ACCOUNTING FUNDAMENTALS (5.4)

(Chapter 30 - AS level 5.4)

Accounts are the financial records of a firm's transactions.

Final Accounts are prepared at the end of the financial year and give details of the profit or loss made as well as the worth of the business.

Income statements

An **income statement** is a financial document of the business that records all income generated by the business as well as the costs incurred by the business and thus the profit or loss made over the financial year. It tells managers and shareholders if the business is profiting.
(The brackets mean we minus from the number above.)

	($000)
Sales Revenue	1250
Cost of Sales	(900)
GROSS PROFIT	**350**
Expenses including interest paid	(155)
NET PROFIT	**195**
Corporation Tax	(35)
PROFIT AFTER TAX	**160**
Dividends	(120)
RETAINED PROFITS FOR THE YEAR	**40**

Income statements consist of :

Sales revenue = total sales (the total amount of cash made from sales before deducting costs)

Cost of Sales = total variable cost of production + (opening inventory of finished goods – closing inventory of finished goods)

Gross Profit = Sales Revenue – Cost of Sales

Expenses = all overheads/fixed costs

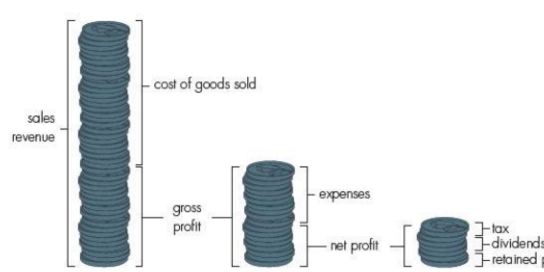
Net Profit = Gross Profit – Expenses

Profit after Tax = Net Profit – Tax

Dividends = share of profit given to shareholders; return on shares

Retained Profit for the year = Profit after Tax – Dividends.
This retained earnings is then kept aside for use in the business.

(So retained profit is the money left over once costs, taxes and dividends have been deducted.)



Only a very small portion of the sales revenue ends up being the retained profit. All costs, taxes and dividends have to be deducted from sales.

Uses of income statements :

- **Know the profit/loss made by the business**
- **Compare their performance** with that of previous years' and with that of competitors'. If profit is lower than that of last year's, why is it falling and what can they do to correct the issue? If it is lower than that of competitors' what can they do to be more profitable and be competitive in the market?
- **Know the profitability of individual products** by preparing separate income statements for each product. They may decide to stop production of products that are making losses.
- **Help decide what products to launch** by preparing forecast income statements for the first few years. Whichever product is forecast to have a higher profit, the business will choose to launch that product
- **Help convince banks/investors** to give the business loans

Statement of financial position

The **balance sheet**, more often called the **financial statement of position**, along with the income statement are prepared at the end of the financial year. The financial statement of position shows the value of a business' *assets* and *liabilities* at a particular time.

This tells managers and stakeholders what the 'net worth' of the business is. This can be compared with past years and other similar businesses.

Assets are those items of value owned by the business.

- **Fixed/non-current assets** (buildings, vehicles, equipment etc.) are assets that remain in the business for more than a year – their values fall over time (they depreciate.)
- **Short-term/current assets** (inventory, trade receivables (debts from customers), cash etc) are owned only for a very short time.
- There can also be **intangible** (cannot be touched or felt) **non-current assets** like copyrights and patents that add value to the business.

Liabilities are the debts owed by the business to its creditors.

- **Long-term/non-current liabilities** (loans, debentures etc.)- they do not have to be repaid within a year.
- **Short-term/current liabilities** (trade payables (to suppliers), overdraft etc.)- these need to be repaid within a year.

Statement of financial position explained :

ABC Ltd. Statement of financial position as at 31/3/2019	($000)
ASSETS	
Non-Current (fixed) Assets:	
Land and buildings	450
Machinery	700
	1150
Current Assets:	
Inventories (stocks)	80
Accounts receivable (debtors)	50
Cash	10
	140
TOTAL ASSETS	1290
LIABILITIES	
Current Liabilities:	
Accounts payable (creditor)	65
Bank overdraft	65
	130
Non-Current (long-term) liabilities:	
Long-term bank loan	300
TOTAL LIABILITIES	430
TOTAL ASSETS - TOTAL LIABILITIES	860
Shareholders' Equity	
Share Capital	520
Profit and Loss Account Reserve (Retained Earnings)	340
TOTAL SHAREHOLDERS' EQUITY	860

(The numbers on the left will *balance* with the numbers on the right.)

