Chapter–9: Concepts & Modes of Analysis

Simple Interest

Simple Interest: Simple Interest is the interest paid only on the principal amount borrowed. No interest is paid on the interest accrued during the term of the loan.

There are three components to calculate simple interest: principal, interest rate and time.

Formula for calculating simple interest:

$I = Prt$

Where,

- I = interest
- P = principal
- r = interest rate (per year)
- t = time (in years or fraction of a year)

Example:

Mr. X borrowed Rs. 10,000 from the bank to purchase a household item. He agreed to repay the amount in 8 months, plus simple interest at an interest rate of 10% per annum (year).

If he repays the full amount of Rs. 10,000 in eight months, the interest would be:

P = Rs. 10,000 r = 0.10 (10% per year) t = 8/12 (this denotes fraction of a year)

Applying the above formula, interest would be: I = Rs. 10,000*(0.10)*(8/12) = Rs. 667.

This is the Simple Interest on the Rs. 10,000 loan taken by Mr. X for 8 months.

If he repays the amount of Rs. 10,000 in fifteen months, the only change is with time.

Therefore, his interest would be:

I = Rs. 10,000*(0.10)*(15/12) = Rs. 1,250

Compound Interest

Compound Interest: Compound interest means that, the interest will include interest calculated on interest. The interest accrued on a principal amount is added back to the principal sum, and the whole amount is then treated as new principal, for the calculation of the interest for the next period.

For example, if an amount of Rs. 5,000 is invested for two years and the interest rate is 10%, compounded yearly:

- At the end of the first year the interest would be (Rs. 5,000 * 0.10) or Rs. 500.
- In the second year the interest rate of 10% will applied not only to Rs. 5,000 but also to the Rs. 500 interest of the first year. Thus, in the second year the interest would be (0.10 * Rs. 5,500) or Rs. 550.

For any loan or borrowing unless simple interest is stated, one should always assume interest is compounded. When compound interest is used we must always know how often the interest rate is calculated each year. Generally the interest rate is quoted annually. E.g. 10% per annum.

Compound interest may involve calculations for more than once a year, each using a new principal, i.e. (interest + principal). The first term we must understand in dealing with compound interest is conversion period. Conversion period refers to how often the interest is calculated over the term of the loan or investment. It must be determined for each year or fraction of a year.

E.g.: If the interest rate is compounded semiannually, then the number of conversion periods per year would be two. If the loan or deposit was for five years, then the number of conversion periods would be ten.

Formula for calculating Compound Interest:

$C = P(1+i)n$

Where

C = amount
P = principal
i = Interest rate per conversion period
n = total number of conversion periods

Example:

Mr. X invested Rs. 10,000 for five years at an interest rate of 7.5% compounded quarterly

P = Rs. 10,000
I = 0.075/4, or 0.01875
n = 4 * 5, or 20, conversion periods over the five years

Therefore, the amount, C, is:

C = Rs. 10,000(1 + 0.01875)^20
= Rs. 10,000 x 1.449948
= Rs. 14,499.48

So at the end of five years Mr. X would earn Rs. 4,499.48 (Rs. 14,499.48 -Rs. 10,000) as interest. This is also called as Compounding.

Compounding plays a very important role in investment since earning a simple interest and earning an interest on interest makes the amount received at the end of the period for the two cases significantly different.

If Mr. X had invested this amount for five years at the same interest rate offering the simple interest option, then the amount that he would earn is calculated by applying the following formula:

S = P(1 + rt),
P = 10,000

r = 0.075

t = 5

Thus, S = Rs. 10,000[1+0.075(5)]

= Rs. 13,750

Here, the simple interest earned is Rs. 3,750.

A comparison of the interest amounts calculated under both the method indicates that Mr. X would have earned Rs. 749.48 (Rs.4,499.48 - Rs. 3,750) or nearly 20% more under the compound interest method than under the simple interest method.

