

## **Security Analysis and Portfolio Management**

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**Module No. # 01**

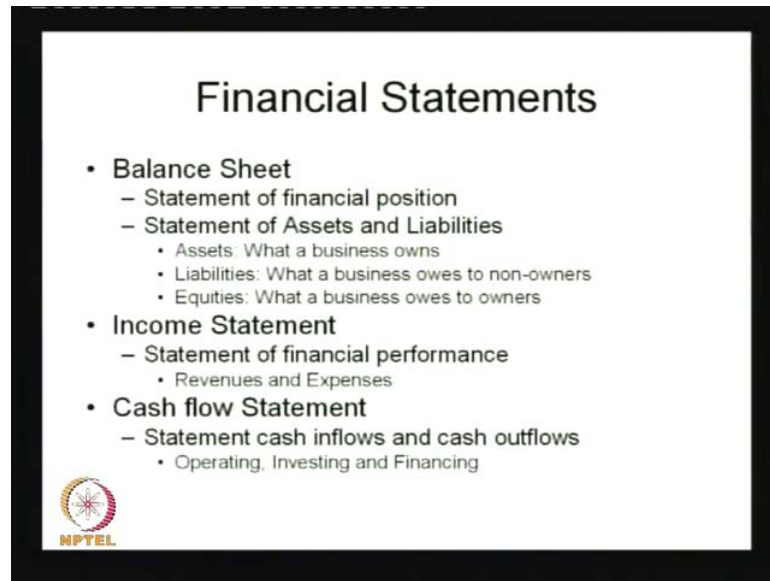
**Lecture No. # 09**

### **Financial Statement Analysis**

Hello, in this unit of security analysis and portfolio management we are going to discuss financial statements and their analysis; financial statements mean, the reports that are published by different companies at the end of a particular accounting period; why do we need this financial statement? It is because when the investors have invested lot of money in the company they like to know about the performance of the company at the end of the particular period; having kept that in mind and also taking into consideration different other stake holders interest like government, suppliers, creditors, banks and all, the companies report their financial performance at certain points of time.

In this particular session we are going to discuss about what the financial statements are and what is their typical content, why we should go for financial statement analysis, **why it is the purpose** and what are the tools that we can use for financial statement analysis. As we discussed financial statements are supposed to provide information that bridge the gap between the company and the investors in terms of what the company is doing so that the investors come to know at certain period of time.

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In this, coming to the first one regarding what the financial statements that we have are - financial statements we have...one of the major statements is called the balance sheet, then we have another called income statement and then we have got a cash flow statement. Balance sheet, income statement and cash flow statement - they are published regularly; if it is annual accounting year then at the end of the particular year we will find these three reports getting published.

What happens is that at the end of the year - after the accounts are audited - the company comes with the financial results and also comes with something **documental** - annual report; annual report will have these things and at the same time if the company is also listed in the stock exchange, as per Indian law, the companies are supposed to disclose their financial status every quarter - they will be disclosing the summary balance sheet or summary income statement at the end of every quarter. They will disclose to stock exchange and also they will publish the same thing in the leading news papers - financial news papers and other news papers; through that the investors can come to know about it.

Coming to the major aspect of balance sheet - balance sheet is essentially a statement of financial position; it says what the company has at a particular point of time, it is also a statement of assets and liabilities; assets are what the business owns and only with those things can the business prosper, can generate revenue. So, assets indicate what the

company has, how well it can do, what revenue it can generate, what the source of revenue and all those things can be known.

That means, how efficiently an asset can be utilized, whether these assets are relevant assets are not; investors can come to know from these financial statements called balance sheets - these assets. Liabilities are something, which the business owes to non-owners; then, we have something called equities - it is what the business owes to the owners.

In fact, whatever the business owes to the owners or outsiders, it is broadly known as liability - it is liability of the business to the outsiders **assess**; broadly outsiders can include the owners, but in a very management point of view the owners are **(( ))** the insiders of the company and they have invested in the company they also expect something from the company - to that extent the business is liable to the owners.

Broadly owners' stake is a liability for the company, but they are insiders of the company because they own the company assets; otherwise whatever they owe to the banks, suppliers - because they have taken certain credit - banks, because they have taken a loan or other investors like debenture holders, bond holders from whom they have borrowed money they come under liabilities of the business.

