REFRESHER COURSE ON IND AS

Ind AS 32

4th May 2022

Faculty : CA R. Venkata Subramani
Western India Regional Council, ICAI

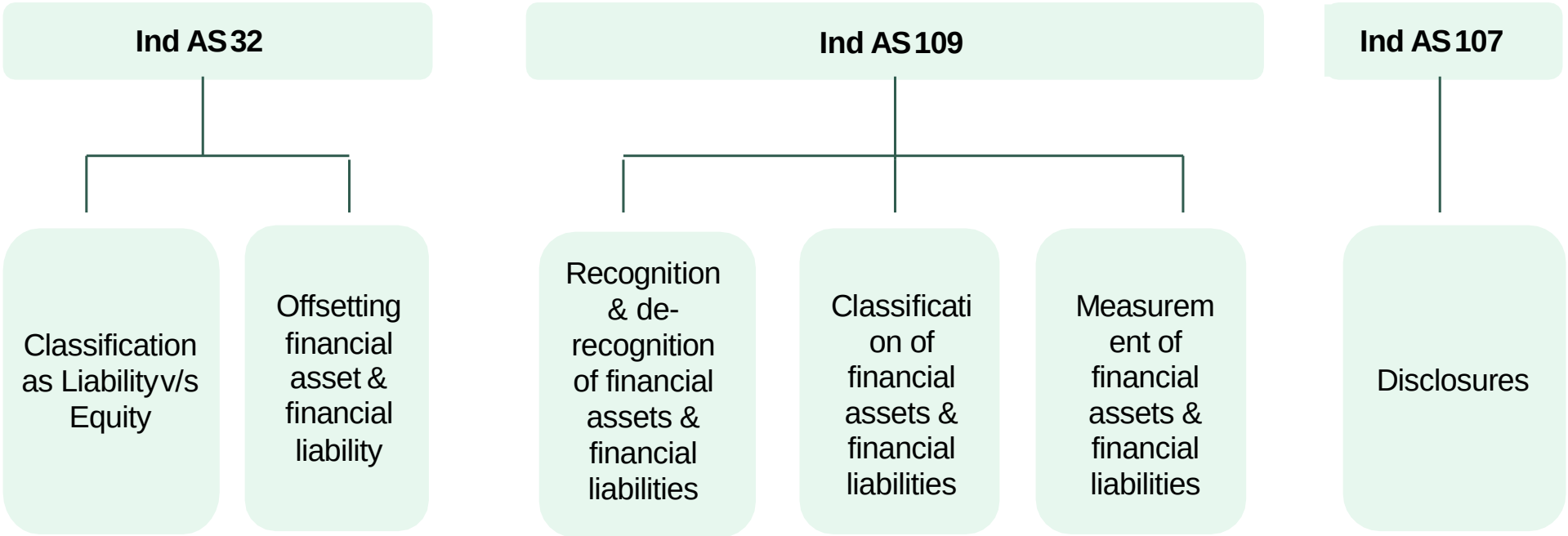
GENESIS OF THE STANDARDS

Ind AS Course
ICAI

		2002	Rule based standard	US GAAP
iGAAP	**IFRS**	2008	Principle base standard	IFRS
AS 30	IAS 39, IFRS 9			
AS 31	IAS 32	2009	Classification &	
AS 32	IFRS 7	2010	Measurement	
		2013	Hedge Accounting	
		2014	Impairment	

FINANCIAL INSTRUMENTS STANDARDS

Ind AS Course
ICAI



Financial Assets **Financial Liabilities**

Equity

FINANCIAL ASSET

Ind AS Course
ICAI

Definition of financial asset as per Ind AS 32

- Cash
- Equity instrument of another entity
- A contractual right
  - to receive cash or another financial asset from another entity
  - to exchange financial assets or financial liabilities with another entity under conditions that are potentially favorable to the entity (example: Purchased call or put options)
- A contract that will/may be settled in the entity's own equity instruments and is
  - A non-derivative resulting in receiving a variable number of the entity's own equity instruments
  - A derivative that will/may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of entity's own equity instruments

FINANCIAL ASSET

When it is a financial asset?

Receivable	Financial Asset		
Cash	500,000		
Own Shares	Rate per share	No of shares	Value obtained
Today	100	5,000	500,000
Settlement date #1	125	4,000	500,000
Settlement date #2	80	6,250	500,000

EQUITY

When it is a Equity?

Receivable	Equity		
Cash	500,000		
Own Shares	Rate per share	No of shares	Value obtained
Today	100	5,000	500,000
Settlement date #1	125	5,000	625,000
Settlement date #2	80	5,000	400,000

FINANCIAL & NON-FINANCIAL INSTRUMENTS

Ind AS Course
ICAI

Financial instruments

- Cash
- Investment in shares
- Receivables
- Loans to other entities
- Investments in bonds
- Deposits
- Derivative financial assets
- Trade receivables/ payables
- Interest Rate Swaps

Non-financial instruments

- Inventories
- Plant and machinery
- Property
- Other intangible assets
- Prepaid expenses
- Advance for goods/ services
- GST Input Tax Credits
- Advance tax/ IT refund
- Export entitlements

IDENTIFY FINANCIAL ASSETS

Ind AS Course
ICAI

Instruments	Yes	No
1. Bank Balance	✓	
2.Shares of subsidiary companies	✓	
3. Advance given for purchase ofgoods		✓
4. Investment in perpetual debt carrying interest atfixed rate	✓	
5. Prepaid expense		✓
6. Deferred tax asset		✓
7. Lease deposit paid	✓	

CONTRACT TO DEAL IN NON-FINANCIAL ASSETS

Contract to deal in non-financial assets is not a financial instrument

- A futures contract to deal with non-financial asset is also not a financial instrument
- Commodity contracts settled only by physical delivery of a non-financial item are not financial instruments
- However, contracts to buy or sell non-financial items are within the scope of these standards provide as if it were financial instruments
  - It can be settled net or
  - by exchanging financial instruments, or
  - is readily convertible to cash

FINANCIAL LIABILITY

Definition of a financial liability

A contractual obligation

- to deliver cash or another financial asset to another entity
- to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavorable to the entity (example: written call or put options)

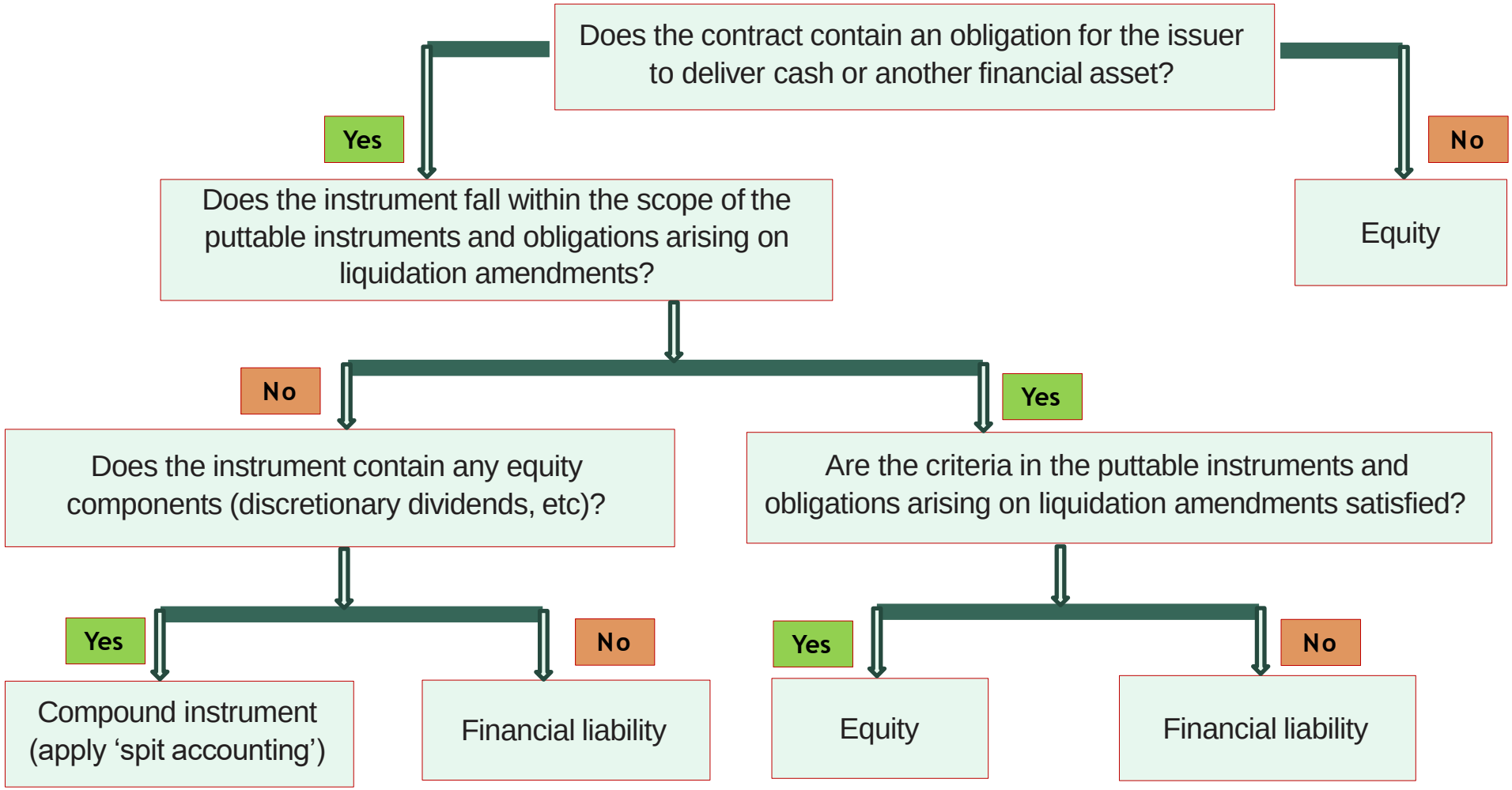
A contract that will/may be settled in the entity's own equity instruments and is

- A non-derivative resulting in delivering a variable number of the entity's own equity instruments
- A derivative that will/may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of entity's own equity instruments

IDENTIFY FINANCIAL LIABILITIES

Ind AS Course
ICAI

Instruments	Yes	No
1. Tax liability		✓
2. Finance lease obligations	✓	
3. Non-refundable revenue received in advance		✓
4. Non-refundable advance received against saleof government securities	✓	
5. Liability for damages under a lawsuit		✓
6. Deferred Revenue		✓
7. Financial guarantees given	✓	


Does the contract contain an obligation for the issuer to deliver cash or another financial asset?
Yes
No
Does the instrument fall within the scope of the puttable instruments and obligations arising on liquidation amendments?
Equity
No
Yes
Does the instrument contain any equity components (discretionary dividends, etc)?
Are the criteria in the puttable instruments and obligations arising on liquidation amendments satisfied?
Yes
No
Yes
No
Compound instrument (apply 'spit accounting')
Financial liability
Equity
Financial liability

OBLIGATIONS TO DELIVER CASH

Examples of contractual obligations to deliver cash or another financial asset to the holder of an instrument

- Redeemable shares – a fixed redemption date or redemption at the holder's discretion typically results in liability classification
- Mandatory dividends – a contractual obligation exists where distributions on an instrument are not at the issuer's discretion
- Distributions of a specified percentage of profits – distributions are not at the issuer's discretion where the terms and conditions of an instrument contain a formula under which a specified percentage of profits must be paid to the holder

POTENTIALLY UNFAVOURABLE

What is meant by potentially unfavourable?

- A contract to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavorable to the entity is financial liability
- All written options - call or put options are financial liabilities at all times
- The buyer of the option would exercise the option if it is favourable to the buyer meaning it is unfavourable to the seller or writer of the option contract

WRITTEN OPTIONS – FINANCIAL LIABILITY

Written options are always a financial liability

Written call option:

- Represents the obligation, if exercised, to sell an item at a specific price
- Always remains a liability till the date of expiry when it may become an income

Written put option:

- Represents the obligation if exercised, to purchase an item at a specified price
- Always remains a liability till the date of expiry when it may become an income

EQUITY INSTRUMENTS

Definition of an equity instrument

An instrument is an equity instrument if, and only if, both conditions are met

- The instrument includes **no contractual obligation**:
- to deliver cash/financial asset or to exchange financial assets/liabilities with another entity under conditions that are potentially unfavorable to the issuer

If the instrument will or may be settled in the issuer's own equity instruments, it is:

- a non-derivative that includes no contractual obligation for the issuer to deliver a variable number of its own equity instruments; or
- a derivative that will be settled only by the issuer exchanging a fixed amount of cash or another financial asset for a fixed number of its own equity instruments

EQUITY INSTRUMENT

Definition of an equity instrument

Any contract that evidences a residual interest in the net assets of an entity

Examples

- Equity shares
- Preference shares (if certain criteria are met)
- Warrants
- Written call options to issue fixed number of equity shares for a fixed price

LIABILITY VS. EQUITY

Issuer to classify issuance into component parts - Equity and/or Liability

- An issuer of a financial instrument must classify the instrument or its component parts:
- On initial recognition as financial liability/financial asset/equity
- In accordance with the substance of the contractual arrangement
- Based on definitions of financial liabilities/financial assets/equity
- Does the entity have an unavoidable contractual obligation?
  - If 'Yes' then it is Liability
  - If 'No' then it is Equity
- A contract that will be settled by the entity (receiving or) delivering a fixed number of its own equity instruments in exchange for a fixed amount of cash or another financial asset is an equity instrument

LIABILITY VS. EQUITY – SECOND CONDITION

Ind AS Course
ICAI

Equity Vs. Liability

A contract is not an equity instrument solely because it may result in the receipt or delivery of the entity's own equity instrument

Two examples

- a contract to deliver as many of the entity's own equity instruments as are equal in value to Rs.1000
- a contract to deliver as many of the entity's own equity instruments as are equal in value to the value of 1 Kilogram of gold
- It is not an equity instrument because the entity uses a variable number of its own equity **instruments (as a currency)** as a means to settle the contract
- Such contract does not evidence a residual interest in the entity's assets after deducting all its liabilities

LIABILITY VS. EQUITY

Criteria for Classification of an instrument as equity or financial liability

Classification of an instrument as equity or a financial liability is not impacted by, for example:

- A history of making distributions
- An intention to make distribution in the future
- A possible negative impact on price of the issuer's ordinary shares if distributions are not made
- The amount of the issuer's reserves
- An issuer's expectations of a profit or loss for a period
- An ability or inability of the issuer to influence the amount of its profit or loss for the period

CASE STUDY

- Company A issues a non-redeemable callable bond with a fixed 8% coupon.
- Coupon can be deferred in perpetuity at the A's option
- A has a history of paying the coupon each year and based on this trend current bond price is predictable on the holders expectation that the coupon will continue to be paid each year
- Stated policy of A says that the coupon will be paid each year, which is available in public domain
- Whether the bond should be classified as liability or equity?