CURRENT ASSETS – CURRENT LIABILITIES = WORKING CAPITAL
This is because the liquid cash a company has with them will be the liquid (short-term) assets they own less the short-term debts they have to pay.

Shareholder's Equity is the total amount of money invested in the company by shareholders. This will include both the share capital (invested directly by shareholders) and reserves (retained earnings reserve, general reserve etc.).
Shareholders can see if their stake in the business has risen or fallen by looking at the total equity figure on the balance sheet.

SHAREHOLDERS EQUITY = TOTAL ASSETS – TOTAL LIABILITIES

TOTAL ASSETS = TOTAL LIABILITIES + SHAREHOLDERS EQUITY

CAPITAL EMPLOYED = SHAREHOLDERS EQUITY + NON-CURRENT LIABILITIES
This is because non-current liabilities like loans are also used for permanent investment in the company.

Uses of a statement of financial position

- When the current assets subtotal is compared to the current liabilities subtotal, investors can estimate whether a firm has access to sufficient funds in the short term to pay off its short-term obligations i.e., whether it is liquid
- One can also compare the total amount of debt (liabilities) to the total amount of equity listed on the balance sheet, to see if the resulting debt-equity ratio indicates a dangerously high level of borrowing. This information is especially useful for lenders and creditors, (especially banks) who want to know if the firm will be able to pay back its debt
- Investors like to examine the amount of cash on the balance sheet to see if there is enough available to pay them a dividend
- Managers can examine its balance sheet to see if there are any assets that could potentially be sold off without harming the underlying business. For example, they can compare the reported inventory assets to the sales to derive an inventory turnover level, which can indicate the presence of excess inventory, which can be sold off for spare $$

Ratio analysis

The data contained in the financial statements (income statement and SOFP) are used to make some useful observations about the performance and financial strength of the business. This is the analysis of accounts of a business. To help analysis, **ratio analysis** is also employed.

The two types of ratio analysis employed are **liquidity ratios** and **profitability ratios.**

Liquidity ratios

Liquidity is the ability of the company to pay back its short-term debts. If it doesn't have the necessary working capital to do so, it will go **illiquid** (forced to pay off its debts by selling assets). In a previous topic, we said that **working capital** = **current assets - current liabilities**. So a business needs current assets to be able to pay off its current liabilities. The two liquidity ratios are shown below :

- **Current Ratio**: this is the basic liquidity ratio that calculates how many current assets are there in proportion to every current liability, so the higher the current ratio the better (a value *above* 1 is favourable, between 1.5-2 is seen as normal).

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

- **Acid Test Ratio**: this is very similar to current ratio but this ratio **doesn't consider inventory to be a liquid asset**, since it will take time for it to be sold and made into cash. A high level of inventory in a business can thus cause a big difference between its current and liquidity ratios. So there is a slight difference in the formula :

$$\text{Acid test ratio} = \frac{\text{Current assets} - \text{inventories}}{\text{Current liabilities}}$$

Profitability ratios :

Profitability is the ability of a company to use its resources to generate revenues that exceed its expenses. These ratios are used to see how profitable the business has been in the year ended. The two profitability ratios required for AS level include : (ROCE is for A-level only.)

