UniSA

BUSINESS ENTERPRISE

Accounting For Decision Making

Topic 1

Understanding Financial Statements

Goals of Topic 1…

- Revisit the 'accounting equation';

- Understand the structure of three of the main financial statements:
  - the statement of financial position (or **Balance Sheet**);
  - the statement of financial performance (or **Income Statement**);
  - the **Statement of Cash Flows**;

What is traditional accounting about?

- Recording and analysing information about the financial *position* and the financial *performance* of the organisation.

- Basic reports -
  - Balance Sheet
  - Profit and Loss (Income Statement)
  - Cash Flow Statement

The Balance Sheet

- Reflects the **financial position** of an entity at a particular point in time
- Lists an entity's **assets, liabilities and owner's equity** at this point in time
- Reflects the assets in which the entity has invested (**its investing decisions**) and how the entity has financed the assets (its **financing decisions**) at a point in time

OUTS = INS

OUTS

…are uses of funds
i.e. ASSETS

Assets

…are things that the entity owns

INS

…are sources of funds
i.e. LIABILITIES, EQUITIES

Liabilities

…are amounts that are owed to others – **external** to the organisation

Equities

…are amounts that are owed by the business to **owners** (the amounts that owners put into the entity)

In a nutshell…

The balance sheet:

- A snapshot of a firm's financial position at a point in time
- Represented by the Accounting Equation:

Assets = Liabilities + Owners Equity

Assets are economic resources which are *owned* by a business and are expected to benefit future operations.

Liabilities are obligations of the entity to *outside* parties who have furnished resources.

Owners Equity represents the interests of shareholders or other *owners* in the assets of an entity.

Asset ~ definition

According to the AASB *Framework* an **asset** is:

'a resource ***controlled*** *by the entity as a result of* ***past events*** *and from which* ***future economic benefits*** *are expected to flow to the entity'*

Classification of Balance Sheet items…

- Assets are divided into classes in order of liquidity :
  - cash and cash equivalents
  - receivables (debtors)
  - prepayments
  - inventories
  - property, plant and equipment
  - intangible assets

- Distinction between current and non-current – based on time (e.g. 12 months).

Classification of Balance Sheet items…

- cash and cash equivalents:
  - cash on hand (petty cash), cash at bank, on short-term deposit etc.
- accounts receivable (trade debtors)
  - the cash the entity expects to receive from parties that owe it money
- prepayments
  - Goods or services that have been paid for but not yet received or used

Classification of Balance Sheet items…

- Inventories
  - Raw materials, work-in-process or finished goods at stock
- Property, plant and equipment
  - Land, buildings, plant and equipment controlled by the entity

Classification of Balance Sheet items…

- Intangible assets
  - Assets do not have physical substance
  - identifiable (e.g. brand names, patents, trademarks, etc.)
  - unidentifiable (e.g. goodwill)
    - Goodwill is recognised only if it is acquired
    - Internally generated goodwill is prohibited
    - Goodwill = purchase price – fair value of net assets acquired

Intangibles…

- Brands
- Goodwill
- R & D

A little history about Intangibles…

- Previously virtually unregulated
- Intangibles were "soft" assets and could be treated as assets "in perpetuity"
- Regulations (since 2005) toughened
- And getting tougher!

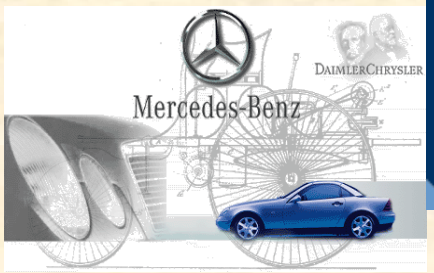
Brands

- Generally brands have no fixed life and therefore capitalisation may be made without a requirement for amortisation

- If purchased, should be shown on Balance Sheet as asset and amortized

- Should the brand suffer a diminution in value, a provision for this reduction would be required.

