

Financial Instruments

WIRC – IFRS Study Circle Ind AS session
Financial Instruments Workshop

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Impairment of financial assets

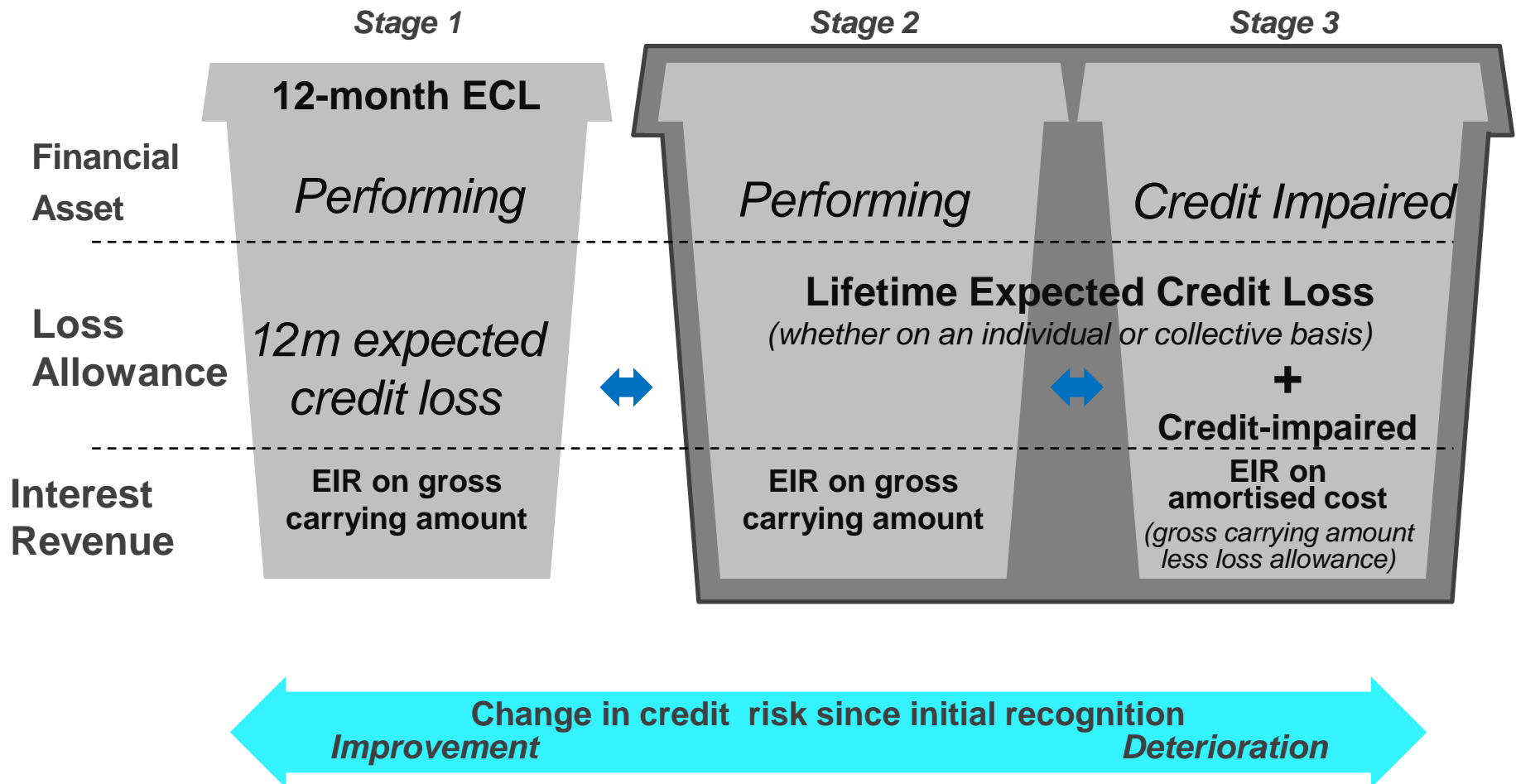


Scope of expected loss impairment provision

- ▶ Debt instruments like – loans, debt securities, bank balances and deposits and trade receivables carried at amortized cost
- ▶ Financial assets that are debt instruments measured at OCI
- ▶ Lease receivables
- ▶ Loans commitments not measured at fair value
- ▶ Financial guarantee contracts not measured at fair value

- ▶ Does NOT apply to equity investments measured at fair value

Expected credit loss model – general approach

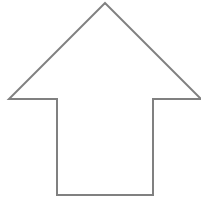


ECL Loss Provision

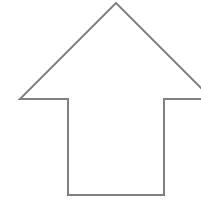
Loss due to
delay

+

Loss due to
credit risk



Time value loss



Realisation shortfall

Time Value of Money

- ▶ B5.5.28 *Expected credit losses are a probability-weighted estimate of credit losses (ie the present value of all cash shortfalls) over the expected life of the financial instrument. A cash shortfall is the difference between the cash flows that are due to an entity in accordance with the contract and the cash flows that the entity expects to receive. **Because expected credit losses consider the amount and timing of payments, a credit loss arises even if the entity expects to be paid in full but later than when contractually due.***

Quantifying the ECL provision

Prescribed Method



Probability Weighted
provisioning



Individual/collective
basis

Permitted Method



Norms based on
historical credit loss



Current data
/conditions to be
factored

Simplified approach for trade receivables

Simplified approach

- ▶ *Scope:* contract assets, trade receivables and lease receivables
- ▶ Loss allowance based on lifetime ECL
- ▶ No tracking of changes in credit risk

Purchased or originated credit-impaired assets

Purchased or originated credit-impaired assets

- ▶ *Scope:* financial assets that are credit-impaired on purchase or origination
- ▶ ECL on initial recognition reflected in credit-adjusted EIR (no 'day one' 12-month ECL)
Loss allowance based on subsequent changes in lifetime ECL

Quantifying Provision

Ind AS 109. 5.5.17 *An entity shall measure expected credit losses of a financial instrument in a way that reflects:*

- (a) an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;*
- (b) the time value of money; and*
- (c) reasonable and supportable information that is available*

without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

Reasonable and supportable information

- ▶ Information available without undue cost or efforts
 - ▶ Management judgment
- ▶ Source of information
 - ▶ External
 - ▶ Internal
- ▶ Rebuttable presumption of default if 90 days past due

Simplified approach: Provision matrix

- ▶ According to the simplified approach, for trade receivables and contract assets that do not contain a significant financing component, an entity shall always measure loss allowance at an amount equal to lifetime expected credit losses.
- ▶ A provision matrix could be used to estimate ECL for these financial instruments.

Simplified approach: Provision matrix - Example

- ▶ A Ltd, a manufacturing company, has trade receivables with gross carrying amount of Rs.500,000 at the end of 2014. Careful analyses of receivables shows:
 - ▶ A customer - Debtor X filed for bankruptcy proceedings during 2014. A's receivables to X amounts to Rs.2,200 and A's expectation to recover is NIL
 - ▶ Ageing structure of remaining trade receivables is as follows:

DPD	Amt in Rs.	% of ECL	Provision in Rs.
	A	B	A X B
Within maturity	392,200	0.5%	1,961
1-30 days	52,300	0.8%	418
31-90 days	27,600	5.6%	1,546
91-180 days	13,200	8.9%	1,175
181-365 days	7,500	20.3%	1,522
365 + days	5,000	70%	3,500
Debtor X	2,200	100%	2,200
	500,000	NA	12,322

Illustrative rates for ECL

Ageing		Cumulative Provision	
In months	Delay Loss	Credit Loss (expected)	Total (Weighted Avg)
0 -6	-	-	-
6-12	7%	5%	8%
12-24	13%	10%	15%
24-36	21%	20%	25%
>36	28%	30%	35%

Impairment of FVOCI debt investment - example

	Period 1	Period 2
Fair value	100	75
12-month ECL	5	15
Lifetime ECL	10	20
Significant increase in credit risk	No	Yes

	Period 1		Period 2		
	Dr.	Cr.		Dr.	Cr.
Asset	100		Asset		25
Cash		100	P&L (ECL)	15	
			OCI	10	
P&L (ECL)	5				
OCI		5			

Expected Credit Loss method - experiences

Company	Ind AS impact (Rs. Crores)
Tata Motors L&T	<i>Provision for expected credit losses impact on profits 362.69 (HY Sep 2015)</i>
	<i>Provision for expected credit loss impact on profits 302.06 (FY March 2016); impact on equity 785.56 (31 March 2016)</i>
Wipro	<i>Expected credit loss recognised impact on profits 4 (HY Sep 2015); impact on equity 134.7 (31 March 2016)</i>

Ind AS 113 – Fair Value Measurement



Objectives

- ▶ Requires entities to provide disclosures that would enable users to evaluate:
 - ▶ The **significance of financial instruments** for an entity's
 - ▶ Financial position
 - ▶ Financial performance; and
 - ▶ Cash flows
 - ▶ The **nature and extent of risks arising from financial instruments** to which the entity is exposed
 - ▶ During the period and
 - ▶ At the reporting date, and
 - ▶ **How the entity manages those risks**

Background

- ▶ Defines 'fair value'
- ▶ Single source of guidance and improved consistency for measuring fair value
- ▶ Enhanced fair value disclosures



Overview of Ind AS 113

Fair value: The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price).