Simply put, compounding refers to the re-investment of income at the same rate of return to constantly grow the principal amount, year after year. Should one care too much whether the rate of return is 5% or 15%? The fact is that with compounding, the higher the rate of return, more is the income which keeps getting added back to the principal regularly generating higher rates of return year after year.

The table below shows you how a single investment of Rs. 10,000 will grow at various rates of return with compounding. 5% is what you might get by leaving your money in a savings bank account, 10% is typically the rate of return you could expect from a one-year company fixed deposit, 15% - 20% or more is what you might get if you prudently invest in mutual funds or equity shares.

The Impact of Power of Compounding:

The impact of the power of compounding with different rates of return and different time periods:

At end of Year	5 %	10 %	15 %	20 %
1	Rs. 10500	Rs. 11000	Rs. 11500	Rs. 12000
5	Rs. 12800	Rs. 16100	Rs. 20100	Rs. 24900
10	Rs. 16300	Rs. 25900	Rs. 40500	Rs. 61900
15	Rs. 20800	Rs. 41800	Rs. 81400	Rs. 154100
25	Rs. 33900	Rs. 1,08300	Rs. 3,29200	Rs. 9,54,000

Time Value of Money

Money has time value. The idea behind time value of money is that a rupee now is worth more than rupee in the future. The relationship between value of a rupee today and value of a rupee in future is known as 'Time Value of Money'. A rupee received now can earn interest in future. An amount invested today has more value than the same amount invested at a later date because it can utilize the power of compounding. Compounding is the process by which interest is earned on interest. When a principal amount is invested, interest is earned on the principal during the first period or year. In the second period or year, interest is earned on the original principal plus the interest earned in the first period. Over time, this reinvestment process can help an amount to grow significantly.

Let us take an example:

Suppose you are given two options:

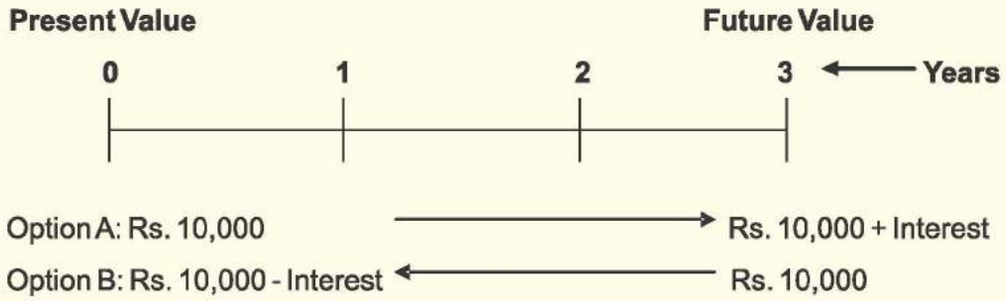
a) Receive Rs. 10,000 now OR

b) Receive Rs. 10,000 after three years.

Which of the options would you choose?

Rationally, you would choose to receive the Rs. 10,000 now instead of waiting for three years to get the same amount. So, the time value of money demonstrates that, all things being equal, it is better to have money now rather than later.

Back to our example: by receiving Rs. 10,000 today, you are poised to increase the future value of your money by investing and gaining interest over a period of time. For option B, you don't have time on your side, and the payment received in three years would be your future value. To illustrate, we have provided a timeline:



If you are choosing option A, your future value will be Rs. 10,000 plus any interest acquired over the three years. The future value for option B, on the other hand, would only be Rs. 10,000. This clearly illustrates that value of money received today is worth more than the same amount received in future since the amount can be invested today and generate returns.

Let us take an another example:

If you choose option A and invest the total amount at a simple annual rate of 5%, the future value of your investment at the end of the first year is Rs. 10,500, which is calculated by multiplying the principal amount of Rs. 10,000 by the interest rate of 5% and then adding the interest gained to the principal amount.