- Where it is clear that a brand has a finite life amortisation would be necessary.



Goodwill

- Is an "unidentifiable" intangible asset
- Refers to "assets" such as quality of management, location, loyal supply chain, reputation, good industrial relations etc, etc
- Usually measured as the "residual" - otherwise very difficult to quantify
- Can be purchased
- ONLY purchased goodwill appears on a Balance Sheet
- Should be amortised over 20 years.

Research & Development

- The only internally generated intangible asset that MAY qualify for inclusion in the Statement of Financial Position
- Must separate "R" from "D"
- R is the search for new knowledge which MAY lead to new products / services
- D is "putting into practice" ~ design, testing, pilot plants etc
- "R" must be treated as an expense
- "D" can be either an expense or asset

The R & D Rules

- To be an asset ALL these must happen:
  - Clearly definable & $$ identifiable
  - Technical feasibility is OK
  - We "intend" to send to market
  - A market must exist
  - Must be resources to complete the project

Liability ~ definition

According to the *AASB Framework* a liability is:

'A **present obligation** of the entity arising from **past events**, the settlement of which is expected to result in **an outflow from the entity of resources** embodying economic benefits.'

Classification of Balance Sheet items…

- Liabilities are also divided into classes:
  - accounts payable (trade creditors)
  - accruals
  - other liabilities such as tax liabilities, mortgage payables, etc.
  - provisions
  - borrowings
  - bank overdraft

Classification of Balance Sheet items…

- **accounts payable (trade creditors)**
  - the cash expected to be paid to parties to whom money is owed
- **borrowings**
  - debt-funding that requires interest payments
- **accruals**
  - unearned income/income received in advance
  - accrued expenses
- **provisions**
  - Liabilities of uncertain amount or timing
    (e.g. provisions for warranties, employee entitlements).

Definition and nature of an equity

Equity is defined in the *AASB Framework* as:

> 'The **residual** interest in the assets of the entity after deducting all its liabilities.'

i.e. **Equity = Assets – Liabilities**

(∴ an Equity cannot be defined independently of assets and liabilities!)

Definition and nature of an equity (Contd)

- The equity balance represents the **owner's claims** on the entity's **net assets**

- In the balance sheet equity is shown as the **owner's contribution/s** plus **profit** and any **gains or losses directly recognised in Equity**.

Classification of Balance Sheet items…

Equity can be categorised as:

- **contributed capital (share capital)**
  - Capital contributed by owners
- **retained earnings**
  - Entity's undistributed profits for reinvestment purpose
- **reserves**
  - Equity created in different ways for different purposes

    e.g. asset revaluation reserve, general reserve, foreign currency translation (fluctuation) reserve, etc.

Classification of Balance Sheet items…

- Specific details of assets, liabilities and equity can be found in the **Notes** to the financial statements.

Format and presentation of the Balance Sheet

- Can be presented in either the **'T' format or narrative format**
- **Comparative** statements from previous years often used
- **Parent** (controller) and **consolidated** (for the group) company statements (plus comparisons) often reported

Example: XYZ Ltd Balance Sheet as at 30 June…

	2013 $000		2014 $000	
Current assets				
Cash at bank	15		--	
Accounts receivable	60		140	
Inventory	110		250	
Prepayments	5	190	5	395
Non-current assets				
Equipment and fittings	170		230	
less Accum. depreciation	(50)		(70)	
Buildings	150		200	
less Accum. depreciation	(20)		(30)	
Land	80	330	180	510
Total		520		905
Current liabilities				
Bank overdraft	--		30	
Accounts payable	120		225	
Tax payable	35		45	
Accured expenses	5	160	7	307
Non-current liabilities				
Long-term Loan		80		200
Equity				
Share capital	220		220	
Revaluation reserve	--		80	
Retained earnings	60	280	98	398
Total		520		905

For each of the following transactions identify how the asset, liability and/or equity accounts increase, decrease or remain unchanged.