- ▶ Does not change **when** to measure at fair value
- ▶ Provides guidance on **how** to measure fair value, when required or permitted by specific Ind AS standards
- ▶ Does not include **transaction costs**

Scope of Ind AS 113

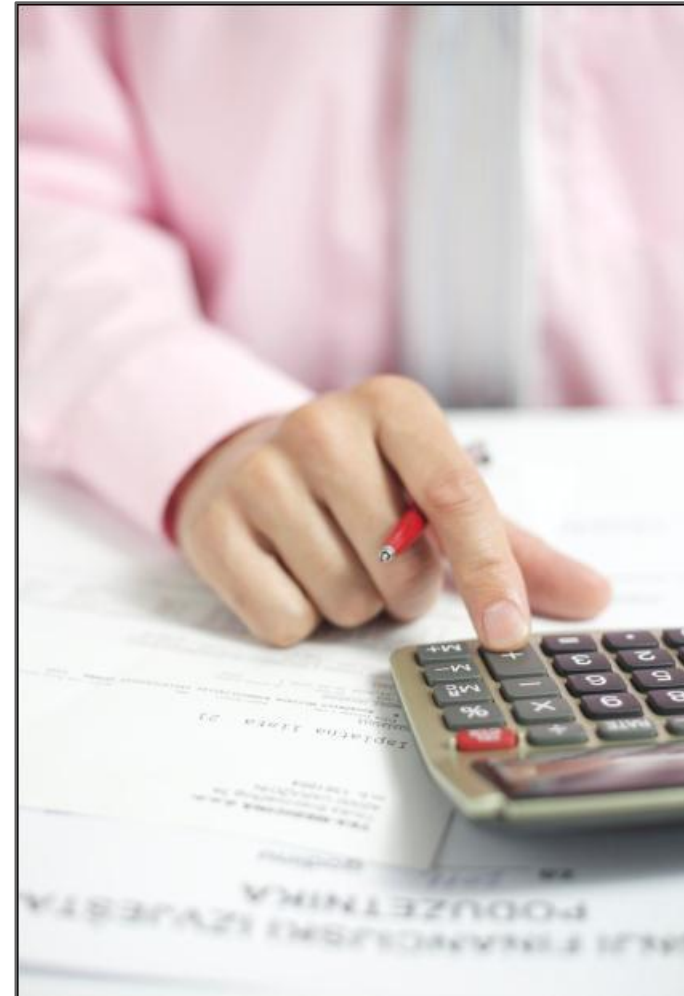
- ▶ Applies when another Ind AS standard requires or permits:
 - ▶ Fair value measurement (asset or liability, both financial and non-financial) or disclosures about fair value measurements
- ▶ Ind AS 113 scope excludes:
 - ▶ Ind AS 2 *Share-based Payment*
 - ▶ Ind AS 17 *Leases*
 - ▶ Similar terms (such as 'net realisable value' in IAS 2 *Inventory* or 'value in use' in IAS 36 *Impairment of Assets*)

Scope of Ind AS 113 (cont.)

- ▶ Ind AS 113 disclosures exclude:
 - ▶ Employee benefit plan assets under Ind AS19 *Employee Benefits*
 - ▶ Recoverable amount (based on fair value less costs of disposal) under Ind AS 36 *Impairment of Assets*

Unit of account

- ▶ Defines what is being measured and recognised for financial reporting purposes (level of aggregation or disaggregation)
- ▶ Is generally determined in accordance with the Ind AS that requires or permits the fair value measurement in the first place



Unit of account: question

An entity holds a large position in a company that is traded in an active market. If the entity sells its entire holding in a single transaction, the market's normal daily trading volume would not be sufficient to absorb the quantity held. That single transaction would affect the quoted price and result in the entity receiving a lower selling price.

Should the entity adjust the fair value of that asset to reflect this?

- ▶ Since there is an active market, the fair value of the asset or liability should continue to be measured as the product of the quoted price and the quantity held ($P \times Q$).
- ▶ The same applies to a liability or a position comprising a large number of identical assets or liabilities, such as a holding of financial instruments, that are traded in an active market.

Characteristics of the asset or liability

- ▶ Characteristics of asset or liability are considered if market participants would consider those characteristics when pricing the asset or liability at the measurement date.
- ▶ Examples:
 - ▶ Condition and location of the asset
 - ▶ Restrictions on the sale or use of the asset
- ▶ Asset or liability measured at fair value might be:
 - ▶ A stand-alone asset or liability
 - ▶ A group of assets, a group of liabilities or a group of assets and liabilities

Example: restriction on the sale of an equity instrument

An entity holds an equity instrument (i.e., financial asset) for which sale is contractually restricted for a specified period by limiting its transfer or sale to qualifying investors.

1. *Is this restriction a characteristic of the instrument?*
2. *How should fair value be measured?*

1. The restriction is a characteristic of the instrument and would therefore be transferred to market participants.
2. Fair value should be measured based on the quoted price for an otherwise identical unrestricted equity instrument of the same issuer that trades in a public market, adjusted to reflect the effect of the restriction. The adjustment would reflect the amount market participants would demand, due to risk relating to the inability to access public market for the specified period.

Highest and best use for non-financial assets

- ▶ Fair value considers a market participant's ability to generate economic benefits by using the asset in its highest and best use.
- ▶ Highest and best use considers a use that is:
 - ▶ Physically possible
 - ▶ Legally permissible
 - ▶ Financially feasible
- ▶ Current use is presumed to be highest and best use.
- ▶ Highest and best use is always considered when measuring fair value, even if the entity intends a different use.

Highest and best use for non-financial assets (cont.)

Can be either:

- ▶ On a stand-alone basis
- ▶ In combination with other assets and/or liabilities
 - ▶ Assumed the complementary assets/liabilities are available to market participants
 - ▶ Complementary liabilities include liabilities that fund working capital, but exclude liabilities to fund assets outside the relevant group
 - ▶ Assumptions must be consistent for all assets and/or liabilities of the relevant group

Example: highest and best use

Land acquired in a business combination is currently developed for industrial use as a site for a manufacturing facility. Nearby sites were recently developed for residential high-rise. It was determined that the land could be used to develop residential high-rise.

How is highest and best used determined?

- ▶ In this case, the highest and best use is determined from the higher of:
 - a) The value of the land used in the manufacturing operation
 - b) The value of the land as a vacant site for residential use
- ▶ Note that transformation costs (e.g., costs to demolish the manufacturing facility) would be considered in the value of land as a vacant site.

Liquidity

- ▶ Ind AS 113 requires liquidity considerations to be incorporated into the valuation.
 - ▶ This may be demanding and require input and engagement from valuation experts.
- ▶ Liquidity is a new Ind AS concept for non-financial assets.
 - ▶ Further discussion may be necessary at the IASB level on how to build liquidity into valuation of non-financial instruments.
- ▶ You should consider the processes and procedures required to ensure liquidity risk is built into fair value measurement for non-financial assets.

Example: liquidity

Investor X holds a 10% investment in private company Y, classified as an FVOCI investment under Ind AS 109. It values Y using a market multiple of recent earnings of comparable listed entity Z.

Should this valuation be adjusted for:

- 1. Illiquidity of Y's shares, as compared to Z?*
- 2. The lower price X is likely to get if X sold the entire 10% investment in a single transaction, rather than if it sold its shares in Y in smaller batches?*

1. X should adjust for Y's illiquidity because this is a characteristic of Y's shares. Y's shares are not listed; Z's are listed.
2. However, X should not adjust the valuation for the likely outcome that if it sold all of the 10% investment in a single transaction, it might receive a lower price. This is because the unit of account in Ind AS 109 is deemed to be a single instrument. Therefore, fair value must reflect the fair value of each share in Y.

