

Fair Value Measurement (Ind AS 113)



Balance Sheet

	2012	2011
Assets		
Current assets:		
Cash	282,546.00	168,742.00
Investments	375,495.00	94,585.00
Inventory	23,310.00	18,754.00
Accounts receivable	11,000.00	21,000.00
Pre-paid expenses	2,874.00	8,068.00
Other	275.00	89.00
TOTAL current assets	372,500.00	209,027.00
Fixed assets:		
Property and equipment	18,387.00	18,962.00
Intangible assets	2,542.00	2,340.00
Leasehold improvements	11,454.00	8,500.00
Less accumulated depreciation	85.00	8,710.00
TOTAL fixed assets	32,408.00	20,092.00
Other assets:		
Goodwill	0.00	0.00
Total other assets	0.00	0.00
Total assets	372,500.00	214,119.00
Liabilities and owner's equity		
Current liabilities:		
Accounts payable	658.00	450.00



Overview of Ind AS 113

Ind AS 113 sets out a framework for measuring fair value in a single Ind AS and answers:

#1:
What is meant
by “fair value”?

#2:
How should an
entity measure
fair value?

#3
What should be
disclosed about fair
value measurement?

Objectives

You will be able to:

- Define fair value and describe the key principles in measuring fair value under Ind AS 113
- Apply the fair value measurement principles to a range of practical scenarios
- Determine the appropriate valuation techniques
- Apply the fair value hierarchy for fair value measurement and disclosures.

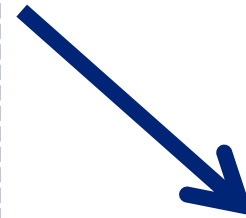
What is the scope of Ind AS 113?

Scope of Ind AS 113

Applies when another Ind AS **requires or permits** fair value **measurements or disclosures**

Applies to both **initial** and **subsequent** measurement as to how to determine fair value

The scope of Ind AS 113 is broad



Ind AS 113 does not address which types of assets, liabilities and items classified as an entity's own shareholders' equity should be measured / disclosed at fair value

Examples of how broad the scope of Ind AS 113 is

Ind AS 103

- Identifiable assets and liabilities of an acquiree are measured at fair value with certain exceptions
- Non-controlling interest can be measured at fair value at the date of acquisition
- Previously-held equity interest is measured at fair value on a step acquisition

Ind AS 105

- Non-current assets and/or disposal groups are measured at the lower of carrying amounts and fair value less costs to sell.

Ind AS 16

- Items that are measured using the revaluation model (i.e., fair value at the date of revaluation less subsequent accumulated depreciation and impairment)

Examples of how broad the scope of Ind AS 113 is

Ind AS 32

- Fair value of a compound instrument as a whole

Ind AS 36

- When the recoverable amount is determined based on “fair value less costs of disposal”

Ind AS 38

- Items that are measured using the revaluation model (i.e., fair value at the date of revaluation less subsequent accumulated depreciation and impairment)

Ind AS 109

- Financial assets and liabilities are measured at fair value on initial recognition
- Financial assets and liabilities that are measured at fair value at the subsequent reporting dates
- Financial assets and liabilities that are not measured at fair value at subsequent reporting dates but disclosure of fair value is required in accordance with Ind AS 107

Scope exemptions

2 categories of scope exemptions

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graph TD; A[2 categories of scope exemptions] --> B[Category 1: Exempt from Ind AS 113 measurement and disclosure requirements]; A --> C[Category 2: Exempt only from Ind AS 113 disclosure requirements];
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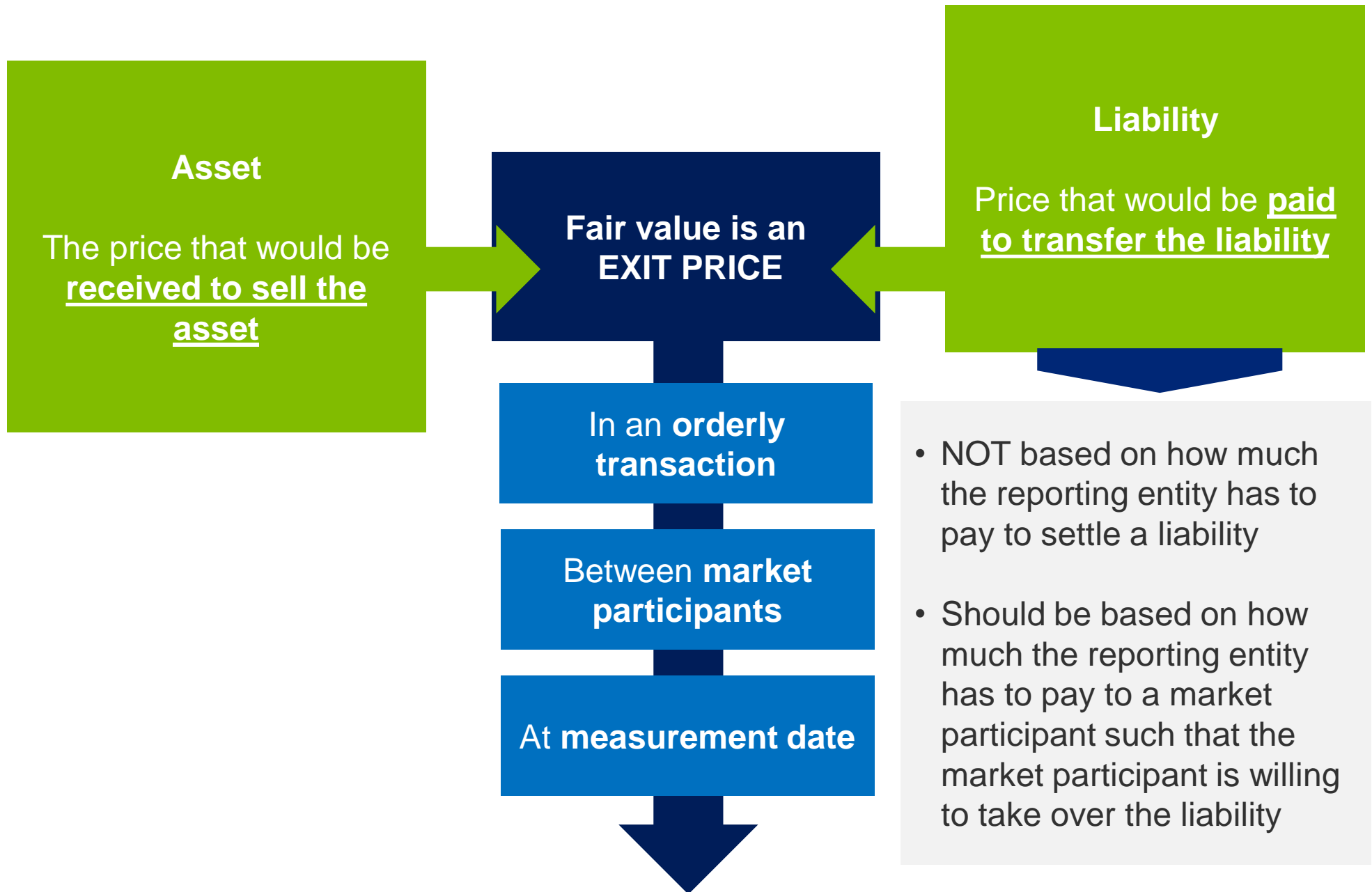
Category 1: Exempt from Ind AS 113 measurement and disclosure requirements

- Share-based payment transactions within the scope of Ind AS 102
- Leasing transactions within the scope of Ind AS 17
- Measurements that have similarities to fair value but are not fair value (e.g., net realisable value in Ind AS 2 or value in use in Ind AS 36)

Category 2: Exempt only from Ind AS 113 disclosure requirements

- Plan assets measured at fair value in accordance with Ind AS 19
- Assets for which the recoverable amount is fair value less costs of disposal in accordance with Ind AS 36

Definition of fair value



What should be considered in determining fair

Unit of account

- What is being measured?
- What is the appropriate **unit of account**? Is it the same as the basis for valuation?

Market

- What is the principal (or if none exists, the most advantageous) market?