	ASSETS (A) =	LIABILITIES (L) +	EQUITY (E)
a. Obtained a loan to purchase equipment for $30 000	↑ Equipment $30 000	↑ Loan $30 000	
b. The owners withdrew $2000 for personal use	↓ Cash $2000		↓ Equity as Drawings $2000 increase
c. A trade debtor, who owes $5000, made a part payment of $3000	↑ Cash $3000 ↓ Debtors $3000		
d. Purchased inventory for $8000 paying $2000 cash and the balance on credit	↓ Cash $2000 ↑ Inventory $8000	↑ Creditors $6 000	
e. Revalued a building from its acquisition cost of $50 000 to its fair value of $70 000	↑ Building $20 000		↑ Asset Revaluation Reserve $20 000
f. Inventory with a carrying amount of $25 000 had a net realisable value of $15 000.	↓ Inventory $10 000		↓ Equity by $10 000 as Expense ↑ by $10 000 (inventory write-down)

Construct a Balance Sheet…

- Freda's Farm Machinery

Freda's Farm Machinery

Freda started business retailing second-hand tractors on 1st June. She set up her business in a company structure with her husband Ken as a Director.

Freda invested $200,000 in cash in the business on the 1st June. She bought a property for $500,000 with a loan of $450,000 from Bank SA. Mrs Patrickson had also bid for the property and told Freda she would pay her $600,000 if she was interested. The directors decided on the 30th June that the property was really worth $550,000.

On the 3rd June she bought a second-hand tractor from Shiv for $45,000 in cash; and bought two more later in the month on credit in a clearance auction for $50,000 and $65,000. She sold *(the second)* tractor on the 30th June for $80,000 on credit, but has since found out that the farm she sold it to is under administration, and her friend, Sandra thinks she will only get 50c in the dollar. The company administrator has since suggested that she might get 60c in the dollar for the sale of this tractor.

On the 1st June she bought a car for the business for $36,000

Freda's Farm Machinery

Assets	
Cash	105,000
Property	500,000
Tractor (1)	45,000
~~Tractor (2)~~	~~50,000~~
Tractor (3)	65,000
A/c's Rec.	80,000
Car	36,000

Liabilities	
Loan (BankSA)	450,000
A/c's Payable	151,000

Owners Equity	
Capital	200,000
Ret Earnings	30,000

$831,000 **$831,000**

Limitations of the Balance Sheet

1. Asset, Liability and Entity values are at a particular point in time only

   (these values would have been different yesterday and will be different tomorrow).

Limitations of the Balance Sheet

2. The entity's value is not really reflected due to:
   - Items that generate future benefits or involve future sacrifices but not satisfying definition/recognition criteria might be missing
   - Items can be measured using different measurement alternatives
   - The historical nature (or combinations of cost and fair values) of the balance sheet

Limitations of the Balance Sheet

3. Preparing a Balance Sheet involves:
   - management choices
   - judgements
   - estimations

The Income Statement

- The difference between income and expenses is profit.

- Components
  - Income
    - Separated by operating (revenue) and non-operating
  - Cost of Goods Sold
    - Usually direct costs such as material & labour
    - As well as the allocation of indirect cost (overhead)
  - Other expenses

Classification of Income

Income is generated from various activities, such as:

- providing goods and services (sales, fees, etc.)
- investing or lending (dividends, interest, etc.)
- receiving contributions from parties other than owners (government grants, etc.)

Classification of Expenses

- Cost of goods sold/Cost of sales
  = Inventory at beginning of period
  + net purchases
  - Inventory at end of period
- Wages and salaries
- Depreciation expense
- Selling & administrative expense
- Finance cost, etc.

Presentation of the Income Statement

(sometimes called the Statement of Financial Performance or Profit and Loss Statement)

… is a statement of revenues, expenses, and any gains and losses, showing the results of an entity's operations in a period.