CASE STUDY

Ind AS Course
ICAI

- Entity A issues undated preference shares with 6% dividend. has a credit rating of AA
- The market rate interest is 5.5%.
- The shareholders may not redeem the preference shares. However, Entity A may repay them after the 5th year.
- After the fifth year (if not repaid by Entity A), the annual dividend on the preference shares will be stepped up to 20% (cumulative)
- Entity A has full discretion on dividend distributions. However, it may not pay dividend on its ordinary shares before paying the dividend on the preference shares.

- In substance, Entity A has an obligation to redeem the shares in the fifth year as the entity can replace it with a cheaper finance.
- The preference shares should be **classified as equity instruments** since the entity has no contractual obligation to redeem or to pay dividends.
- The fact that not paying dividend may have serious effects on the entity's share price and on its reputation does not negate the equity classification.

CONTRACTUAL OBLIGATION TO DELIVER CASH

Situation

ABC Limited has a strong history of dividend. The subscribers to these shares expect the regular dividend pay out and it is highly probable that the Company will be pay the dividend on regular basis.

- Whether the payment of dividend is a financial liability?

Response

- There is **no contractual obligation** on ABC limited to pay cash or any other financial assets. Thus, the payment of dividend is not a financial liability.
- Thus, liability and equity classification shall be based on contractual rights and obligations. Aspects such as probability of outflow or constructive obligation due to market expectations are not considered.

CONTINGENT SETTLEMENT PROVISIONS

Ind AS Course
ICAI

Contingent settlement provisions

A financial instrument may require delivery of cash depending on occurrence or non- occurrence of uncertain future events.

- If the events are beyond the control of issuer and holder:
  - The issuer does not have the unconditional right to avoid delivering cash of another financial asset.
- The instrument is a

liability Unless:

a) The part of the contingent settlement provision that could require settlement in cash or another financial asset is not genuine; or

b) The issuer can be required to settle the obligation in cash or another financial asset only in the event of liquidation of the issuer.

CASE STUDY

How would the entity classify the instrument under Ind AS 32?

- A cumulative convertible bond, whose interest payments are at the discretion of the entity.
- However, it contains a clause that states that instrument (including all unpaid cumulative interest) will become mandatorily payable if there is not an IPO by the end of 3 years from the instrument's issuance date.
- Although it may be within the entity's control to determine whether IPO is attempted, market and regulatory forces determine whether any **attempt is successful**
- These forces are beyond the control of the entity, therefore redemption upon an IPO event not occurring meets the definition of a contingent settlement event and results in the bond being **classified as a financial liability from inception.**

CASE STUDY

Ind AS Course
ICAI

- An entity has issued two instruments.
- The first instrument is mandatorily redeemable and pays a mandatory fixed coupon, so it is classified as a financial liability in accordance with Ind AS 32.
- The second instrument has no mandatory payments, except that it is mandatorily redeemable if there is an event of default on the first instrument.
- The event of default on the first instrument is a contingent settlement provision that makes the second instrument a financial liability of the issuer.
- Adequate resources are required to make the payments when contractually due for any instrument
- The availability of adequate resources depends primarily on the future revenue and income of the entity.
- **Revenues and net income are not within the control of the entity**
- Mandatory redemption in the event of default meets the definition of a genuine contingent settlement provision, which results in the **second instrument being classified as a financial liability.**

TRANSACTIONS IN OWN EQUITY

Ind AS Course
ICAI

When is an issuance a financial liability?

- An instrument would be a financial liability of the issuer, if it gave the holder right to obtain:
  - **Variable number of non-puttable ordinary shares** of the issuer for **fixed amount** of cash/ other financial asset; or
  - **Fixed number of non-puttable ordinary shares** of the issuer for **variable amount** of cash/ other financial asset
- Net-Settled contracts are contracts settled by payment of difference between the fair value, at the time of settlement, of the equity instrument and that of the consideration given

SETTLEMENT IN OWN EQUITY INSTRUMENTS

Ind AS Course
ICAI

Contract settled in entity's own shares	Monetary value of consideration*	Number of equity shares	Classification
Scenario 1	Fixed	Variable	Financial liability
Scenario 2	Variable	Variable	Financial liability
Scenario 3	Variable	Fixed	Financial liability
Scenario 4	Fixed in a currency other than the entity's functional currency	Fixed	Financial liability
Scenario 5	Fixed	Fixed	Equity

Case Study - Settlement in own equity instruments

1) ABC Limited enters into a contract to deliver 5,000 of its own ordinary shares to a third party in settlement of an obligation.

2) PQR Limited enters into a contract which require to settle a contractual obligation using its own shares in an amount that equals the contractual obligation.

Case Study - Settlement in own equity instruments

1) **Since the number of shares is fixed in the contract to meet the obligation, it is an equity instrument. There is no obligation to transfer cash, another financial asset or an equivalent value.**

2) **Since the number of shares to be issued will vary depending on the MP of the shares at the date of the contract or settlement. If the contract was agreed at a different date, a different number of shares may be issued. Although cash will not be paid, the equivalent value in shares will be transferred. The contract is a financial liability.**

Case Study - Settlement in own equity instruments

3) XYZ Limited has an option contract to buy gold. If exercised, it will be settled, on a net basis, in the company's shares based on the share price at the date of settlement.

Case Study - Settlement in own equity instruments

3) Since the Company has an option to buy gold, the contract is a derivative contract and to be recognized as a financial assets or liability. However, the Company has to issue the variable number of shares in both cases, therefore it is a financial liability.

SETTLEMENT WITH OWN EQUITY INSTRUMENT

Ind AS Course
ICAI

Settlement with own equity instrument when it is a derivative contract

- R. Ltd. purchases a call option from Z Ltd. on 1,000 of R's shares with a strike price of Rs.103 per share for a premium of Rs.6
- The call option expires in 6 months' time
- The current share price is Rs.100. The price of R's shares shot up to Rs.110 just before the expiry of the call option
- How is this transaction accounted?

EXAMPLE - 1

Settlement with own equity instrument when it is a derivative contract

Solution

- Here the settlement is through own equity instrument and the contract is a derivative contract
- The contract will be settled by exchanging a fixed sum for a fixed number of its own equity instrument
- This satisfies all the condition of an equity instrument

EXAMPLE - 1

Settlement with own equity instrument when it is a derivative contract

Solution:

- R Ltd. should debit the cost of the premium to equity as follows:

  Dr Equity Rs.6,000
  Cash Rs.6,000

- Changes in fair value of R's call option are not recognized since the terms of the option are such that it meets the definition of an equity instrument (a fixed number of shares is required to be delivered for a fixed amount of cash. Here the amount is fixed as the strike price of the derivative contract)

EXAMPLE - 1

Settlement with own equity instrument when it is a derivative contract

Solution:

- When R exercises the option, Z would deliver 1,000 of R's shares to R for Rs.103,000 in cash and R should record the following journal entry:

  Dr Equity Rs.103,000
  Cr Cash Rs.103,000

- Price of R's share being Rs.110 at the time of exercise of the option has no relevance for this entry except to the extent of deciding to exercise the call option

EXAMPLE - 2

Settlement with own equity instrument when it is a non-derivative contract

- T Ltd. issues a debt for Rs. 10,00,000
- The debt will be repaid using its equity shares to the value of Rs.10,00,000

- The number of T's shares required to settle the obligation will vary with the change in T's share price
- However, the fair value of the equity instruments to be delivered will always be equal the amount of the contractual obligation Rs.10L
- Consequently, the holder is not exposed to changes in T's share price
- The holder does not hold a residual interest in the entity
- The instrument is a liability in accordance with the financial liability definition

LIABILITIES VS. EQUITY – PREFERENCE SHARES

Ind AS Course
ICAI

Mandatorily redeemable/ redeemable at the option of the Holder	Others - Redeemable at the option of the Issuer
▶ Classified financial Liability	▶ Classified as Equity as there is no obligation for redemption
▶ If dividends are payable at the option of issuer, preference shares also contain as equity element and have to be treated as compound instrument and "split" accounted	▶ If there are contractual rights to dividends, preference shares also contain financial liability element and have to be treated as compound instrument and "split" accounted

OPTIONS OVER OWN EQUITY INSTRUMENTS

Ind AS Course
ICAI

Treatment of options over own equity instruments (settled gross by receipt or delivery of own equity instruments)

1. Written call option 2. Purchased put option 3. Purchased call option over own equity instruments	→ The derivative qualifies as an equity instrument if the 'fixed for fixed' test is met. Else the derivative should be accounted for as per Ind AS 109
1. Written put option over own equity instruments	→ Record financial liability for the present value of the redemption amount irrespective of whether the derivative itself qualifies as an equity instrument

EXAMPLE

Writing put option over ones own shares

- On 1st April 2019, A Ltd writes a put option over 1,000 of its own equity shares for which it receives a premium of Rs.25,000 strike price Rs.325
- As per the terms A may be obliged to take delivery of 1,000 of its own shares in one year's time and to pay the option exercise price of Rs.3,25,000. The option can only be settled through physical delivery of the shares.
- The present value of Rs. 3,25,000 is Rs. 3,00,000
- How should A account for this transaction?

EXAMPLE

Writing put option over ones own shares

- Writing Put option involves Ataking delivery of a fixed number of equity shares for a fixed amount of cash.
- Ahas an obligation to deliver cash which it cannot avoid, even though it depends upon the holder exercising the put option
- The premium received should be taken to Equity
- The present value of the cash outflow should be treated as a liability
- Interest should be recognized on the liability

JOURNAL ENTRIES

Writing put option over ones own shares

Date	Particulars	Debit (Rs)	Credit (Rs)
1-Apr-19	Bank A/c	25,000	
	To Equity A/c		25,000

Date	Particulars	Debit (Rs)	Credit (Rs)
1-Apr-19	Equity A/c	3,00,000	
	To Liability A/c		3,00,000

Year end:

Date	Particulars	Debit (Rs)	Credit (Rs)
31-Mar-20	Interest Expense A/c	25,000	
	To Liability A/c		25,000

JOURNAL ENTRIES

Writing put option over ones own shares

On exercise of the option by the holder

Date	Particulars	Debit (Rs)	Credit (Rs)
31-Mar-20	Liability A/c	3,25,000	
	To Bank A/c		3,25,000

If option is not exercised

Date	Particulars	Debit (Rs)	Credit (Rs)
31-Mar-20	Liability A/c	3,25,000	
	To Equity A/c		3,25,000

REFRESHER COURSE ON IND AS

Convertible Instruments

4th May 2022

Faculty : CA R. Venkata Subramani
Western India Regional Council, ICAI

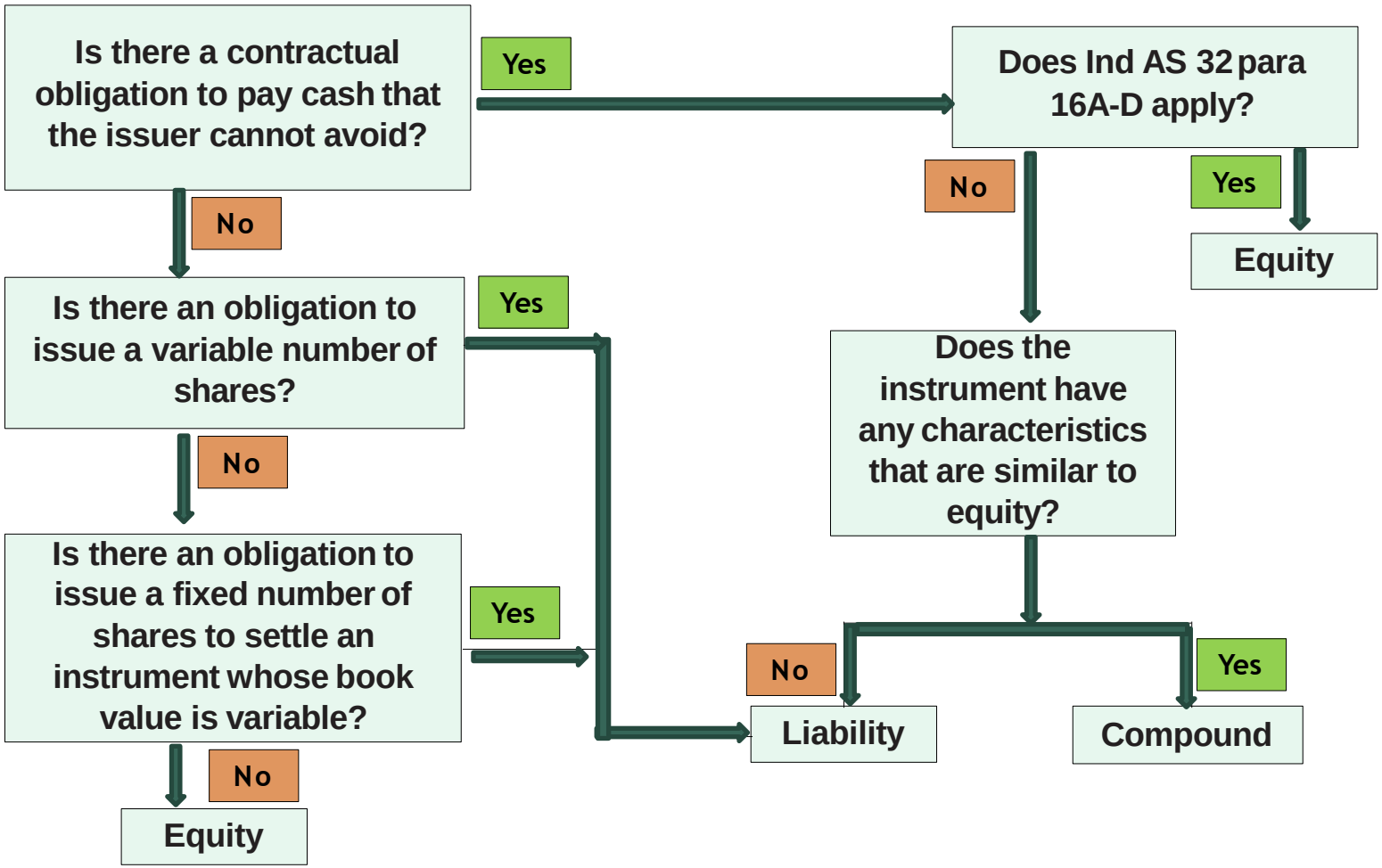
COMPOUND INSTRUMENTS

Compound instruments contain two components

- Compound instruments, have both a liability and an equity element
- The component parts should be separated from each other
- Each part accounted for and presented separately