Valuation techniques

- ▶ Objective – Estimate the Price
- ▶ Use valuation techniques that:
 - ▶ Are appropriate in the circumstances
 - ▶ Have sufficient available data
 - ▶ Maximise use of relevant observable inputs
 - ▶ Minimise use of unobservable inputs
- ▶ Ind AS 113 describes three valuation techniques
 - ▶ Income approach (discounted future cash flows)
 - ▶ Cost approach (current replacement cost)
 - ▶ Market approach (price and other relevant information)
- ▶ One or several valuation techniques might be used
 - ▶ If a range of values are indicated, select the point within that range most representative of fair value

Valuation techniques (cont.)

- ▶ If transaction price equals fair value at initial recognition, calibrate valuation technique to this price at initial recognition
- ▶ Apply valuation techniques consistently
- ▶ Change in valuation technique needed if:
 - ▶ New markets develop
 - ▶ New information becomes available
 - ▶ Information previously used is no longer available
 - ▶ Valuation techniques improve
 - ▶ Market conditions change
- ▶ Change in valuation technique = change in estimate
- ▶ Evaluate whether changes to valuation techniques are appropriately disclosed (IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* has limited application)

Fair value hierarchy

	Level 1	Level 2	Level 3
Definition	Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date	Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly	Unobservable inputs to valuation techniques
Examples	Quoted prices for an equity security that trades on the London Stock Exchange	Interest rates and yield curves observable at commonly quoted intervals, implied volatilities and credit spreads	Growth rate applied to historical cash flows used to value a business or non-controlling interest in an entity that is not publicly listed

Fair value hierarchy (cont.)

- ▶ Valuation must be based on the quoted price of an identical asset or liability traded in an active market (if available).
- ▶ Valuation techniques must maximise use of relevant observable inputs and minimise unobservable inputs.
- ▶ Multiple inputs might be categorised in different levels of the hierarchy.
 - ▶ The overall fair value measurement is categorised in the hierarchy at the lowest level input that is significant to entire measurement.
 - ▶ This requires judgement.
 - ▶ Adjustments to arrive at measurements based on fair value are **not** considered when determining the level in the hierarchy (e.g., fair value less cost to sell).

Disclosure principles

- ▶ Disclose information that helps users assess the following:
 - ▶ For assets and liabilities measured at fair value on a recurring or non-recurring basis after initial recognition, **valuation techniques** and **inputs used** to develop those measurements
 - ▶ For recurring fair value measurements using significant unobservable inputs (Level 3), the **effect of measurements** on profit or loss or other comprehensive income for the period
- ▶ Fair value disclosures are required separately for each class of assets and liabilities.
- ▶ Quantitative disclosures are presented in a tabular format unless another format is more appropriate.

Fair value hierarchy and disclosures

	Recurring fair value measurement	Non-recurring fair value measurement (after initial recognition)	Fair value disclosure (for items not measured at fair value)
Fair value at end of reporting period	✓	✓	✓
Reasons for measurement at fair value		✓	
Level in fair value hierarchy	✓	✓	✓
Amounts of transfers between Level 1 and Level 2, reasons for transfers and policy for determining when transfers occurred	✓		
If highest and best use differs from current use, that fact, and why being used that way	✓	✓	✓

Fair value hierarchy and disclosures (cont.)

	Recurring fair value measurement	Non-recurring fair value measurement (after initial recognition)	Fair value disclosure (for items not measured at fair value)
For Level 2 and 3, a description of valuation technique(s) and inputs used	✓	✓	✓
For Level 2 and 3, any changes in valuation technique(s), and reasons for change	✓	✓	✓
For Level 3, quantitative information about significant unobservable inputs	✓	✓	
For Level 3, description of valuation processes	✓	✓	

Recurring Level 3 measurement disclosures

- ▶ For recurring Level 3 fair value measurements, reconcile opening balances to closing balances showing separately:
 - ▶ Total gains or losses recognised in P&L, and which line item(s)
 - ▶ Unrealised gains or losses relating to assets and liabilities held at balance date and which line item(s)
 - ▶ Total gains or losses recognised in other comprehensive income and which line item(s)
 - ▶ Purchases, sales, issues and settlements (each separately)
 - ▶ Amounts of any transfers in/out of Level 3 (each separately)
 - ▶ Reasons for transfers in/out of Level 3
 - ▶ Accounting policy for determining when transfers occurred

Recurring Level 3 measurement disclosures (cont.)

- ▶ A **narrative description of sensitivity** to changes in unobservable inputs, if a change in those inputs to a different amount might result in a significantly higher or lower fair value
- ▶ If there are **interrelationships** between those inputs and other unobservable inputs used, describe those interrelationships and how they might magnify or mitigate effect of changes in unobservable inputs
 - ▶ At a minimum, qualify the unobservable inputs
- ▶ For financial assets and financial liabilities, disclose if changing one or more of the unobservable inputs would change fair value significantly
 - ▶ Same disclosure previously required in Ind AS 7.27B(e) *Financial Instruments: Disclosures*

Amazon

AMAZON'S CASH MACHINE

Its earnings aren't much to look at, but the company's cash flows have been stupendous.

MILLIONS OF \$US

\$6,000 —

4,000 —

2,000 —

2004

06

08

10

12

13

OPERATING
CASH FLOW

FREE CASH
FLOW

NET
INCOME

SOURCE COMPANY REPORTS

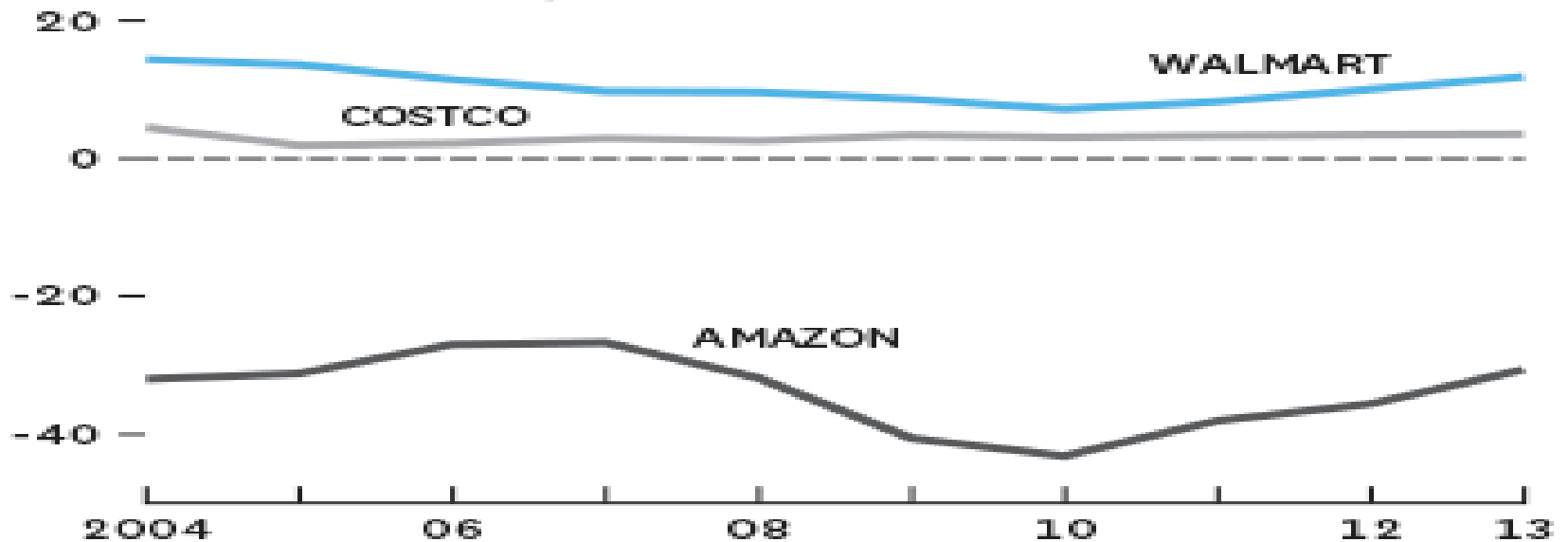
HBR.ORG

Amazon, Walmart and Costco

IN A DIFFERENT LEAGUE

There's a lag of just a few days at Walmart and Costco between when they have to pay suppliers and when their customers pay. Amazon, however, gets paid weeks *before* it has to pay out.