Thus, Future value of investment at end of first year:

= ((Rs. 10,000 X (5/100)) + Rs. 10,000

= (Rs.10,000 X 0.050) + Rs. 10,000

= Rs. 10,500

You can also calculate the total amount of a one-year investment with a simple modification of the above equation:

Original equation: (Rs.10,000 x 0.050) + Rs.10,000 = Rs.10,500

Modified formula: Rs.10,000 x [(1 x 0.050) + 1] = Rs.10,500

Final equation: Rs. 10,000 x (0.050 + 1) = Rs. 10,500

Which can also be written as:

S = P (r+ 1)

Where,

S = amount received at the end of period

P = principal amount

r = interest rate (per year)

This formula denotes the future value (S) of an amount invested (P) at a simple interest of (r) for a period of 1 year.

Computation of time value of money

The time value of money may be computed in the following circumstances:

1. Future value of a single cash flow
2. Future value of an annuity
3. Present value of a single cash flow
4. Present value of an annuity

1. Future Value of a Single Cash Flow

For a given present value (PV) of money, future value of money (FV) after a period M:' for which compounding is done at an interest rate of V, is given by the equation

FV = PV (1+r)t

This assumes that compounding is done at discrete intervals. However, in case of continuous compounding, the future value is determined using the formula

FV = PV * ert

Where 'e' is a mathematical function called 'exponential' the value of exponential (e) = 2.7183. The compounding factor is calculated by taking natural logarithm (log to the base of 2.7183).

Example 1: Calculate the value of a deposit of Rs.2,000 made today, 3 years hence if the interest rate is 10%.

By discrete compounding:

FV = 2,000 * (1+0.10)3 = 2,000 * (1.1)3 = 2,000 * 1.331 = Rs. 2,662

By continuous compounding:

FV = 2,000 * e (°-10*3) =2,000 * 1.349862 = Rs.2699.72

2. Future Value of an Annuity

An annuity is a stream of equal annual cash flows. The future value (FVA) of a uniform cash flow (CF) made at the end of each period till the time of maturity 't' for which compounding is done at the rate V is calculated as follows:

$$FVA = CF*(1+r)^{t-1} + CF*(1+r)^{t-2} + ... + CF*(1+r)^{1} + CF$$

$$= CF\left|\frac{(1+1)^{t}-1}{}\right|$$

The term $\left|\frac{(1+r)^{t}-1}{}\right|$ is referred as the Future Value Interest factor for an Annuity (FVIFA).

The same can be applied in a variety of contexts. For e.g. to know accumulated amount after a certain period, to know how much to save annually to reach the targeted amount, to know the interest rate etc.

Example 1: Suppose, you deposit Rs. 3,000 annually in a bank for 5 years and your deposits earn a compound interest rate of 10 per cent, what will be value of this series of deposits (an annuity) at the end of 5 years? Assume that each deposit occurs at the end of the year.

Future value of this annuity is:

= Rs. 3000*(1.10)4 + Rs.3000* (1.10)3 + Rs.3000* (1.10)2 + Rs.3000* (1.10) + Rs. 3000

= Rs. 3000* (1.4641) + Rs.3000* (1.3310) + Rs.3000* (1.2100) + Rs.3000* (1.10) + Rs. 3000

= Rs. 18315.30

3. Present Value of a Single Cash Flow

Present value of (PV) of the future sum (FV) to be received after a period T for which discounting is done at an interest rate of V, is given by the equation

In case of discrete discounting: PV = FV / (1+r)1

Example 1: What is the present value of Rs. 5,000 payable 3 years hence, if the interest rate is 10 % p.a.

PV = 5000/ (1.10)3 i.e. = Rs. 3756.57 In case of continuous discounting: PV = FV *

Example 2: What is the present value of Rs. 10,000 receivable after 2 years at a discount rate of 10% under continuous discounting?

Present Value = 10,000/(exp^(0.1*2)) = Rs. 8187.297

4. Present Value of an Annuity

The present value of annuity is the sum of the present values of all the cash inflows of this annuity.

