Lecture summary #8

Understanding financial statements 2: Profit & Loss Account

One must develop an intuitive understanding of financial statements to become a more effective business leader. A strong grasp of financial statements can aid in managing various components of a business and may even transform a weak business model into a successful one. Through this, you will learn the significance of cash in business operations and how to ensure you never run out of it.

The three key financial statements are

Profit & Loss Account

Balance Sheet

Cash Flow Statement

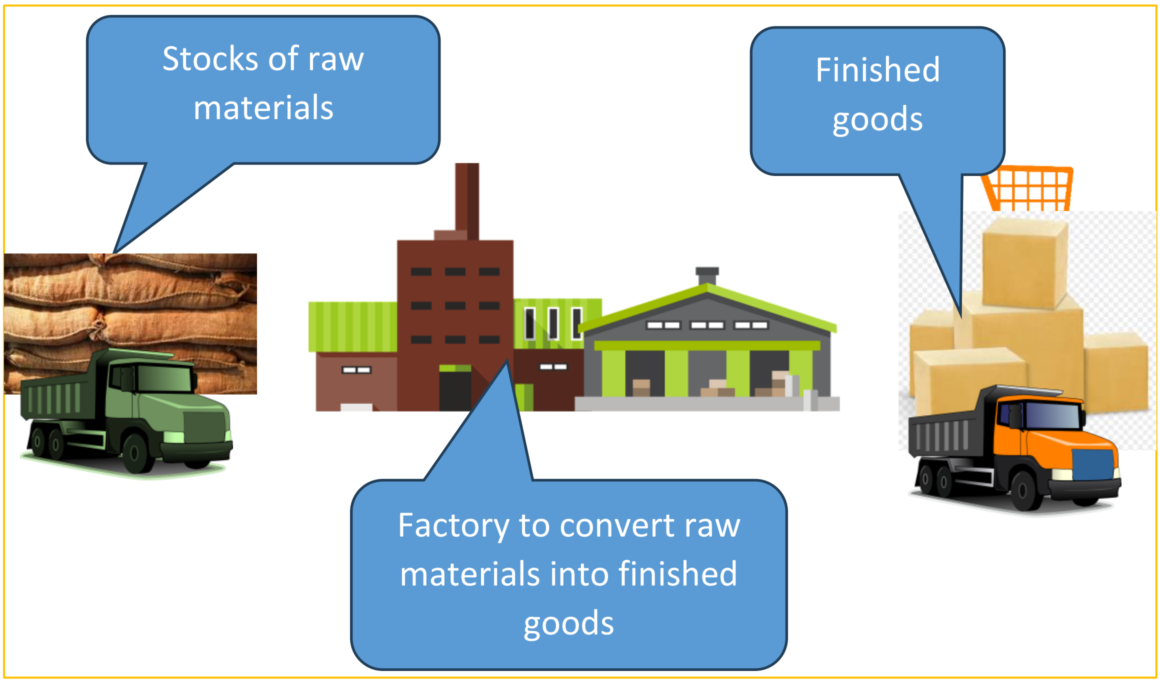
Let us understand the **Profit & Loss Account.**