A convertible bond contains two components

- One is a financial liability - obligation to pay the principal and interest
- The other is an equity instrument, a call option written to the holder to convert the debt security into common shares
- The separation of components is made at the time the instrument is issued and is not subsequently revised


Is there a contractual obligation to pay cash that the issuer cannot avoid?
Yes
Does Ind AS 32 para 16A-D apply?
No
Yes
Equity
No
Is there an obligation to issue a variable number of shares?
Yes
Does the instrument have any characteristics that are similar to equity?
No
Is there an obligation to issue a fixed number of shares to settle an instrument whose book value is variable?
Yes
No
Yes
Liability
Compound
No
Equity

CONVERTIBLE INSTRUMENTS

Compound instruments contain two components

- Convertible instruments are financial instruments that fall within the scope of Ind AS 32 “Financial Instruments: Presentation” and Ind AS 109 “Financial Instruments”.
- Generally, such instruments are either be classified as an equity or compound instrument or a hybrid instrument (liability with embedded derivatives)

CONVERTIBLE INSTRUMENTS

Compound instruments contain two components

- A derivative contract involving the delivery or receipt of
  - a fixed number of equity instruments for a variable amount of cash or another financial asset.
  - a variable number of own equity instruments for a variable amount of cash or other financial assets.
  - Net share or cash settled contracts is a financial asset or financial liability
- A derivative financial instrument with settlement options is a financial asset or liability unless all possible settlement options would result in classification as equity

CASE STUDY - EQUITY & DEBT COMPONENT

Ind AS Course
ICAI

Separation of compound financial instruments

Separation of a compound financial instrument on initial recognition

- An entity issues 2,000 convertible debentures at the start of year 1
- The debentures have a three-year term and are issued at par with a face value of Rs.1,000 per debenture, giving total proceeds of Rs.20,00,000
- Interest is payable annually in arrears at 7% p.a. Each debenture is convertible at any time up to maturity into 250 equity shares or the holder has an option either to receive a cash repayment of Rs.1,000 per debenture
- When the debentures are issued, the risk-free interest rate was 7.50% and the credit spread for the company (based on B rating) was 250 bps for three-year term.
- Assume the entity spent Rs.50,000 towards transaction costs for the issue

CASE STUDY - EQUITY & DEBT COMPONENT

Ind AS Course
ICAI

Component	Analysis	Classification
Cash payment of 7% annual coupon and principal repayment of Rs. 1,000	This component is a liability because: There is a contractual obligation to pay cash that the issuer cannot avoid This component is not a derivative	Liability
Conversion feature to convert Rs. 1,000 into 250 shares of the Entity A	There is no contractual obligation to pay cash This component may be settled by the entity issuing its own equity instruments if the option is exercised by the holder This component is a derivative because: Its value changes in response to the Entity A's share price It requires a net investment that is smaller than otherwise would be required It is settled on maturity date. The derivative may be settled by Entity A exchanging a fixed amount of cash (i.e. Rs. 1,000) for a fixed number of its own equity instruments (250 shares) Therefore, this component is equity.	Equity

CASE STUDY - EQUITY & DEBT COMPONENT

Measure liability first and the balancing figure is equity

- The liability component is measured first, and the difference between the proceeds of the debenture issue and the fair value of the liability is assigned to the equity component
- The present value of the liability component is calculated using a discount rate of 10%, the market interest rate for similar debentures having no conversion rights
- This is calculated as the total of the risk-free interest rate plus the credit spread for the company

TRANSACTION COSTS

Treatment of transaction costs

- For compound financial instruments, Ind AS 32 requires transaction costs to be allocated to the liability and the equity components in proportion to the allocation proceeds
- For equity: Transaction costs of an equity transaction are accounted for as a deduction from equity
- For financial liabilities that are not measured at fair value through profit or loss: Transaction costs are subtracted from the carrying amount of the financial liability

CASE STUDY - EQUITY & DEBT COMPONENT

Ind AS Course
ICAI

Allocation of transaction costs

Entity Ashould allocate the equity and debt component and also adjust the carrying amount of the components for Rs.50,000 incurred in transaction costs as follows:

Year	Principal	Interest	Total	Discount factor	Present value	Transaction costs	Net amount
1		1,40,000	1,40,000	0.90909	1,27,273		
2		1,40,000	1,40,000	0.82645	1,15,702		
3	20,00,000	1,40,000	21,40,000	0.75131	16,07,814		
	Present value of the debt component				18,50,789	46,270	18,04,519
	Issue Proceeds				**20,00,000**	**50,000**	**19,50,000**
	Value of the Equity component				1,49,211	3,730	1,45,481

CARRYING VALUE OF DEBT COMPONENT

Amortisation of transaction costs

EIR	10.9996%			
Year	Cash flows	Opening Liability	Amortisation - transaction cost	Closing Liability
0	18,04,519			
1	(1,40,000)	18,04,519	58,491	18,63,010
2	(1,40,000)	18,63,010	64,924	19,27,934
3	(21,40,000)	19,27,934	72,066	20,00,000

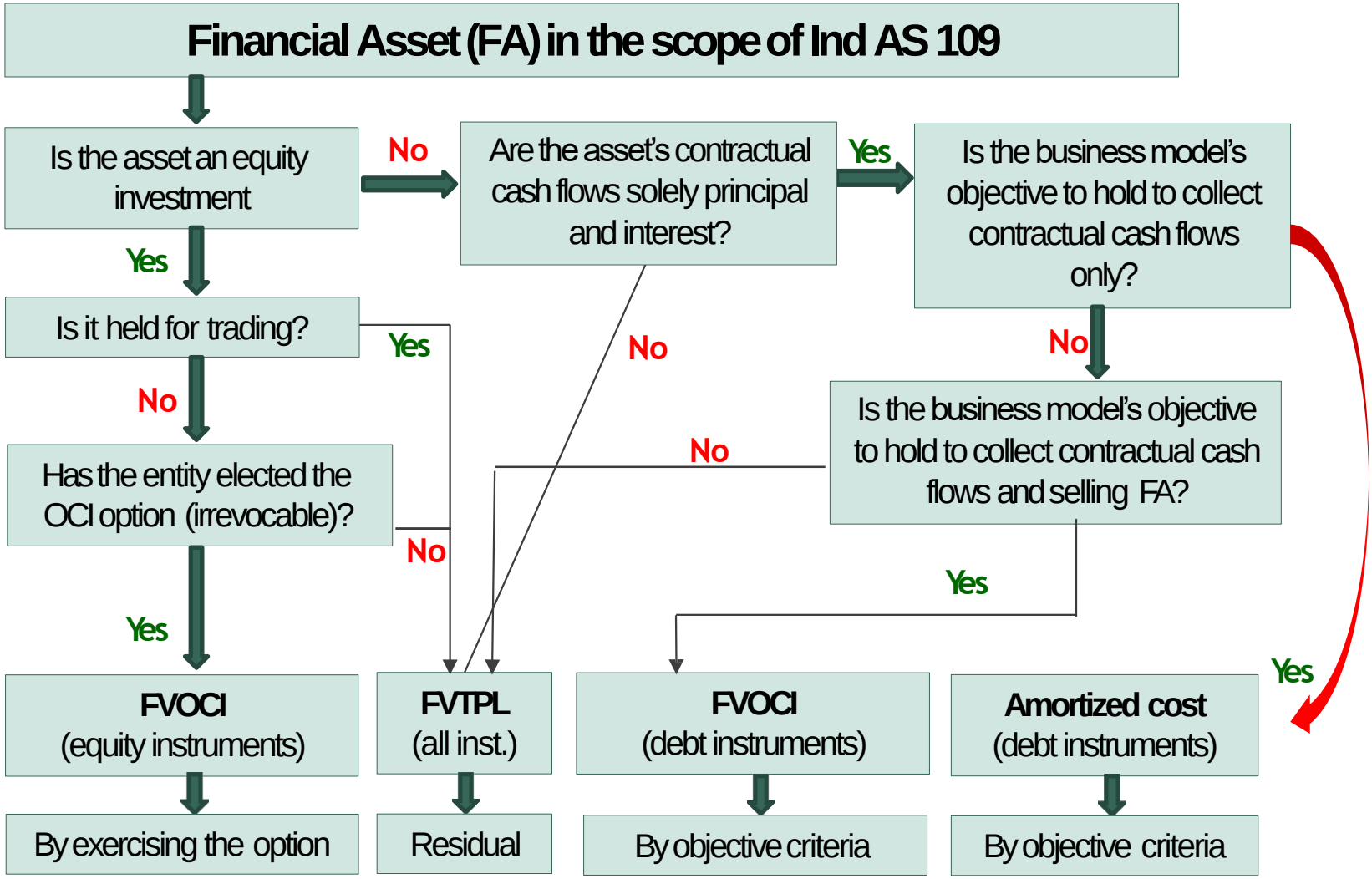
REFRESHER COURSE ON IND AS

Ind AS 109 – Classification & Measurement

4th May 2022

Faculty : CA R. Venkata Subramani
Western India Regional Council, ICAI

Classification of Financial Assets



CLASSIFICATION OF FINANCIAL ASSETS

Category	Treatment
FVOCI (Equity instruments)	• Dividends generally recognized in P&L • Changes in fair value recognized in OCI • No reclassification of gains and losses to P&L on derecognition and no impairment recognized in P&L
FVOCI (debt instruments)	• Interest revenue, credit impairment and foreign exchange gain or loss recognized in P&L (in the same manner as for amortized cost assets) • Other gains and losses recognized in OCI • On derecognition, cumulative gains and losses in OCI reclassified to P&L
FVPL	• Changes in fair value recognized in P&L
Amortized cost	• Interest revenue, credit impairment and foreign exchange gain or loss recognized in P&L • On de-recognition, gains or losses recognized in P&L

FVOCI - EQUITY INSTRUMENT

Equity instruments classified as FVOCI

- Accounting for FVOCI category for debt instruments is different from FVOCI for equity instruments due to the following:
  - Impairment requirements are not applicable
  - Foreign exchange differences are not recognized in OCI
  - Amounts recognized in OCI are never reclassified to profit or loss

SPPI TEST

Solely Payment of Principal & Interest [SPPI]

- An entity shall assess whether contractual cash flows are Solely Payments of Principal and Interest (SPPI) on the principal amount outstanding for the currency in which the financial asset is denominated
- If this test passes, then the instrument itself qualifies for being classified as **'Amortized Cost'** instrument

WHAT IS PRINCIPAL & INTEREST?