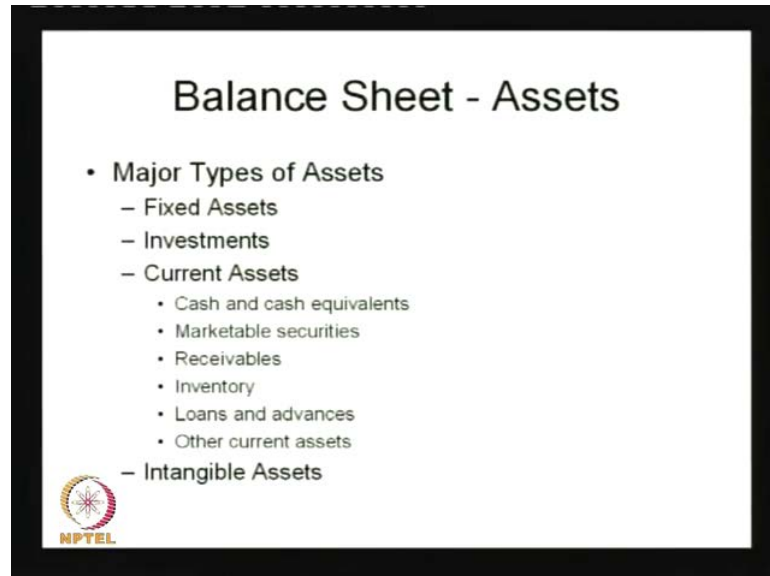
Then, we have another major statement, which talks about the periodic financial performance - how this company did, that is called income statement; income statement essentially gives a summary of revenues and expenses; revenue from the main line of activity, revenue from other sources of income; like, the company might have invested some thing in securities and other investments in some other companies; from that the company might have got some interest or dividends; that also comes as one of the sources of revenue and then **(( ))** something called expenses also is there.

Revenues and expenses are the major part of income statement and expenses will be given a broad classification like manufacturing expenses, other operating expenses, financial expense like interest, then tax provision and subsequently after the tax is paid by the company then one has the profit after tax and how the profit is distributed; all these things are given in the income statement.

Another major statement that we have is, called cash flow statement; it talks about **(( ))** where the cash has come from and where the cash has gone; this cash flow statement

classifies the cash flows in three ways: one is operating, another investing and next is financing.

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We will be discussing about these typical statements one by one in detail; coming to the balance sheet which give the assets, the assets are actually classified on different heads and the first asset is called the fixed asset, then we have got investments; fixed, then we have got current assets, then we have got intangible assets; when we talk about fixed assets, fixed assets means the company owns this particular asset or holds on to the asset for a long period of time. It is not necessary that asset should be fixed with the land or something like that rather the company has the intention of holding this asset for a long period of time for a particular purpose.

One simple example could be the plant and machine for a manufacturing company or building for a manufacturing company or any company for that matter - that becomes a fixed asset, because this plant and machine could operate for long period of time and generate goods which can be sold over a period of time.

That is why plant and machinery is called a fixed asset, but these same plant and machineries which are sold by an outlet is like a trading concern - it is not a fixed asset, it is like a short term asset because they are not be held for a long period of time.

Next, in the assets category is investment; investment means the investments made by the company in group companies or some other company or subsidiary companies, where the intention of the investment is for a long term; the company does not make short term investments rather it has made the investment for a long period of time - like a strategic control - they have another company.

If they have made some investment equity of the company, they are stake holders of a particular company - may be inside the country or outside country - or a certain joint venture they have participated in - some ownership, in that case ( ) investments where they are supposed to get certain income in terms of may be dividend or interest from that company where they have invested their money.

The next thing that we have is called the current assets; current assets typically mean the assets which can be converted into liquid cash over a short period of time - typically it is one year; whatever asset that they have - the company has - that can be converted to into cash or the company has intention to convert it in to cash in a short period of time - that is called current assets; current assets have got different types of assets - the first type of asset is cash and cash equivalents.

Whatever cash there is with the company or whatever is with the bank by the company that is called cash (( )); cash equivalent is - the company might have put some short term deposits with the intention that instead of keeping the money idle they can earn some small amount of interest on that; they may have put the money in some short investments, but the idea is to get back the money whenever we need; in that case, they will sell the investments and get the cash.

Then we have the receivables; receivables mean...where we have got the...companies made some credit sales and after the credit sales whatever amount is not collected they are known as receivables or debtors; that is also supposed to be collected back within a short period of time, that is why it is called as current assets.

We also have one more aspect - marketable securities, which are also like cash equivalent where the company has invested in (( )) treasure bill or some certificate deposit or commercial paper and this money can come whenever the company needs; the temporary investments can be sold and cash can be generated to meet the regular requirement.

The next category of current asset is the inventory; inventory means that which is kept for production or for sales; inventory can be like raw material of the company, it can be the working process of the company, it can be the finished goods of the company, it can also be spare parts of the company; but, the inventory is supposed to be converted into finished goods and sold. If the company is a trading concern typically their inventory will be the finished goods, which they have procured from suppliers and they are going to sell them.

