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Despite the fact that inflation levels are low at present, the challenge of measuring the economic income is as complex as it is ever been.

Income can be interpreted in a number of ways. Income is the amount which an individual can consume and still be as well off at the end of the period as he was at the start of the period. The definition of income requires us to identify if there has been an increase in assets or a decrease in liabilities. The assumption is that income can only arise after the capital stock has been maintained at the same amount as at the beginning of the accounting period.

However, ambiguity and uncertainty arises via the measurement system used to maintain the capital stock. Measurement is perhaps the most controversial issue in financial accounting with each method having both advantages and disadvantages. Relevance and reliability of measurement systems are the most important attributes to discuss with each measurement system.

Several current income and value models have been proposed to replace or operate in tandem with the historical cost convention. However, in terms of basic characteristics, they may be reduced to the following three models; current purchasing power (CPP) or general purchasing power (GPP), current replacement cost or replacement cost (RC), or current exit cost or net realizable value (NRV). Each system has its own advantages and disadvantages which will be discussed.

### Current purchasing power parity (CPPA)

The CPP method measures income and value by adapting a price index system. Movements in price levels are gauged by reference to price changes in a group of goods and services in general use within the economy. The aggregate price/value of this basket of commodities/services is determined at a base point in time and indexed at 100. Subsequent changes in price are compared on a regular basis with this base period price and the change recorded. Normally referred to as consumer price index. For example, if inflation/increase was 10%, to have same purchasing power this year as last year with 100 we need 110.

However there are two arguments against the use of these market prices. Market prices represent the expectation of the buyers and sellers in the market. These expectations are based on predictions which may not be correct. There is often volatility in market prices and sometimes this is caused by market "corrections" in which past prices were considered to have been too high or too low. Some question whether accountants should use prices at all for measurement. This is based on the belief that part of the role of accounting information is to assess the validity of prices.

### Current entry or replacement cost accounting (RCA)

The REPLACEMENT cost of an item is the amount that would be paid at the current time to acquire an identical item. The current cost of an item is the lowest amount that would be paid at the current time to provide or replace the future economic benefits expected from the current item. The valuation attempt to replace the worn item and thus takes account of the



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quality and condition of the existing assets

#### Virtues

- Its unit of measurement is the monetary unit and consequently it is understood and accepted by the user of accounting reports
- It identifies and isolates holding gains from operating income that it can prevent the inadvertent distribution of dividend in excess of operating profit. It satisfies the prudence criterion of the traditional accountant and maintains the physical operating capacity of the entity
- It introduces realistic current value of assets in the balance sheet, thus making the balance sheet a "true" statement and consequently more meaningful to the user (relevance).

#### Defects / criticism

It is a subjective measure, in that replacement costs are often necessarily based on estimate or assessment. It does not possess the factual character of HCA. It is open to manipulation within constraints. Often it is based on index number which themselves may be based on a compound of price of a mixture of similar commodities used as raw material or operating assets. The subjectivity is exacerbated in circumstances where rapid technological advance and innovation are involved in the potential new replacement asset eg. computer.

It assumes replacement of assets being based on their replacement cost. Difficult one if such assets are not to be replaced by similar assets. Presumably, it will then be assumed that a replacement of equivalent value to the original will be deployed, however different in capital when being

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Replacement cost may also have no correlation to value for example: An entity could have a machine that provides benefits greater than the cost of replacing it. Alternatively an entity may have a machine that would cost far more to replace than the value it generated for the company.

### Current exit cost or net realizable value accounts

An exit value is the value that an entity would get from the item leaving the entity (by selling it). Fair value is the amount for which an item could be exchanged between knowledgeable parties in an arm's length transaction. Net realizable value somewhat referred to as net selling price if fair value less the cost of sale or disposal. Both of these values assume normal sale conditions; it is not the price you would receive if you needed to sell an item quickly. Both of these values reflect market prices which is an advantage and disadvantage.

### Advantages

- Assuming value can be found, it is a market price set by forces outside the entity so it is considered a realistic measure in the sense that it is rational, it is not based on biased judgement or subjective or judgement and cannot be manipulated or influenced by an entity management.
- Fair value is an easy concept to understand for all stakeholders. The amount to be received if the item is sold.
- It avoids the need to estimate depreciation and in consequence, the attendant problem of assessing life-span and residual value. Depreciation is treated as arithmetic difference between NRV at end of period and NRV at its beginning.



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### Defects / Disadvantages

**Relevance** - It can be argued that fair value ignores the assumption made in accounting that the entity will continue in business and effectively measure value as though the entity had to liquidate. Even though the item provided future economic benefits to the entity from its use, the item may have no value to any other (entity), apart from scrap value, so it would have no nominal or fair value.

Assumed price is determined by market forces. However not all items are regularly traded. For those an estimate needs to be made of the fair value.

- The income statement will report a more volatile profit if changes in NRV are taken to the income statement each year.
- The profits arising from the changes in NRV may not have been realised.