Category	Treatment
Principal	Principal is the fair value of the financial asset at initial recognition. However, principal may change over time – e.g. if there are repayments of principal
Interest	Interest is consideration for: • The time value of money; and • The credit risk associated with the principal amount outstanding during a particular period of time Interest can also include: • Consideration for other basic lending risks (e.g. liquidity risk) and costs (e.g. administrative costs); and • A profit margin

CLASSIFICATION OF FINANCIAL ASSETS

Classification of Financial Assets			
Cash	**Equity Instruments**	**Debt Instruments**	**Derivative Instruments**
Amortized cost	FVTPL FVOCI	Amortized Cost FVTPL FVOCI	FVTPL

FVOCI - EQUITY VS. DEBT INSTRUMENT

Year	Description	Equity Instrument			Debt Security		
		FVOCI	P&L	OCI	FVOCI	P&L	OCI
0	Purchased	100	-	-	100	-	-
1	Fair Value	115	-	15	115	-	15
2	Fair Value	125	-	10	125	-	10
3	Liquidated	130		5	130		5
3	**Recycled**		**0**	**30**		**30**	**-30**

AMORTISED COST METHOD - EIR

Ind AS Course
ICAI

			Effective Interest Rate				
			Principal	100	(also maturity value)		
			Price	85	Bought on	1-Jan-19	
			Interest	6%			
			EIR	9.9521%			
			Maturity date	31-Dec-23			

	Year	Details	Cash flow	Discount factor	Present Value	Interest Income	**Amortized cost**
0	1-Jan-19	Principal	(85.00)	1.000000	(85.00)		85.00
1	1-Jan-20	Interest	6.00	0.909487	5.46	8.46	87.46
2	1-Jan-21	Interest	6.00	0.826951	4.96	8.70	90.16
3	1-Jan-22	Interest	6.00	0.752101	4.51	8.97	93.14
4	1-Jan-23	Interest	6.00	0.684026	4.10	9.27	96.41
5	31-Dec-23	Interest + Principal	106.00	0.622274	65.96	9.59	100.00

FEES THAT ARE INTEGRAL PART OF EIR

Ind AS Course
ICAI

Objectives of Ind AS 109

- Fees that are an integral part of the effective interest rate of a financial instrument are treated as an adjustment to the effective interest rate

Fees that are an integral part of the effective interest rate instrument include:

- Origination fees received by the entity relating to the creation or acquisition of a financial asset,
- compensation for evaluating the borrower's financial condition
- evaluating and recording guarantees,
- collateral and other security arrangements,
- negotiating the terms of the instrument,
- preparing and processing documents and closing the transaction
- origination fees paid on issuing financial liabilities measured at amortised cost

FEES THAT ARE NOT INTEGRAL PART OF EIR

Objectives of Ind AS 109

- Fees that are not an integral part of the effective interest rate of a financial instrument:
  - fees charged for servicing a loan;
  - loan syndication fees received by an entity that arranges a loan and retains no part of the loan package for itself

SPPI TEST - EXAMPLE 1

Situation

- Instrument B is a bond with a stated maturity date
- Payments of principal and interest on the principal amount outstanding are linked to
- Case 1 - debtor's performance (e.g. the debtor's net income)
- Case 2 - an equity index

Answer

- The contractual cash flows are not payments of principal and interest on the principal amount outstanding
- That is because the interest payments are not consideration for the time value of money and for credit risk associated with the principal amount outstanding
- There is variability in the contractual interest payments that is inconsistent with market interest rates

SPPI TEST - EXAMPLE 2

Situation

- Instrument C is a bond with a stated maturity date and pays a variable market interest rate
- That variable interest rate is capped

Answer

- The contractual cash flows of both instruments that has a fixed interest rate and an instrument that has a variable interest rate are payments of principal and interest on the principal amount outstanding
- The interest reflects consideration for the time value of money and for the credit risk associated with the instrument during the term of the instrument

BUSINESS MODEL TEST

Ind AS Course
ICAI

What is the business model objective of holding the instrument

- Not dependent on management's intention & ability
- Not instrument by instrument
- Assessed at a high level of aggregation
- Not at the entity level
- Applied at portfolio or sub-portfolio level
- May have more than one business model for managing Financial Assets
- Matter of fact and is typically observable
- Standard acknowledges that judgment is needed

E.g., 'Bright line' for sales activity

OBJECTIVES OF HOLDING THE INSTRUMENT

An entity may hold

- a portfolio of investments that it manages in order to collect contractual cash flows and
- another portfolio of investments that it manages in order to trade to realize fair value changes

Possible to have both models

- Key management personnel to decide (Ind AS 24)
- Examples
  - Financial Institutions holding Financial Assets to meet its every day liquidity needs
  - Insurer holding Financial Assets to fund insurance contract liabilities
- Will involve greater frequency / value of sales
- No threshold or ‘bright line’ for sales activity

EXAMPLE – SALES HELD-TO-COLLECT

- Company A has a portfolio of financial assets which is part of a held-to-collect business model
- Change in the regulatory treatment of these assets has caused Company A to undertake a significant rebalancing of its portfolio in a particular period
- However, A does not change its assessment of the business model, as the selling activity is considered an isolated – i.e., one-time – event
- Continues to be held-to-collect business model

- By contrast, suppose that Company A is required by its regulator to routinely sell financial assets from a portfolio to demonstrate that the assets are liquid, and that the value of the assets sold is significant?
- In this case, A's business model for managing that portfolio would not be held-to-collect – instead it should be treated as 'trading portfolio'

EXCEPTIONS TO SELLING THE FINANCIAL ASSET

Exceptions where the financial assets can be sold

- The entity need not hold all of those instruments until maturity.
- Thus, an entity's business model can be to hold financial assets to collect contractual cash flows even when sales of financial assets occur

The entity may sell a financial asset if: [Exceptions]

- the financial asset no longer meets the entity's investment policy (e.g. the credit rating of the asset declines below that required by the entity's investment policy);
- an insurer adjusts its investment portfolio to reflect a change in expected duration (i.e. the expected timing of payouts); or
- an entity needs to fund capital expenditures

BUSINESS MODEL TEST- EXAMPLE 1

Ind AS Course
ICAI

Situation

- An entity holds investments to collect their contractual cash flows but would sell an investment in particular circumstances

Answer

- The entity's objective is to hold the financial assets and collect the contractual cash flows. Some sales would not contradict that objective

BUSINESS MODEL TEST- EXAMPLE 2

Ind AS Course
ICAI

Situation

- An entity's business model is to purchase portfolios of financial assets, such as loans
- Those portfolios may or may not include financial assets with incurred credit losses
- If payment on the loans is not made on a timely basis, the entity attempts to extract the contractual cash flows through various means—for example, by making contact with the debtor by mail, telephone or other methods

Answer

- The objective of the entity's business model is to hold the financial assets and collect the contractual cash flows
- The entity does not purchase the portfolio to make a profit by selling them
- The same analysis would apply even if the entity does not expect to receive all of the contractual cash flows (e.g. some of the financial assets have incurred credit losses)

Financial Liabilities

Classification of financial liabilities

S. No	Classification of financial liabilities	Measurement requirements
1	Held for trading – including derivatives	FVTPL
2	Designated as at FVPL on initial recognition	FVTPL
3	All other Financial Liabilities	Amortised Cost

FAIR VALUE OPTION

Only when there is an accounting mismatch

Eligibility criteria

- Reduce measurement or recognition inconsistency
- Managing a group of Financial Liabilities or Financial Assets / Financial Liabilities on a fair value basis
- Embedded derivatives & host is not a Financial Asset as per Ind AS 109 then the entire hybrid can be designated as FVTPL

Accounting treatment

- Fair value changes due to credit risk taken to OCI
- Fair value changes not due to credit risk taken to Profit or loss

DETAILS OF TWO INSTRUMENTS

Ind AS Course
ICAI

Hedged Item		Hedging Instrument			Balance sheet
Debt Security		Interest Rate Swap			
Debt issued	100 Crores	Receive leg	Rec Fixed	Pay leg - Float	FV of Swap
Date of Issue	1-Apr-15	01-Apr-15	8.00%	8.00%	-
Maturity	31-Mar-22	31-Mar-16	8.00%	6.00%	9.83
Terms	8% Fixed rate	31-Mar-17	8.00%	5.00%	12.99
Risk free rate	6%	31-Mar-18	8.00%	6.00%	6.93
Credit Spread (Rating A)	2%	31-Mar-19	8.00%	8.50%	-1.28
Total	8%	31-Mar-20	8.00%	9.00%	-1.76
		31-Mar-21	8.00%	11.00%	-1.82
		31-Mar-22	8.00%	10.00%	0

WHAT IS THE ISSUE?- P&L DISTORTION

Ind AS Course
ICAI

What is the issue?- P&L distortion

- IRS entered into to hedge the fair value of a fixed rate issuance (bond)
- Bond (being AC liability) is recognized at amortized cost in the balance sheet
- Swap being a derivative fair value changes are recognized in the P&L
- PL shows wide fluctuations due to the FV changes of the Swap
- Swap is not a speculative instrument but only a hedging instrument to hedge the fair value of Bond

WHAT IS THE ISSUE?- P&L DISTORTION

Ind AS Course
ICAI

Date	Interest Rates		Profit & Loss Account				Balance Sheet		Net P&L
Date	Benchmark rate	Pay + 100 bps	Interest Pay Leg (Rs.lakhs)	Interest Receive Leg (Rs.lakhs)	Interest on Bond Pay	Net Interest Expense	Fair value of IRS	NPV of debt	P&L Impact
01-Apr-15	7.00%	8.00%	Nil	Nil			-	-	-
31-Mar-16	5.00%	6.00%	8.00	-8.00	8.00	8.00	9.83	-	-9.83
31-Mar-17	4.00%	5.00%	6.00	-8.00	8.00	6.00	12.99	-	-3.15
31-Mar-18	5.00%	6.00%	5.00	-8.00	8.00	5.00	6.93	-	6.06
31-Mar-19	7.50%	8.50%	6.00	-8.00	8.00	6.00	-1.28	-	8.21
31-Mar-20	8.00%	9.00%	8.50	-8.00	8.00	8.50	-1.76	-	0.48
31-Mar-21	10.00%	11.00%	9.00	-8.00	8.00	9.00	-1.82	-	0.06
31-Mar-22	9.00%	10.00%	11.00	-8.00	8.00	11.00	-	-	-1.82
			53.50	-56.00	56.00	53.50	Net P&L Impact		-

CAN THIS ISSUE BE RESOLVED WITH FVO?

Ind AS Course
ICAI

- To resolve the issue the entity exercises FVO for Bond
- Bond is then recognized at fair value in the balance sheet & FV changes are recognized in the P&L

Date	Interest Rates		Profit & Loss Account				Balance Sheet		Net P&L
Date	Benchmark rate	Pay + 100 bps	Interest Pay Leg (Rs.lakhs)	Interest Receive Leg (Rs.lakhs)	Interest on Bond Pay	Net Interest Expense	Fair value of IRS	NPV of debt	P&L Impact
01-Apr-15	7.00%	8.00%	Nil	Nil			-	-	-
31-Mar-16	5.00%	6.00%	8.00	-8.00	8.00	8.00	9.83	-9.83	0.00
31-Mar-17	4.00%	5.00%	6.00	-8.00	8.00	6.00	12.99	-12.99	-0.00
31-Mar-18	5.00%	6.00%	5.00	-8.00	8.00	5.00	6.93	-6.93	-
31-Mar-19	7.50%	8.50%	6.00	-8.00	8.00	6.00	-1.28	1.28	-
31-Mar-20	8.00%	9.00%	8.50	-8.00	8.00	8.50	-1.76	1.76	-
31-Mar-21	10.00%	11.00%	9.00	-8.00	8.00	9.00	-1.82	1.82	-0.00
31-Mar-22	9.00%	10.00%	11.00	-8.00	8.00	11.00	-	-	-
			53.50	**-56.00**	**56.00**	**53.50**	Net P&L Impact		-

- Due to extraneous circumstances the IRS is terminated after some months.
- However, since FVO is irrevocable P&L is impacted by FV changes of the Bond after IRS is terminated
- Here the remedy is worse than the disease!

Date	Interest Rates		Profit & Loss Account				Balance Sheet		Net P&L
Date	Benchmark rate	Pay + 100 bps	Interest Pay Leg (Rs.lakhs)	Interest Receive Leg (Rs.lakhs)	Interest on Bond Pay	Net Interest Expense	Fair value of IRS	NPV of debt	P&L Impact
01-Apr-15	7.00%	8.00%	Nil	Nil			-	-	-
31-Mar-16	5.00%	6.00%	8.00	-8.00	8.00	8.00	9.83	-9.83	0.00
31-Mar-17	4.00%	5.00%	6.00	-8.00	8.00	6.00	12.99	-12.99	-0.00
31-Mar-18	5.00%	6.00%	No Interest Rate Swap as the Swap is terminated already		8.00	8.00	-	-6.93	6.93
31-Mar-19	7.50%	8.50%			8.00	8.00	-	1.28	-8.21
31-Mar-20	8.00%	9.00%			8.00	8.00	-	1.76	-0.48
31-Mar-21	10.00%	11.00%			8.00	8.00	-	1.82	-0.06
31-Mar-22	9.00%	10.00%			8.00	8.00	-	-	1.82
			14.00	**-16.00**	**56**	**54**	Net P&L Impact		0

OCI TREATMENT

Ind AS Course
ICAI

Treatment of OCI

A) Instances where OCI should not be reclassified:

- Ind AS 109: Gains or losses due to changes in own credit risk (financial liabilities) designated at fair value (FVO)
- Ind AS 109: Gains or losses on investments in equity instruments measured at fair value through OCI (FVOCI)

B) Instances where OCI should be reclassified:

- Ind AS 21: The effects of changes in Foreign Exchange Rates Exchange differences on translation of foreign operations
- Ind AS 109: Gains or losses on investments in debt securities classified as FVOCI
- Ind AS 109: Gains or losses due to changes in fair values of cash flow hedging instruments [Cash Flow Hedge]

REFRESHER COURSE ON IND AS

Ind AS 109 – ECL Simplified

4th May 2022

Faculty : CA R. Venkata Subramani
Western India Regional Council, ICAI

ECL METHODOLOGIES / MODELS – IND AS

Ind AS Course
ICAI

- No specific method / model prescribed
- Principle based
- No Ph. D or Nobel laurate required
- Simple model that passes common sense test is good enough
- Should be consistent (regulators are particular about this)
- However, model can be calibrated progressively

- Transition Matrix Method (Markov Chain Model)
- Discounted Cash Flow Method
- ECL for Project Loans
- ECL for receivables (Simplified Method)

