Ind AS 113

Fair Value Measurement

e-Book

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(This chapter deals with non-financial aspects of assets and liabilities only)

INTRODUCTION

Fair value has had a different meaning depending on the context and usage. Basically, it is an exit price. Fair value is focused on the assumptions of the market place and is not entity specific. The definition of fair value focuses on assets and liabilities, because income and expenses recognised in Statement of Profit and Loss are based on the amount of the assets and liabilities recognised in Balance Sheet. For example, depreciation expense is based on the cost or fair value of the related asset.

Fair value is the price that would be received to **sell an asset** [1] or paid to **transfer a liability** [2] in an **orderly transaction** [3] in the *principal (or most advantageous) market* between **market participants** [4] at the **measurement date** [5] under current market conditions (ie, an *exit price)* regardless of whether that price is directly observable or estimated using another *valuation technique.*

[1] It specifies that the entity is selling an asset.

[2] It refers to the transfer of a liability.

[3] It is not a forced/distress sale.

[4] It is market based.

[5] It states explicitly when the sale/transfer takes place.

o *Orderly transaction*

A transaction that assumes exposure to the market for a period before the measurement date to allow for marketing activities that are useful and customary for transactions involving such assets or liabilities; it is not a forced transaction (eg, forced liquidation or distressed sale).

Circumstances that may indicate that a transaction is not orderly include the following:

- There was –
  - not adequate exposure to the market for a period before the measurement date to allow for marketing activities that are usual and customary for transactions involving such assets or liabilities under current market conditions.
  - a usual and customary marketing period, but the seller marketed the asset or liability to a single market participant.

- The seller –
  - is in or near bankruptcy or receivership (ie, the seller is distressed)
  - was required to sell to meet regulatory or legal requirements (ie, the seller was forced).
  - the transaction price is an outlier when compared with other recent transactions for the same or a similar asset or liability.

If a transaction is not orderly, the *transaction price* (the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties, eg, sales taxes) might not represent the fair value of an asset or a liability at initial recognition if the transaction:

- is between related parties; or
- is for a different unit of account; or
- takes place –
  - under duress; or
  - in a different market.

The fair value definition refers to an exchange in an orderly transaction. Therefore, the exit price must be based on what would occur in an orderly transaction. If the transaction is not orderly, then there will not have been enough time to create competition and potential buyers may reduce the price that they are willing to pay. Similarly, if a seller is forced to accept a price in a short period of time, the price may not be representative. It does not follow that a market in which there are few transactions is not orderly. If there have been competitive tension, sufficient time and information about the asset, then this may result in a fair value for the asset.

o *Principal market*

The market with the greatest volume and level of activity for the asset or liability.

o *Most advantageous market*

The market that maximises the amount that would be received to sell the asset or minimises the amount that would be paid to transfer the liability, after taking into account :

- *Transaction costs* The costs to sell an asset or transfer a liability in the principal (or most advantageous) market for the asset or liability that are directly attributable to the disposal of the asset or the transfer of the liability and meet both of the following criteria –
  - They result directly from and are essential to that transaction.
  - They would not have been incurred by the entity had the decision to sell the asset or transfer the liability not been made (similar to costs to sell, as defined in Ind AS 105)

- *Transportation costs* The costs that would be incurred to transport an asset from its current location to its principal (or most advantageous) market.

  Although transportation costs are taken into account when identifying the most advantageous market, the fair value is not after adjustment for transaction costs because these costs are characteristics of the transaction and not the asset or liability.

There is a presumption in the standard that the market in which the entity normally transacts to sell the asset or transfer the liability is the principal or most advantageous market unless there is evidence to the contrary.

- *Market participants*

Buyers and sellers in the principal (or most advantageous) market for the asset or liability that have all the following characteristics –:

They are –

- independent of each other, ie, they are not related parties, although the price in a related party transaction may be used as an input to a fair value measurement if the entity has evidence that the transaction was entered into at market terms.
- knowledgeable, having a reasonable understanding about the asset or liability and the transaction using all available information, including information that might be obtained through due diligence that are usual and customary.
- able to enter into a transaction for the asset or liability.
- willing to enter into a transaction for the asset or liability, ie, they are motivated but not forced or otherwise compelled to do so.