Present value of an annuity (in case of discrete discounting)

$$PVA = FV\left[\{(1+r)^{1} - 1\}/\{r*(1+r)^{1}\}\right]$$

The term $\left|(1+r)^{t} - 1/r*(1+r)^{t}\right|$ is referred as the Present Value Interest factor for an annuity (PVIFA).

Present value of an annuity (in case of continuous discounting) is calculated as:

$$PVa = FVa * (1-e^{-rt})/r)$$

Example 1: What is the present value of Rs. 2000/- received at the end of each year for 3 continuous years

= 2000*[1/1.10]+2000*[1/1.10]^2+2000*[1/1.10]^3

= 2000*0.9091+2000*0.8264+2000*0.7513

= 1818.181818+1652.892562+1502.629602

= Rs. 4973.704

Effective Annual return

Usually while applying for a fixed deposit or a bond it is stated in the application form, that the annual return (interest) of an investment is 10%, but the effective annual return mentioned is something more, 10.38%. Why the difference? Essentially, the effective annual return accounts for intra-year compounding and the stated annual return does not. The difference between these two measures is best illustrated with an example. Suppose the stated annual interest rate on a savings account is 10%, and say you put Rs 1,000 into this savings account. After one year, your money would grow to Rs 1,100. But, if the account has a quarterly compounding feature, your effective rate of return will be higher than 10%. After the first quarter, or first three months, your savings would grow to Rs 1,025. Then, in the second quarter, the effect of compounding would become apparent: you would receive another Rs 25 in interest on the original Rs 1,000, but you would also receive an additional Rs 0.63 from the Rs. 25 that was paid after the first quarter. In other words, the interest earned in each quarter will increase the interest earned in subsequent quarters. By the end of the year, the power of quarterly compounding would give you a total of Rs 1,103.80. So, although the stated annual interest rate is 10%, because of quarterly compounding, the effective rate of return is 10.38%. The difference of 0.38% may appear insignificant, but it can be huge when you're dealing with large numbers. 0.38% of Rs. 100,000 is Rs 380! Another thing to consider is that compounding does not necessarily occur quarterly, or only four times a year, as it does in the example above. There are accounts that compound monthly, and even some that compound daily. And, as our example showed, the frequency with which interest is paid (compounded) will have an effect on effective rate of return.

Systematically analyzing a company

You must look for the following to make the right analysis:

Industry Analysis: Companies producing similar products are subset (form a part) of an Industry/Sector. For example, National Hydroelectric Power Company (NHPC) Ltd., National Thermal Power Company (NTPC) Ltd., Tata Power Company (TPC) Ltd. etc. belong to the Power Sector/Industry of India. It is very important to see how the industry to which the company belongs is faring. Specifics like effect of Government policy, future demand of its products etc. need to be checked. At times prospects of an industry may change drastically by any alterations in business environment. For instance, devaluation of rupee may brighten prospects of all export oriented companies. Investment analysts call this as Industry Analysis.

Corporate Analysis: How has the company been faring over the past few years? Seek

information on its current operations, managerial capabilities, growth plans, its past performance vis-a-vis its competitors etc. This is known as Corporate Analysis.

Financial Analysis: If performance of an industry as well as of the company seems good, then check if at the current price, the share is a good buy. For this look at the financial performance of the company and certain key financial parameters like Earnings Per Share (EPS), P/E ratio, current size of equity etc. for arriving at the estimated future price. This is termed as Financial Analysis. For that you need to understand financial statements of a company i.e. Balance Sheet and Profit and Loss Account contained in the Annual Report of a company.

Annual Report

An annual report is a formal financial statement issued yearly by a corporate. The annual report shows assets, liabilities, revenues, expenses and earnings - how the company stood at the close of the business year, how it fared profit-wise during the year, as well as other information of interest to shareholders. Companies publish annual reports and send abridged versions to shareholders free of cost. A detailed annual report is sent on request. Remember an annual report of a company is the best source of information about the financial health of a company.

