Lecture 3: Measurement

Understand the measurement systems that are available (after recognition)

- Measurement*: process of* ***quantifying****, in* ***monetary terms****,* ***information*** *about an entity's assets, liabilities, equity, income and expenses.*

⇨ Attribute **numbers** to items that appear in financial report.

- Choice*:*
  - ***Historical cost***
  - **Current value** (***Fair value*** – exit pricing Or ***Value in use***)
  - e.g. cost model or fair value model (PPE AASB 116).

⇨ **Choice depends on:**

- **Objective** of Financial Reports: whether report is prepared for Valuation or Stewardship? Which system will better suit that objective?
  - Valuation: investors and creditors need info to forecast FCFs and assess credit risk → **relevant** (e.g. FV, Value-in-use more than HCA)
  - Stewardship/contracting: info to assess management performance & write efficient contracts e.g. covenants, compensation → **past emphasis** (HCA), **reliable**, **conservative**
- **Relevance/Reliability trade-off**: one system may be more relevant for an objective but not as reliable (faithful representation) e.g. valuation objective may prefer current value → more relevant for investors to make decisions. But for stewardship, info should be reliable (i.e. cost) since FV is often subject to estimation error.

⇨ The current standard provides no explicit guidance on how we should choose.

⇨ **No perfect measurement system exists** → evaluate advantages/ disadvantages of each system from perspective of ***prepares*** and ***users*** in using information to achieve their objective.

Know the advantages and disadvantages of each measurement system

Historical Costs	
Advantages	Disadvantages
+ Past transactions (past performance) is important input into prediction of FCFs → may reflect future *operating* performance of firm → highly relevant for *valuation*. ▪ ***HC's primary financial statement is IS*** (earnings reflect future income i.e. FCF → used to value firm). ▪ Earnings report how well firm has performed in ***arbitraging (entry & exit) prices*** in input (supplier) and output (customer) markets (ACTUAL transactions) → profit = excess of selling price over historical cost ▪ Assuming ***stable margins***, HC may be suitable for predicting future *operating* returns.	+ HC matches current revenue against historic operating cost. ▪ If *current* operating costs differ from *HC* operating costs, reported profit may be uninformative of future profits. ▪ Can overstate profits in times of rising prices (high current sales matched against low historical cost) → distribution of profits leading to an erosion of operating capacity E.g. match PPE depreciation cost with revenue of products produced using PPE over time BUT *this cost may not reflect future cost* e.g. when PPE is replaced (new cost in today/future terms).
+ Past transactions/ events are important for *stewardship* to make management *accountable*. ▪ If managers know that their performance during the period would be measured & compensated	+ Revenue recognition lag (since revenue is not recognized until receipt of cash is probable).

based on, incentive to work hard -> align interests to increase firm value (reduce moral hazard problem).

+ Reliable and verifiable
- HC recorded ***transaction with a third party*** -> Can verify through documents e.g. invoice. Less subject to opportunistic actions of managers and more reliable.

+ Confirmatory value – provide integrity to forecasts by providing a means to ***confirm*** their value.
- Discipline managers to make reliable forecasts (forward-looking info e.g. earnings forecasts) because forecasts can be compared against actual performance (HC) to check for accuracy – risk of reputation loss if false/unreliable statement.
- Also give credibility to forecasts – investors can trust since accuracy has been confirmed. **HC and forward-looking info thus are complement; NOT substitute.**

+ Predominant method used for many years.
- If not found useful, business entities would have abandoned it.
- Recent accounting standards being released have embraced 'fair values' as the basis of measurement. However, various assets are still measured on historical cost basis. E.g. many firms still measure PPE at cost despite the choice given b/w 2 models.

- ***An economic event that is valuable is not recognised until 3rd (external) party transaction happens***
- No recognition in P&L of losses/gains from simply holding assets (or liabilities) due to their changing value.

E.g.
- *discovery of oil* (an economic event that increases firm value) not recognised as revenue until oil sold to customers
- *discover of drugs* not recognised as revenue until drugs sold to customers in 3 years' time
- *increase in inventory value* not recognised until inventories sold to customers

+ Problem with PL in times of **rising prices** - Include holding gains from selling an asset (which accrued in previous periods) in current year's income → **distorts current year's operating results.**
- E.g. PPE increase in value accrues over time BUT this gain is only recognized at point of sales, not when the increase in value occurs. Overstate current period's profit.

+ No recognition of **current** value of assets/liabilities in BS.
- Only record Unallocated/Unamortized cost = Net Book Value (gross amount less accumulated depreciation). BUT current value may be useful for users in some circumstances.

+ Aggregation of different measurement units - not decision useful
- HC will report similar assets/liabilities acquired at different points in time at very different amounts.
- '**additivity' problem** i.e. adding together *similar assets/ liabilities* acquired at **different times** (different currency units due to inflation i.e. dollars with different purchasing power).
- **Reduce comparability** within and between entities E.g. difficult to compare b/w 2 entities with exactly the *same asset* but *acquired at different times so recorded in very different amounts*.

Fair value (value-in-exchange)

+ **Exit price**
- price **received to sell an asset/ paid to transfer a liability** in an **orderly transaction** between **market participants**.

+ **Market based measures** → not entity-specific measurements
- Price market participants would pay for assets rather than the value generated through unique use in a specific business.

+ **Present (selling) price is seen as correct valuation of wealth at a point in time**

- **BS is primary FS** (shows net selling prices of the entity's assets) → book value is sufficient to value firm.

+ **Capacity to adapt**:
  - Assume objective of accounting is to guide future actions (as opposed to focusing on past performance such as stewardship). → Exit values provides info in relation to new opportunities.
  - Show the amount of **funding** (**adaptive capital**) can get if we liquidate the assets/liabilities in external market to fund alternate investments → enable the company to adapt to changing circumstances.
  - Provide information to measure **opportunity costs** i.e. value of alternatives forgone (e.g. sales to invest in alternate investments) as we hold and use the asset in the business – whether the benefits exceed the opportunity costs.

+ **Profit**:
  - ***Abandons notion of realisation in terms of recognising revenue*** → *No recognition lag*
    - Revenues are recognised at point of production rather than sales to external parties
    - E.g. recognition in P&L of losses/gains from simply holding assets (or liabilities) due to their changing ***exit*** value (as if sales already occur), which will then be immediately reflected in profit.
  - ***No distinction between realized and unrealized gains***
    - all gains are treated as part of profit
    - e.g. either gain from selling an asset to 3^{rd} party or holding gains from an increase in fair value
  - ***Profit =*** increase/decrease in current net selling prices of assets/liabilities
    - ***Change* in *fair value* of *net assets*** or ***change in wealth* or *economic income*** over the period i.e. increase in capacity to adapt over the period/ increase in funds the business has for alternative investments.
    - The amount that can be distributed while maintaining total exit values and **the entity's adaptive ability**.