CASH CONVERSION CYCLE, IN DAYS



SOURCE MORNINGSTAR

HBR.ORG

Ind AS 107 - *Financial Instruments Disclosures*



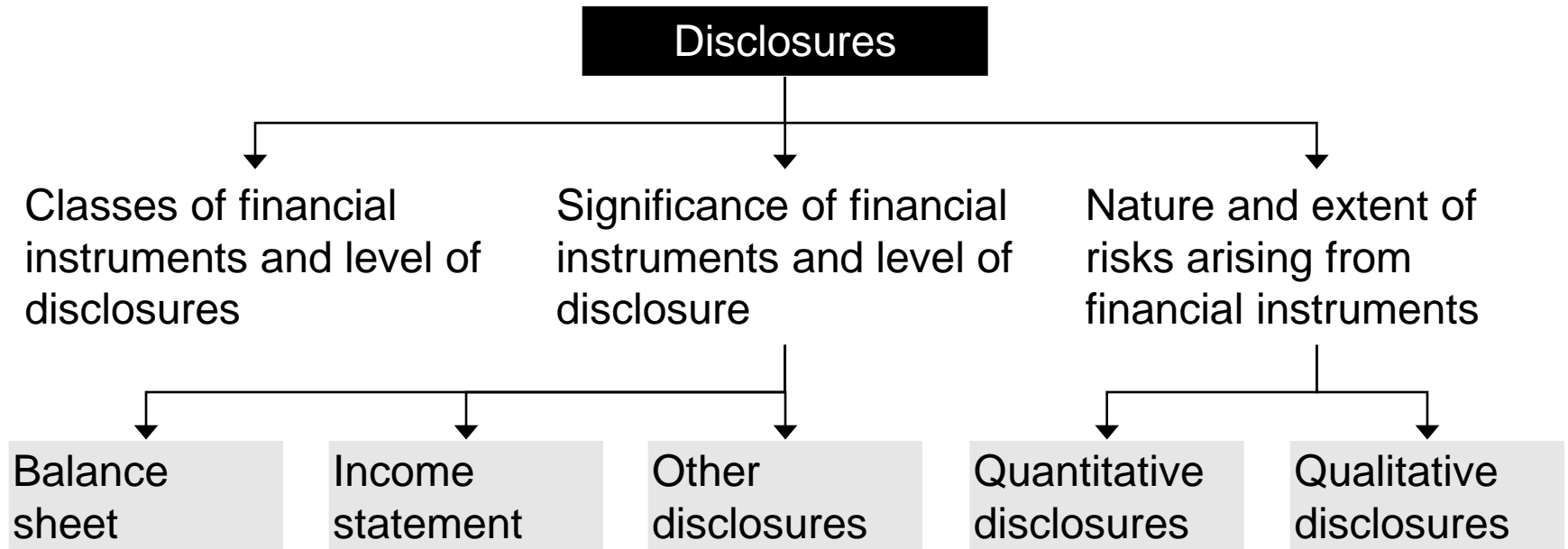
Objectives

- ▶ Requires entities to provide disclosures that would enable users to evaluate:
 - ▶ The **significance of financial instruments** for an entity's
 - ▶ Financial position
 - ▶ Financial performance; and
 - ▶ Cash flows
 - ▶ The **nature and extent of risks arising from financial instruments** to which the entity is exposed
 - ▶ During the period and
 - ▶ At the reporting date, and
 - ▶ **How the entity manages those risks**

Scope

- ▶ Similar to Ind AS 109/ Ind AS 32
- ▶ Applies to all entities
- ▶ Applies to all financial instruments, except:
 - ▶ those interests in subsidiaries, associates and joint ventures that are accounted for in accordance with Ind AS 27 and IndAS 28
 - ▶ employers' rights and obligations arising from employee benefit plans
 - ▶ insurance contracts as defined in Ind AS 104
 - ▶ financial instruments, contracts and obligations under share-based payment transactions to which Ind AS 102 applies

Ind AS 107 – Disclosure summary



Classes of financial instruments

- ▶ Group financial instruments into classes that:
 - ▶ Are appropriate to the nature of the information disclosed; and
 - ▶ Take into account the characteristics of those financial instruments
- ▶ Classes are determined by the entity
- ▶ May be distinct from the categories specified in Ind AS 109

Classes of financial instruments (cont'd.)

- ▶ In determining classes, at a minimum:
 - ▶ distinguish instruments measured at amortised cost from those measured at fair value
 - ▶ treat financial instruments outside the scope of Ind AS 107 as a separate class or classes
- ▶ Strike a balance between:
 - ▶ overburdening financial statements with excessive details; and
 - ▶ obscuring important information as a result of too much aggregation

Significance of financial instruments for financial position and performance

- ▶ Disclose information that enables users to evaluate the significance of financial instruments for an entity's:
 - ▶ Financial position; and
 - ▶ Performance

Balance sheet disclosures

- ▶ Disclosure permitted on the face of the balance sheet or in the notes to the financial statements
- ▶ Focus on disclosure by class of financial instrument
- ▶ Additional detail in disclosures for each category of financial instruments

Categories of financial assets and financial liabilities

- ▶ Disclose carrying amounts of the following categories either on face of balance sheet or in notes:
 - ▶ Financial assets at fair value through profit or loss (FVTPL), showing separately:
 - ▶ Designated as such upon initial recognition; and
 - ▶ Classified as held-for-trading
 - ▶ FVOCI equity investments
 - ▶ FVOCI debt investments
 - ▶ Financial assets at amortised cost
 - ▶ Financial liabilities at fair value through profit or loss (FVTPL), showing separately:
 - ▶ Designated as such upon initial recognition; and
 - ▶ Classified as held-for-trading
 - ▶ Financial Liabilities carried at amortised cost

Categories of financial assets and financial liabilities

- ▶ Sufficient information should be provided to permit the disclosures by class of asset to be reconciled to the line items presented in the balance sheet
- ▶ Carrying amounts of financial instruments classified as held for trading and those designated at fair value through profit or loss are shown separately because designation is at the discretion of the entity

▶ Example:

▶ Infosys



Infy- FI FV note.xps

Nature and extent of risks

- ▶ Disclose information that enables users to evaluate
 - ▶ Nature and extent of risks arising from financial instruments to which the entity is exposed at the reporting date.
- ▶ Combination of qualitative and quantitative risk disclosures required to meet the objective
- ▶ To bring financial reporting more closely into line with the way the management views/ runs their businesses
- ▶ May bridge gap between the internal management information and the general purpose financial statements

Nature of risks

- ▶ Credit risk
- ▶ Liquidity risk
- ▶ Market risk
 - ▶ Currency risk
 - ▶ Interest rate risk
 - ▶ Other price risk

Qualitative disclosures

- ▶ Disclose for each type of risk
 - ▶ exposures to risk and how they arise;
 - ▶ objectives, policies and processes for managing the risk;
 - ▶ methods used to measure the risk; and
 - ▶ any changes in the above from the previous period

Quantitative disclosures

- ▶ For each type of risk arising from financial instruments, an entity shall disclose:
 - ▶ summary quantitative data about its exposure to that risk at the reporting date
 - ▶ This disclosure shall be based on the information provided internally to key management personnel of the entity
 - ▶ disclosures required by specific paragraphs of the standard, to the extent not provided in above, unless the risk is not material
 - ▶ concentrations of risk if not apparent from the above

Quantitative disclosures – liquidity risk

- ▶ An entity shall disclose:
 - ▶ A maturity analysis for financial liabilities that shows the remaining contractual maturities; and
 - ▶ A description of how it manages the liquidity risk inherent in the above requirement
- ▶ Disclosure of contractual maturities i.e. undiscounted future cash flows arising from the financial instruments

Liquidity Risk – How should financial guarantees be disclosed?

- ▶ Financial Guarantees to be recorded in the contractual maturity analysis based on the maximum amount guaranteed
- ▶ Financial guarantees disclosures based on the earliest date they can be drawn down, irrespective of whether it is likely that those guarantees will be drawn or the amount that is expected to be paid.

Quantitative disclosures

▶ Market risks

Market risk is “the risk that the fair value or future cash flows of a financial instruments will fluctuate because of changes in market prices and includes interest rate risk, foreign currency risk and other price risk.”