Features of an Annual Report

One must read an Annual Report with emphasis on the following:

- Director's Report and Chairman's statement which are related to the current and future operational performance of a company.
- Auditors' Report (including Annexure to the Auditors Report)
- Profit and Loss Account.
- Balance Sheet.
- Notes to accounts attached to the Balance Sheet.

Difference between Balance Sheet and Profit and Loss Account Statements

The Balance sheet of a company shows the financial position of the company at a particular point of time. The balance sheet of a company/firm, according to the Companies Act, 1956 should be either in the account form or the report form.

Balance Sheet: Account Form

Liabilities	Assets
Share Capital	Fixed Assets
Reserves and Surplus	Investments
Secured loans	Current Assets, loans and advances
Unsecured loans	Miscellaneous expenditure
Current liabilities and provisions	

Balance Sheet: Report Form

I. Sources of Funds

1. Shareholders' Funds
   a) Share Capital
   b) Reserves & surplus
2. Loan Funds
   a) Secured loans
   b) Unsecured loans

II. Application of Funds

(i) Fixed Assets
(ii) Investments
(iii) Current Assets, loans and advances
Less: Current liabilities and provisions
Net current assets
(iv) Miscellaneous expenditure and losses

The Profit and Loss account (Income Statement), on the other hand, shows the financial performance of the company/firm over a period of time. It indicates the revenues and expenses during particular period of time. The period of time is an accounting period/year, April-March. The accounting report summarizes the revenue items, the expense items, and the difference between them (net income) for an accounting period.

Interpretation of Balance Sheet and Profit and Loss Account

Let's start with Balance Sheet. The Box-1 gives the balance sheet of XYZ Ltd. company as on 31st March 2005. Let us understand the balance sheet shown in the Box-1

BOX - 1

XYZ COMPANY LTD.

	Balance sheet as on 31st March, 2005				As at 31st March, 2005	As at 31st March, 2004
	Sources of Funds	**Schedule**	**Page**	**Rs. Cr**	**Rs. Cr**	**Rs. Cr**
1	Shareholders' Funds					
	(a) Capital	1	19	103.87		104.44
	(b) Reserves and Surplus	2	20	479.21		387.70
					583.08	**483.14**
2	Loan Funds					
	(a) Secured	3	21	353.34		387.76

	(b) Unsecured	4	21	129.89		101.07
					483.23	**488.83**
3	Total Funds Employed				**1066.31**	**971.97**
Application of Funds					**1066.31**	**971.97**
4	Fixed Assets					
	(a) Gross Block	5	22	946.84		870.44
	(b) Less. Depreciation			482.19		430.70
	(c) Block Net			464.65		439.74
	(d) Capital Work in Progress			62.10		44.44
					526.75	**484.18**
5	Investments	6	23		108.58	303.48
6	Current Assets, Loans and Advances					
	(a) Inventories	7	24	446.34		350.25
	(b) Sundry Debtors	8	24	458.47		300.32
	(c) Cash and Bank Balances	9	25	66.03		5.67
	(d) Loans and Advances	10	25	194.36		110.83
				1165.20		**767.07**
7	Less: Current Liabilities and Provisions					
	(a) Current Liabilities	11	26	595.22		500.19
	(b) Provisions	12	26	139.00		82.57
				734.22		**582.76**
8	Net Current Assets [(6) less (7)]				430.98	184.31
9	Total Assets (Net)				**1066.31**	**971.97**
10	Notes to Balance Sheet and Contingent Liabilities	13	27			
	As per our report attached				For and on behalf of the Board	
	For A. SDF & Co.	XXXXX	AAAA		ASDFG	
	Chartered Accountants	Chairman	BBBB		LKJH	
	Q.W. Tyur		CCCC		TYUB	
	Partner		REFGH		POIUY Directors	
	For HIJKL	YYYY	NSDF			

	Chartered Accountants	Vice Chairman and	QWER		
	WERT	Managing Director	MNBV		
	Partner	ZZZZZZ			
	Bombay 10th July 2004	Secretary			Bombay 28th June 2004

The balance sheet of a company is a record showing sources of funds and their application for creating/building assets. However, since company's fund structure and asset position change everyday due to fund inflow and outflow, balance sheets are drawn on a specific date, say 31st March.