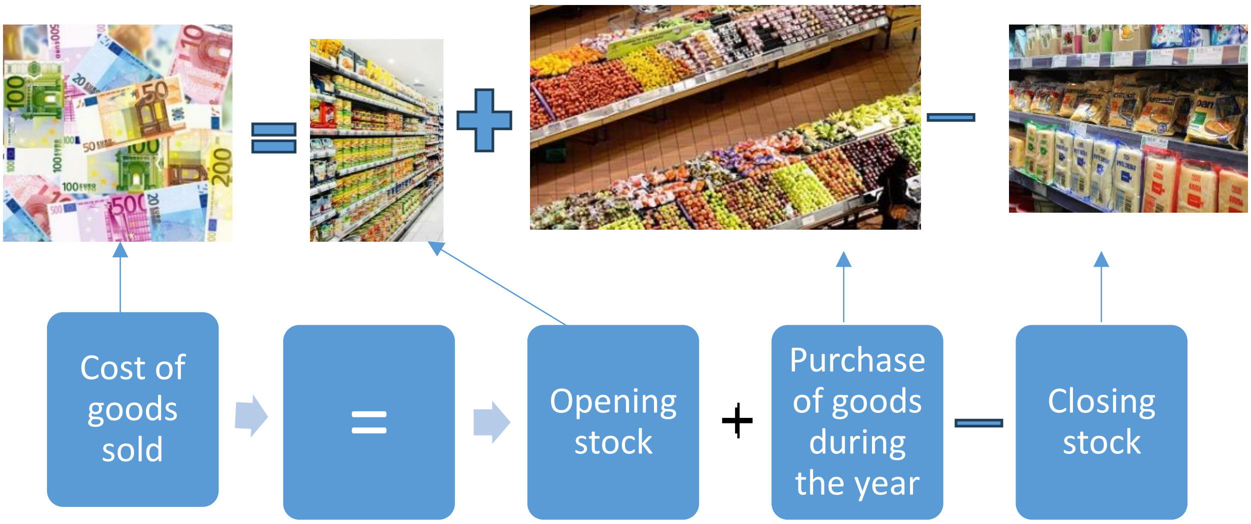
It is important to cultivate a holistic view of an enterprise. The money earned through the sale of products and/or services constitutes the primary incoming cash stream, which is used to cover all expenses. Any money remaining after meeting all expenses constitutes the pre-tax profit. Once taxes are paid, the remaining funds belong to the owners of the business.

"You have to understand accounting and you have to understand the nuances of accounting. It's the language of business and it's an imperfect language, but unless you are willing to put in the effort to learn accounting - how to read and interpret financial statements - you really shouldn't select stocks yourself." - Warren Buffett

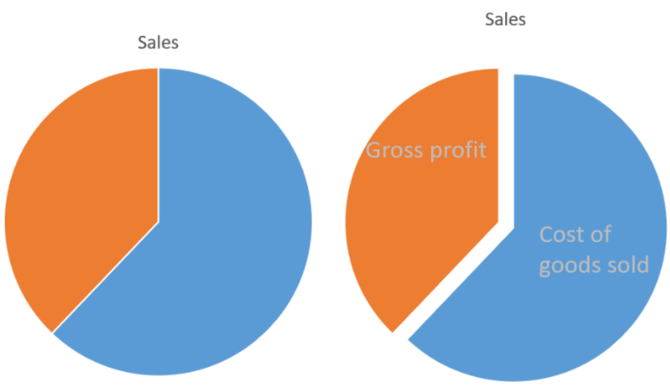
GROSS PROFIT = Sales minus Cost of goods sold

Cost of goods sold = Opening stock + goods purchased during the year – closing stock of goods.





Gross Profit = Sales – Cost of goods sold



Various types of profits are defined to comprehend the efficiency with which firms utilize their resources. You estimate the following different profits:

- Gross profit
- EBITDA
- Operating profit
- Profit before tax
- Net profit
- Retained profit

EBIDTA = Gross profit minus all the expenses except Depreciation (D), Interest (I), Tax (T), and Amortization (A). [in EBIDTA, B stands for 'before' meaning minus. Full form of EBIDTA is 'Earnings before interest, depreciation, tax and amortization'. In USA, the word 'earnings' is used to mean what we call 'profit'].

OPERATING PROFIT or EBIT = Gross profit – Interest & Tax

PROFIT BEFORE TAX (or PBT) = Operating profit – Interest

NET PROFIT (or Profit After Tax or **PAT**) = Profit Before Tax – Income Tax

RETAINED PROFIT or RETAINED EARNINGS = Net profit – dividends

(In this context, please know that people in the USA use the term 'Earnings' to mean what we call 'Profit.')

In India, the financial year commences on 01st of April of one year and concludes on 31st of March of the next year (Companies, however, can choose any 12-month period as the financial year). The notation for financial year is as follows: YEAR 2020-21 (or simply 20–21), which means a 12-month period from 01st of April 2020 to 31st of March 2021. [However, some companies opt for an alternate financial year period when reporting to stakeholders other than government agencies. This choice may stem from the cyclic nature of their operations or because their parent companies follow a different financial year period due to being located in another country.]

