest at 13%	650
	Coupon interest	(600)
	Closing balance	**5,050**

End of Year 1 –
The fair value of the debenture was 4,800 due to market circumstances.
X Ltd concludes that there's NO significant increase in credit risk and categorizes the debenture as Stage 1 – Performing financial asset. Therefore it measures expected credit losses based on 12 month ECL.
The 12 month PD is estimated at 4% and life time PD is estimated at 12% LGD is estimated at 80%.

ECL = 5,050 x 4% x 80% = 161.6

Amortized cost = 5,050
Impairment provision = (161.6)
Amortized cost after impairment = 4,888.4

Amortized cost after Impairment = 4,888.4
Fair value = 4,800
FV adjustment (loss) in OCI = (88.4)

	Description	Amount (Rs')
Year 2	Opening balance	5,050
	Interest at 13%	657
	Coupon interest	(600)
	Closing balance	**5,107**

End of Year 2 –
The fair value of the debenture was 4,850 due to market circumstances.
X Ltd concludes that there's NO significant increase in credit risk and categorizes the debenture as Stage 1 – Performing. Therefore it measures expected credit losses based on 12 month ECL.
The PD is estimated at 5% and LGD is estimated at 80%.

ECL = 5,107 x 5% x 80% = 204.26

Amortized cost = 5,107
Impairment provision = (204.6)
Carrying amount after impairment = 4,902.24

Carrying amount after Impairment = 4,902.24
Fair value = 4,850
FV adjustment (loss) in OCI = (52.24)

Summary of Financial statements

S/F/P Item	Year 0	Year 1	Year 2
Gross amount	5000	5,050	5,107
Impairment provision	-	(161.60)	(204.26)
Amortized cost	5,000	4,888.40	4,902.24
FV adjustments	-	(88.40)	(52.24)
FV / Carrying amount	5,000	4,800	4,850

S/P&L Item		Year 1	Year 2
Interest income		650	657
Impairment (provision) / reversal		(161.60)	(42.66)
Net effect to Profit for the period		**488.40**	**613.84**
OCI			
FV change in FA carried at FVTOCI		(88.40)	36.16

LKAS 32 FI - Presentation

Equity or Liability?

Contractual obligation to pay cash (either Principal or Interest / return) ?
- Yes → **Financial Liability**
- No → **Contract to be settled in fixed number of equity instruments**
  - No → **Financial Liability**
  - Yes → **Equity instrument**

Exceptions – certain puttable instruments

Puttable instruments requires the issuer to redeem the instrument on the exercise of the put

These instruments are classified as equity if,

- **Entitles holder to net assets on liquidation**
- **Ranks below all other instruments**
- **Returns are based on profit or losses**

Compound Instruments

Such as Convertible Debentures

Split the initial value between liability component & equity component

Liability component = PV of CF discounted using interest rate of a similar instrument without the conversion option

Equity Component = Balance amount = Issue value less liability component

Illustration

GEF Ltd on 1st Jan 2020 issued a debentures worth 10,000 at a coupon interest of 7% p.a. These debentures carry a conversion option where on the maturity date these can be converted to 100 shares or be settled in cash. The maturity date is 31st Dec 2023.

A debenture of a similar company without the conversion option would have a coupon interest of 10% p.a.

GEF incurred transaction cost of 100 on the issue of these debentures

Step 1 - Calculation of liability component
PV of CF discounted using interest rate of a similar instrument without the conversion option

Year	CF	DF @10%	PV
1	700	0.909	636
2	700	0.826	579
3	10,700	0.751	8,039
			9,254

Step 2 - Calculation of equity component
The balance amount
10,000 – 9,254 = 746

Step 3 – Allocation of transaction cost between equity and liability components

To liability component = 100 x (9,254/10,000) = 92.54
To equity component = 100 x (746/10,000) = 7.46

Step 4 – Recalculate effective interest rate on liability component

Initial value of liability component = 9,254 – 92.54 = 9,161.46

Effective rate that makes PV of CF equal to 9,161.46 = 10.40%

Step 5 – Accounting for the instrument on the issue date

Cash	**Dr**	**10,000 – 100 = 9,900**
Liability – Debenture	**Cr**	**= 9,161.46**
Equity option	**Cr**	**= 746**
Retained earnings	**Dr**	**= 7.46**

Step 6 – Subsequent accounting for liability component

Date	Description	Amount
1.1.2020	Opening balance	9,161.46
2020	Interest at 10.40%	952.37
31.12.2020	Coupon interest payment	(700)
31.12.2020	**Balance**	**9,413.83**
2021	Interest at 10.40%	978.60
31.12.2021	Coupon interest payment	(700)
31.12.2021	**Balance**	**9,692.43**
2022	Interest at 10.40%	1,007.57
31.12.2022	Coupon interest payment	(700)
31.12.2022	**Balance**	**10,000.00**