Sources of funds

As shown in a sample balance sheet in Box-1, there are two sources of funds:

a) **Shareholders' Fund** (also known as **Net Worth**) is the fund coming from the owners of the company and

b) **Loan Fund** is the fund borrowed from outsiders.

When a company/firm starts operations, its owners, called shareholders, contribute funds called **Share Capital.** Note that in Box-1 XYZ COMPANY LTD.'s capital in 2005 was Rs. 103.87 crore. The shareholders being the owners, share part of the profit of the company, as dividend. Share capital has been further divided into **equity capital** and **preference capital.** Equity capital does not have fixed rate of dividend. The preference capital represents contribution of preference shareholders and has fixed rate of dividend.

After distributing dividends, a part of the profit is retained by the company for meeting fund requirements in future. The retained profits accumulated over the years are called reserves and surplus, which are shareholders' property. In case of XYZ COMPANY LTD., note that the **reserves and surplus** increased from Rs. 387.70 crore in 2004 to Rs. 479.21 crore in 2005.

Difference between Equity shareholders and Preferential shareholders

Equity Shareholders are supposed to be the owners of the company, who therefore, have right to get dividend, as declared, and a right to vote in the Annual General Meeting for passing any resolution.

The act defines a **preference share** as that part of share capital of the Company which enjoys preferential right as to: (a) payment of dividend at a fixed rate during the life time of the Company; and (b) the return of capital on winding up of the Company.

But Preference shares cannot be traded, unlike equity shares, and are redeemed after a pre-decided period. Also, Preferential Shareholders do not have voting rights.

Meaning of terms like authorized, issued, subscribed, called up and paid up capital

- **Authorized capital** is the maximum capital that a company is authorized to raise.
- **Issued capital** is that part of the authorized capital which is offered by the company for being subscribed by members of the public or anybody.
- **Subscribed capital** is that part of the issued capital which is subscribed (accepted) by the public.
- **Called up capital** is a part of subscribed capital which has been called up by the company for payment. For example, if 10,000 shares of Rs. 100 each have been subscribed by the public and of which Rs. 50 per share has been called up. Then the subscribed capital of the Company works out to Rs. 1,00,000 of which the called up capital of the Company is Rs. 50,0000.
- **Paid Up capital** refers to that part of the called up capital which has been actually paid by the shareholders. Some of the shareholders might have defaulted in paying the called up money. Such defaulted amount is called as arrears. From the called up capital, calls in arrears is deducted to obtain the paid up capital.

Difference between secured and unsecured loans under Loan Funds

Secured loans are the borrowings against the security i.e. against mortgaging some immovable property or hypothecating/pledging some movable property of the company. This is known as creation of charge, which safeguards creditors in the event of any default on the part of the company. They are in the form of debentures, loans from financial institutions and loans from commercial banks. Notice that in case of the XYZ COMPANY LTD. it was Rs. 353.34 crore as on March 31, 2005. The unsecured loans are other *`short term borrowings without a specific security. They are fixed deposits, loans and advances from promoters, inter-corporate borrowings, and unsecured loans from the banks. Such borrowings amount to Rs. 129.89 crore in case of the XYZ COMPANY LTD.

Application of funds

The funds collected by a company from the owners and outsiders are employed to create following assets:

Fixed Assets: These assets are acquired for long-terms and are used for business operation, but not meant for resale. The land and buildings, plant, machinery, patents, and copyrights are the fixed assets. In case of the XYZ COMPANY LTD., fixed assets are worth Rs. 526.75 crore.