Accountants usually measure profit or loss as:

Sales

- COGS

Gross Profit

-Expenses

Net Profit (EBIT)

Presentation example

Donald and Sons Pty Ltd

Income Statement for the year ended 30 June 2013

Sales revenue		640 000	
less Sales returns		9 200	630 800
Discount revenue			10 600
			641 400
less Cost of goods sold			
Inventory at beginning	47 200		
Purchases	429 500	476 700	
Closing inventory		56 300	420 400
Gross profit			221 000
less Operating expenses (classified by nature)			
Wages expense		84 000	
Sales discounts		7 600	
Bad and doubtful debts expense		4 300	
Sales commissions		6 900	
Depreciation expense		12 400	
Electricity expense		3 700	
Finance costs expense		12 000	
Insurance expense		8 100	
Rent expense		31 000	170 000
Profit before tax			51 000
Income tax expense			21 600
Net Profit			29 400

Example: Preparing an income statement

Dogwash Pty Ltd commenced operations on 1 September 2014 with an investment of $40 000 cash. The outcome of its first three months of operations is detailed below:

Cash	$11 200
Accounts receivable	10 500
Equipment (net of depreciation)	28 500
Service revenue	12 600
Advertising expense	2 500
Accounts payable	1 900
Loan	10 000
Rent expense	3 600
Repair expense	900
Fuel expense	1 200
Insurance expense	400
Prepaid insurance	1 200
Depreciation expense	1 500
Drawings	3 000

Preparing an income statement - Analysis

An investment of $40 000 cash	→	Asset & Equity
Cash	→	Asset
Accounts receivable	→	Asset
Equipment (net of depreciation)	→	Asset
Service revenue	→	Income
Advertising expense	→	Expense
Accounts payable	→	Liability
Loan	→	Liability
Rent expense	→	Expense
Repair expense	→	Expense
Fuel expense	→	Expense
Insurance expense	→	Expense
Prepaid insurance	→	Asset
Depreciation expense	→	Expense
Drawings	→	Equity

Preparing an income statement - Analysis

DOGWASH PTY LTD
Income Statement
for the 3-month period ended 30 November 2014

Income:		
Service Revenue		12 600
Total Income		*12 600*
Expenses		
Advertising Expense	2 500	
Rent Expense	3 600	
Repair Expense	900	
Fuel Expense	1 200	
Insurance Expense	400	
Depreciation Expense	1 500	
Total Expenses		*10 100*
Net Profit		*$2 500*

Allocating cost of non-current assets

- The interrelationship between the balance sheet and the income statement in the case of long-lived assets is through their acquisition cost and their progressive write-down.

- There are three classes of charges:

  - *depreciation (Fixed Assets)*
  - *depletion (Natural Resources)*
  - *amortization (Intangible Assets)*

How do we account for useful life?

How do we account for residual values?

What is Depreciation?

- With the exception of land, most items of plant and equipment have a limited useful life

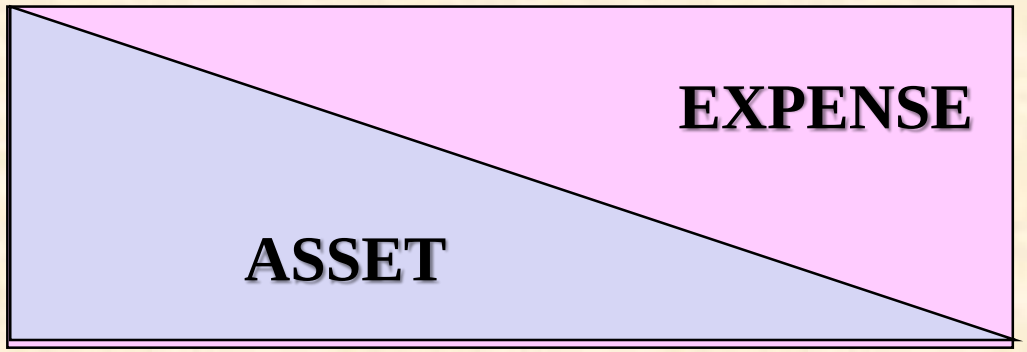
- they will provide service to the entity over a limited number of future accounting periods

- A fraction of the cost of the asset is therefore properly chargeable as an expense in each of the accounting periods in which the asset provides service to the entity

- The accounting process for this gradual conversion of plant & equipment capitalised cost into expense is called **depreciation**.