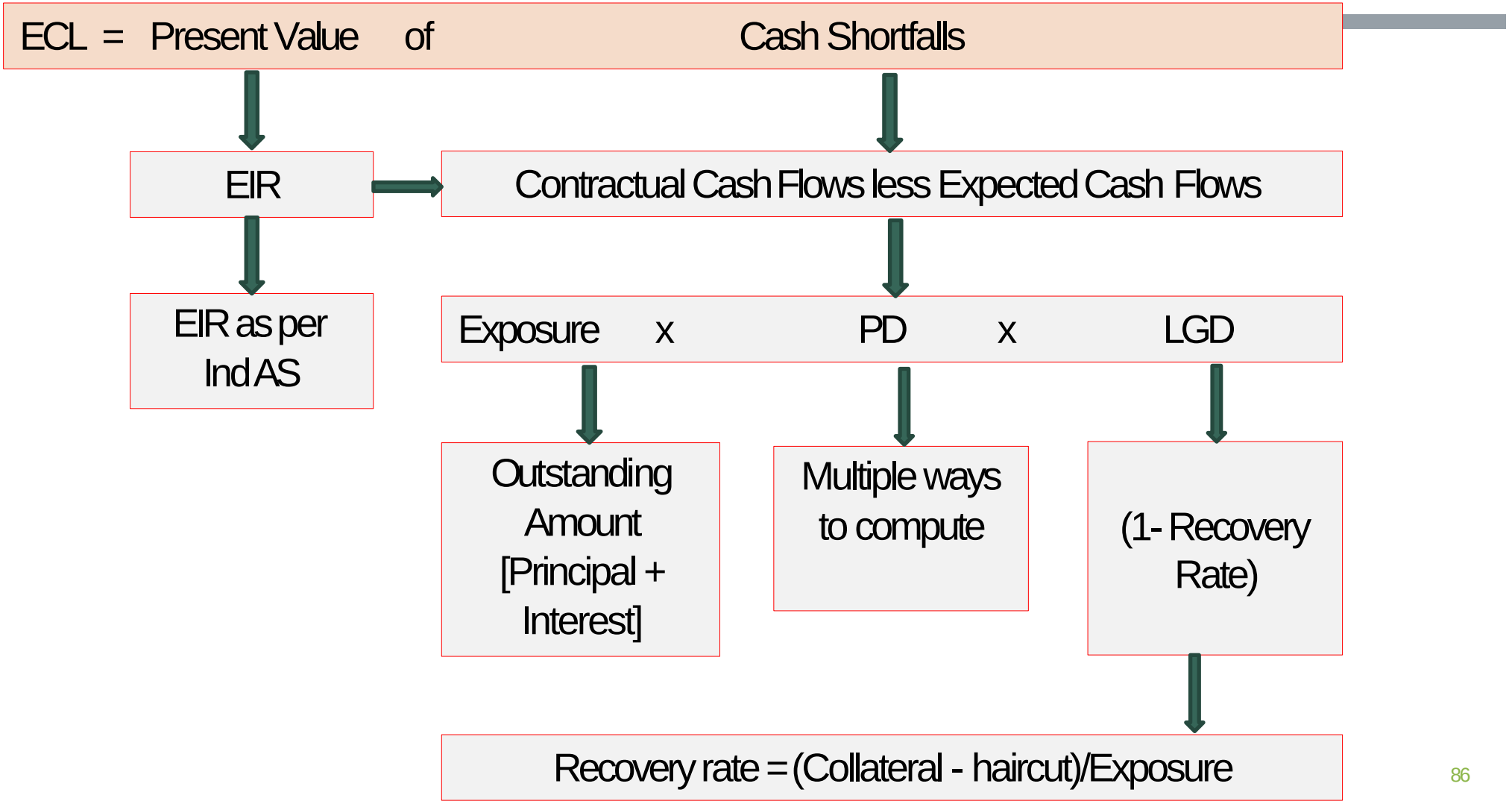
Expected Credit Loss

At a very high level

ECL = Present Value of Cash Shortfalls

Cash Shortfalls = Contractual Cash Flows less Expected Cash Flow

Exposure x PD x LGD x df


ECL = Present Value of Cash Shortfalls
EIR
Contractual Cash Flows less Expected Cash Flows
EIR as per Ind AS
Exposure x PD x LGD
Outstanding Amount [Principal + Interest]
Multiple ways to compute
(1- Recovery Rate)
Recovery rate = (Collateral - haircut)/Exposure

New requirements of impairment model

- Recognize ECL at all times and update the changes in the credit risk of financial instruments
- Incurred loss model replaced with expected credit loss model
- Model is forward-looking
- Macro-economic data of past and future considered
- More timely information provided about expected credit losses
- Same impairment model applied to all financial instruments

SCOPE OF IMPAIRMENT

Ind AS Course
ICAI

In scope

- Financial assets – debt instruments measured at Amortised Cost or FVOCI including loans, trade receivables and debt securities
- Loan commitments/ financial guarantee contracts not measured at FVTPL
- Lease receivables as per Ind AS 116/ Contract assets as per Ind AS 115

Out of scope

- Equity investments
- Loan commitments / Other financial instruments

  – measured at FVTPL

Stage 1

- 12 month expected credit losses recognized in profit or loss through a loss allowance
- 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**
- Interest revenue is calculated on the gross carrying amount of the asset (that is, without deduction for credit allowance)

Stage 2

- If the credit risk increases significantly, full life-time expected credit losses are recognized
- Includes financial instruments that have had a significant increase in credit risk since initial recognition but that **do not have objective evidence of impairment**
- For these assets, lifetime ECL are recognized, but interest revenue is still calculated on the gross carrying amount of the asset

Stage 3

- If the credit increases to the point that it is considered credit-impaired, full life-time expected credit losses are recognized
- Interest revenue is calculated on the amortized cost (gross carrying amount less life-time expected credit losses)
- Individually assessed generally
- Includes financial assets that have objective evidence of impairment at the reporting date

SICR

Significant increase in credit risk [SICR]

- No definition in the standard
- Whether risk of default has increased significantly since initial recognition
- There is a rebuttable presumption that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than **30 days past due (DPD)**

Default

Default

- No definition of the term default
- Each entity should do so
- Should be consistent with that used for internal credit risk management purposes
- Qualitative indicators – breaches of covenants to be considered
- Standard contains a rebuttable presumption that default does not occur later than **90 days** past due

Definition of credit-impaired asset

An asset is credit-impaired if one or more events have occurred that have detrimental impact on the estimated future cash flows of the asset

Example of such events

- Significant financial difficulty of the issuer or the borrower
- A breach of contract – e.g., a default or past due event
- A lender granting a concession to the borrower that he would not otherwise consider
- The borrower is likely to enter bankruptcy or other financial reorganization
- Disappearance of an active market because of financial difficulties
- Purchase of a financial asset at a deep

Factors to be considered for ECL

1. Segmentation criteria for different sub-portfolios
2. Methodology to be used – DCF or transition matrix method
3. Basis of arriving at the Probability of Default (PD)
4. Basis for computing Loss Given Default (LGD)
5. Compute the EAD – principal outstanding + interest due
6. Forward looking macro economic indicators – only relevant economic indicators
7. COVID Scenarios to be considered as management overlays if required
8. Additional macro scenarios to be treated as separate outcomes
9. Assign appropriate probability weights for various scenarios/outcomes

No specific method to address credit risk

- Ind AS 109 does not prescribe a specific or mechanistic approach to assess changes in credit risk
- Appropriate approach will vary for different levels of sophistication of entities, the financial instrument and the availability of data
- The use of the term ‘probability of a default’ occurring was intended to capture the concept of the risk of a default occurring
- Credit analysis is a multifactor and holistic analysis

Markov Chain Model

- Markov chain model is used for estimating loss on loan dues
- In a Markov chain model for loan dues, an account moves through different delinquency states each month
- For example, an account in the "current" state this month will be in the "current" state next month if a payment is made by the due date and will be in the "30 days past due" state if no payment is received
- The transition matrix in the Markov chain represents the period-by-period movement of the loans between delinquency classifications or states
- The transition evaluates loan quality or collection practice

Markov Chain Model

- The matrix elements are commonly referred to as "roll-rates" since they denote the probability that an account will move from one state to another in one period
- The transition matrix is sometimes referred to as the "roll-rate matrix" or the "delinquency movement matrix"
- The buckets and the frequency of the data points are 30 days in this case
- The transition matrix is computed for each portfolio by considering all the loans at an individual level and the results are aggregated
- Monthly transition matrix is then raised to the power of 12 to get one year transition matrix
- Similarly the transition matrix for different maturity periods are computed by raising the quarterly transition matrix to the appropriate power

Number of observations

	Not due	1 to 30	31 to 60	61 to 90	91 to 120	> 120
Not due	16286	1050	0	0	0	0
1 to 30	663	1581	67	0	0	0
31 to 60	4	43	150	32	0	0
61 to 90	1	2	4	26	5	0
91 to 120	0	1	1	4	35	3
> 120	0	0	0	0	2	58

Converted into percentage

	Not due	1 to 30	31 to 60	61 to 90	91 to 120	> 120
Not due	93.94%	6.06%	0.00%	0.00%	0.00%	0.00%
1 to 30	28.69%	68.41%	2.90%	0.00%	0.00%	0.00%
31 to 60	1.75%	18.78%	65.50%	13.97%	0.00%	0.00%
61 to 90	2.63%	5.26%	10.53%	68.42%	13.16%	0.00%
91 to 120	0.00%	2.27%	2.27%	9.09%	79.55%	6.82%
> 120	0.00%	0.00%	0.00%	0.00%	3.33%	96.67%

Probability of default

Several ways to compute Probability of Default

- Transition Matrix Method – based on own historical data
- Transition Matrix from credit rating agencies
- Roll rate method (delinquency trends)
- Flow rate method (aging schedule)

Loss Given Default (LGD)

- Collateral is considered for each and every loan, wherever it is available
- Appropriate ‘hair cut’ is taken into account while computing the present value of the estimated cash flows
- Recovery costs are considered to realise the collateral
- The time lag from the time the loan gets defaulted, till the time collateral can be realised should be considered. The realisable value of the collateral is discounted using EIR, to arrive at the present value of the collateral
- Recovery rate is present value / Exposure.
- LGD = 1 – recovery rate

Macro economic factors for additional scenarios

- Forward looking macro economic indicators should be considered
- Use the best information that is available without undue cost and effort when measuring expected credit losses
- Ensure that there is a statistically acceptable correlation between the receivables data [dependent variable] and the macro economic factors [independent variables]
- For loan repayment the following factors may be relevant
  - Inflation
  - Unemployment rates
  - Interest rates
  - Gross Domestic Product growth
  - House Purchase Index
  - Any other data relevant from reliable source

How to build scenarios

Using Macro Economic Data

Steps to build additional scenarios

1. Get the loan receivables snapshot for the last several periods [dependent variable]
2. Get relevant macro economic data for the same periods [independent variables]
3. Run a multi-variate regression analysis between the dependent and independent variables
4. Check if the statistical test passes – R-squared, p-value etc.
5. Iterate the regression analysis with combinations of independent variables till the statistical test passes
6. Use the intercept and slope of the analysis to find out the projected value of the loan receivables

Macro economic indicators

Valuation_Date	DataPoint_Date	GDP	Inflation	RiskFree_Rate
03/21/2021	3/15/2021	7.90	5.00	8.010605
03/21/2021	6/15/2021	7.90	5.00	7.672905
03/21/2021	9/15/2021	7.90	5.00	7.371083
03/21/2021	12/15/2021	7.90	5.00	7.470578
03/21/2021	3/16/2021	7.95	5.00	7.294125
03/21/2021	6/16/2021	8.00	5.00	7.155137
03/21/2021	9/16/2021	8.05	5.00	6.775641
03/21/2021	12/16/2021	8.20	5.00	6.494839
03/21/2021	3/17/2021	7.85	4.58	6.355605
03/21/2021	6/17/2021	7.60	4.15	6.489425
03/21/2021	9/17/2021	7.35	3.73	6.363643
03/21/2021	12/17/2021	7.00	3.30	6.602100
03/21/2021	3/18/2021	6.78	3.45	7.155137
03/21/2021	6/18/2021	6.55	3.60	7.343403
03/21/2021	9/18/2021	6.33	3.75	7.820679
03/21/2021	12/18/2021	6.10	3.90	7.000000
03/21/2021	3/19/2021	5.63	3.85	6.530402
03/21/2021	6/19/2021	4.75	3.80	6.332215
03/21/2021	9/19/2021	4.68	3.75	5.804167
03/21/2021	12/19/2021	4.20	3.70	5.609262
03/21/2021	3/20/2021	1.40	4.40	4.870000
03/21/2021	6/20/2021	(1.40)	5.10	3.745864
03/21/2021	9/20/2021	(4.20)	5.80	3.830000
03/21/2021	12/20/2021	(7.00)	6.60	3.590000
03/21/2021	3/21/2021	(2.00)	6.20	3.866664

Loan snapshot for various valuation dates

Company	Segment	Valuation_Date	DataPoint_Date	Percentage
ABC Ltd	Segment 1	03/31/2021	3/31/2015	99.4814%
ABC Ltd	Segment 1	03/31/2021	6/30/2015	99.3588%
ABC Ltd	Segment 1	03/31/2021	9/30/2015	99.3305%
ABC Ltd	Segment 1	03/31/2021	12/31/2015	99.3643%
ABC Ltd	Segment 1	03/31/2021	3/31/2016	99.5282%
ABC Ltd	Segment 1	03/31/2021	6/30/2016	99.3473%
ABC Ltd	Segment 1	03/31/2021	9/30/2016	99.3846%
ABC Ltd	Segment 1	03/31/2021	12/31/2016	99.3606%
ABC Ltd	Segment 1	03/31/2021	3/31/2017	99.5541%
ABC Ltd	Segment 1	03/31/2021	6/30/2017	99.2568%
ABC Ltd	Segment 1	03/31/2021	9/30/2017	99.1718%
ABC Ltd	Segment 1	03/31/2021	12/31/2017	99.1196%
ABC Ltd	Segment 1	03/31/2021	3/31/2018	99.2422%
ABC Ltd	Segment 1	03/31/2021	6/30/2018	98.7210%
ABC Ltd	Segment 1	03/31/2021	9/30/2018	98.7691%
ABC Ltd	Segment 1	03/31/2021	12/31/2018	98.6383%
ABC Ltd	Segment 1	03/31/2021	3/31/2019	98.7587%
ABC Ltd	Segment 1	03/31/2021	6/30/2019	98.0159%
ABC Ltd	Segment 1	03/31/2021	9/30/2019	97.6960%
ABC Ltd	Segment 1	03/31/2021	12/31/2019	97.3551%
ABC Ltd	Segment 1	03/31/2021	3/31/2020	97.2139%
ABC Ltd	Segment 1	03/31/2021	6/30/2020	97.2474%
ABC Ltd	Segment 1	03/31/2021	9/30/2020	97.2983%
ABC Ltd	Segment 1	03/31/2021	12/31/2020	97.2873%
ABC Ltd	Segment 1	03/31/2021	03/31/2021	96.0256%