Investments: The investments are the financial securities created by investing surplus funds into any non-business related avenues for getting income either for long-term or short-term. Thus incomes and gains from the investments are not from the business operations.

Current Assets, Loans, and Advances: This consists of cash and other resources which can be converted into cash during the business operation. Current assets are held for a short-term period for meeting day-to day operational expenditure. The current assets are in the form of raw materials, finished goods, cash, debtors, inventories, loans and advances, and pre-paid expenses. For the XYZ COMPANY LTD., current assets are worth Rs. 1165.20 crore.

Miscellaneous Expenditures and Losses: The miscellaneous expenditures represent certain outlays such as preliminary expenses and pre-operative expenses not written off. Though loss indicates a decrease in the owners' equity, the share capital can not be reduced with loss. Instead, share capital and losses are shown separately on the liabilities side and assets side of the balance sheet, respectively.

Meaning of 'Gross block' 'Depreciation', 'Net Block' and Capital-Work in Progress

The total value of acquiring all fixed assets (even though at different points of time) is called **'Gross Block'** or **"Gross Fixed Asset'.**

As per accounting convention, all fixed assets except land have a fixed life. It is assumed that every year the worth of an asset falls due to usage. This reduction in value is called **'Depreciation'.** The Companies Act 1956 stipulates different rates of depreciation for different types of assets and different methods calculating depreciation, namely, Straight Line Method (constant annual method) and Written Down Value Method (depreciation rate decreases over a period of time).

The worth of the fixed assets after providing for depreciation is called **'Net Block'.** In case of the XYZ COMPANY LTD., Net Block was Rs. 464.65 crore as on March 31, 2005.

Gross Block - Depreciation = Net Block

Rs. 946.84 - Rs. 482.19 = Rs. 464.65

The capital/funds used for a new plant under erection, a machine yet to be commissioned etc. are examples of 'Capital Work in Progress', which also has to be taken into account while calculating the fixed assets as it will be converted into gross block soon.

Current Liabilities and Provisions and Net Current Assets in the balance sheet

A company may receive many of its daily services for which it does not have to pay immediately like for raw materials, goods and services brought on credit. A company may also accept advances from the customer. The company thus has a liability to pay though the payment is deferred. These are known as **"Current Liabilities'.** Similarly the company may have to provide for certain other expenses (though not required to be paid immediately) like dividend to shareholders, payment of tax etc. These are called **'Provisions'.** In short, Current Liabilities and Provisions are amounts due to the suppliers of goods and services brought on credit, advances payments received, accrued expenses, unclaimed dividend, provisions for taxes, dividends, gratuity, pensions, etc.

Current Liabilities and Provisions, therefore, reduce the burden of day-to¬day expenditure on current assets by deferring some of the payments. For daily operations the company requires funds equal to the current assets less the current liabilities. This amount is called **"Net Current Assets'** or **"Net Working Capital'.** In case of the XYZ COMPANY LTD., Net Current Asset figure of Rs. 430.98 cr. has been arrived at by deducting Current Liabilities (Rs. 595.22 cr.) and Provisions (Rs. 139 cr.) from Current Assets worth Rs. 1165.20 crore.

Summarizing balance sheet

A balance sheet indicates matching of *sources of funds with application of funds.* In case of the XYZ Company Ltd., Total Funds Employed' to the tune of Rs. 1066.31 cr. are from the said two Sources

of Funds-Shareholders Funds and Loan Funds. These funds have been utilized to fund Total (Net) Assets of Rs. 1066.31 cr. that consist of Fixed Assets (Rs. 526.75 cr.), Investments (Rs. 108.58 cr.) and Net Current Assets (Rs. 430.98 cr.).

Thus in a balance sheet,

Total Capital Employed = Net Assets.