Let's take a simple example. Suppose you start a business in your hostel room. You buy pens from Kolkata and sell them from your room. Say, each pen cost you ₹10, and you sell them for ₹15 each. Consider that you have just completed the second year of business (say 2020-21) and now want to estimate the profit for the year. The first question you need to find an answer to is, 'how many pens have you sold?' The answer is intuitive but needs some explanation. Suppose you bought 500 pens in the previous year, i.e. year 2019-20 and sold 400 of them. Therefore, as at the close of the business of year 19-20, you are left with 100 unsold pens (this bundle of 100 unsold pens is referred to as '**closing stock'**). Therefore, when you start the year 2020-21, i.e. on the 1st of April 2020, you already have these 100 pens with you (this bundle of 100 pens that remained unsold in the previous year as 'closing stock', is referred to as '**opening stock'** for the year 2020-21). So, you start selling the pens and keep buying pens from Golebazar/Kolkata throughout the year 2020-21. You buy a total of 1000 pens during the current year (2020-21). At the end of the year, i.e. on 31 March 2021, you notice that 200 pens remained unsold. Therefore, your '**closing stock**' for the year 2020-21 is 200 pens. So, how many pens have you sold during 2020-21?

The intuitive formula is: Opening stock + purchase during the year – closing stock = 100 + 1000 – 200 = 900. Therefore, you sold 900 pens during the year 2020-21. In reality, you sell many different items such as pens, pencils, notebooks, etc. and, therefore, stocks are not referred to **by numbers but by their cost of purchase**. In Rupee term, your closing stock was worth ₹ 1000, your purchase during the year was ₹ 10,000 and your closing stock as of 31.03.2021 was ₹ 2,000. The cost of the goods that you sold during 2020-21 can be estimated using the same formula:

Cost of Goods Sold (or CoG) = opening stock + purchase – closing stock = 1,000 + 10,000 – 2,000 = 9,000 or ₹ 9,000.

You sell pens @₹15 apiece. Your sales during the year is 900 pends = (900*15) = ₹ 13,500.

GROSS PROFIT (GP) = SALES – COST OF GOODS SOLD = 13,500 – 9,000 = ₹4,500

The percentage of GROSS PROFIT MARGIN is also important. MARGINS ARE ALWAYS ESTIMATED WITH RESPECT TO SALES. For the above example:

Gross Profit Margin = (Gross profit/ Sales)*100 = (4,500/13,500)*100 = 33.33%, which means that (1.00 – 0.3333)% constitute the cost of the goods that you sold.

We have just estimated one form of profit, i.e. Gross Profit (GP margin).

Let us now understand OPERATING PROFIT:

Operating profit is equal to GROSS PROFIT – minus all '**operating expenses'** (except **'Interest'** paid for any loans). [When you borrow money from anybody, particularly banks, you have to pay interest on that.]

Operating expenses are those that are incurred and to the extent used up during the year. Some of the elements in operating expenses are:

Factory and office rent.

Transportation expenses.

Traveling expenses.

Power and fuel expenses.

Telephone bill payments (purchase of telephone is not part of operating expenses).

Insurance expenses.

Salary paid to factory and office staff.

Wages paid to daily workers.

Maintenance.

Depreciation.

Amortization.

Depreciation is that part of the long-term assets such as machinery, which is used up during the year, meaning that the machinery loses some value in one year which is accounted in the form of depreciation.

Amortization takes place when the value of an asset, typically an intangible one such as expenses related to research and development (R&D) or a trademark, is systematically reduced over a specific time period, generally aligned with the asset's estimated useful life. This accounting practice is commonly applied when an expense, particularly a significant one relative to the operating profit, yields benefits or outcomes over an extended duration. In such cases, the expense is capitalized by being converted into long-term assets and is then gradually reduced over time.

Please refer to the example in the shared Excel sheet to know more about it.

After operating profit, we estimate Profit Before Tax (PBT) by deducting 'Interest' from Operating profit.

PBT = Operating profit – Interest payment

Income tax is estimated by multiplying income tax rate with the PBT.

Income tax payment= PBT X IT rate.

Net Profit = PBT – Income tax

Net profit belongs to the owners of the company. The owners now decide how much of the Net Profit they take home and how much remains with the company for achieving growth.

The portion of the profit that owners take away from the company is called 'Dividend'

Net Proft – Dividend = Retained profit.

Retained Profit is added to Reserves & Surplus (also known as 'Other Equity') to obtain the Reserves and Surplus data as of the end of the year. Traveling