### Historic Cost

Historic cost is the cost incurred by the individual or enterprise in acquiring an item measured at the time the transaction took place. It is extremely important as it underpins most current accounting practice. The main advantage of historic cost is reliability. The amount paid for an item can usually be proved by documentation (e.g. an object receipt), which is easy to establish and understood by the user.

**Relevance** - how relevant is the cost for any decision you need to make now? Once you have acquired an item, the amount you have paid for it (its historic cost) should not rationally influence the decision.

The usefulness of historic cost is also questionable if you believe

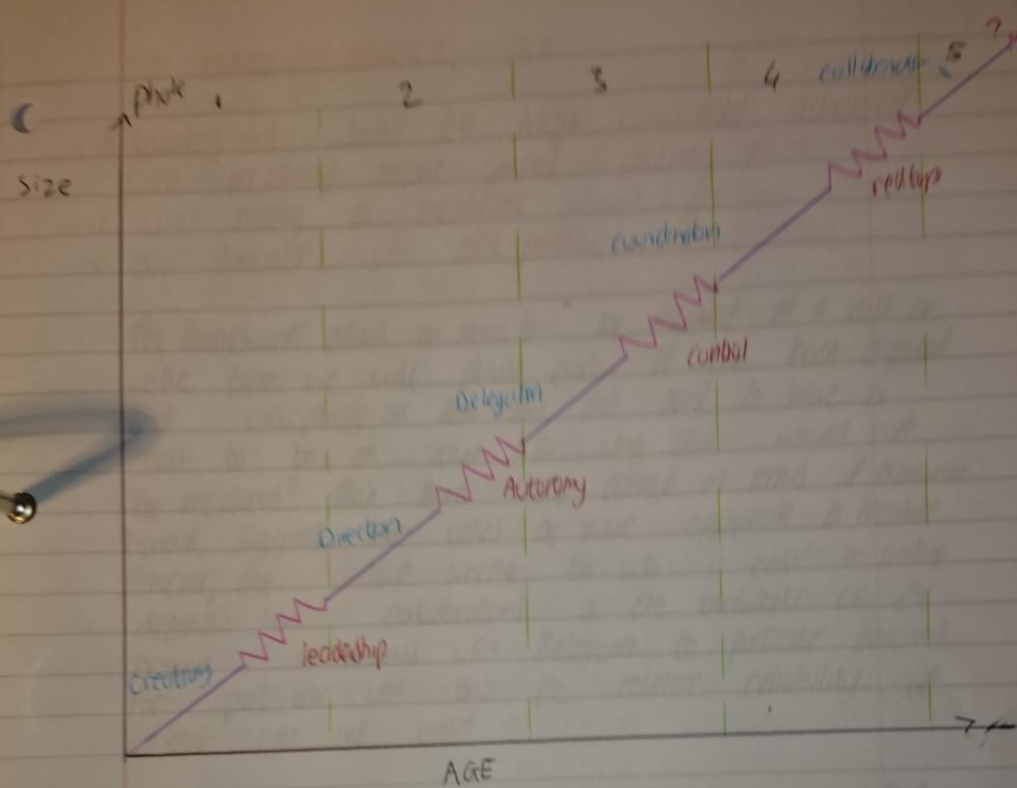
that users need info about the value of items. Cost can be an indicator of the minimum value you expected to get from an item at the time you purchased it. After purchase the historic cost may give an indication of the minimum value of an item.

The value of money changes, some argue that because historic cost does not account for this, it does not show the true cost of an item.

Subjecting in depreciation

Exclusion - what if you have an item valued at no cost to the entity? What about items that are not purchased but are internally generated intangible goods?

Measurement remains the most controversial and unimportant issue in financial accounting. Getting the measurement "right" defines the essential usefulness of financial accounting, yet it is not an easy task. Alternative measures each have their own advantages and disadvantages, and these relative qualities vary depending on the nature of the item being measured and the context. Although there is a strong tendency towards the use of fair value, this is not without its problems and it is likely that financial accounting will continue to utilise a range of different measures despite the ~~intention~~ internal inconsistency for the multi attribute model necessary in this. It is also expected, given practical and political considerations, that choice may still be allowed, but will have to be open to political manipulation.





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- A. Identify and discuss the major challenges associated with measuring income (profit) arising from:
- i. issues relating to measurement of cost
  - ii. other dimensions of the problem

The framework allows an item to be measured at a cost or value. Here we will discuss cost. It has been argued that conceptually, an item does not need to have a cost to be an asset so why then would cost be measured? These items are defined in terms of economic benefits, suggests that value is more appropriate to measure. However, the decision whether to use a cost or value depends on considerations of the usefulness of the measure in terms of: Relevance to particular decisions for particular users and the relative reliability of different cost and value.