Like some retail outlets or some shopping malls where they hold so many types of stock for the customers - those things are called the inventory; they do not produce them rather they procure from different suppliers and sell them, but they are categorized as inventory and they are supposed to be sold in a very short period of time that is why it is called a current asset.

The next that we have is loans and advances; loans and advances is short term loans or short term advances given to the group companies or employees have been given some advances which they are going to pay back within a very short period of time, that is called the loan advances and this is also known as a current asset.

Then, we have what other current assets which is not covered under this earlier category - like, some company might have paid some expense in advance that is called pre paid expenses; that is also called a current asset, because having paid the expense earlier we are going to get the benefit of that expense within a very short period of time that is why it is called pre paid expense.

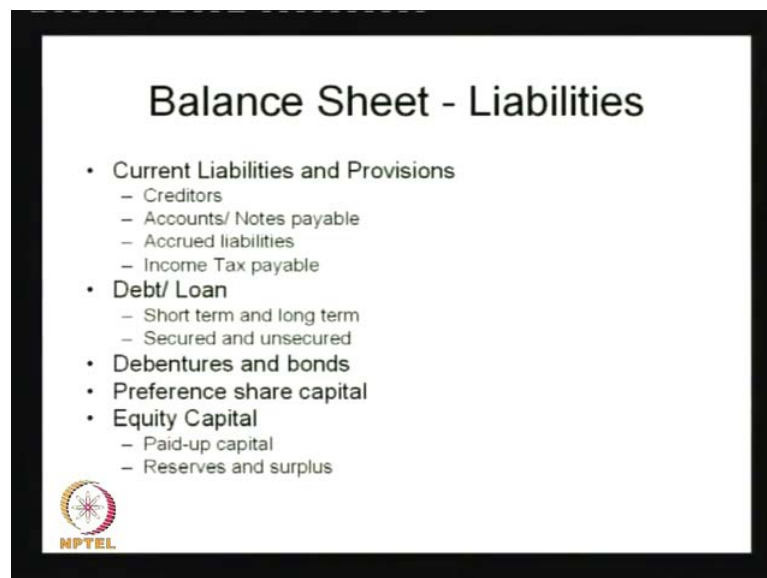
Any other current asset is also part of this particular group; essentially, this current asset talks about that how liquid the company is; that means, if there is a need for meeting certain expenses does this company have the **(C)** to meet the expenses or not; or the company will either go for liquidating some other non-current assets or fixed assets and meet the obligation or maybe it will go for borrowing or something, which is not a proper sign - it is not a good sign for the company; if there is a need and you have to meet the regular expenses - you should have the liquid assets in your hand so that you can get the expenses on time.

Another category of assets is called intangible assets; for instance the fixed assets investments, current assets - they are tangible, because you can feel that and you can see

those assets; whereas, intangible assets are something which you can feel, but you cannot see that and intangible assets can be classified as like goodwill of the company; if the company has got some patents, or company has got some copyrights, company has made some R &D and technology has been developed and patented; all those things come under intangible assets; as long as this...but all the assets which have got some economic benefit to accrue to the company then this company can report as an asset.

If there is no economic benefit to come from this particular holding of the asset then it is better that company does not show that; rather, it should write off this asset for at a particular period of time; asset means that which can give some economic benefit in future, which can be classified into all this types that we have discussed just know.

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Next, we go to the balance sheet that is called liabilities; the liabilities we have...again the classification we have are: first one is called current liabilities and provisions; current liability is something which the company has to pay within a very short period of time - typically, one year; just like the current assets can be converted into cash within one year and similarly current liability is liability which the company has to meet within one year period of time.

There we have the categories like creditors, then we have accounts or notes payable; creditors mean...the company might have purchased certain goods from the supplier on credit which has to be paid may be within one month or two months or something or

whatever the supplier has asked; till the money is paid, that is a liability of the company; it is a short term liability it has to be taken care of within a certain period - a short period of time.

Accounts and notes payable are something...which are certain instruments which indicate that the company owes something to someone over a short period of time, which has to be honored within a short period of time. The next item is called accrued liabilities, where the company has incurred the expense, but it has not been paid in cash; till it is paid in cash - may be something like this, that some employees have worked for the company where their salary is yet to be paid, till the salary is paid it is called a accrued liability or outstanding expense for that matter and it is a short term liability; it is also current liability where this has to be taken care of within a very short period of time.

Another type of asset - the liability we have, current liability is called the taxes payable or income tax payable; the company has made a provision to pay the tax, but it is yet to be paid by the company till it is paid the provision has been created and that is called the income tax payable.