Multivariate Regression Statistics

Regression Statistics						
Multiple R	0.886257148					
R Square	0.785451732					
Adjusted R Square	0.765947344					
Standard Error	0.004837973					
Observations	25					
ANOVA						
	df	*SS*	*MS*	*F*	*Significance F*	
Regression	2	0.001885142	0.000942571	40.27051401	4.43379E-08	
Residual	22	0.000514932	2.3406E-05			
Total	24	0.002400074				
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	0.961203961	0.007102822	135.3270547	1.24878E-33	0.94647361	0.975934312
X Inflation	0.002826264	0.001355788	2.084592134	0.04892568	1.45328E-05	0.005637996
X GDP Growth	0.002343824	0.000278526	8.415089295	2.52344E-08	0.001766196	0.002921453

Apply intercept and slope to arrive at the projected numbers

	FIMMDA	Economist Forecasting Service		
Date	Risk free rate - 1 Year	Inflation	Real GDP Growth	DPD < 90 Days
30/06/17	6.49	4.15	7.60	99.26%
30/09/17	6.36	3.73	7.35	99.17%
31/12/17	6.60	3.30	7.00	99.12%
31/03/18	7.16	3.45	6.78	99.24%
30/06/18	7.34	3.60	6.55	98.72%
30/09/18	7.82	3.75	6.33	98.77%
31/12/18	7.00	3.90	6.10	98.64%
31/03/19	6.53	3.85	5.63	98.76%
30/06/19	6.33	3.80	4.75	98.02%
30/09/19	5.80	3.75	4.68	97.70%
31/12/19	5.61	3.70	4.20	97.36%
31/03/20	4.87	4.40	1.40	97.21%
30/06/20	3.75	5.10	-1.40	97.25%
30/09/20	3.83	5.80	-4.20	97.30%
31/12/20	3.59	6.60	-7.00	97.29%
31/03/21	3.87	6.20	-2.00	96.03%
Scenario 2	4.00	5.40	-4.00	96.7090%
Scenario 3	3.50	5.20	-3.00	96.8869%

The resultant scenario factors

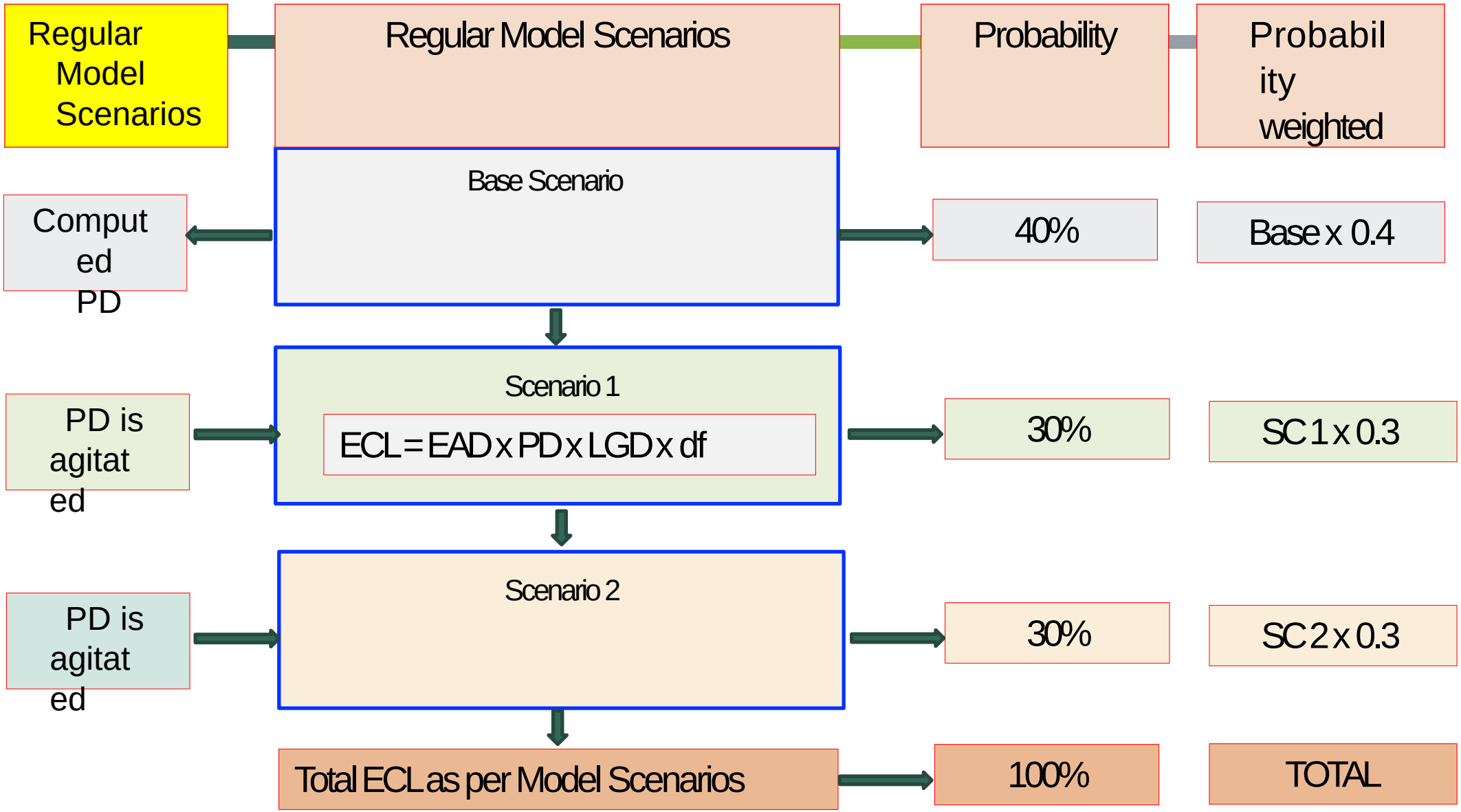
Existing Model Scenarios	~~FIMMDA~~	Macro-economic data		Increase (decrease) in default
	~~Risk free rate - 1 Year %~~	Inflation %	Real GDP Growth %	
Base	3.87	6.20	-2.00	0.00%
Scenario 2	~~4.00~~	5.40	-4.00	-14.38%
Scenario 3	~~3.50~~	5.20	-3.00	-23.67%

- The additional scenarios need not necessarily be an optimistic scenario and a pessimistic scenario.
- Note that the resultant numbers which are basically the multipliers used for the additional scenarios point to a decrease in default

Probability-weighted outcome

- The estimates of cash flows are expected values
- Hence, estimates of the amounts and timing of cash flows are based on probability-weighted possible outcomes
- The term ‘expected’ as used in the terms ‘expected credit losses’, ‘expected value’ and ‘expected cash flow’ is a technical term that refers to the probability-weighted mean of a distribution and should not be confused with a most likely outcome or an entity’s best estimate of the ultimate outcome

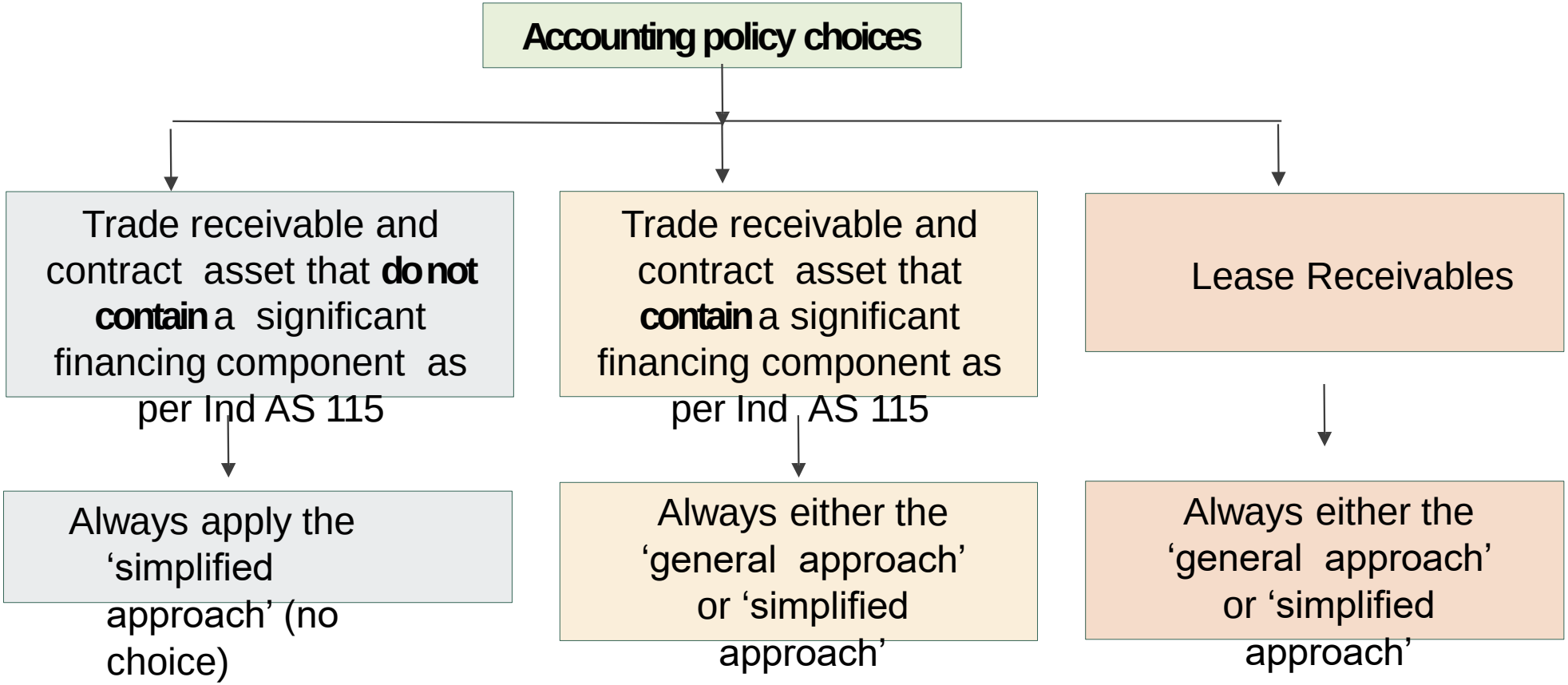
Scenario	Probability	ECL	Probability weighted	Details
1	10	2,300	230	
2	15	2,500	375	
3	40	2,000	800	Most likely outcome
4	12	2,800	336	
5	23	2,700	621	
	100		2,362	


Regular Model Scenarios
Regular Model Scenarios
Probability
Probability weighted
Base Scenario
Computed PD
40%
Base x 0.4
Scenario 1
ECL = EAD x PD x LGD x df
PD is agitated
30%
SC 1 x 0.3
Scenario 2
PD is agitated
30%
SC 2 x 0.3
Total ECL as per Model Scenarios
100%
TOTAL

Expected Credit Loss

Simplified Approach for Receivables

ECL FOR TRADE RECEIVABLES



Applying the ‘simplified approach’ – Step 1

Step 1

- Determine the appropriate groupings of receivables based on
  - geographical region
  - product type
  - customer rating
  - collateral
  - trade credit insurance
  - type of customer say wholesale /retail
- Aggregate receivables into groups that share similar credit risk characteristics

Applying the ‘simplified approach’ – Step 2

Step 2

- Determine the period over which historical loss rates are appropriate
- Historical loss data should 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
- The period should be reasonable – not an unrealistically short or long period of time
- In practice, the period could span two to five years

Applying the ‘simplified approach’ – Step 3

Step 3

- Determine the historical loss rates
- Determine the loss rates for each sub-group sub-divided into past- due categories
- Example, 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

Applying the 'simplified approach' – Step 4

- Consider forward looking macro-economic factors to arrive at the appropriate loss rates
- The historical loss rates are a starting point for identifying expected losses
- They are not necessarily the final loss rates that should be applied to the carrying amount
- Determine the adjusted loss rates under economic conditions that are representative of those expected to exist during the exposure period for the portfolio at the balance sheet date

Multipliers & Probability weights

Scenario	Multipliers	Probability Weight
Base	1.00	40
Scenario 1	1.20	30
Scenario 2	0.92	30

Applying the ‘simplified approach’ – Step 5

Step 5

- Calculate the expected credit losses
- The expected credit loss of each sub-group is calculated by multiplying the current gross receivable balance by the adjusted loss rate
- The specific adjusted loss rate should be applied to the balance of each age-band for the receivables in each group
- Add all the expected credit losses of each age-band for the total expected credit loss of the portfolio

REFRESHER COURSE ON IND AS

Ind AS 109 - Hedge Accounting

4th May 2022

Faculty : CA R. Venkata Subramani
Western India Regional Council, ICAI

OBJECTIVES OF IND AS 109

Ind AS Course
ICAI

What is hedge accounting

- Process by which the effects on profit or loss of changes in the fair values of the hedging instrument and hedged item are offset
- Hedge accounting is optional and not mandatory
- However, once it is started, it cannot be voluntarily discontinued unless certain conditions are met
- Hedge accounting should be discontinued compulsorily if certain conditions are not met
- Entity should comply with certain requirements regarding hedge documentation, hedge effectiveness etc.
- Conditions to comply with hedge accounting is not that rigorous as it used to be based on the erstwhile IAS 39