Quantitative disclosures

- ▶ Disclosure
 - ▶ Sensitivity analysis for each type of market risk
 - ▶ Market risk sensitivity analysis includes the effect of ‘a reasonably possible change’ in risk variables in existence at balance sheet date if applied to all risks in existence at that date.
 - ▶ Reasonable possible change is not remote or ‘worst-case’ scenarios or ‘stress tests’
 - ▶ Affect on profit or loss and equity
 - ▶ Methods and assumption used in analysis
 - ▶ Changes for previous period
 - ▶ Reason for change

Examples

- ▶ Crompton Greaves



Adobe Acrobat
Document

- ▶ Sify Technologies



Adobe Acrobat
Document

- ▶ Infosys (IFRS)



Adobe Acrobat
Document

- ▶ Unilever Plc (IFRS)



Adobe Acrobat
Document

Derivatives and embedded derivatives



Derivative definition

Three characteristics

```
graph TD; A[Three characteristics] --> B[Fair value changes in response to changes in one or more underlying variables]; A --> C[No or little initial net investment]; A --> D[Settled at a future date]; B --> E[Instruments with a non-financial underlying variable that is specific to a party to the contract are NOT derivatives; example:]; E --> F[• Non-financial variables that are NOT specific to a party may include an index of earthquake losses in a particular region or an index of temperatures in a particular city]; E --> G[• Non-financial variables that are specific to a party - Linked to credit rating of the party to the contract];
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Fair value changes in response to changes in one or more underlying variables

No or little initial net investment

Settled at a future date

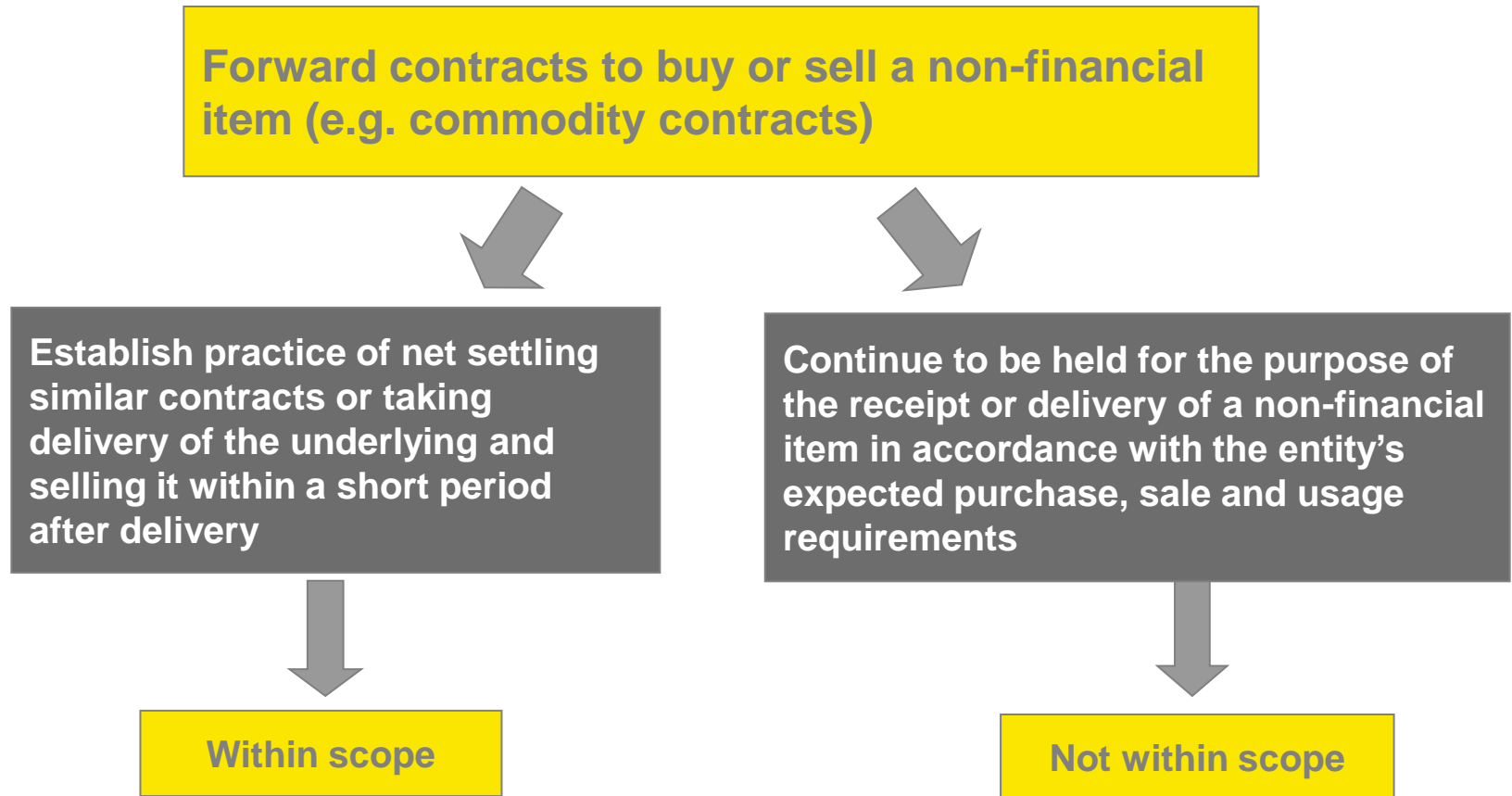
Instruments with a non-financial underlying variable that is specific to a party to the contract are **NOT** derivatives; example:

- **Non-financial variables that are NOT specific to a party** may include an index of earthquake losses in a particular region or an index of temperatures in a particular city
- **Non-financial variables that are specific to a party** - Linked to credit rating of the party to the contract

Examples of derivatives and underlyings

Type of contract	Main variable
Interest rate swap	Interest rate
FX forward	Foreign exchange rate
Commodity option	Commodity price
Credit default swap	Credit risk
Purchased or written stock call or put option	Equity price

Scope: Non-financial item contracts



Embedded derivatives

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract

An embedded derivative causes some of the cash flows of the combined instrument to vary in a similar way to a stand-alone derivative

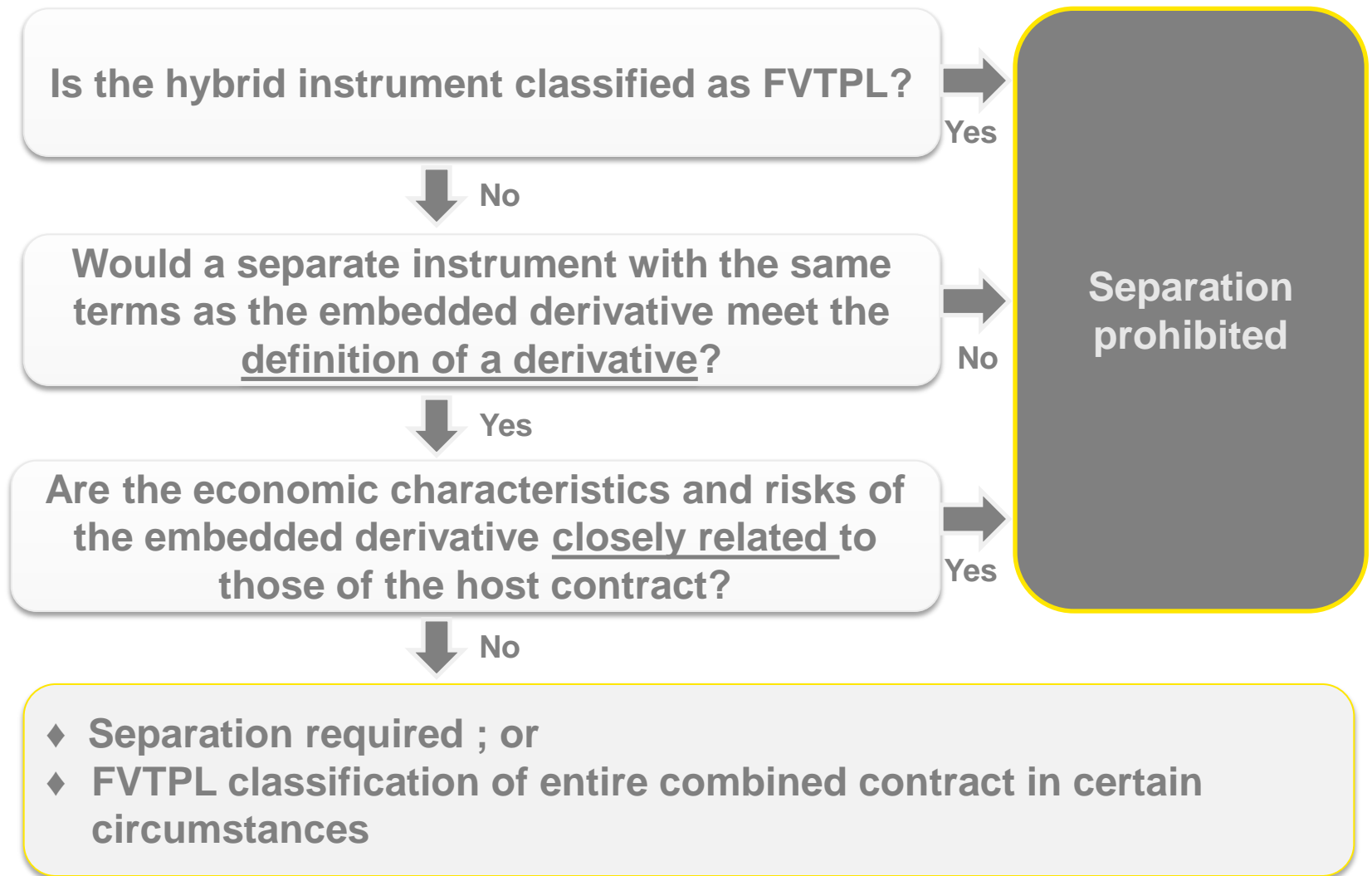
Requirements on separation of embedded derivatives retained from Ind AS 109 in relation to Financial Liability

An embedded derivative is attached to a financial instrument and is not contractually transferable independently of that instrument and has the same counterparty

Examples of embedded derivatives

Type of contract	Embedded derivative
Bond with interest payments linked to an equity index	Equity-indexed payments
Inflation-indexed lease contract	Inflation-indexed payments