Depreciation

- How do we match the cost of our assets with revenue?
- Consider the following relationship:



Calculating Depreciation

- We call this process of slowly using up an asset "depreciation"
- As we have no objective measure of this process we approximate it
- However in charging depreciation expense we are not trying to measure market value, rather how much of the asset has been used.

Common Depreciation Methods

1.Straight line depreciation

2.Reducing balance (diminishing value)

3.Sum-of-the-year's-digits.

1. Straight line depreciation

$$\text{Depreciation Expense} = \frac{\text{Cost of Asset - Estimated Scrap Value}}{\text{Estimated Useful Life of Asset}}$$

2. Reducing balance (diminishing value)*

$$\text{Depreciation Rate} = r = 1 - \sqrt[n]{\frac{s}{C}}$$

Where = r = depreciation charge rate
n = estimated service life of asset
s = estimated salvage value
C = acquisition cost

* This is a simple formula for calculating the Reducing Balance Depreciation Rate. It cannot be used when the salvage value is $0, since the depreciation rate is then 100%. Very low residual values also give unrealistically high depreciation rates. More complex formulae are used in such instances.

3. Sum-of-the-year's-digits

i. Add the numbers representing the periods of service life
ii. Use as numerators, the same numbers in reverse order
iii. Multiply the amount to be depreciated by the fractions in (2)

Methods of calculating depreciation…

Allocation of the *depreciable amount* of a depreciable asset over its *estimated* useful life:

- *Straight-line method*:
  - annual depreciation is the same each year

- *Reducing-balance method*:
  - annual depreciation reduces each year

Straight Line Depreciation

For example:

An organisation purchased a machine at a cost of $33,000, it is estimated that its residual value would be $3,000, and its useful life is 4 years. Using the straight-line method to calculate annual depreciation and accumulated depreciation at the end of year 3…

$$\text{Annual depreciation} = \frac{\text{Original Purchase Price – Salvage Value}}{\text{Useful life}}$$

$$= \frac{\$33{,}000 - \$3{,}000}{4} = \$7{,}500$$

Accumulated depreciation in year 3 = $7,500 x 3 = $22,500

Reducing Balance Depreciation

For example:

An organisation purchased machine at a cost of $33,000 and wanted to depreciate it at the depreciation rate of 45%. Using the reducing-balance method to calculate annual depreciation for Year 1 and Year 2…