Objective of 'hedging'

- Reduce the risk exposure, usually to minimize loss or
- To protect the gains already earned
- Hedging transactions reduce or neutralize the variability in
  - fair value or
  - cash flows that arise from these risks

Objective of 'hedge accounting'

- To protect the Profit & Loss from unintended fluctuations in profits
- Hedge accounting enables the matching of timing in the recognition of gains and losses in profit and loss
- The objective is to represent in the financial statement, the effect of an entity's risk management activities
- To convey the context of hedging instruments for which hedge accounting is applied in order to allow insight into their purpose and effect

Hedging instruments – Futures/Forwards

- However, if the underlying is not in existence at the time of taking the futures position, then futures can be designated as a hedging instrument
- For example, if you buy coffee futures to hedge the underlying 'coffee produce to be produced in future' then coffee futures is a hedging instrument
- FX Forwards
- Risk reward ratio of a futures position is symmetric

Hedging instruments - Options

- Bought Options minimizes the risk and offers scope for unlimited profits
- Ideal instrument for hedging
- Risk reward ratio of an options position is asymmetric
- Written options cannot be designated as hedging instrument – limited profit but unlimited potential for loss

DERIVATIVE HEDGING INSTRUMENTS

Ind AS Course
ICAI

Hedging instruments – CAPs and Floors

- CAPs and Floors
- Bought caps and floors can be designated as hedging instrument – unlimited profit with mere cost of caps/floor as potential loss
- IRS also has a symmetric risk reward; can still be a hedging instrument
- IRS helps achieve the risk management objective of the enterprise

DETAILS OF TWO INSTRUMENTS

Ind AS Course
ICAI

Hedged Item		Hedging Instrument			Balance sheet
Debt Security		Interest Rate Swap			
Debt issued	100 Crores	Receive leg	Rec Fixed	Pay leg - Float	FV of Swap
Date of Issue	1-Apr-15	01-Apr-15	8.00%	8.00%	-
Maturity	31-Mar-22	31-Mar-16	8.00%	6.00%	9.83
Terms	8% Fixed rate	31-Mar-17	8.00%	5.00%	12.99
Risk free rate	6%	31-Mar-18	8.00%	6.00%	6.93
Credit Spread (Rating A)	2%	31-Mar-19	8.00%	8.50%	-1.28
Total	8%	31-Mar-20	8.00%	9.00%	-1.76
		31-Mar-21	8.00%	11.00%	-1.82
		31-Mar-22	8.00%	10.00%	0

HEDGE ACCOUNTING HAPPY PATH

Ind AS Course
ICAI

Date	Interest Rates		Profit & Loss Account				Balance Sheet		Net P&L
Date	Benchmark rate	Pay + 100 bps	Interest Pay Leg (Rs.lakhs)	Interest Receive Leg (Rs.lakhs)	Interest on Bond Pay	Net Interest Expense	Fair value of IRS	NPV of debt	P&L Impact
01-Apr-15	7.00%	8.00%	Nil	Nil			-	-	-
31-Mar-16	5.00%	6.00%	8.00	-8.00	8.00	8.00	9.83	-9.83	0.00
31-Mar-17	4.00%	5.00%	6.00	-8.00	8.00	6.00	12.99	-12.99	-0.00
31-Mar-18	5.00%	6.00%	5.00	-8.00	8.00	5.00	6.93	-6.93	-
31-Mar-19	7.50%	8.50%	6.00	-8.00	8.00	6.00	-1.28	1.28	-
31-Mar-20	8.00%	9.00%	8.50	-8.00	8.00	8.50	-1.76	1.76	-
31-Mar-21	10.00%	11.00%	9.00	-8.00	8.00	9.00	-1.82	1.82	-0.00
31-Mar-22	9.00%	10.00%	11.00	-8.00	8.00	11.00	-	-	-
			53.50	**-56.00**	**56.00**	**53.50**	Net P&L Impact		-

HA WITH SWAP TERMINATED

Ind AS Course
ICAI

			Profit & Loss Account				Balance Sheet			Net P&L
Date	Benchmark rate	Pay + 100 bps	Interest Pay Leg (Rs.lakhs)	Interest Receive Leg (Rs.lakhs)	Interest on Bond Pay	Net Interest Expense	Fair value of IRS	NPV of debt	Amortised Cost of Debt	P&L Impact
01-Apr-15	7.00%	8.00%	Nil	Nil			-	-		-
31-Mar-16	5.00%	6.00%	8.00	-8.00	8.00	8.00	9.83	-9.83		0.00
31-Mar-17	4.00%	5.00%	6.00	-8.00	8.00	6.00	12.99	-12.99	112.99	-0.00
31-Mar-18	5.00%	6.00%	5.00	-8.00	8.00	5.00	-	-	110.39	-2.73
31-Mar-19	7.50%	8.50%	6.00	-8.00	8.00	6.00	-	-	107.79	-2.66
31-Mar-20	8.00%	9.00%	8.50	-8.00	8.00	8.50	-	-	105.20	-2.60
31-Mar-21	10.00%	11.00%	9.00	-8.00	8.00	9.00	-	-	102.60	-2.53
31-Mar-22	9.00%	10.00%	11.00	-8.00	8.00	11.00	-	-	100.00	-2.47
			53.50	-56.00	56.00	53.50	Net P&L Impact			**-12.99**

AMORTISATION OF BOND

Ind AS Course
ICAI

Details	Cash flows	Year	Discount factor	Op. Bal	Interest	Closing Bal
Amort cost	112.99	-	1.0000000	112.99	-	112.99
	-	1.00	0.9764412	112.99	-2.73	110.26
	-	2.00	0.9534374	110.26	-2.66	107.60
	-	3.00	0.9309755	107.60	-2.60	105.01
	-	4.00	0.9090429	105.01	-2.53	102.47
Maturity	-100.00	5.00	0.8876269	102.47	-2.47	100.00
	This is the cash received on termination of swap ->				**-12.99**	
IRR	-2.41272%					

HEDGED ITEM & HEDGING INSTRUMENTS

HEDGED ITEM

- A hedged item must be an item that could affect profit or loss
- A hedged item can be
  1. a recognized asset or liability
  2. an unrecognized firm commitment
  3. a highly probable forecast transaction [Only through cash flow hedge]
  4. a net investment in a foreign operation that could affect profit or loss

HEDGING INSTRUMENT

- It should help minimize risk
- It should protect the profit still unrealized by locking the same & not increase the existing risk by taking a changed exposure to risk
- It usually has a zero cost or a cost that is very low at the inception of the instrument
- It should normally be a derivative instrument; there are exceptions for these

PREREQUISITES OF HEDGE ACCOUNTING

Ind AS Course
ICAI

Prerequisite of hedge accounting

- At inception formal designation and documentation of
  - Hedging relationship
  - Entity's risk management objective
  - Strategy for undertaking the hedge
  - Identification of hedging instrument
  - Identification of hedged item
  - Nature of risk being hedged
  - Method of assessing the hedge instrument's effectiveness

PREREQUISITES OF HEDGE ACCOUNTING

Hedge effectiveness requirements

1. **Economic relationship** should exist between the hedged item and the hedging instrument

   - Implication: 80% to 125% condition is now relaxed. Delta FV changes of hedged and hedging should move in opposite directions

2. **Effect of credit risk** should not dominate the hedge

   - Implication: Credit risk of the cash item and/or counterparty credit risk of the hedging instrument (derivative) should not vitiate the HR

3. **Hedge ratio for accounting purposes** should be the same as actually deployed by the entity

   - Implication: Hedge ratio means the quantity or notional of hedged item / quantity or notional of the hedging item. The ratio cannot be different to achieve artificial effectiveness and should be the same as the one that is used for risk management purposes

Risk management strategy

- The risk management strategy is established at the highest level at which an entity determines how it manages its risk
- The risk management strategy is normally in place for a longer period of time
- It may include some flexibility to react to changes in circumstances even while the strategy is in place
- The risk management strategy is usually documented at the highest level with guidance on the policies to be pursued for implementing the strategy

Risk management objective

- The risk management objective is applied for every hedging relationship which dovetails into the risk management strategy of the enterprise
- The risk management objective specifies how a particular hedging instrument that has been designated is used to hedge a particular exposure of the corresponding hedged item
- A risk management strategy may have multiple hedging relationships whose risk management objectives relate to executing that overall risk management strategy

RISK MANAGEMENT STRATEGY

Risk management strategy
Vs
Risk management objective

FAIR VALUE HEDGE

Ind AS Course
ICAI

Fair value hedge

- Fair value changes of hedged item is matched with the profit or loss in the hedging instrument
- A hedge of the exposure to changes in fair value of:
  - a recognized asset, liability or an unrecognized firm commitment or
  - an identified portion of an asset, a liability or a firm commitment that are attributable to a particular risk and could affect profit or loss
- Examples of hedged items in a fair value hedge:
  - fixed-rate debt
  - fixed-rate receivables
  - equity instruments, or inventory

HEDGING A NON-FINANCIAL ITEM - FVH

Ind AS Course
ICAI

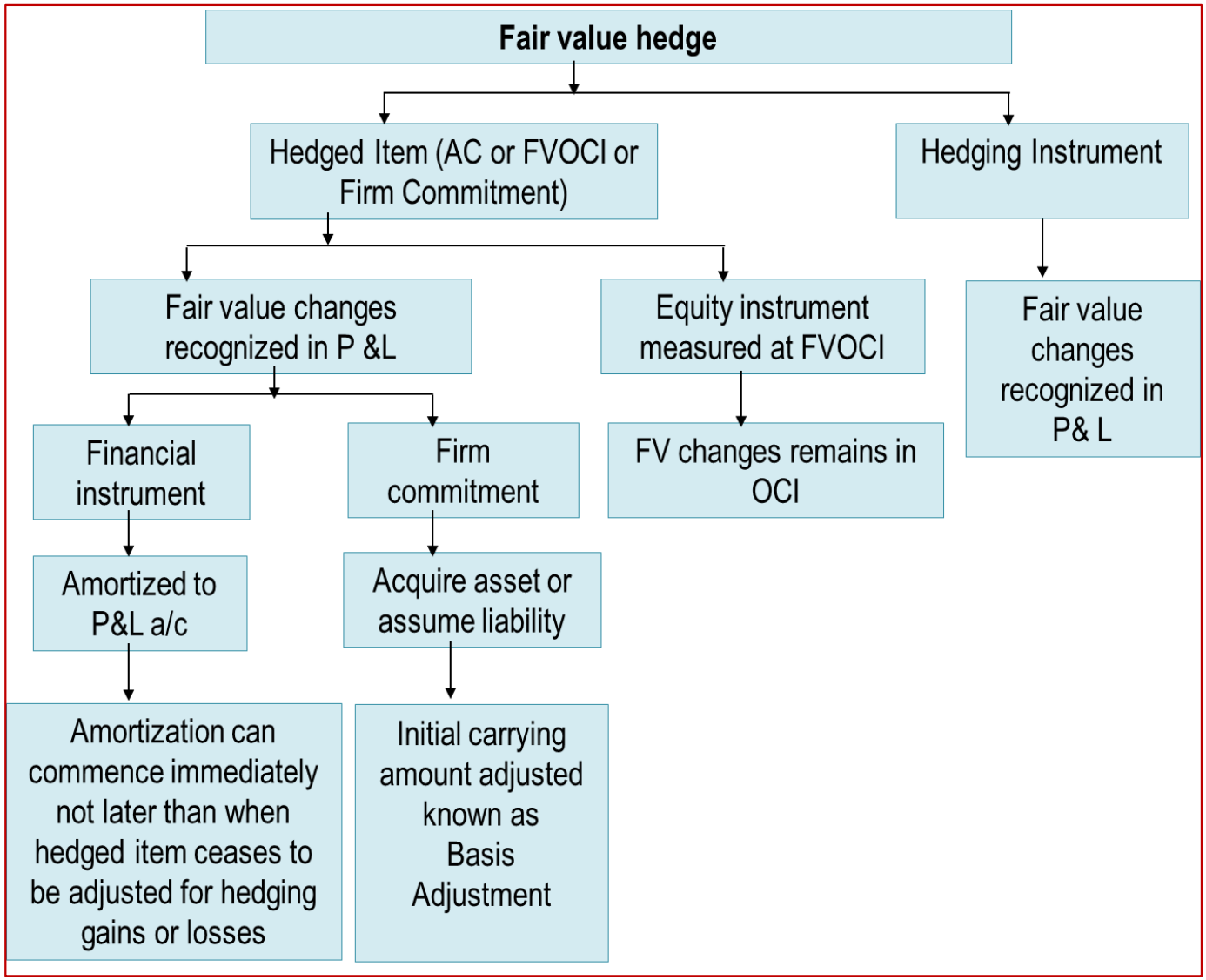
Firm commitment to purchase copper - Hedging fair value using FX Forwards			
Date	Activity	Spot rate	FX Forward Expiry on 31/Mar/22
		USD/ INR	
01-Apr-21	Firm commitment to import Copper	74.00	76.00
30-Jun-21	Reporting date	76.00	77.50
30-Sep-21	Reporting date	79.00	78.00
31-Dec-21	Reporting date	77.00	77.50
31-Mar-22	Amount paid for the imports	80.00	80.00

HEDGING A NON-FINANCIAL ITEM - FVH

Ind AS Course
ICAI

Firm commitment to purchase copper - Hedging fair value using FX Forwards								
Date	Activity	Spot rate	FX Forward Expiry on 31/Mar/22	Cum FX (Gains) / Loss	Cum FX Forwards Receivable (Payable)	Cum Firm Commitment	Inventory	Inventory after basis adjustment
		USD/ INR		Rupees in Lakhs				
01-Apr-21	Firm commitment to import Copper	74.00	76.00					
30-Jun-21	Reporting date	76.00	77.50	(1.50)	1.50	(1.50)		
30-Sep-21	Reporting date	79.00	78.00	(2.00)	2.00	(2.00)		
31-Dec-21	Reporting date	77.00	77.50	(1.50)	1.50	(1.50)		
31-Mar-22	Amount paid for the imports	80.00	80.00	(4.00)	4.00	(4.00)	80.00	76.00

Fair value hedge



CASH FLOW HEDGE

What is cash flow hedge?