Bond with a call option	Call option
Sales contract in third currency	FX forward

Separation of embedded derivatives



Separation of foreign currency embedded derivatives from non-financial instrument contract

Is the embedded foreign currency derivative leveraged or does the hybrid contract contain an option feature?

No

Are payments denominated in the **functional currency of one of the substantial parties** to the contract?

Yes

No

Are payments denominated in the currency in which the price of related goods/services are **routinely denominated around the world**?

Yes

No

Are payments denominated in **currency commonly used in contracts to purchase / sell non-financial items in economic environment in which transaction takes place**?

Yes

No

Separation required

Separation prohibited

Yes

Example- Optionally convertible bond

- ▶ I Ltd. issues bonds optionally convertible preference shares to H Ltd. amounting to Rs. 50 crores.
- ▶ The shares are convertible at the option of H during the term of 10 years.
- ▶ If H does not convert, I Ltd. has to redeem the preference shares at the end of 10 years
- ▶ Fair value of the conversion option is Rs. 2 crores.

- ▶ How do you separate the embedded derivatives?

Sale/ purchase contracts: Functional currency of counter party

- ▶ If payments are denominated in the **functional currency of one of the substantial parties** to the contract, embedded derivatives are not separated.
- ▶ **Example 1:**

A Ltd. an Indian company enters into a long term exports transaction with A Plc a US based company.

Scenario 1: The contract is denominated in USD.

Scenario 2: The contract is denominated in INR.

Scenario 3: The contract is denominated in Euro.

Sale/ purchase contracts: Functional currency of counter party- Example

Airport Authority of India (Indian Authority) invited a construct and install airport radar equipment and maintain a city airport. The tender requires the bidder to procure the certain airport equipment from either A plc or B Plc, both US based multinationals. X Ltd. (Indian company) wins the contract and enters into agreement with A Plc.

X bills to the Airport Authority for the equipment that it procures from A in USD. This is meant to pass on the foreign exchange volatility to the customer.

Billing for installation and maintenance is in INR, since there is no foreign involved.

Would the embedded derivatives be required to be separated?

Sale/ purchase contracts: Routinely denominated- Example

Payments denominated in the currency in which the price of related **goods/services are routinely denominated around the world are** not separated.

Example

A Ltd. an oil refining company in India enters in long term agreement to procure crude oil from X a Russian company. The contract is denominated in USD.

Would the embedded derivatives be required to be separated?

Sale/ purchase contracts: Commonly used currency- Example

No separation of embedded derivatives is required in payments denominated in **currency commonly used in contracts to purchase / sell non-financial items in economic** environment in which transaction **takes place**