Market participants buyers are generally representative of both –

- strategic buyers (eg, competitors); and
- financial buyers (eg, private equity or venture capital).

Fair value takes into account any assumptions about risk and, therefore, it is measured using the same assumptions and taking into account the same characteristics of the asset or liability as market participants would.

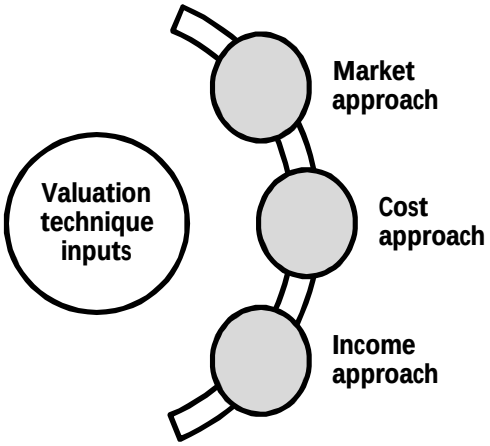
- *Exit price*
  The price that would be received to sell an asset or paid to transfer a liability.

- *Entry price*
  The price paid to acquire an asset or receive to assume a liability in an exchange transaction.

VALUATION TECHNIQUE

An entity shall use valuation techniques that are appropriate in the circumstances are for which sufficient data are available to measure fair value maximising the use of relevant *observable inputs* and minimising the use of *unobservable inputs*.

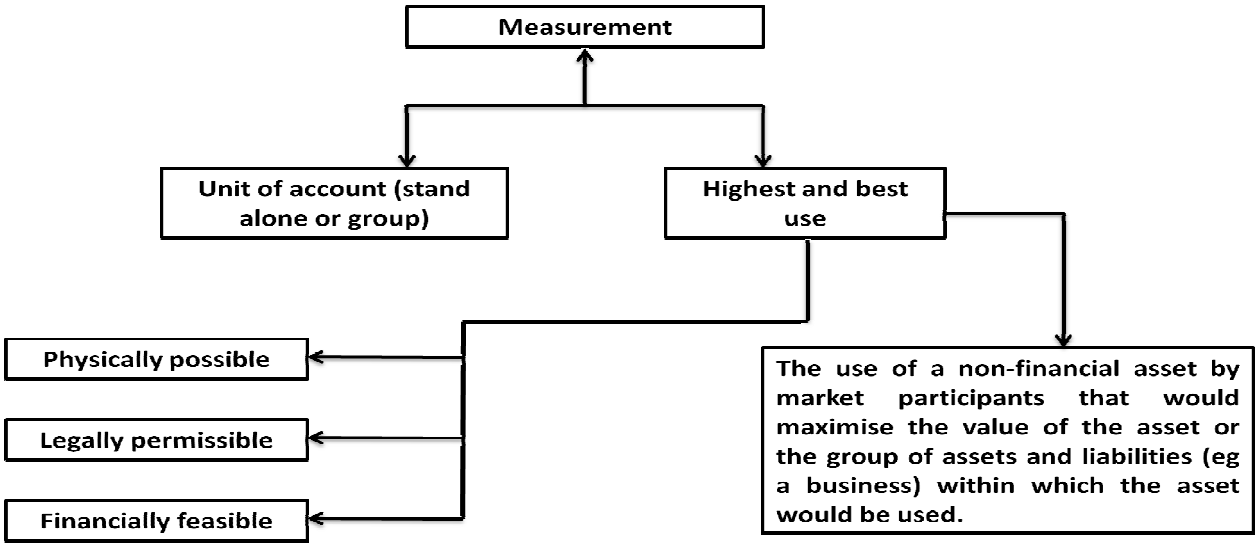
- *Observable inputs* are those that are developed using market data, such as publicly available information about actual events or transactions, and that reflect the assumptions that market participants would use when pricing the asset or liability.
- *Unobservable inputs* are those for which market data are not available and that are developed using the best information available about the assumptions that market participants would use when pricing the asset or liability.