- **Gross Profit Margin** : this calculates the **gross profit** (sales – cost of production) in terms of the sales, or in other words, the % of gross profit made on each unit of sales revenue. The higher the GPM, the better. The formula is :

$$\text{Gross profit margin (\%)} = \frac{\text{Gross profit}}{\text{Sales revenue}} \times 100$$

- **(Net) Profit Margin** : this calculates the net profit (gross profit-expenses) in terms of the sales, i.e. the % of net profit generated on each unit of sales revenue. The higher the NPM, the better. The formula is :

$$\text{Net profit margin (\%)} = \frac{\text{Net profit}}{\text{Sales revenue}} \times 100$$

- **Return on Capital Employed** (ROCE): this calculates the return (net profit) in terms of the capital invested in the business (shareholder's equity + non-current liabilities) i.e. the % of net profit earned on each unit of capital employed. The higher the ROCE the better the profitability is. The formula is:

$$\textbf{ROCE \%} = \frac{\text{Net profit}}{\text{Capital employed}} \times 100$$

Ways to improve ratios :

- **Liquidity ratio too high -** means that a company can easily meet its short-term debts. An abnormally high ratio means the company holds a large amount of unnecessary liquid assets (high inventories), which can be sold off for cash to be spent
- **Liquidity ratio too low -** low liquidity implies that a business may be unable to pay off their short-term debts. This means a company could be facing bankruptcy. A way to solve this would be by selling off inventories/unused assets for quick cash or taking on a long-term loan
- **Gross-profit margin too low -** means that a company uses an ineffective cost structure and/or poor pricing strategies, so find lower cost materials or increase the price (but this may negatively impact sales)
- **Profit margin too low -** reduce operating costs (raw materials + labour) ,increase the price, reduce indirect costs (rent, promotion cost etc.)

Main users of accounts

The various stakeholders in a business have differing uses for accounts, for example :

1. Managers

Managers will use the accounts to help them keep control over the performance of each product or each division since they can see which products are profitably performing and which are not.

- **This will allow them to make better decisions**. If for example, product A has a good gross profit margin of 35% but its net profit margin is only 5%, this means that the business has very high expenses that is causing the huge difference between the two ratios. They will try to reduce expenses in the coming year. In the case of liquidity, if both ratios are very low, they will try to pay off current liabilities to improve the ratios.
- **Ratios can be compared with other firms** in the industry/competitors and also with previous years to see how they're doing. Businesses will definitely want to perform better than their rivals to attract shareholders to invest in their business and to stay competitive in the market. Businesses will also try to improve their profitability and liquidity each year

2. Shareholders

Since they are the owners of a limited company, it is a legal requirement that they be presented with the financial accounts of the company.

- From the income statements and the profitability ratios, existing shareholders and potential investors can **see whether they should invest in the business** by buying shares. A higher profitability, the higher the chance of getting dividends
- They will also **compare the ratios with other companies** and with previous years to take the most profitable decision
- The balance sheet will **tell shareholders whether the business was worth** more at the end of the year than at the beginning of the year, and the liquidity ratios will be used to ascertain how risky it will be to invest in the company- they won't want to invest in businesses with serious liquidity problems

3. Creditors

The balance sheet and liquidity ratios will tell creditors (suppliers) the cash position and debts of the business. They will only be ready to supply to the business if they will be able to pay them. **If there are liquidity problems, they won't supply** the business as it is risky for them.

4. Banks

Similar to how suppliers use accounts, they will look at **how risky it is to lend to the business.** They will only lend to profitable and liquid firms.

5. Government

The government and tax officials will look at the profits of the company **to fix a tax rate** and to see if the business is profitable and liquid enough to continue operations and thus **if the worker's jobs will be protected.**

6. Workers and trade unions

They will want to see **if the business' future is secure or not**. If the business is continuously running a loss and is in risk of insolvency (not being liquid), it may shut down operations and workers will lose their jobs!

7. Other businesses

Managers of competing companies may want to **compare their performance** too or may want to take over the business and want to see if the takeover will be beneficial.

Limitations of accounts and ratios

- Ratios are **based on past accounting data** and will not indicate how the business will perform in the future
- Managers will have all accounts, but the external users will only have those published accounts that contain only the data required by law- they may not get the '**full-picture**' about the business' performance.
- Comparing accounting data over the years can lead to misleading assumptions since the data will be affected by **inflation** (rising prices)
- Different companies may use different accounting methods and so will have **different ratio results**, making comparisons between companies unreliable
- The accounts may have been made to appear more attractive for potential investors or banks, i.e '**window dressing**'
- Ratio results help highlight problems - but they **do not find solutions**