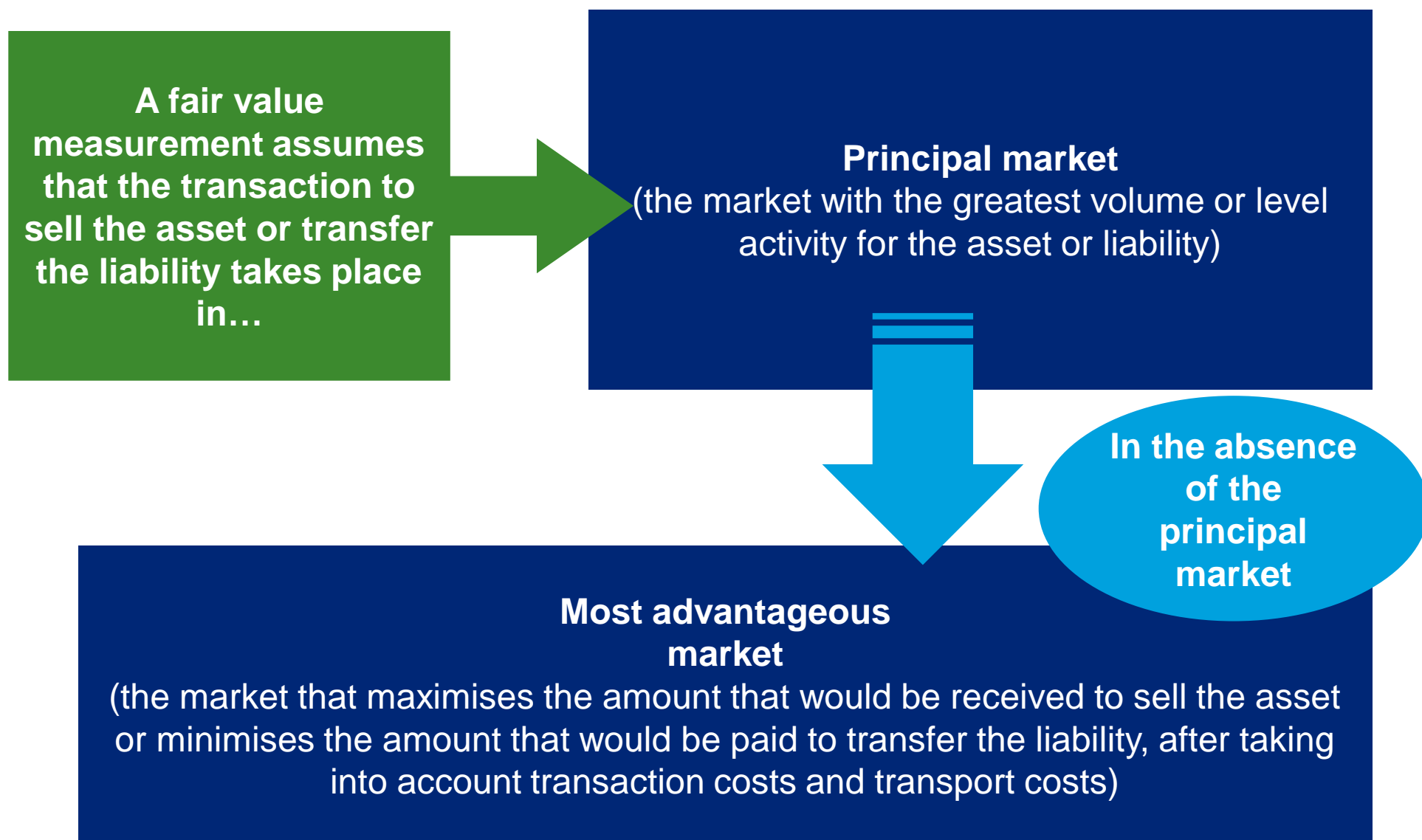
Assumptions

- What **assumptions** would market participants in the principal (or the most advantageous) market take into account when pricing the asset or liability?
- What **characteristics** of the asset or liability would market participants take into account?

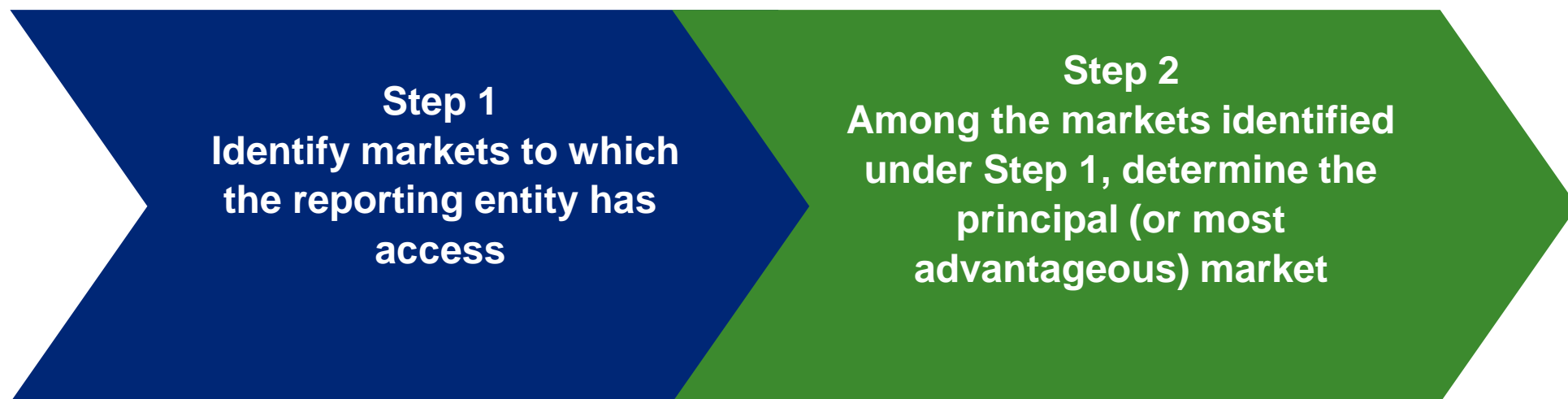
Inputs and valuation techniques

- What **inputs** are available and could be used in determining the fair value? What is (are) the appropriate **valuation technique(s)**?

Step 2: Identifying the market



Identifying the market



Example

Step 1

Entity A is engaged in the trading of goods and has access to Markets B, C, D, E and F

Step 2

Entity A determines that Market B is the principal (or most advantageous) market

Identifying the market

Does it mean that we need to do an exhaustive search in identifying the principal (or the most advantageous) market?



Entities need not undertake an exhaustive search of all possible markets

- Should take into account all information that is reasonably available
- In the absence of evidence to the contrary, the market in which the entity would normally enter into a transaction to sell the asset or to transfer the liability is presumed to be the principal market or the most advantageous market

Step 3: Determining the pricing assumptions

Adjust

Don't adjust

Transport costs

Adjust if location is a characteristic of an asset



e.g., cost to ship goods from one location to another

Fair value is an
EXIT PRICE

Note: Both transport costs and transaction costs would be taken into account in identifying the most advantageous market

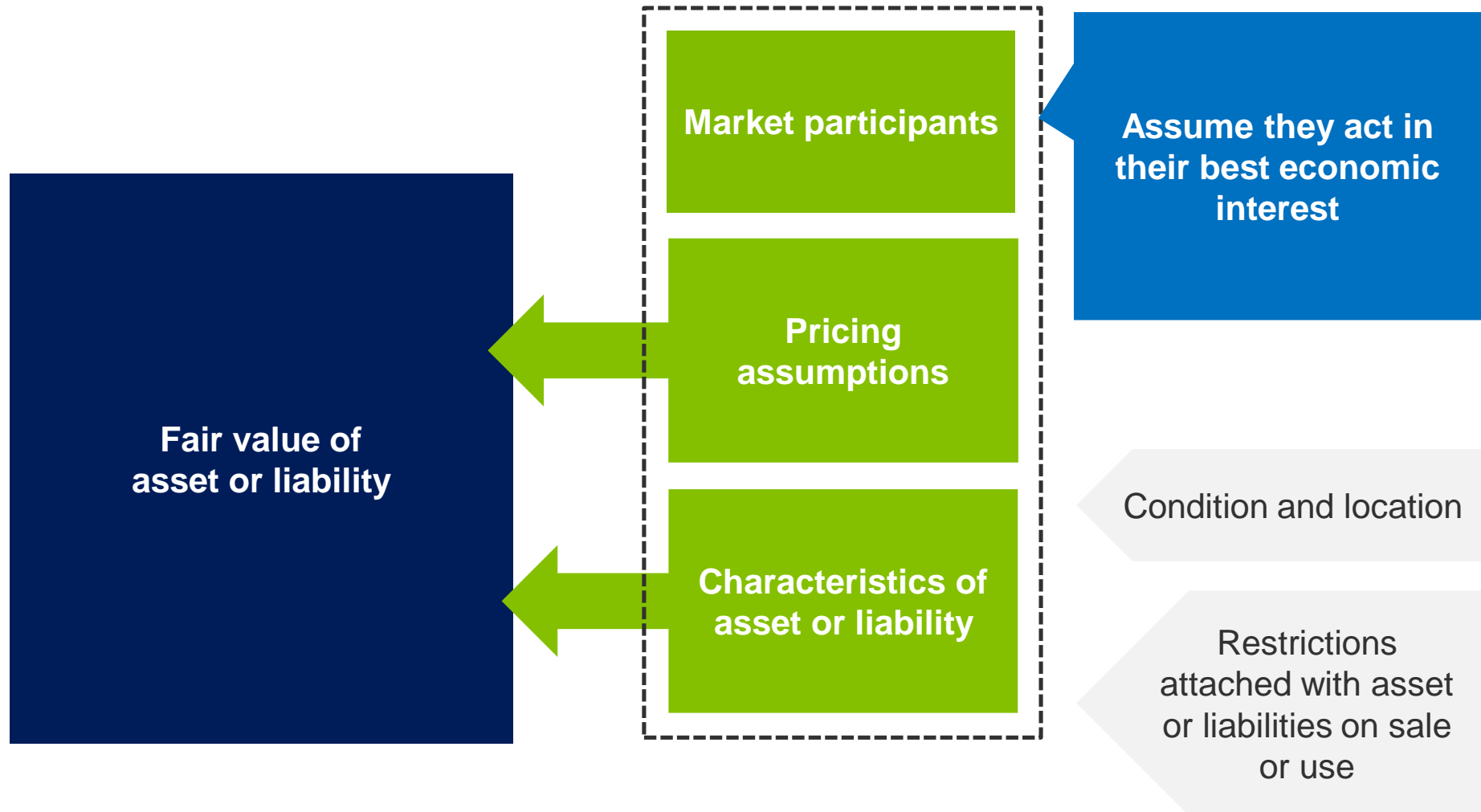
Transaction costs

Don't adjust – not a characteristic of an asset or liability
Transaction costs are accounted for in accordance with other applicable Ind ASs



e.g., commission fees payable to real estate agents when an entity sells its property

Characteristics of the asset or liability



Quiz 4: Characteristics of asset or liability

Facts:

- Entity A has a loan receivable from Entity B (a borrower).