- A cash flow hedge could be
  - a hedge of variable interest payments on a debt instrument or
  - the variability in the future cash outflow on a forecast transaction to purchase inventory in a foreign currency
- A hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with
  - a recognized asset or liability (such as future interest payments on variable-rate debt)
  - or a highly probable forecast transaction] and
  - could affect profit or loss

ELIGIBLE HEDGED ITEMS

Eligible hedged item (Cash flow hedge)

- Hedged Item [need not necessarily be an instrument]
- A recognized asset or a liability with potential variability in cash flows impacting profit
  - Example: Floating rate Bond purchased; Floating rate Bond issued
- An unrecognized firm commitment to buy or sell a non-financial asset – only FX risk [This can be accounted either as FVH or CFH]
  - Example: Buy/sell inventory in foreign currency – delivery in future

ELIGIBLE HEDGED ITEMS

Eligible hedged item (Cash flow hedge)

- A highly probable forecast transaction impacting profit
  - Example: Sales forecast (expressed in foreign currency)
  - Example: Highly probable forecasted fixed rate Issuance
  - Example: Cash flows of Bond attributable to changes in benchmark rate
- A component of the above
  - Example: A portion of the Bond say 60% of the Bond Principal
- Aggregated exposure
  - Example: A combination of a bond and a swap can be a hedged item

ELIGIBLE HEDGING INSTRUMENTS

Ind AS Course
ICAI

Eligible hedging instrument

Hedging Instrument

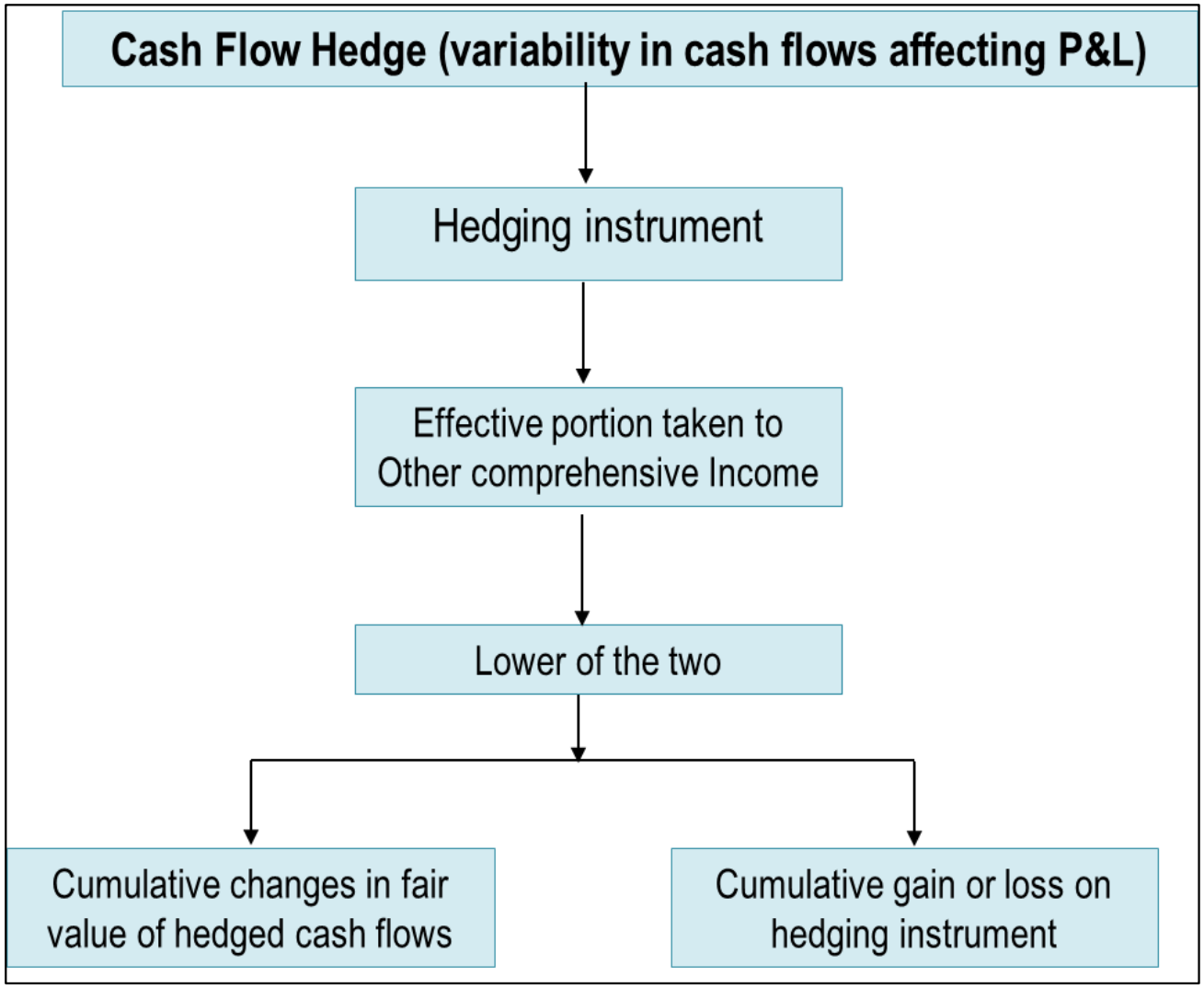
- Should normally be a derivative but not a written option
  - Example: Bought put options, Bought Caps or Floors, IRS allowed
  - Example: Written options, sold caps or floors not allowed
  - Interest Rate Collar / Reverse collar – allowed so long as the FV is positive
- FX component of a non-derivative financial asset or a non-derivative financial liability
  - Example: FX component of a Foreign Currency debt

ELIGIBLE HEDGING INSTRUMENTS

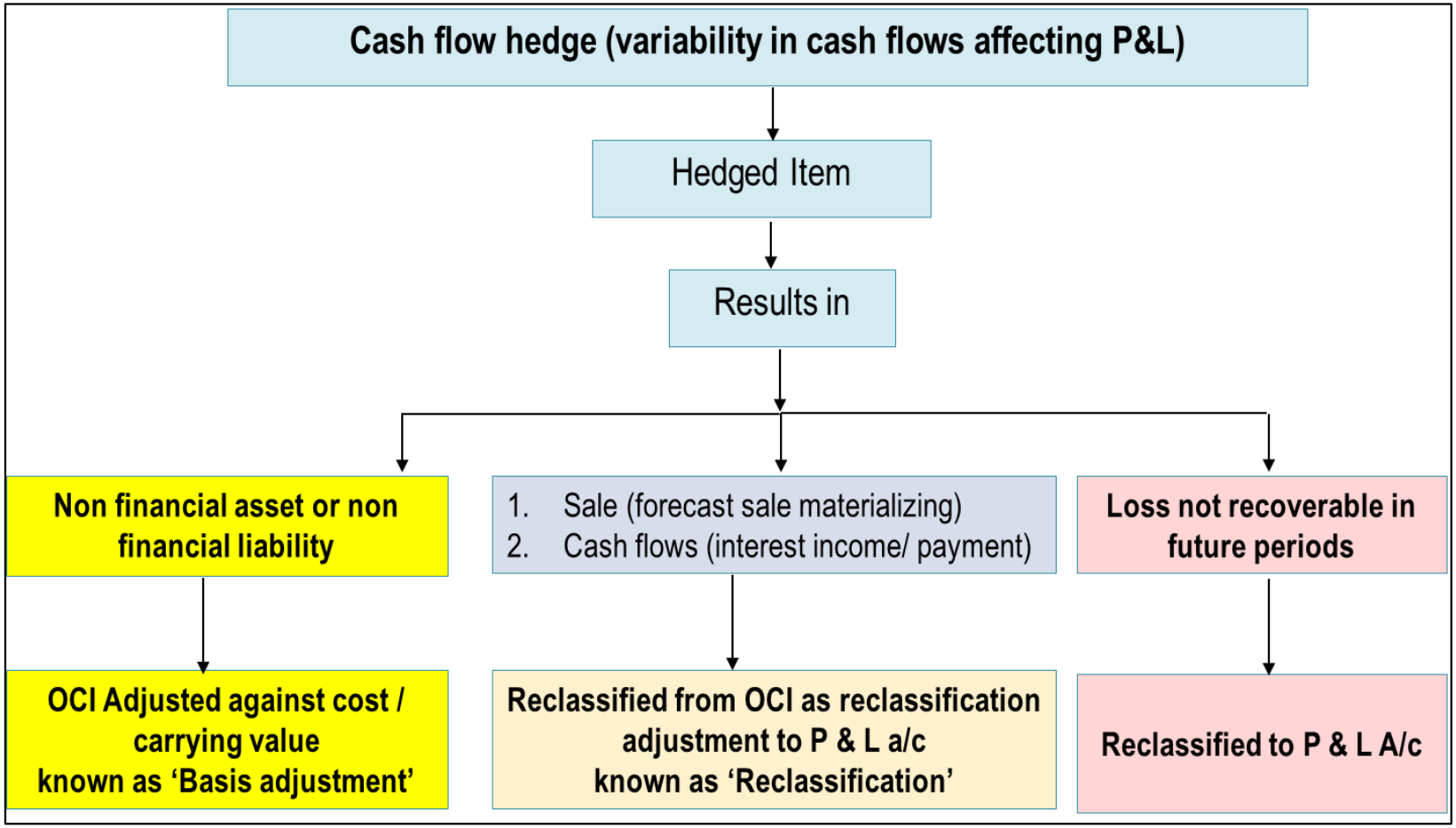
Eligible hedging instrument

- FV changes should be designated in its entirety
  - Exception: 1. Can designate only the changes in intrinsic value of an option
  - Exception: 2. Can designate only the changes in the spot element of a FX Forward
- A portion of the hedging instrument can be designated
  - Example: 60% of interest rate swap
- A portion of the time period of hedging instrument not allowed
  - Example: First 3 years of a 5-year swap

Effective portion in cash flow hedge



Reclassifi-cation of OCI to P&L



DISCONTINUATION OF CASH FLOW HEDGE

Ind AS Course
ICAI

Discontin-uation of cash flow hedge

- If the hedged future cash flows are still expected to occur
  - that amount remains in OCI until the future cash flows occur
- When the future cash flows occur
  - Hedged item results in non-financial asset or non-financial liability – OCI adjusted against cost/carrying value – 'Basis Adjustment'
  - Example - Hedged item is a forecasted sales – OCI adjusted against the actual sales
- For all other cash flow hedges, the amount is reclassified from OCI to P&L in the same period the hedged expected future cash flows affect the P&L
- Hedged item affects the P&L say interest expense/income, OCI adjusted to offset the income/expense
- Hedged item results in loss – OCI immediately recognized in P&L
- If the hedged future cash flows are no longer expected to occur
  - that amount is immediately reclassified from OCI to P&L as reclassification adjustment

TREATMENT OF OCI AFTER DISCONTINUATION

Examples of treatment of OCI

- Hedged item results in non-financial asset or non-financial liability – OCI adjusted against cost/carrying value
  - Example: FX forwards to hedge a forecasted purchase of copper results in a non-financial asset (inventory) in foreign currency
- Hedged item is a forecasted sales – OCI adjusted against the actual sales
  - Example: FX Forwards to hedge a forecasted sale in foreign currency
- Hedged item affects the P&L say interest expense/income, OCI adjusted to offset the income/expense
  - Example: IRS to hedge variable rate loan
- Hedged item results in loss – OCI immediately recognized in P&L
  - Example: FV of hedged item drops resulting in a loss

Adjusted against carrying value

- Scenario: FX Forwards (hedging instrument) taken to hedge purchase of copper in Euros (non-financial hedged item) results in a gain of USD 1.5 m which is taken to OCI [base currency USD]
- How will this be accounted for when the inventory is imported?

FX Forwards gains taken to Other comprehensive Income

↓

When the goods are imported

↓

Particulars	*(In millions USD)*
Cost of inventory	65.00
Less: OCI Balance adjusted	(1.50)
Carrying value of inventory	63.50

Adjusted against the actual sales

- Scenario: FX Forwards (hedging instrument) taken to hedge forecasted sales in Euros (non-financial hedged item) results in a gain of USD 1.5 m which is taken to OCI
- How will this be accounted for when the actual sales happen?

FX Forwards gains taken to Other comprehensive Income

↓

When the actual sales happen

↓

Particulars	*(In millions USD)*
Sales	65.00
Add: OCI balance reclassified	1.50
Adjusted value of sales	66.50

Revision in forecasted cash flow

- Scenario: FX Forwards (hedging instrument) taken to hedge forecasted sales in Euros (non- financial hedged item) results in a gain of USD 1.5 m which is taken to OCI
- How will this be accounted for when the sales forecast is cut by 40%?

FX Forwards gains taken to Other comprehensive Income

↓

When the sales forecast is revised

↓

Particulars	*(In millions USD)*
Original Sales forecast	60.00
Revised Sales forecast (60%)	36.00
OCI Balance	1.50
Reclassified to P&L (being speculative) 40%	0.60

Thank You

Faculty Contact Details: CA R.Venkata Subramani

Email: rvsbell@gmail.com;