Three widely used valuation techniques are –

- *Market approach* uses prices and other relevant information generated by market transactions involving identical or comparable (ie, similar) assets, liabilities or a group of assets and liabilities, such as a business.
- *Cost approach* reflects the amount that would be required currently to replace the service capacity of an asset (often referred to as current replacement cost).
- *Income approach* converts the future amounts (eg, cash flows or income and expenses) to a single current (ie, discounted) amount. When the income approach is used, the fair value measurement reflects current market expectations about those future amounts.

MEASUREMENT



A fair value measurement requires an entity to determine all the following:

- The particular asset or liability that is the subject of the measurement consistently with its *unit of account* – which is the level at which an asset or a liability is aggregated or disaggregated in an Ind AS for recognition purposes. The asset or liability measured at fair value might be either of the following:

  - a stand-alone asset or liability (eg, a financial instrument or a non-financial asset); or
  - a group of assets, a group of liabilities or a group of assets and liabilities (eg, cash generating unit or a business).

Ind AS 113 does not specify the unit of account for measuring fair value. This means that it is left to the individual standard to determine the unit of account for fair value measurement.

- For a non-financial asset, the valuation premise that is appropriate for the measurement consistently with its *highest and best use* – which is the use of a non-financial asset by market participants that would maximise the value of the asset or the group of assets and liabilities (eg, a business) within which the asset would be used. The highest and best use of a non-financial asset takes into account the use of the asset that is :

  - *physically possible* ie the physical characteristics of the asset that market participants would take into account when pricing the asset (eg, the location or size of property).

  - *legally permissible* ie any legal restrictions on the use of the asset that market participants would take into account when pricing the asset (eg, zoning regulations applicable to a property).

  - *financially feasible* ie whether a use of the asset that is physically possible and legally permissible generates adequate income or cash flows (taking into account the costs of converting the asset to that use) to produce an investment return that market participants would require from an investment in that asset put to that use.

When considering a use that is financially feasible, market participants take into account whether the use of an asset that is physically possible and legally permissible would generate a satisfactory investment return after taking into account the costs on converting the asset to that use.

An entity's current use of a non-financial asset is presumed to be its highest and best use unless market or other factors suggest that a different use by market participants would maximise the asset's value.

- The principal (or most advantageous) market for the asset or liability. A fair value measurement assumes that the transaction to sell an asset or transfer a liability takes place either in the –

  - principal market for the asset or liability; or
  - in the absence of a principal market, in the most advantageous market for the asset or liability.

The price in the principal (or most advantageous) market used to measure the fair value of the asset or liability shall not be adjusted for transaction costs. Transaction costs shall be accounted for in accordance with other Ind AS. Transaction costs are not a characteristic of an asset or a liability; rather, they are specific to a transaction and will differ depending on how an entity enters into a transaction for the asset or liability.

Transaction costs do not include transport costs. If location is a characteristic of the asset (as might be the case, eg, for a commodity), the price in the principal (or most advantageous) market shall be adjusted for the costs, if any, that would be incurred to transport the asset from its current location to that market.

The valuation technique(s) appropriate for the measurement, considering the availability of data with which to develop inputs that represent the assumptions that market participants would use when pricing the asset or liability.

APPURTENANCES OF MEASURING LIABILITIES

At initial measurement, an entity shall measure a liability at the amount that it would rationally pay at the end of the reporting period to be relieved of the present obligation which is the lowest of the :

- present value of resources to **fulfill** the obligation estimated by taking into account the –

  - expected outflows of resources and the time value of money; and
  - risk that the actual outflows of resources might ultimately differ from those expected.

  Examples are –
  - payment of cash;
  - transfer of other assets;
  - provision of services;
  - replacement of that obligation with another obligation; or
  - conversion of the obligation to equity.

  - amount that the entity would have to pay for the obligation to –
    - cancel (creditor waiving or forfeiting its rights); and
    - transfer to a third party (financial guarantee contract).

A fair value measurement of a liability assumes that the liability is transferred to a market participant at the measurement date (ie, the liability would remain outstanding and the market participant transferee would be required to fulfill the obligation; it would not be settled with the counterparty or otherwise extinguished on the measurement date).