Step 7 – Financial statements extract

S/F/P as at	1.1.2020	31.12.2020	31.12.2021	Before settlement 31.12.2022	Option 1 - Settlement - by Cash	Option 2 - Settlement - by shares
Assets						
Cash	+ 9,900				(-) 10,000	-
Equity						
Share capital	XXX					XXX + 10,000 + 746
Retained earnings	XXX - 7.46				XXX + 746	XXX
Equity option	746	746	746	746	-	-
Liabilities						
Debentures	9,161.46	9,413.83	9,692.43	10,000	-	-

S/P&L for the year ended		31.12.2020	31.12.2021	31.12.2020	Total
Finance cost					
Interest on debentures		(952.37)	(978.60)	(1,007.57)	**(2,938.54)**
Profit before tax		**XXX**	**XXX**	**XXX**	**XXX**

SLFRS 9 – Derivatives

SLFRS 9 FI - Derivatives

Definition

- Requires little or no initial investment
- Value changes based on an underlying variable such as interest rate / exchange rate
- To be settled at a future date

Examples

- Forward exchange contracts
- Interest rate swaps

Accounting

- At fair value in the SFP
- Changes in fair value recognized in P&L

Illustration 1 – Forward Exchange Contract

On 1 Jan 2020

ABC Ltd ← Bank of America

Obtains a loan of USD 1 Repayable on 31 Dec 2020

Exchange rate 1 USD : 100 LKR

ABC is not certain of the exchange rate on 31 Dec 2020 Therefore enters into a contract with HSBC Sri Lanka to buy 1 USD on 31 Dec 2020 at 124

This safeguards ABC from any unexpected movement in exchange rates
Regardless of the exchange rate on 31st Dec 2020, ABC has the right / commitment to purchase 1 USD at 124 from HSBC

On 31 Mar 2020 exchange rate increases to 1 USD : 130 LKR

On this date if a 3rd party requests a quote from HSBC to buy 1 USD on 31st Dec 2020, HSBC will quote a rate of 1 USD : 148 LKR

This results in an advantageous position to ABC and their contract to purchase 1 USD on 31 Dec 2020 will have a value

This happens due to change in exchange rates. At the start of the contract ABC did not incur any expenses and the contract is to be settled in the future.

Therefore this forward exchange contract satisfies the conditions to be a derivative

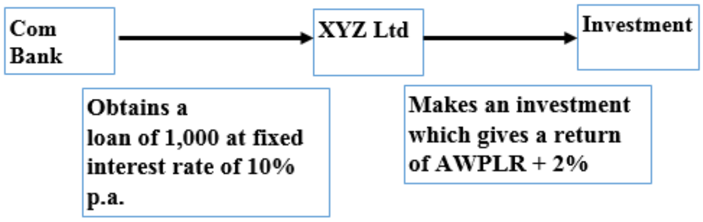
Summary of Financial statements

Description	Calculation reference	As at 1 Jan 2020	As at 31 Mar 2020	As at 30 June 2020	As at 30 Sep 2020	As at 31 Dec 2020
Exchange rate 1 USD : LKR	A	100	130	140	132	150
Forward exchange rate to buy 1 USD on 31 Dec 2020	B	124	148	152	138	150
Contracted rate by ABC Ltd	C	124	124	124	124	124
Value of the forward exchange contract	D = B - C	-	24	28	14	26
Amount of USD contracted to purchase	E	1	1	1	1	1
Total value of the contract	F = D x E	-	24	28	14	26
Change in fair value	G = Change in value of F		24	4	(14)	12

S/F/P as at		As at 1 Jan 2020	As at 31 Mar 2020	As at 30 June 2020	As at 30 Sep 2020	As at 31 Dec 2020
Assets						
Derivative Asset	F	-	24	28	14	26
Liabilities						
FCY Loan	H = A x Loan amount	100	130	140	132	150

S/P&L for the quarter ended			31 Mar 2020	30 June 2020	30 Sep 2020	31 Dec 2020	Total for 2020
Other income and expenses							
FV change in derivative	I = G		24	4	(14)	12	26
Exchange gain / (loss) on FCY loan	J = Change in value of FCY loan		(30)	(10)	8	(18)	(50)
Net effect to profit for the period	**K = I + J**		**(6)**	**(6)**	**(6)**	**(6)**	**(24)**

Illustration 2 – Interest rate swap

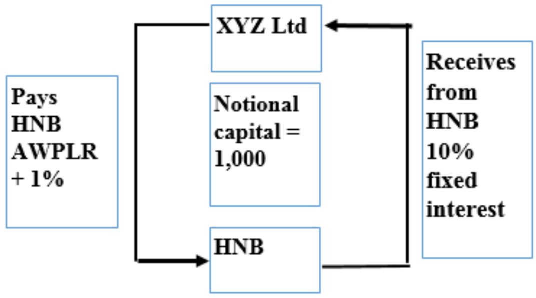


The period of the loan and investment is 5 years

Current AWPLR = 9%

XYZ is not certain of the interest rate in the future and if the interest rate (AWPLR) drops below 8% they will incur losses.