Historic cost is the amount of money or equivalent sacrificed or given up to obtain an item. This is the traditional measure used in accounting, and is usually in nominal currency - simply the number of dollars involved in the original transaction. The main advantage of historic cost has key issues associated with its use. Cost is reliable. The amount paid for an item can usually be proved by documentation. It is an objective measure, usually easy to establish and understood by the user.

The key criticism is relevance, historic cost is a "sunk" cost and cannot be changed by any future decisions or actions. How relevant is cost for any decision you need to make now? Once you have acquired an item, the amount you have paid for it should not rationally influence



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deciding the usefulness of historic cost is also questionable if you believe that user needs information about the value of item. Cost can be an indicator of the minimum value you expected to get from an item at the time you purchased it. We have all bought something thinking it will be useful and then found that it is not useful or as useful as we thought it was. So after purchase, the historic cost may give no indication even of the minimum value of an item.

Subjectivity

In practice, although historic cost is the basis for measurement, the measure that is reported in the financial statements is written down historic cost (historic cost less accumulated depreciation). Depreciating involves using judgement to make decisions about how to allocate the historic cost over the period that the asset will generate benefits for the entity. This could provide opportunities for inconsistency or manipulation, and threaten reliability.

Exclusions - The use of historic cost restricts the recognition of some items. What if you have an item donated or no cost to the entity? What about items that are internally generated within the entity such as goodwill?

**Replacement cost and current cost** - An alternative cost that can be used in measurement is the cost to replace resources now. There are two different ways to measure the cost of replacing resource. The **replacement cost** of an item is the amount that would be paid at the current time to acquire an identical item. The focus here is on the cost of exactly the same item in the same condition as the one the entity currently holds. Sometimes this is calculated by using the replacement cost of a new item by adjusting it by depreciation to reflect the item's age.

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The current cost of an item is the lowest amount that would be paid at the current time to provide or replace the future economic benefit expected from the current use. This recognizes that an entity may be able to obtain the same benefits from different items, particularly with technological change. These costs attempt to replace the item with the

Why choose replacement or current cost? Businesses need to consider the current cost of replacing resources (not what they originally paid for their resources). If resources are replaced, the business will need to pay the current price for these, which may be quite different from historic cost if inflation is high or relative prices are changing. The second reason for using current cost is that it seems to be a compromise (it sits) comfortably between the two extremes of historic cost and fair value. Current cost also deals with the problem of how to value assets that have no resale value (so no fair value) but are used by an entity to produce future economic benefits. Current cost is also reliable in the sense that the use of market prices to determine the current cost is more objective, and is less open to manipulation and influence by management.

Relevance: Because the entity already has the item the decision open to it is either to continue to use the item or to sell it rather than replacing it. Replacement cost may also have no connection to value, for example! An entity could have a machine that would cost far more to replace than the value it generated for the company or the machine may provide benefits greater than the cost of replacing it. These criticisms of current cost and replacement cost are using market prices and not being entity specific.



As you have noticed, casting on items is no simple procedure. It requires a more in-depth approach with the realization that no method is 100% correct.

## ii. Value System

Fair value and net realizable value

Two alternate exit values are used in accounting. An exit value is the value that an entity would get from the item leaving the entity (by selling it). **Fair value** - the amount for which an item could be exchanged between knowledgeable parties in an arms length transaction. The two exit values are fair value and net realizable value. Both of these values assume normal sale conditions, so for example it is not the price you would receive if you needed to sell an item quickly. **Net realizable value** (sometimes referred to as **selling price**) is fair value less the cost of sale or disposal. Both of these values reflect market prices. This is both a key advantage and a disadvantage.

If fair value is considered against the qualitative characteristics required in framework, its advantages are: **Reliable** - Assuming fair value can be found, it is a market price, set by forces outside the entity so it is considered a realistic measure in the sense that it is neutral, it is not biased by subjective or judgement and cannot be manipulated by an entity's management.

**Relevant** - for many decisions, this figure and fair value is useful. If you are considering either purchasing or selling an item, clearly the amount you will need to pay or receive and will help you establish the value of an entity. **Understandable and comparable** - Easy enough to understand for all users - simply the amount to be received if the item is sold - and given that fair value is determined at same point of time, can valid comparison among entities can be made.



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Relevance - It can be argued that FV ignores the assumption that the entity will continue in business (going concern) and effectively measures value as though the entity was to liquidate. Even though an item provides future economic benefits to the entity from its use, the item may have no value to any other entity, apart from scrap value, so it would have no or minimal fair value. Fair value is measured at current date. Many investments may be held for long term gain, short term fluctuations in fair value may not be relevant.

Subjectivity - It is independent from management and determined by market forces. However, not all items are regularly traded, for these an estimate needs to be made of the fair value.

market prices represent the expectation of buyers and sellers. the expectation are based on predictions which may not be correct. There is often volatility in market prices.

### Present Value

The present value of an item is the present discounted value for the future net cash flows allocated with an item.