Question:

- **Should Entity A consider the credit standing of Entity B in determining the fair value of the loan receivable?**

Quiz 4: Suggested accounting response

- Yes. Entity A should consider Entity B's credit standing in determining the fair value of the loan receivable in accordance with Ind AS 113.
- Ind AS 113.22 states "An entity shall measure the fair value of an asset or a liability using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest".
- Market participants would incorporate the effects of the borrower's credit into the valuation of a loan receivable because this can potentially affect the amount of proceeds they ultimately receive from the borrower.

Quiz 5: Restrictions on the sale or use of an asset

Facts:

- Entity A owns some equity instruments.
- There are some restrictions on the sale of the shares for a specified period of time.

Question:

- **Should a restriction on the sale or use of an asset be considered in determining its fair value?**

Quiz 5: Suggested accounting response

- It depends.
- For example, the contractual restriction on the sale of the instrument should be incorporated in the asset's fair value measurement (if the restriction is instrument-specific and would be transferred to market participants).
- Entity-specific restrictions should not be considered in determining the fair value of the asset.

Fair value v/s transaction price

Fair value

Price that would be received to sell the asset or paid to transfer the liability

EXIT PRICE

Transaction price

Price paid to acquire the asset or received to assume the liability

ENTRY PRICE

v/s

**Is transaction price always equal to fair value?
If not, how should a 'day 1 gain/loss' be accounted for?**

Fair value v/s transaction price

In many cases, the transaction price will equal the fair value (e.g., on the transaction date, the transaction to buy an asset takes place in the market in which the asset would be sold)

Ind AS 113 takes into account factors that are specific to the transaction and to the asset or liability

Transaction price might not equal fair value if...

Transaction is between related parties (i.e., transactions may include capital contribution / distribution element)

Transaction takes place under stress or the seller is forced to accept the price in the transaction

Unit of account represented by the transaction price differs from the unit of account for the asset or liability measured at fair value (e.g., a business combination situation)

The market in which the transaction takes place is different from the principal (or most advantageous) market

Fair value vs. transaction price

How to account for 'day 1 gain or loss'?

Entities should account for the difference between the transaction price and the day 1 fair value as a gain or loss in profit or loss unless the applicable Ind ASs specify otherwise

Non-financial assets

A fair value measurement of a non-financial asset should take into account a **market participant's ability** to generate economic benefits by **using the asset in its highest and best use** OR by **selling it to another market participant that would use the asset in its highest and best use**

Highest and best use: The highest and best use of an asset might provide maximum value through either:-

- **Its use in combination with other assets and liabilities;**

Or

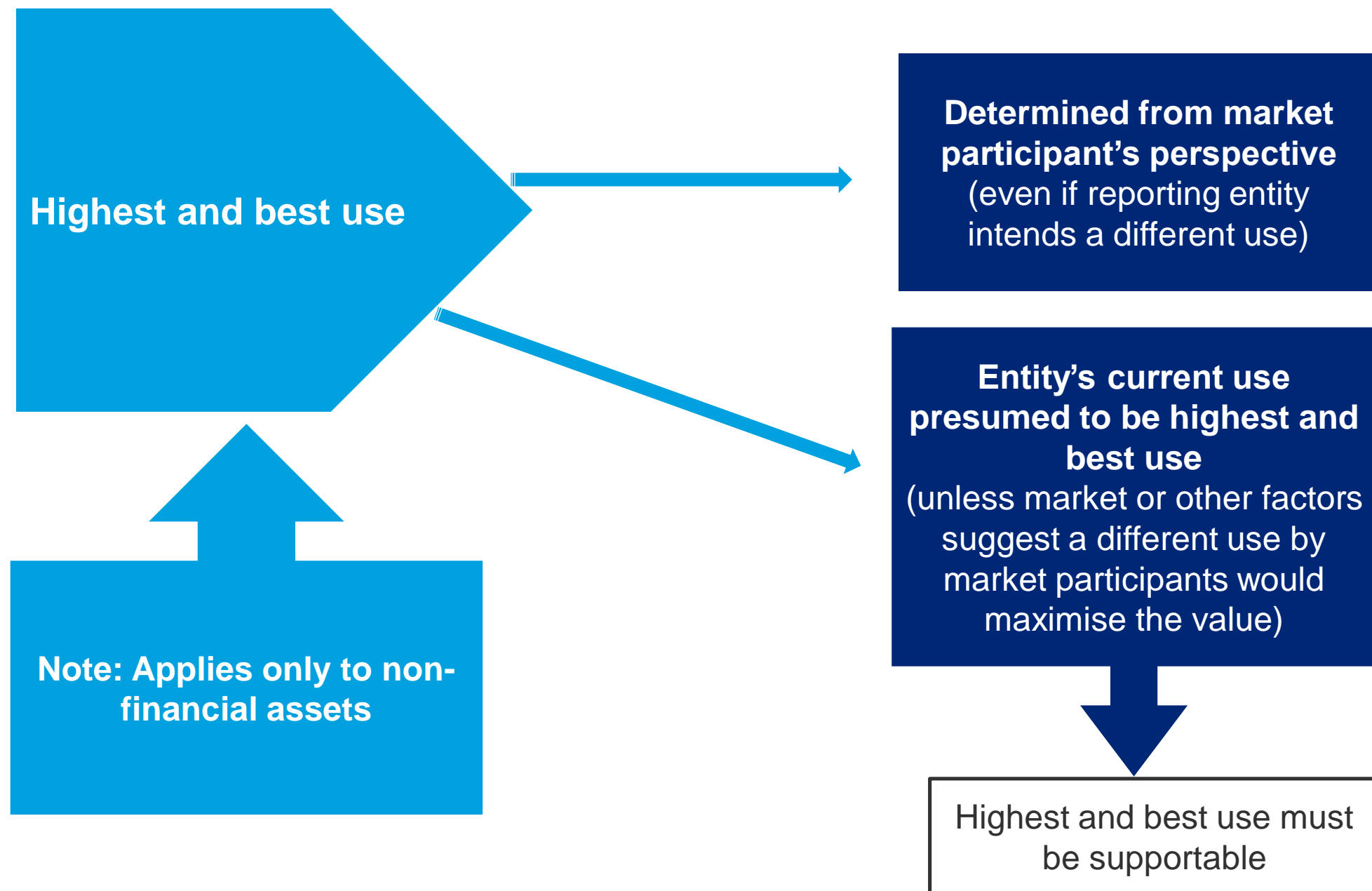
- **On a stand-alone basis**

Physically possible?
(location or size of the asset)

Legally permissible?
(legal restrictions on the use of the asset)

Financially feasible?
(ability to generate adequate income or cash flows to produce an investment return that market participants expect)

Non-financial assets



Non-financial assets

- The standard does not require an entity to perform an exhaustive search for other potential uses of a non-financial asset if there is no evidence to suggest that the current use of an asset is not its highest and best use.

Quiz 6: Highest and best use

Facts:

- Entity A owns a factory property in Country A
- The factory property is comprised of two elements: (a) freehold land and (b) building elements that are accounted for as separate classes of property, plant and equipment and presented separately within the balance sheet
- Freehold land is not depreciated whilst the building element is depreciated over its estimated useful life
- Entity A accounts for the factory property (freehold land and building elements) using the revaluation model in accordance with Ind AS 16
- In recent years, nearby sites have been redeveloped as sites for high-rise commercial buildings
- Taking into account all available market and other factors, Entity A determined that the highest and best use of the site is to use it for developing a high-rise commercial building.