To safeguard them from this risk they enter into the following contract



This results in XYZ being safeguarded from the changes in the AWPLR

Whatever the AWPLR is XYZ will always have a 1% margin over it

Through this arrangement XYZ has SWAPPED its fixed interest loan from Com Bank to a variable interest loan. This is called an Interest Rate Swap (IRS)

Cashflows arising from the Interest Rate SWAP

Description	Calculation reference	2020	2021	2022	2023	2024
AWPLR (at the beginning)	A	9%	13%	6%	17%	3%
Income - Interest received						
From Investment - AWPLR + 2%	B = 1,000 x (AWPLR + 2%)	110	150	80	190	50
From HNB - Fixed at 10%	C = 1,000 x 10%	100	100	100	100	100
Expense - Interest paid						
To Com Bank - Fixed at 10%	D = 1,000 x 10%	(100)	(100)	(100)	(100)	(100)
To HNB - AWPLR + 1%	E = 1,000 x (AWPLR + 1%)	(100)	(140)	(70)	(180)	(40)
Net effect to Profit for the period	**F = B + C + D + E**	**10**	**10**	**10**	**10**	**10**

Measuring and accounting for the FV changes in the IRS

Description	1.1.2020	31.12.2020	31.12.2021	31.12.2022	31.12.2023	31.12.2024
FV or IRS - Asset / (Liability)	-	(120)	75	(150)	60	-
FV change to be recognized in P&L		(120)	195	(225)	210	(60)

Generally measured at PV of expected cash flows from the IRS

Cashflows could either be positive or negative. If expected cash flows are positive the FV of the IRS is an Asset and if the expected cashflows are negative the FV of the IRS is a liability

Hedge Accounting

Definition

- Hedge – Action of managing a risk

- Hedge item – item that is exposed to the risk the entity has chosen to Hedge

- Could be,
- Recognised asset or liability or
- Unrecognised firm commitment
- Highly probable forecast transaction
- Net investment in a foreign operation

- Hedge instrument – instrument used to minimize the risk – such as, Derivative with third parties

Types of hedges

- Fair value hedge

- Hedge of exposure to changes in fair value of,
  - ✓ a recognised asset or liability / an unrecognised firm commitment
  - ✓ that is attributable to a particular risk
  - ✓ could affect profit or loss

- Cashflow hedge

- Hedge of exposure to variability in cash flows that is,
  - ✓ attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction
  - ✓ could affect profit or loss

Hedge Accounting

Accounting

- Hedge accounting is voluntary

- **Fair value hedge –**
  e.g.- FV hedge on bond prices

- **Change in FV of Hedge Item and Hedge Instrument accounted in P&L**

- **Except where the hedge item is an equity instrument where the entity has chosen the FVTOCI option – in this case the FV changes are reflected in OCI**

- **No segregation as effective and ineffective**

- **Cashflow hedge –**

E.g.
- using an interest rate swap to hedge the interest rate risk of a floating rate interest-bearing asset or liability
- using a forward contract to hedge the foreign currency risk of foreign currency denominated future operating lease or payroll payments;
- using a forward contract to hedge the commodity price risk of highly probable forecast purchase or sale transactions.

- **Change in FV of Hedge Item and Hedge Instrument accounted in OCI – if EFFECTIVE**

- **If INEFFECTIVE – the ineffective portion is transferred to P&L**

- **A CashFlow Hedge Reserve (CFHR) is created in equity which will be the lower of (in absolute amounts)**
  - ✓ **Cumulative gain/loss on the hedge INSTRUMENT from inception of the hedging relationship**
  - ✓ **Cumulative change in FV of the Hedge ITEM from inception of the hedging relationship**

- **The remaining component of FV change after adjusting the CFHR as above is recognized in P&L – this is the INEFFECTIVE portion**

Hedge Accounting

Hedge accounting criteria

- Only on eligible Hedge ITEMs and Hedge INSTRUMENTS
- At the inception of the hedge formal designation and documentation is required. Documentation should include,
- Hedge relationship and the entity's risk management objective and strategy
- Identification of the hedged ITEM and INSTRUMENT
- The nature of the risk being hedged and how the entity will measure the hedge effectiveness

Flexibility in determining the type of hedge

- A hedge of the foreign currency risk of a firm commitment may be designated as a fair value hedge or as a cash flow hedge
- A forward contract to buy foreign currency may be designated as the hedging instrument in a fair value hedge of a foreign currency financial liability, or alternatively in a cash flow hedge of the forecast settlement of that liability
- A receive-fixed - pay-floating interest rate swap may be designated as a fair value hedge of a fixed interest liability or as a cash flow hedge of a variable interest asset.