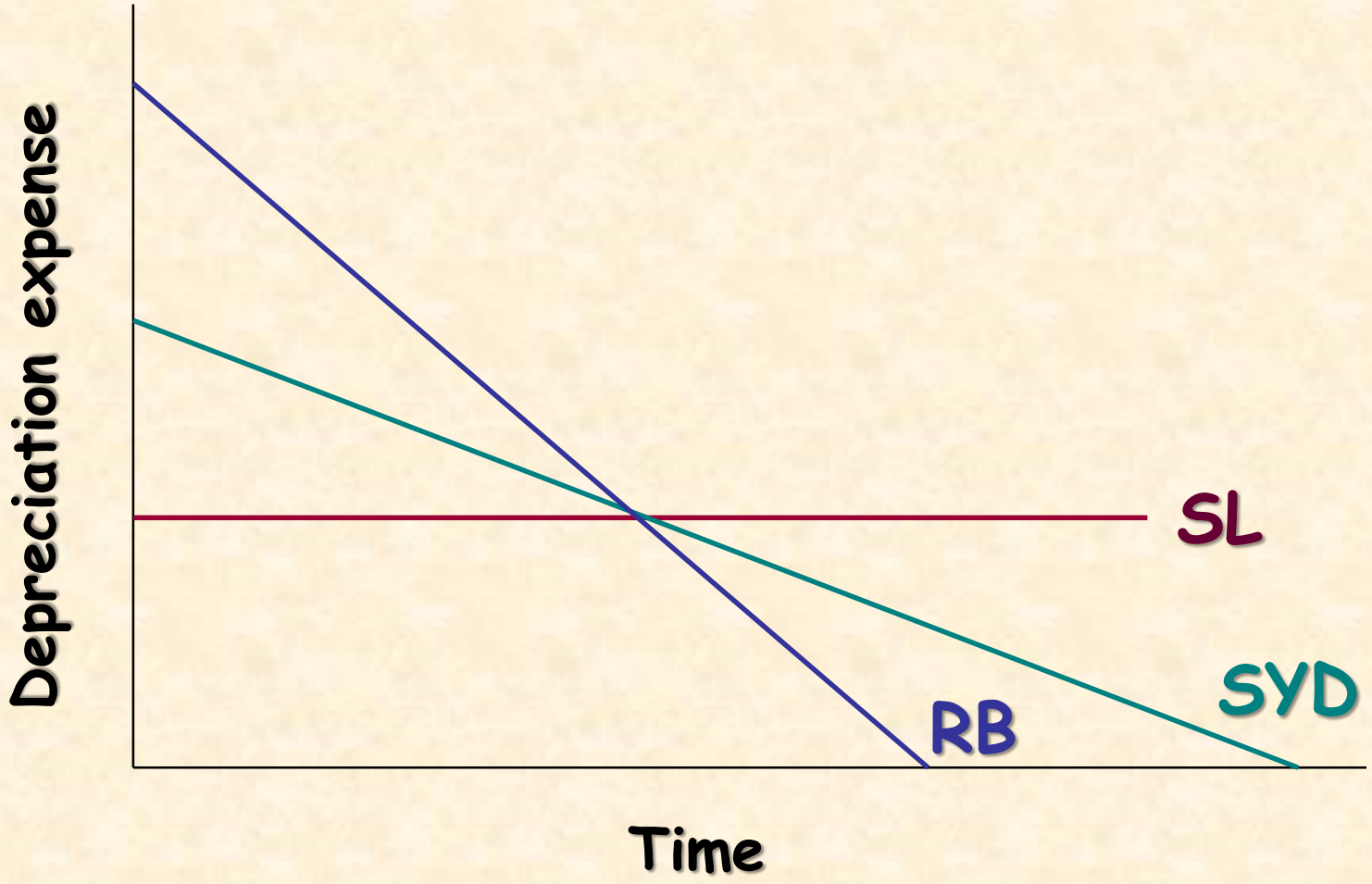
Year 1: Carrying amount x depreciation rate

= $33,000 x 45% = **$14,850**

Year 2: Carrying amount x depreciation rate

= ($33,000 – 14,850) x 45% = **$8,168**

Effects of Different Depreciation Methods Over Time



Tax and Depreciation

Which depreciation method to use?

- Most firms use straight line for accounting records
- But for tax, use the allowable method that writes off the **most** depreciation in the current year
- i.e. Where allowed for tax they will use an accelerated method over straight line
- Reason: Saves tax now ~ pay later
- Tax and Book methods result in TIMING DIFFERENCES - called DEFERRED TAX.

The purpose of the Depreciation charge

Question:

Is depreciation used in financial reporting for the purpose of valuing assets?

Answer:

No!

Depreciation is ***not*** a valuation process;

it **is** a *systematic allocation of acquisition cost as expense over the estimated useful life of an asset* for the purpose of measuring periodic net income (Matching)