The fair value of a liability reflects the effect of non-performance risk. It is the risk that an entity will not fulfill the obligation. Non-performance risk includes, but may not be limited to, the entity's own *credit risk* (the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge the obligation).

When measuring the fair value of a liability, an entity shall take into account the effect of its credit risk (credit standing), and any other factors that might influence the likelihood that the obligation will or will not be fulfilled. That effect may differ depending on the liability, for example:

- whether the liability is an obligation to deliver –
  - cash; or
  - goods or services.

- the terms of the credit enhancements related to the liability, if any.

EXAMPLE 1

Market	Sales price per machines (`)	Machines sold	Total volume of machines sold in the market	Transaction cost – per machine `	Transport cost to the market – per machine `
France	10,000	1,500	37,500	125	100
Italy	9,500	625	187,500	100	175
Germany	8,500	375	25,000	75	150

Italy would be the principal market as this is the market in which the majority of transactions for the machines occur. As such, the fair value of each machine would be (` 9,500 – ` 175) ` 9,325. Actual sales of the machines in either France or Germany would result in a gain or loss when compared with the fair value, i.e. ` 9,325. The most advantageous market would be France where a net price of ` 9,900 (` 10,000 – ` 100) would be gained. Therefore, fair value should be calculated by reference to the Italian market as this is the principal market.

EXAMPLE 2

An entity uses the expected present value technique to measure the fair value of a decommissioning liability to dismantle and remove an offshore oil platform at the end of 10 years, which the entity was contractually allowed to transfer to a market participant.

When estimating the price, a market participant would use all the following probability-weighted inputs:

- labour costs;
- allocation of overhead costs (80% of expected labour costs);
- compensation for undertaking the activity and for assuming risk associated to fulfill the obligation includes the following –
  - profit on labour and overhead cost (20% mark-up); and
  - the risk that the actual cash outflows might differ from those expected (5% including the effect of inflation);
- effects of inflation on estimated costs and profits (4% for 10 years);
- time value of money, represented by the risk-free rate (5%)
- non-performance risk relating to the risk that the entity will not fulfill the obligation, including the entity's own credit risk (3.5%).

The entity measures the fair value of the decommissioning liability as under:

Cash flow estimate	Probability assessment	Expected cash flows
100,000	25%	25,000
125,000	50%	62,500
175,000	25%	43,750

Expected labour costs	131,250
Allocated overheads (80% of 131,250)	105,000
Total cost	236,250
Mark-up (20%)	47,250
	283,500
Inflation factor (4% for 10 years = 1.4802)	
Expected cash flow adjusted for inflation (283,500 x 1.4802)	419,637
Market risk premium (5%)	20,982
Expected cash flow adjusted for market risk	440,619
Expected present value using discount rate (5% + 3.5% = 8.5%) for 10 years	194,879

EXAMPLE 3

ABC Ltd wants to sell a retail division which sells vehicles. It wishes to measure the fair value of the inventory of vehicles (300 new vehicles, which are identical) for the purpose of the sale. ABC Ltd has transacted regularly in three markets (A, B and C) that currently exist for the vehicles. The following information is available -

Market	A	B	C
Sales price (per vehicle)	` 8,000	` 7,600	` 6,800
Vehicles sold by ABC Ltd (Nos.)	1,200	500	300
Total Volume of sales in the market (Nos.)	30,000	1,50,000	20,000
Delivery cost of the market	` 80	` 140	` 120
Sales commission per vehicle	` 100	` 80	` 60

A key principle of Ind AS 113 *Fair Value Measurement* is the concept of measuring the fair value in the principal market or, in the absence of a principal market, in the most advantageous market. An exhaustive search of all possible markets is not necessary, but the entity should take into account all information that is reasonably available. There is a presumption in the standard that the market in which the entity normally transacts to sell the asset is the principal or most advantageous market unless there is evidence to the contrary.

Ind AS 113 *Fair Value Measurement* states that fair value is an exit price (based on what would occur in an orderly transaction) in the principal market, which is the market with the highest volume and level of activity, even if the entity has historically not transacted in that market. Therefore, fair value of an asset is not determined based on the volume or level of activity of the reporting entity's transaction in a particular market. In practice, an entity would first consider the markets it can access. Once the accessible markets are identified, market-based volume and activity determines the principal market. In the absence of a principal market, it is assumed that the transaction would occur in the most advantageous market for that asset.