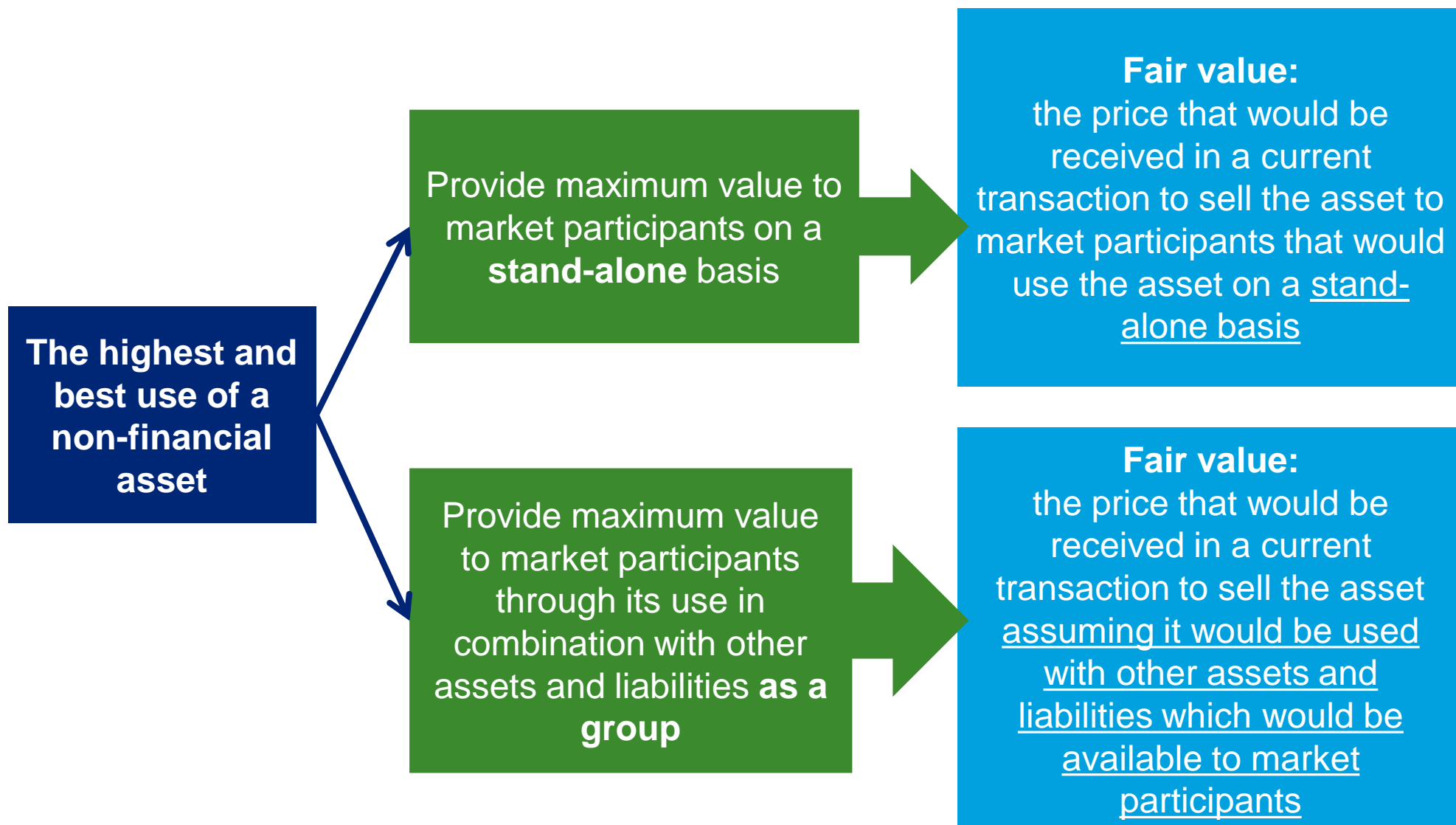
Question:

- **How should Entity A determine the fair value of the property?**

Quiz 6: Suggested accounting response

- The fair value of the property should be determined on the assumption that Entity A disposed of the factory building to market participants at the measurement date and that the market participants would demolish the factory building and use the site to develop a high-rise commercial building.

Valuation premise for non-financial assets



Quiz 7: Applying the valuation premise

Facts:

- Entity A acquired a 100% equity interest in Entity B (the acquiree)
- Entity B has undertaken a research and development project to develop a medicine (currently cure has not yet been discovered) – i.e., in process R&D
- Entity A is also engaged in pharmaceutical industry. Entity A and Entity B are competitors – Entity A is also in the process of developing medicine for the same type of sickness. Whoever is able to develop and market the medicine first will become the market leader on that area
- Entity A does not intend to use the R&D acquired as it has already had the knowledge. The acquisition of Entity B is for defensive purposes
- Entity A has to develop the fair value of the R&D at the date of acquisition.

Question:

- **How should Entity A determine the fair value of the in-process R&D at the date of business combination?**

Quiz 7: Suggested accounting response

Step 1 – Determine the highest and best use of the R&D
(Maximum value to market participants)

Option 1:

Continue development if market participants would continue to do so

Option 2:

Cease development if, for competitive reasons, market participants would lock up the project

Option 3:

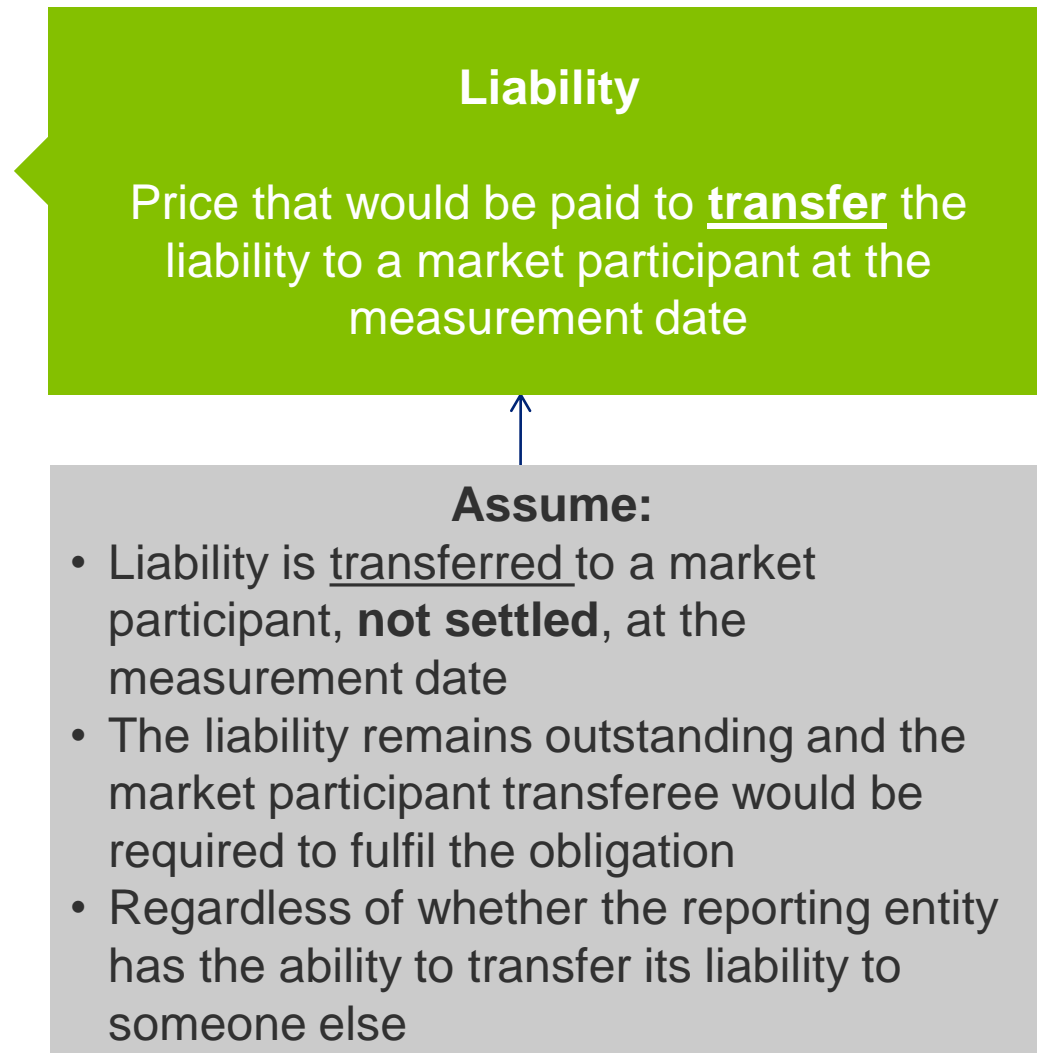
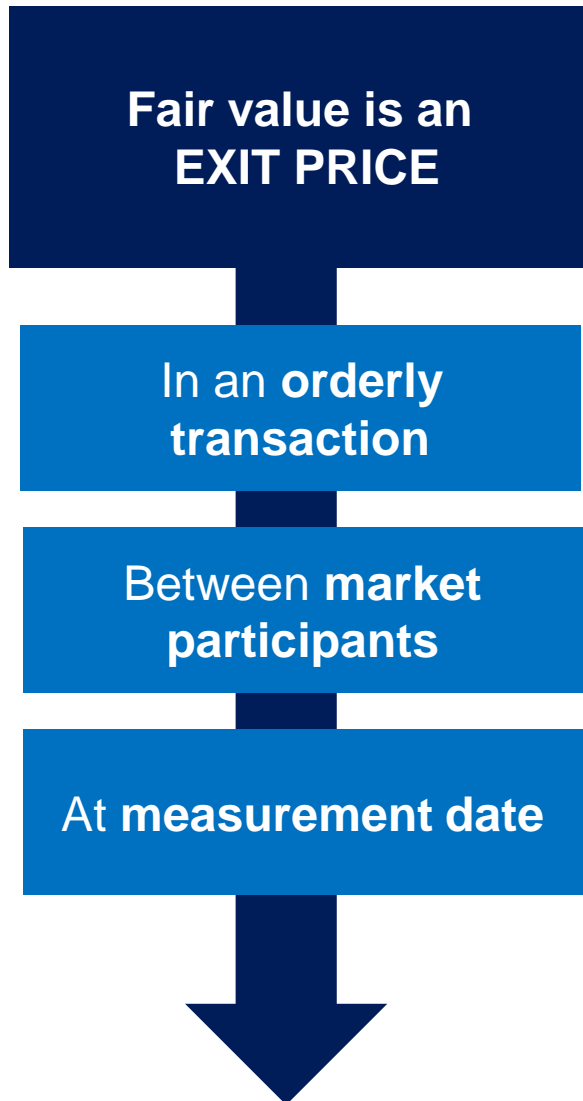
Cease development if market participants would discontinue its development