Components of Profit and Loss Account Statement

A Profit and Loss Account shows how much profit or loss has been incurred by a company from its income after providing for all its expenditure within a financial year. One may also know how the profit available for appropriation is arrived at by using profit after tax as well as portion of reserves. Further, it shows the profit appropriation towards dividends, general reserve and balance carried to the balance sheet.

The Box-2 exhibits Profit and Loss Account of XYZ Company Ltd. Item-1 represents income, Items from 2 to 6 show various expenditure items. Items from 7 to 12 show the profits available for appropriation and items 13 (a), (b), and (c) indicate appropriation of profits.

BOX - 2

Profit and Loss Account for the year ended 31st March, 2005

	Particulars	Rupees (in crores)	Rupees (in crores)	Rupees (in crores)
			As at 31st March, 2005	As at 31st March, 2004
Income				
1	Sale of Products and Other Income		2595.99	1969.10
Expenditure				
2	Manufacturing and Other Expenses	2275.37		1742.54
3	Depreciation	54.26		48.91
4	Interest	81.63		73.63
5	Expenditure Transferred to Capital Accounts	49.82		(44.27)
6	Total Expenditure		2316.44	1820.81
Profit Before Tax			234.55	148.29
7	Tax for the Year		92.50	45.75
Profit After Tax			234.55	148.29
8	Investment Allowance Reserve Account		142.05	102.54
9	Investment Allowance (Utilised) Reserve WrittenBack		(15.2)	(11.2)
10	Debenture Redemption Reserve			

11	Capital Redemption Reserve			(0.57)	(0.57)
12	Balance Brought Forward from Previous Year			86.71	33.65
Amount Available for Appropriations					
13	Appropriations				
	(a) Proposed Dividends*			41.54	31.26
	(b) General Reserve			100	10
	(c) Balance Credited to Balance Sheet			76.11	86.71
				217.65	127.97
14	Notes to Profit and Loss Account *Details as per Direction Report				
	As per our Report Attached to the Balance Sheet		For and on behalf of the Board		
	For XYZ & Co.	PQR	AAA		
	Chartered Accountants	Chairman	BBB		
	ABC Parnter		CCC DDD		Directors
	For LMN & Co.	GHI			
	Chartered Accountants	Vice-Chairman			
		and			
	DEF	Managing Director			
	Partner	STU			
	Mumbai, 10th July 2004	Secretary		Mumbai, 28th July 2004	

Check points for a Profit and Loss Account

For a company, the profit and loss statement is the most important document presented to the shareholders. Therefore, each company tries to give maximum stress on its representati18on/ misrepresentation. One should consider the following:

- Whether there is an overall improvement of sales as well as profits (operating, gross and net) over the similar period (half-yearly or annual) previous year. If so, the company's operational management is good.
- Check for the other income carefully, for here companies have the scope to manipulate. If the other income stems from dividend on the investments or interest from the loans and advances, it is good, because such income is steady. But if the other income is derived by selling any assets or land, be cautious since such income is not an annual occurrence.

- Also check for the increase of all expenditure items viz. raw material consumption, manpower cost and manufacturing, administrative and selling expenses. See whether the increases in these costs are more than the increase in sales. If so, it reveals the operating conditions are not conducive to making profits. Similarly, check whether ratio of these costs to sales could be contained over the previous year. If so, then the company's operations are efficient.
- Evaluate whether the company could make profit from its operations alone. For this you should calculate the profits of the company, after ignoring all other income except sales. If the profit so obtained is positive, the company is operationally profitable, which is a healthy sign.
- Scrutinize the depreciation as well as interest for any abnormal increase. The increase in depreciation is attributed to higher addition of fixed assets, which is good for long term operations of the company. High depreciation may suppress the net profits, but it's good for the cash flow. So instead of looking out for the net profits, check the cash profits and compare whether it has risen. High interest cost is always a cause of concern because the increased debt burden cannot be reduced in the short run.
- Calculate the earnings per share and the various ratios. In case of half yearly results, multiply half yearly earnings per share by 2 to get approximately the annualized earnings per share.