Example

A Ltd. an Indian company enters into a contract with a Japanese company to export goods. The contract is denominated in USD.

Would the embedded derivatives be required to be separated?

Sale/ purchase contracts: Commonly used currency- Example

Example

A Ltd. an Indian company enters into a contract with a Indonesia company to export goods. The contract is denominated in JPY.

Would the embedded derivatives be required to be separated?

Embedded derivatives in lease agreements

- ▶ Lease escalations based on inflation
- ▶ Contingent rentals based on sales of the lessee
- ▶ Contingent rentals based on foot fall

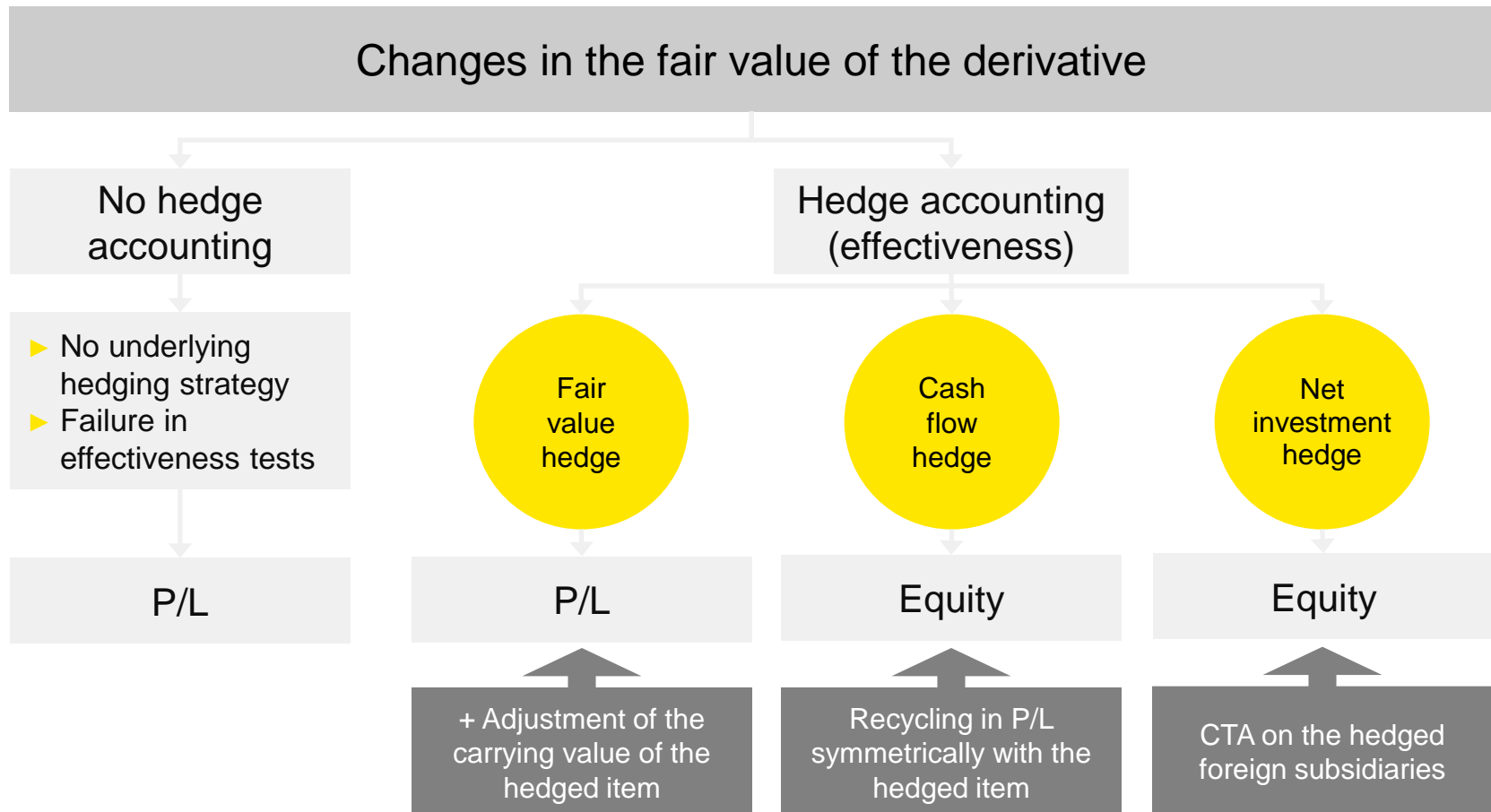
Embedded derivatives in input /ingredient based pricing

- ▶ Proxy pricing mechanism, examples,
 - ▶ Base oil supply contract based on crude oil price
 - ▶ Natural Gas supply based on crude oil price
 - ▶ Equipment supply contract based on steel price index
 - ▶ Manpower supply contract linked to wage scales

Hedge accounting



General framework of hedge accounting



Hedge accounting

- ▶ Special accounting used to reflect hedge relationship in the financial statements
- ▶ Objective is to manage/ smoothen profit of loss
 - ▶ Matches earnings recognition of hedging instruments with that of hedged item
 - ▶ Normal derivative accounting does not apply
 - ▶ At the sacrifice of balance sheet
- ▶ Designated hedging relationship between hedging instrument and hedged item is required
- ▶ Ind AS 109 also lays down conditions for documentation and hedge effectiveness

Commonly used types of hedging relationship

- ▶ Fair value hedge
- ▶ Cash flow hedge
- ▶ Net investment hedge

Fair value hedges

- ▶ Hedging the exposure to changes in the fair value of a recognised asset, liability, or unrecognised firm commitment that is attributable to a particular risk and could affect reported profit or loss
- ▶ Aims to provide protection from changes in the fair value arising from market price movements

Examples of fair value hedges

- ▶ Fixed-rate debt issued by the entity and hedged using a 'receive fixed/pay floating' interest rate swap. This protects the fair value of the debt against changes in interest rates.
- ▶ Equity security hedged with a purchased put option. This protects against a decline in fair value of the security below a pre-determined level (the strike price of the option).
- ▶ Oil held in inventory and hedged using a six-month oil forward. This protects the fair value of the inventory against changes in the oil price during the six-month period.

Cash flow hedges

- ▶ Hedging the exposure to changes in the cash flows attributable to a particular risk associated with a recognised asset, liability, or highly probable forecasted transaction and could affect reported profit or loss
- ▶ Aims to provide protection from the variability of cash flows arising from market price movements

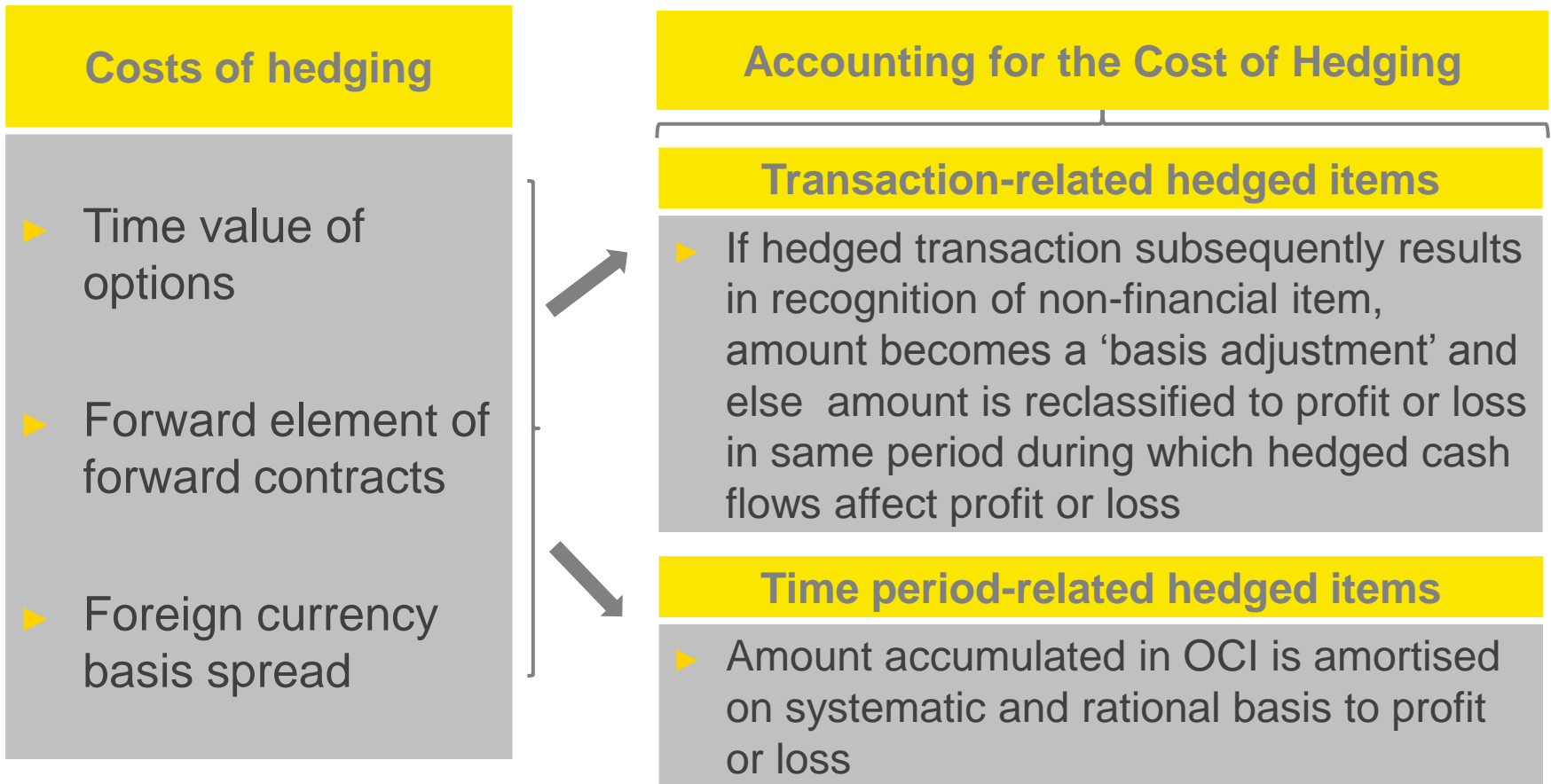
Examples of cash flow hedges

- ▶ Floating-rate debt issued by the entity and hedged using a "receive floating/pay fixed" interest rate swap. This protects the future interest cash flows to be paid on the debt against changes in interest rates