Step 2 – Determine fair value of the R&D

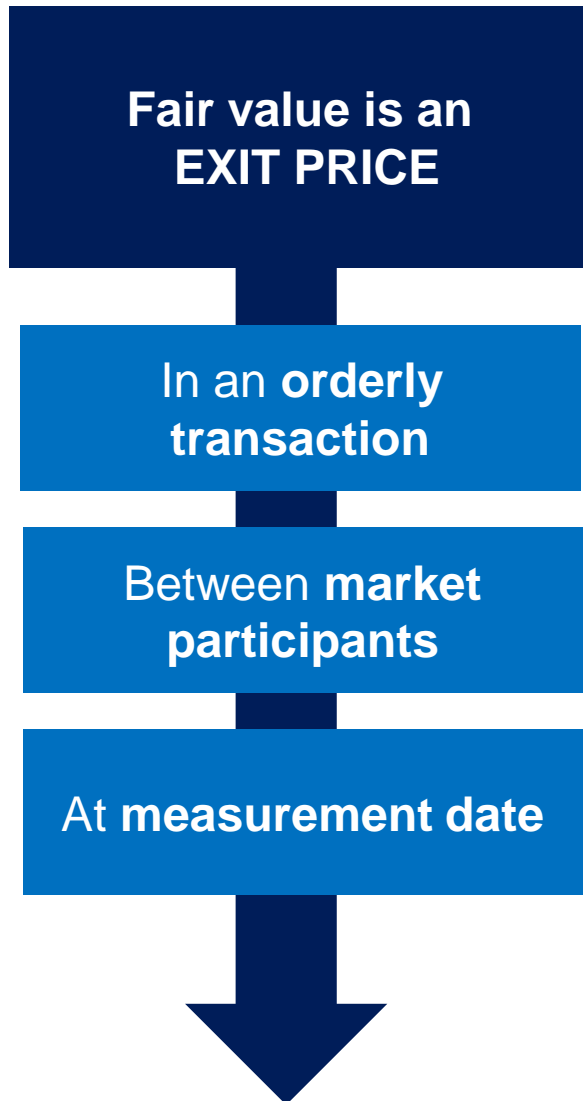
Determined on the premise of how much a market participant would pay the reporting entity for the R&D and that the market participant would continue development of the R&D

Assume Option 1 represents the highest and best use for market participants

Liabilities



Own equity instruments



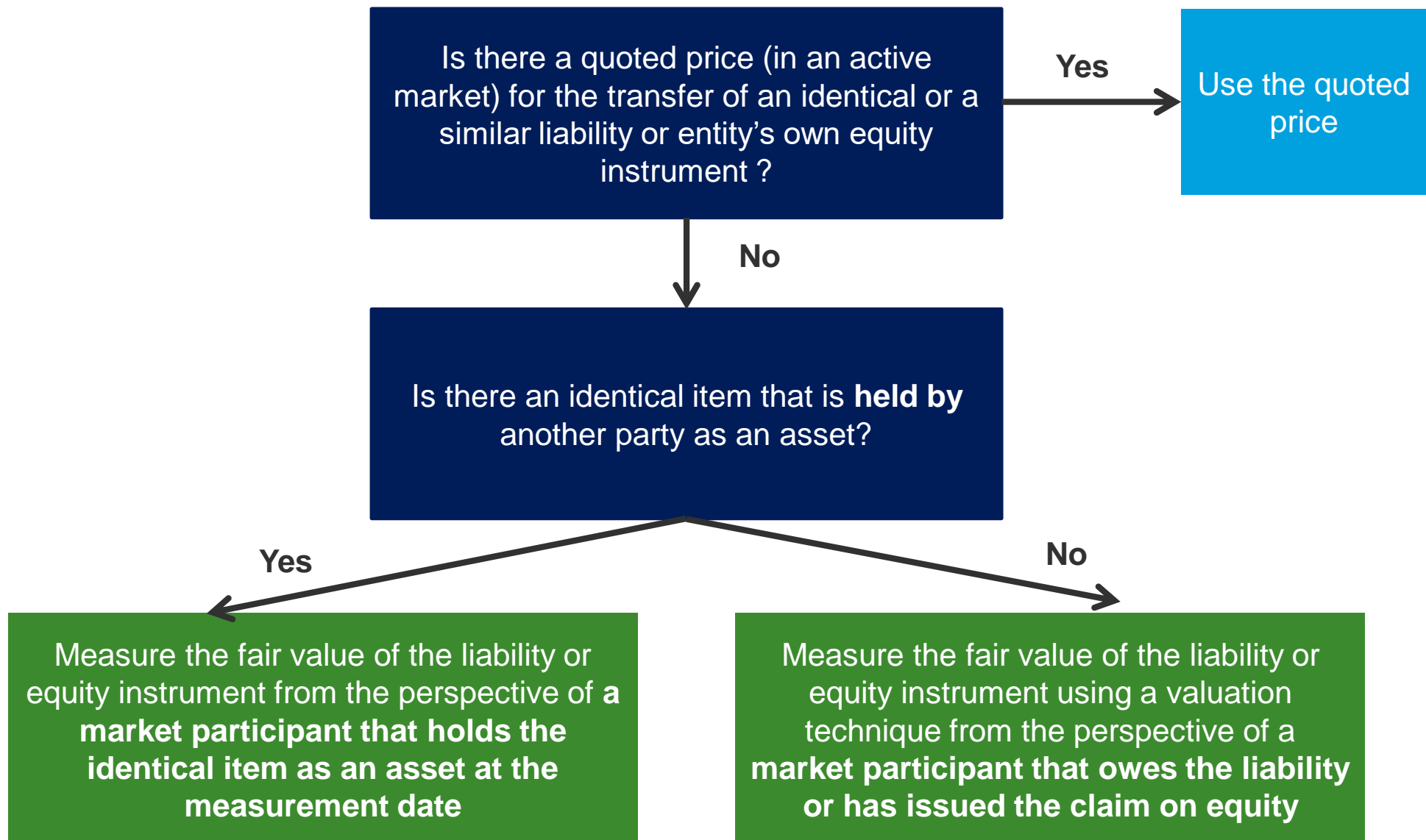
Own equity instruments

Price that would be paid to transfer the equity instruments to a market participant at the measurement date

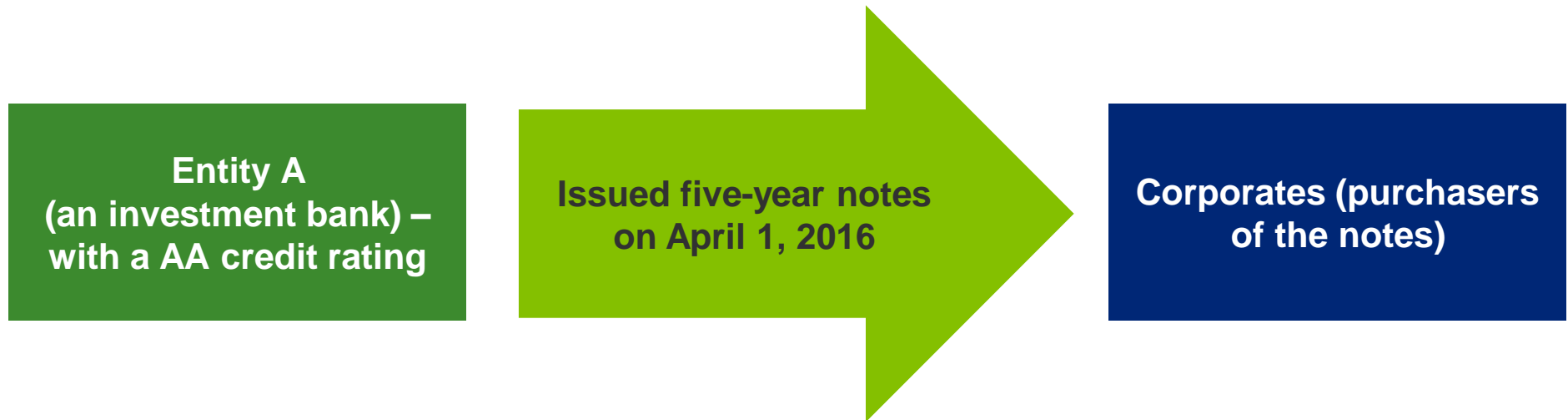
Assume:

- The entity's own equity instruments would remain outstanding at the measurement date and the market participant transferee would take on the rights and responsibilities associated with the instrument. The instrument would not be cancelled or otherwise extinguished on measurement date.

Liabilities and entity's own equity instruments



Quiz 8: Liabilities



Facts:

- Entity A designates the notes as at fair value through profit or loss on initial recognition
- On initial recognition and at subsequent reporting dates, Entity A needs to determine the fair value of the notes
- There is no market for the transfer of the identical liability
- Assume that there is no collateral or corporate guarantee.