This is the market which would maximise the amount which would be required to sell an asset, taking into consideration transportation and transaction costs. Ind AS 113 makes it clear that the price used to measure fair value must not be adjusted for transaction costs, but should consider transportation costs. This is because,

transaction costs are not deemed to be a characteristic of the asset but they are specific to a transaction and will differ depending on how an entity enters into a transaction.

An entity must have access to the market on the measurement date. Although the entity must be able to access the market at the measurement date, Ind AS 113 does not require an entity to be able to sell the particular asset on that date.

If there is a principal market for the asset, the fair value measurements represent the price in that market at the measurement date regardless of whether that price is directly observable or estimated using another valuation technique and even if the price in a different market is potentially more advantageous. The principal or more advantageous market price for the same asset might be different for different entities and therefore the principal or most advantageous market is considered from the entity's prospective which may result in different prices for the same asset.

While not deducted from fair value, an entity consider transaction costs in the context of the determining the most advantageous, market because the entity is seeking to determine the market which would maximize the net amount which would be received for the asset.

In this case, B would be the principal market as this is the market in which the majority of transaction for the vehicle occur. As such, the fair value of 300 vehicles would be ` 22,38,000 [(7,600 – 140) x 300]. Actual sales of the vehicles in either market A or market C would result in a gain or loss to ABC Ltd. When compared with fair value ie ` 7,460, the most advantageous market would be A where a net price of ` 7,820 (8,000 – 80 – 100) would be gained by selling there and the number of vehicles sold in the market by ABC Ltd is at its highest. ABC Ltd would utilise the fair value calculated by reference to market B as there is the principle market, since this market provides the most reliable price to determine the fair value and also serves to increase consistency amount reporting entities.

EXAMPLE 4

ABC Ltd wishes to have fair value of some of the assets acquired in a business combination. One such asset is a piece of land, which is currently used for farming. The other one is the brand name associated with the produce from the farm.

The current fair value of the land is ` 5,000. Since the land is used for farming purposes, an income tax credit of ` 100 arises annually. ABC Ltd feels that the land would have more value if it were used for residential purposes. There are several potential purchasers for the land but planning permission has not yet been granted for use of land for residential purposes. However, preliminary enquiries with the regulatory authorities seem to indicate that planning permission may be granted. The fair value of the land for residential purpose before associated costs is thought to be ` 7,600. There will be an additional cost of ` 600 in order to transform the land from farming to residential use. The market participants have indicated that the fair value of land, after deducting the above cost, would be discounted by 25% because of the risk of not obtaining planning permission.

In regard to the brand name, ABC Ltd has determined that if it ceases to use the brand, then the indirect benefits will be ` 4,000. If it continues to use the brand, then the direct benefit will be ` 3,400.

A fair value measurement of a non-financial asset takes into account a market participants' ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant who would use the asset in its highest and best use. The maximum value of a non-financial asset may arise from its use in combination with other assets or by itself. Ind AS 113 *Fair Value Measurement* requires the entity to consider uses which are physically possible, legally permissible and financially feasible. When considering a use that is financially feasible, market participants take into account whether the use of an asset that is physically possible and legally permissible would generate a satisfactory investment return after taking into account the costs of converting the

asset to that use. The highest and best use of a non-financial asset is determined by reference to its use and not its classification and is determined from the perspective of market participant. It does not matter whether the entity intends to use the asset differently. An entity's current use of a non-financial asset is presumed to be its highest and best use unless market or other factors suggest that a different use by market participants would maximise the asset's value.

If the land is used for farming, the fair value would be: ` 5,000 + ` 100 = ` 5,100.

If the land is used for residential purposes, the fair value would be: (` 7,600 – ` 600) x 75% = ` 5,250.

In regard to the brand, on the basis of the highest and best use, the fair value is determined from the perspective of a market participant and should be valued at ` 3,400. The fair value should not be influenced by the decision to discontinue the brand.