- ▶ Forecasted USD foreign currency sales of airline seats in September hedged by a USD/euro forward contract. This protects the euro cash flows to be received from the sales against changes in exchange rates
- ▶ A firm commitment to buy a machine in six months' time for a fixed USD foreign currency amount hedged by a USD/euro forward contract.
This protects the future euro cash flows to be paid against changes in exchange rate

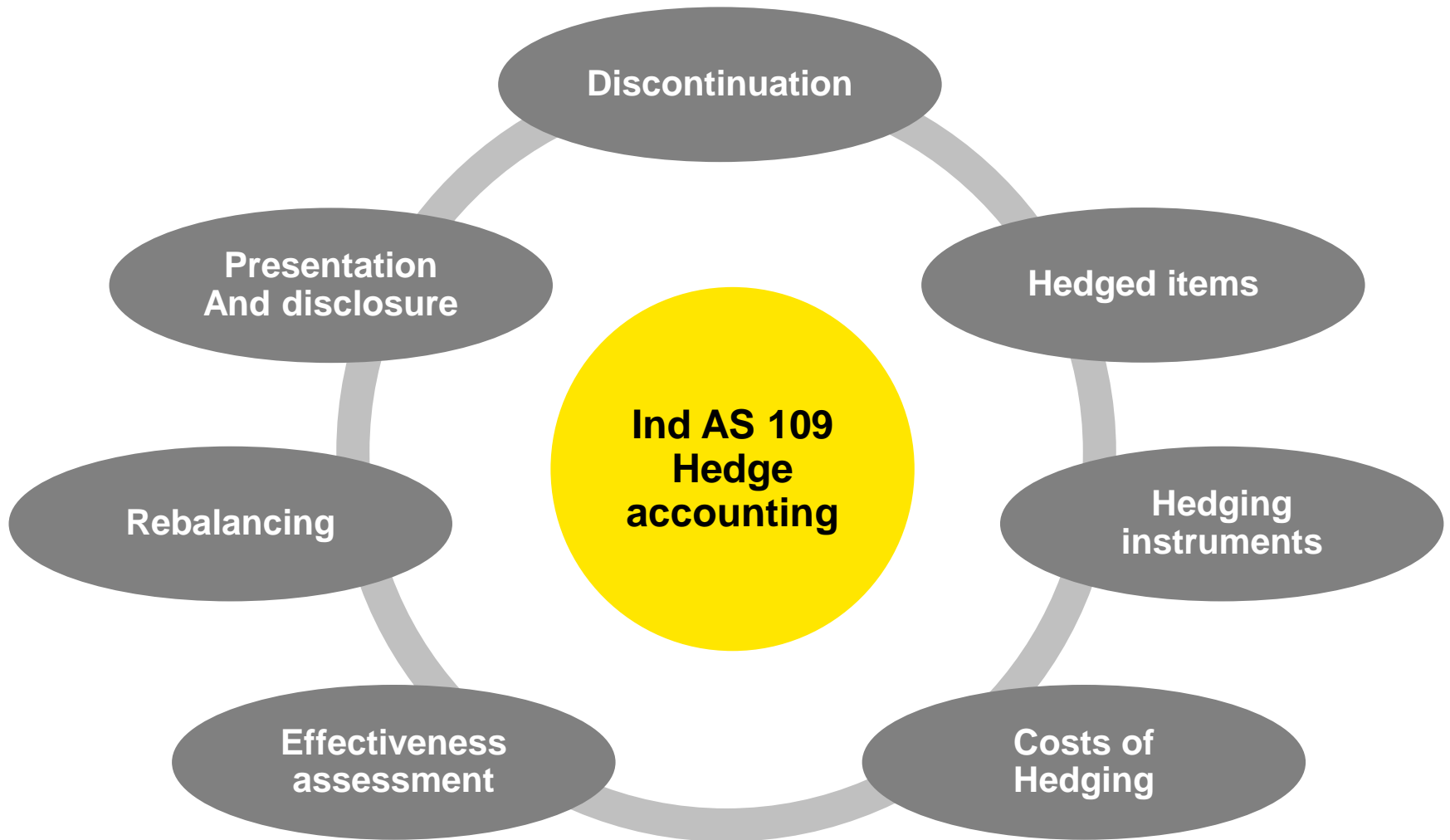
Summary – accounting treatment for qualifying hedges

	Fair value hedges	Cash flow hedges
1. Gain/loss on hedging instrument	Recognised immediately in profit or loss	To the extent fully effective, in equity
2. Adjustment to hedged item	Change in fair value due to the hedged risk recognised immediately in profit or loss	N/A
3. Hedged effectiveness recorded in profit or loss	By default	Calculated
4. Gain or loss in equity transferred to profit or loss	N/A	Generally, in the same period or periods during which the hedged forecast transaction or asset acquired or liability assumed affects profit or loss

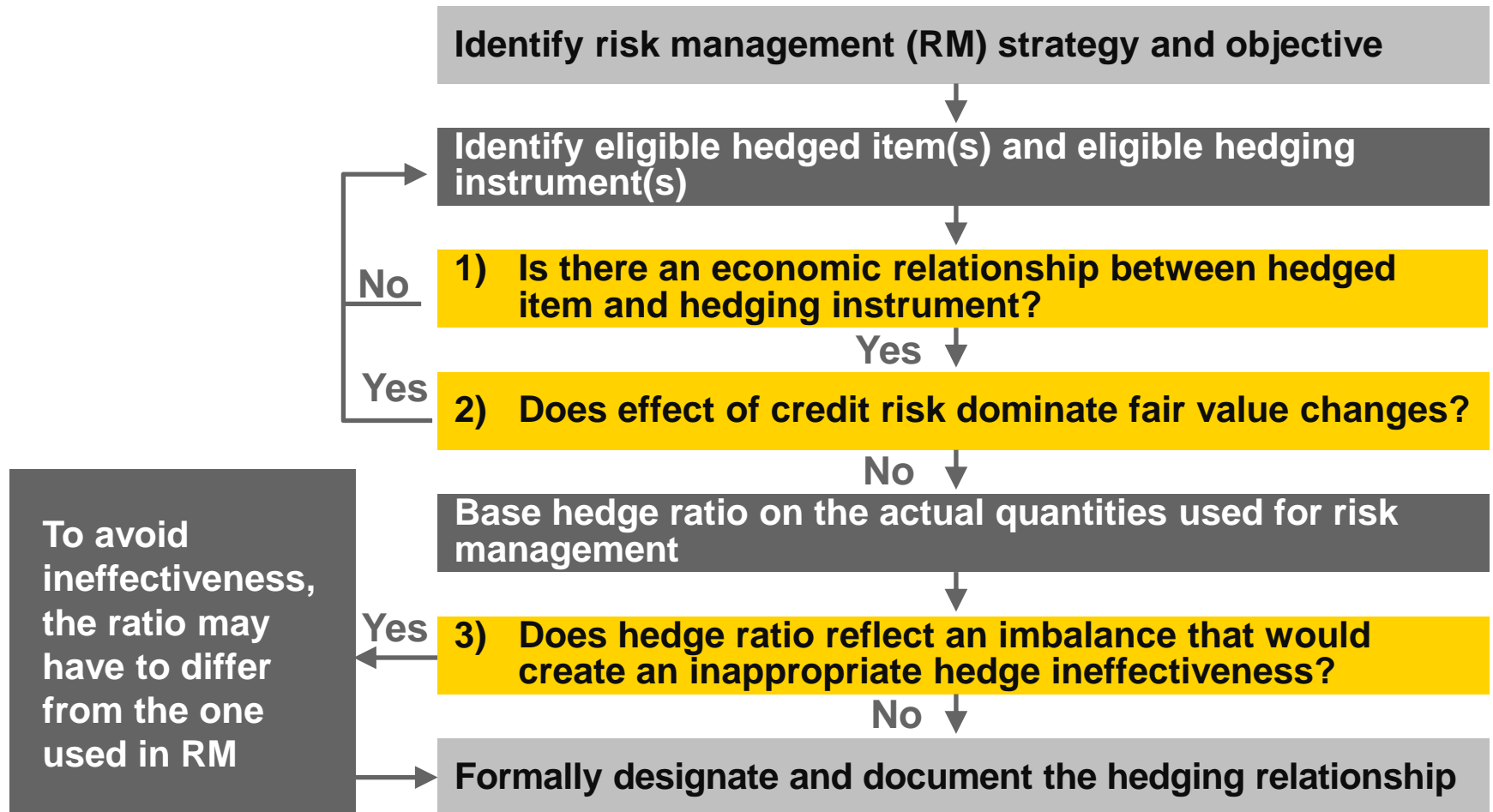
Costs of hedging



Hedge accounting: overview



Designating a hedging relationship



Risk management strategy and risk management objective

Risk management *strategy*

- ▶ Established at a high level (e.g., entity)
- ▶ Identifies risks (in general) and how entity responds to them
- ▶ Typically in place for longer period
- ▶ May include flexibility
- ▶ Often a formal policy document
- ▶ Part of hedge documentation

Risk management *objective*

- ▶ Applies at level of particular hedging relationship
- ▶ Describes how a particular hedging instrument is used to hedge a particular exposure designated as the hedged item
- ▶ Part of hedge documentation

Examples of risk management strategy and risk management objective

Risk management strategy

Maintain 40% of liabilities at floating interest rate

Assure long-term price stability of commodity purchases

Hedge foreign currency risk of all forecast purchases in USD up to 12 months

Risk management objective

Designate an interest rate swap as a fair value hedge of a GBP 100m fixed rate liability

Designate a coal forward contract to hedge the first 100 tonnes of coal purchases in March 2013

Designate a foreign exchange forward contract to hedge the foreign exchange risk of the first USD100 purchases in March 2013

Qualifying hedge items

A single (or a group of items if they share the same risk):

- ▶ Recognised asset or liability
- ▶ Unrecognised firm commitment
- ▶ Highly probable forecast transaction
- ▶ Net investment in a foreign operation
- ▶ Equity investments at FVTOCI
- ▶ Net position hedging for fair value hedges and cash flow hedges of foreign exchange risk

Qualifying hedging instruments

Derivatives

Separable embedded derivatives

Non-derivatives designated as hedging instruments for hedging of any risk.

For example: Commodity price linked investments can be used as hedging instruments against purchase of commodity

Written options may be designated only for hedging of purchased options



Thank you