Question:

- **How should Entity A determine the fair value of the notes?**

Quiz 8: Suggested accounting response

- The liability is held by another party as an asset
- Entity A should measure the fair value of the notes from the perspective of a market participant that holds the identical item as an asset at the measurement date
- The fair value of the notes could be determined based on:
 - Quoted price of the notes (when the notes are traded in an active market)
 - A valuation technique if neither active market nor other observable inputs are available
 - *For example, the fair value of the notes are estimated using an expected present value technique – the cash flows are discounted at a rate that includes risk-free rate plus, if non-performance risk has not already been reflected in the cash flows, the current market observable AA corporate bond spread and adjusted for Entity A's specific credit risk.*

Quiz 9: Liabilities

Facts:

- Entity A (a corporate) assumes a decommissioning liability in a business combination— e.g., it is legally required to dismantle and remove an offshore oil platform at the end of the related asset's useful life
- Such a decommissioning liability is not held by another party as an asset
- The fair value of such a decommissioning liability should be determined from a market participant that owes the liability
- Assumes that the fair value is determined using an expected present value technique.

Question:

- **How should Entity A determine the fair value of the decommissioning liability at the date of business combination?**

Quiz 9: Suggested accounting response

- Such an item is not held by another party as an asset
- Entity A should measure the fair value of the liability using a **valuation technique** from the perspective of a market participant that owes the liability
- Entity A should take into account the following inputs in estimating the fair value of the decommissioning liability at the date of acquisition:
 - Estimated labor costs, allocation of overhead
 - Compensation that market participants would ask to undertake the activity and to assume risks associated with the obligation (e.g., the risk that the actual cash outflows might differ from those expected)
 - Effect of inflation
 - Time value of money
 - Non-performance risk

Valuation techniques

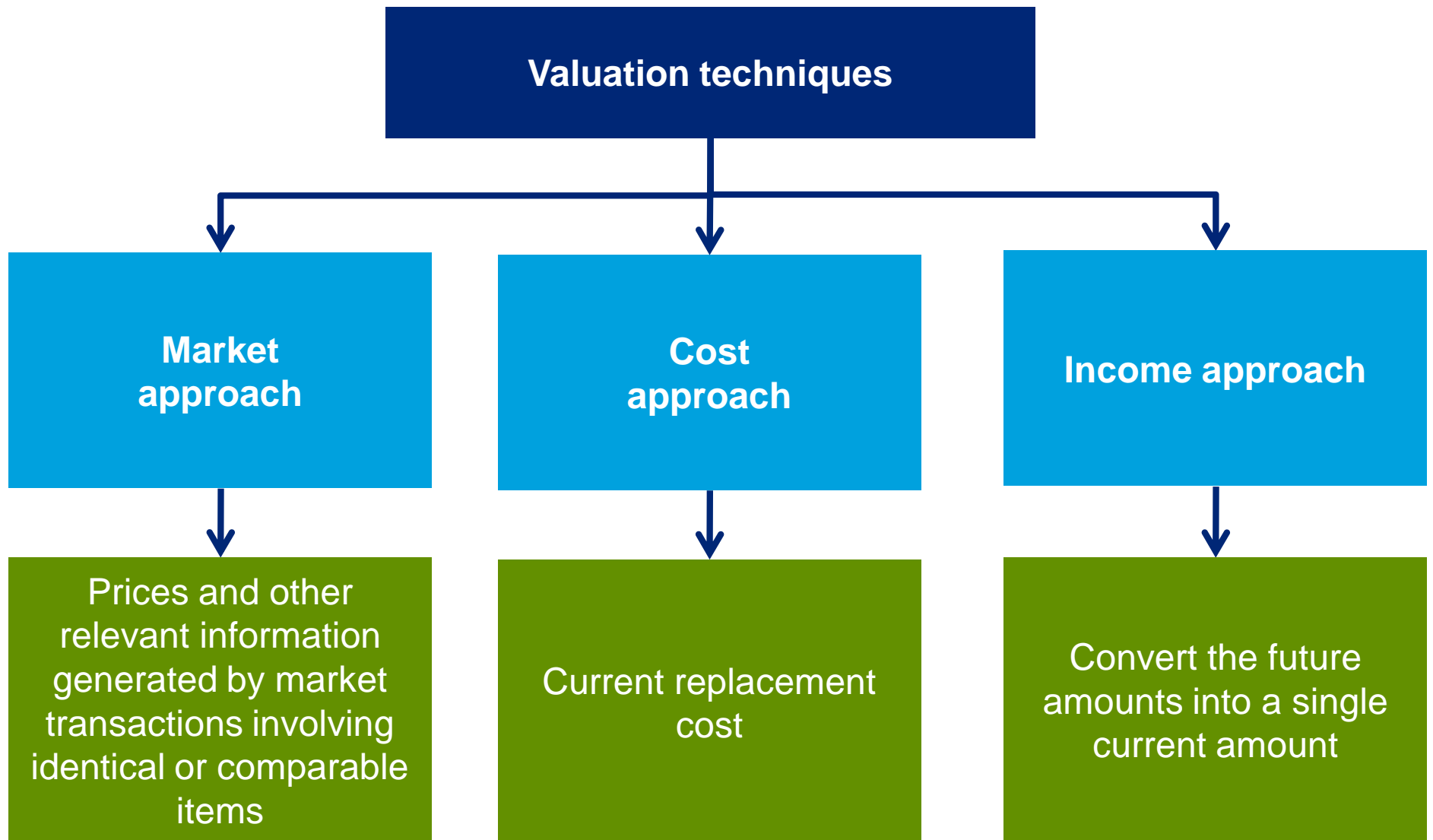
Valuation techniques

- No rules as to which valuation technique(s) must be used
- Select the most appropriate technique in the circumstances, for which sufficient data is available
- Apply consistently
- Change in technique = change in accounting estimate (Ind AS 8)



- Maximise the use of relevant observable inputs
- Minimise the use of unobservable inputs
- Select inputs that are consistent with characteristics of asset or liability (from market participant perspective)
- Consider:
 - Location and condition
 - Restrictions on sale or use

Valuation techniques



Market Approach

- The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets, liabilities or a group of assets and liabilities.
- Example of markets in which inputs might be observable for some assets and liabilities include:
 - Exchange markets;
 - Dealer markets;
 - Brokered markets.

Market Approach (contd.)

Applying a premium or a discount

- Fair value measurement should not incorporate a premium or discount that is inconsistent with the unit of account in the Ind AS that requires or permits the FV measurement;
- Premiums or discount that reflects the size as a characteristic of the entity's holding are not permitted in a FV measurement. E.g. investor holding one share quoted in an active market may receive different amount of consideration per share compared to another investor holding 20% of equity shares. The difference is mainly due to size. For both the investors, the FV measurement of the shares is the price for disposing of a single share multiplied by the quantity held.
- In contrast, when measuring the FV of a controlling interest, it is appropriate to incorporate control premium as it's a characteristic of the asset.

Bid price and ask price inputs

- The price within the bid-ask spread that is most representative of the FV should be used to measure FV.
- Ind AS 113 permits, but does not require, that asset positions may be measured at bid price and liabilities position may be measure at ask price.
- Ind AS 113 allows use of mid-market pricing as an practice expedient for fair value measurement within the bid-ask spread.

Cost approach

- The cost approach reflects the amount that would be required currently to replace the service capacity of an asset
- From the perspective of a market participant seller, the price that would be received for the asset is based on the cost to a market participant buyer to acquire or construct a substitute asset of comparable utility, adjusted for obsolescence
- **Obsolescence** encompasses physical deterioration, functional and economic obsolescence—broader than depreciation for financial reporting purposes
- Commonly used to measure the fair value of tangible assets that are used in combination with other assets or with other assets and liabilities.

Income approach



Valuation techniques include:

- Present value techniques;
- Option pricing models (e.g., the Black-Scholes-Merton formula or a binomial model)
- The multi-period excess earnings method (normally used to measure the fair value of some intangible assets)

Present value techniques



Capture all of the following elements:

- An estimate of future cash flows for the asset or liability being measured;
- Expectations about possible variations in the amount and timing of the cash flows representing the uncertainty inherent in the cash flows;
- The time value of money (i.e., a risk-free interest rate);
- The price for bearing the uncertainty inherent in the cash flows (i.e., a risk premium);
- Other factors that market participants would take into account in the circumstances; and
- For a liability, the non-performance risk relating to that liability, including the entity's own credit risk

Present value techniques

General principles:

- Cash flows and discount rates should reflect assumptions that market participants would use when pricing the asset or liability
- Cash flows and discount rates should take into account only the factors attributable to the concerned asset or liability
- **To avoid double-counting or omitting the effects of risk factors**
- Assumptions about cash flows and discount rates should be internally consistent
- Discount rates should be consistent with the underlying economic factors of the currency in which the cash flows are denominated

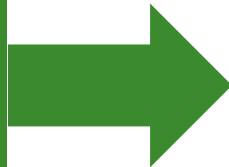
E.g., if contractual cash flows of a loan are used, the discount rate should reflect the uncertainty in expectations about future defaults

However, if expected cash flows are used, that discount rate should not be used.

Single approach vs. multiple approaches?

Single vs. multiple approach?

Ind AS 113 –neither requires entities to use multiple approaches in all situations nor supports the use of a single approach in all circumstances



Factors to consider

- The appropriateness (i.e., relevance and applicability of each valuation technique)
- Whether there is sufficient reliable data available to support a particular approach
- Comparative level of the alternative approaches in the fair value hierarchy
- Any significant decline in volume and level of market activity
- View of market participants on the relevance of valuation techniques

Judgment is required taking into account the relevant fact and circumstances

Quiz 10: Valuation techniques

Facts:

- Entity A has a 10% equity interest in Entity B
- Entity B's shares are not traded in an active market
- However, Entity B is considered comparable to a number of companies whose shares are traded in an active market.

Question:

- **Which valuation technique(s) should Entity A use in estimating the fair value of the equity interest in Entity B?**

Quiz 10: Suggested accounting response

- Cost approach is generally not appropriate in estimating the fair value of investments in equity securities
- Market approach and income approaches are common valuation techniques in estimating the fair values of investments in equity securities that are not publicly traded
- Not necessarily required to use both market approach and income approach—depends on the specific facts and circumstances
- For example: Where no significant adjustments are required regarding the market approach (i.e., Level 2 inputs), it would be acceptable to use the market approach only in estimating the fair value of the investments in equity securities.

Quiz 11: Valuation techniques

Facts:

- Entity A acquires a group of assets. These assets include an income-producing software asset developed internally and used for licensing to customers
- Assume that the highest and best use of the software asset is its current use
- Information about market transactions for the comparable software assets is not available
- Market participants would not be able to construct a substitute software of comparable utility.

Question:

- **Which valuation technique(s) should Entity A use in estimating the fair value of the software asset?**

Quiz 11: Suggested accounting response

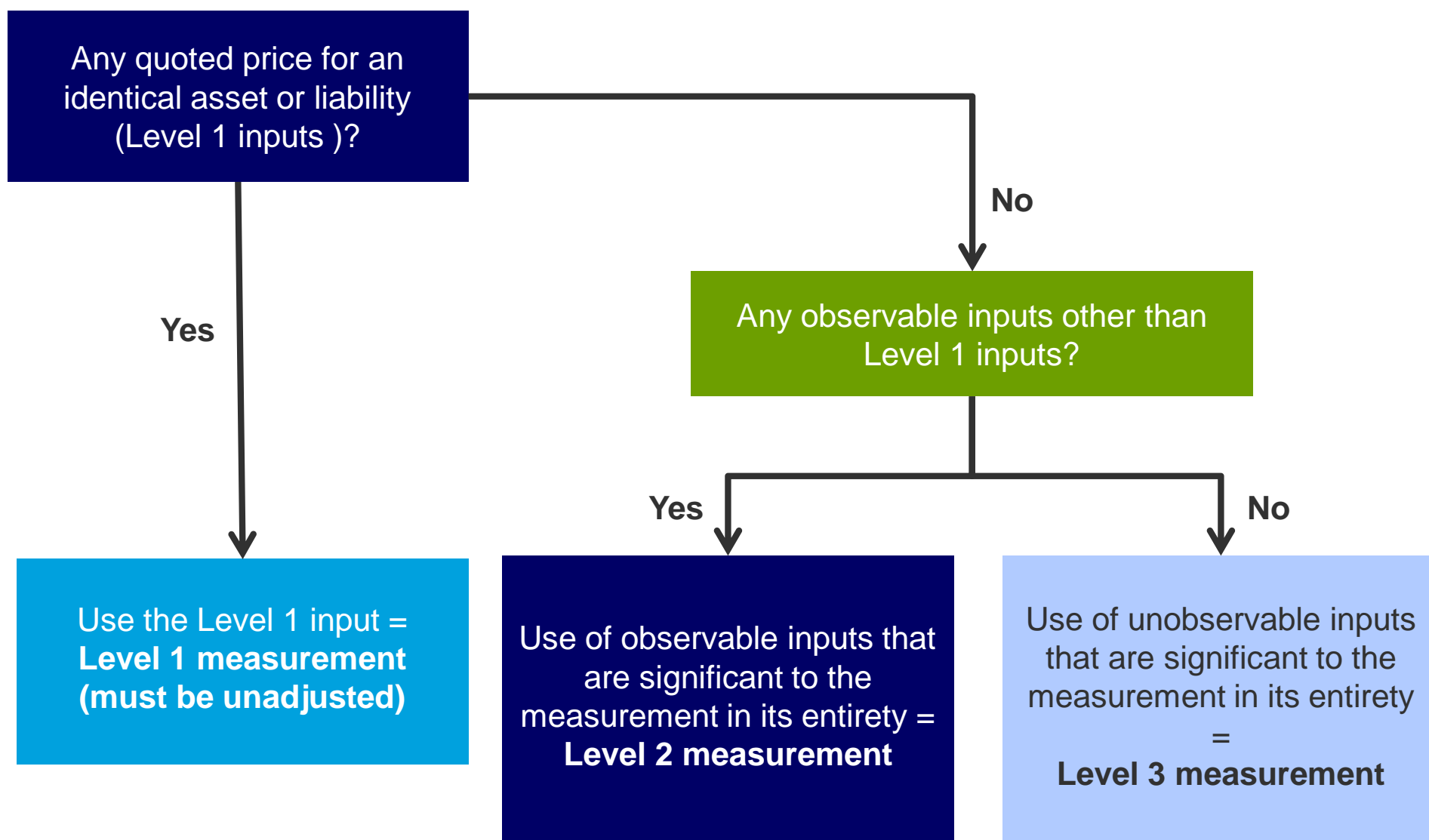
- Market approach is not appropriate in this particular circumstance
- Cost approach is not appropriate either as market participants would not be able to construct a substitute software of comparable utility
- The income approach is used in this example
- For example: use a present value technique to determine the fair value of the software asset - taking into account cash flows that can be generating from licensing the software to customers.

Fair value hierarchy

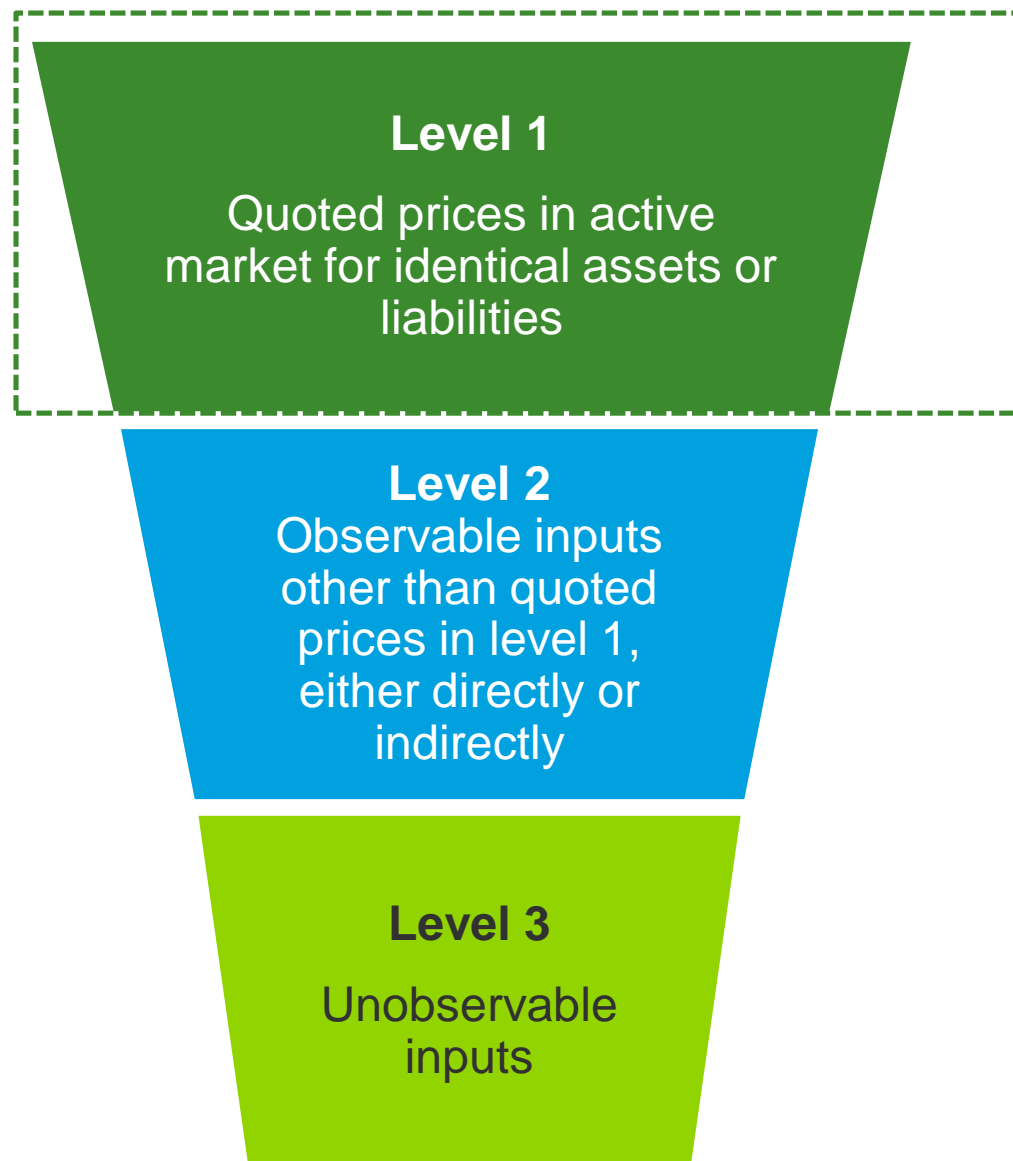


- The fair value hierarchy is applicable to both financial and non-financial items that are within the scope of Ind AS 113
- The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets and liabilities and the lowest priority to unobservable inputs
- The fair value measurement is categorised in its entirety based on the lowest level of significant input
- Fair value hierarchy depends on the inputs, not valuation techniques.

Fair value hierarchy (contd.)



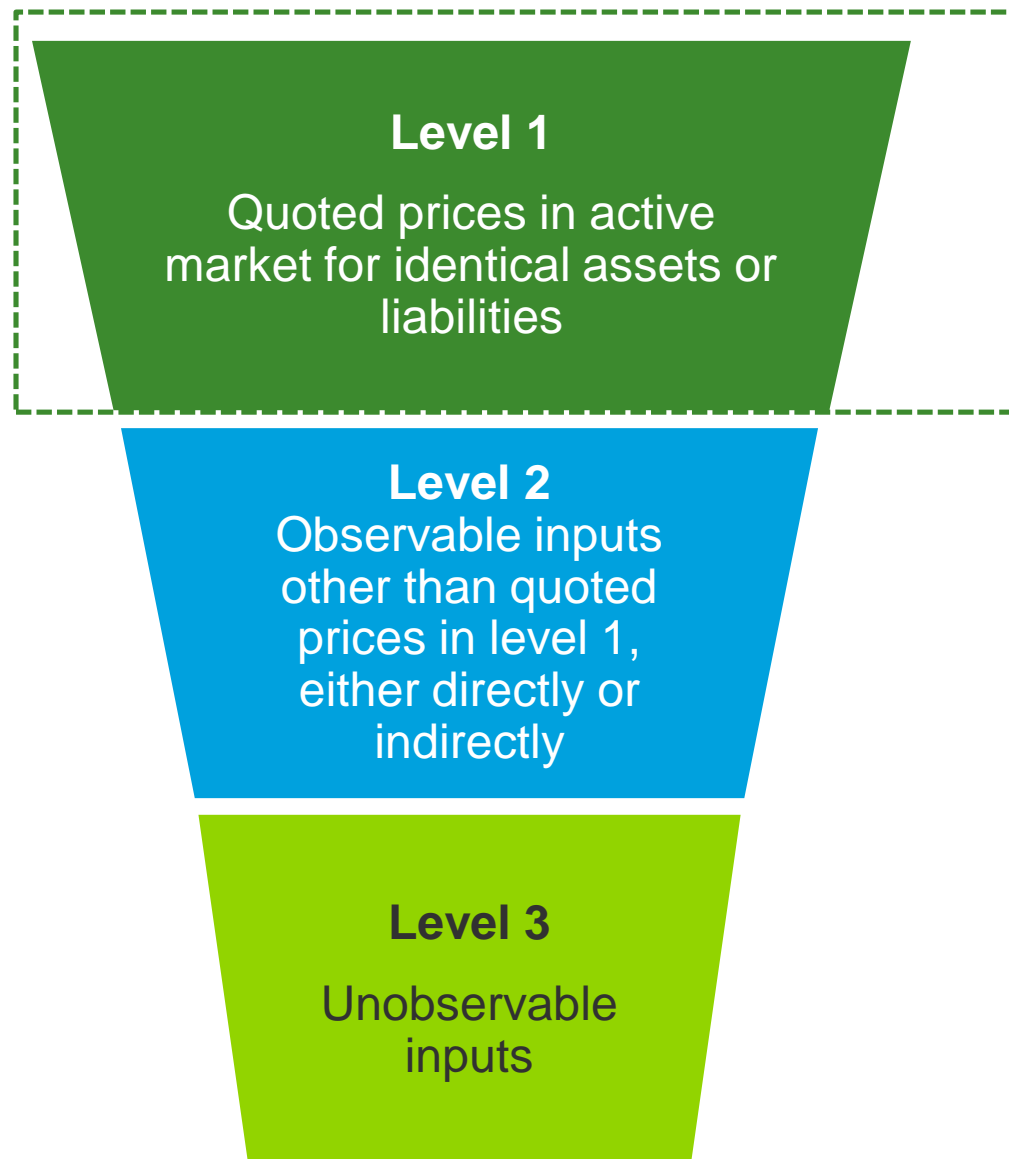
Fair value hierarchy–Level 1



Active market

A market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis

Fair value hierarchy–Level 1



How about quotes from brokers or financial institutions? Are they always Level 1 inputs?

Not necessarily—need to understand how brokers' quotes are determined.

Fair value hierarchy–Level 2



- If the asset or liability has a specified (contractual) term, a Level 2 input must be observable for **substantially** the full term of the asset or liability
- Level 2 inputs include the following:
 - Quoted prices for similar assets or liabilities in active markets
 - Inputs other than quoted prices that are observable for the asset or liability (e.g., observable interest rates and yield curves).

Fair value hierarchy–Level 3



- Fair value measurement objective remains the same—exit price
- Entities should try to select the most reliable among unobservable inputs
- The Level 3 measurement inputs should include risk inherent in the particular valuation technique and the risk inherent in the inputs to the valuation technique
- Examples of Level 3 inputs
 - Labour quotes for a particular job in determining the fair value of a decommissioning liability in a business combination
 - Profit/cash flow forecast used in determining the fair value of a cash-generating unit (e.g., cash flows or profit or loss forecast)

Quiz 12: Fair value hierarchy

Facts:

- Entity A enters into a fixed-price three-year agreement to sell 50 megawatts (MW) of on-peak power for delivery at location ABC beginning on January 1, 2014, and continuing through December 31, 2016
- On March 31, 2014, Entity A determines the fair value of the agreement
- Active market quotes are available for forward contracts to sell power at location ABC for one year (from March 31, 2014 to March 31, 2015)
- Entity A uses the one-year of observable forward pricing data and develops an expectation for the remaining 1 year and 9 months.

Question:

- **How should Entity A categorise the fair value measurement (i.e., Level 1, 2 or 3)?**

Level 3

- Since the forward price curve is observable for only 12 months of the 33 months (i.e., 36%), it does not meet the criterion that the input is observable for substantially the full term of the asset or liability.

Disclosures: key principles

Entities should disclose information that helps users assess the following:

- For Assets and liabilities measured at fair value **on a recurring basis** or non-recurring basis after initial recognition, valuation techniques and inputs used to develop those measurements; and
- For recurring fair value measurements using significant unobservable inputs (Level 3), the effect of the measurements on profit or loss or other comprehensive income for the period.

Recurring vs. Non-recurring basis

- **Recurring** fair value measurements of assets or liabilities are those that other Ind ASs require or permit in the balance sheet at the end of each reporting period.

- **Non-recurring** fair value measurements of assets or liabilities are those that other Ind ASs require or permit in the balance sheet in particular circumstances.

Recurring v/s Non-recurring basis (contd.)

To meet the above objective, an entity shall disclose, at a minimum, the following information for each class of assets and liabilities measured at fair value in the balance sheet after initial recognition.

	Recurring after initial recognition	Non-recurring after initial recognition
Fair value measurement at the end of the reporting period [Ind AS 113:93(a)]	✓	✓
Reasons for the fair value measurement [Ind AS 113:93(a)]	x	✓
Fair value hierarchy (Levels 1, 2 and 3) [Ind AS 113.93(b)]	✓	✓

Recurring v/s Non-recurring basis (contd.)

	Recurring after initial recognition	Non-recurring after initial recognition
Amounts of any transfers between Level 1 and Level 2 of the fair value hierarchy, the reasons for the transfers and policies for determining when transfers between levels are deemed to have occurred. Transfers into each level shall be disclosed and discussed separately from transfers out of each level. [Ind AS 113.93(c)]	✓	✗
Description of the valuation techniques and inputs used regarding fair value measurements categorised within Level 2 and Level 3 [Ind AS 113.93(d)]	✓	✓
Change in the valuation techniques and the reasons for the change (Level 2 and Level 3) [Ind AS 113.93(d)]	✓	✓
Quantitative information about the significant unobservable inputs used in the fair value measurement (when fair value measurements are categorised within Level 3 of the fair value hierarchy) [Ind AS 113.93(d)]	✓	✓

Recurring vs. Non-recurring basis (contd.)

	Recurring after initial recognition	Non-recurring after initial recognition
For fair value measurements categorised within Level 3 of the fair value hierarchy, a reconciliation from the opening balances to the closing balances (Level 3), disclosing separately (i) total gains or losses for the period recognised in profit or loss and the line item(s) in profit or loss in which those gains or losses are recognised; (ii) total gains or losses for the period recognised in other comprehensive income and the line item(s) in other comprehensive income in which those gains or losses are recognised; (iii) purchases, sales, issues and settlements; and (iv) the amounts of any transfers into or out of Level 3 and the reasons for those transfers and the policies for determining when transfers between levels are deemed to have occurred. Transfers into Level 3 shall be disclosed and discussed separately from transfers out of Level 3. [Ind AS 113.93(e)]	✓	✗

Recurring vs. Non-recurring basis (contd.)

	Recurring after initial recognition	Non-recurring after initial recognition
Level 3 only—a description of the valuation processes used by the entity (e.g., how an entity decides its valuation policies and procedures and analyses changes in fair value measurements). [Ind AS 113.93(g)]	✓	✓
Level 3 only: A narrative description of the sensitivity of the fair value measurement to changes in unobservable inputs and description about the interrelationships between inputs. [Ind AS 113.93(h)(i)]	✓	✗

HAPPY LEARNING

HAVE A GREAT EVENING

THANKS

VINAY BANSAL