The next category of liability we have is the debt or loan; debt means where the company has borrowed some money and the company is going to repay the amount over a period of time; also periodically the company is supposed to pay certain interest and the debt can be short term or long term; short term can one to three years period then you can also have medium term - three to five years, more than five years can be taken as long term.

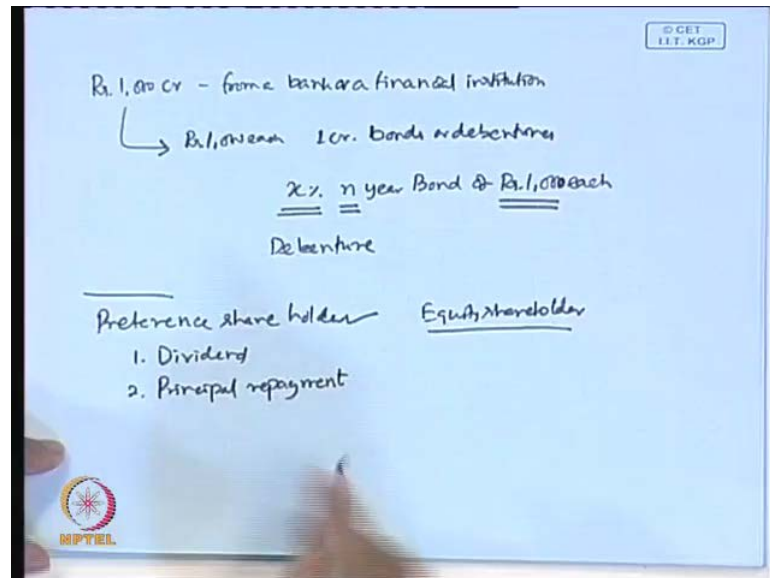
Long term or short term depends upon the tenure - within how many years the company is going to honor the obligation in terms of paying repaying back the money; that indicates whether it is short term, medium term or long term; the loan also can be classified into secured and unsecured; secured means, the company can place, hypothecate or mortgage certain assets the company has and the lender has a comfort level that, yes, if there is a problem in repaying the loan by the company then these assets can be sold and they can get the money; if something is left over the it can be given back to the company; that is called secured.

There should be some form of security; if there is a security given by the company in terms of mortgage, a guarantee (( )) or something like that it is called secured debt otherwise it is known as an unsecured debt; unsecured debt means if the company pays -



well and good if the company does not pay then there is no mortgage or there is no place of some assets some guarantee which the lender can take a recourse and get back the money.

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We have another type of liabilities called the debt - the debt which is known as debentures or bonds; debenture or bond...instead of having a loan of let us say 1000 crores rupees the company can go for a loan of rupees 1000 crores from a bank or a financial institution; instead of that there are certain people in the retail market who will also like to give a loan to this company; this 1000 crore loan amount can be divided into...of rupees one thousand is; so, there is one crore instruments and these instruments are called bonds or debentures.

Typically the bonds are written like this - let us say x percent n year bond of rupees 1000 each; this x percent is the interest per annum, n year is within how many years the bond is going to be repaid - the amount is going to be given back to the investor; what happens in this...and this value of the bond - on the face value let us say it is rupees 1000.

These bonds can be issued for rupees one thousand to different investors; what happens here is instead of getting on 1000 crore from a particular bank or financial institution this is now raised through as many investors who can give 1000 rupees each and one crore bonds are issued; you have one crore - maximum one crore bond holders - who have

might have subscribed to one bond for that matter; if they have subscribed to more than one bond that will be less than one crore number of bond holders.

What happens in this case is that the company can raise a loan from ordinary investors - this is called bonds; similarly, same bond also can be termed as something called debenture; for debenture and bond there is no financial instrument type of difference - both are loan instruments, both also have got this x percent, n year - may be ten percent seven year bond (( )) 10 percent interest and within 7 years the bond has to be or debenture has to be repaid; they are also loan as the debt of the company.

Next we have what is called the preference share capital; in the preference share capital what happens is preference share holders have got preference over the equity holders regarding two things; the first thing that they have preference over is that the preference share holder has got the preference regarding two things one is the dividend and the second is principle being repaid - repayment.

If the company has profit company can declare dividend and if the dividend is declared it means it has to first declare to preference share holders then it can be declared for any equity share holder; without declaring to the preference share holder dividends can be paid to equity share holder; that is why they are the first preference dividend payment; similarly, if there is a need that the company is likely to repay the money because of - whatever it maybe - the company is liquidating the business, where all the stake holders are given money, first thing that has to be paid is to the liability holders - like bonds, debentures, secured, unsecured, current liability all those things have to be honored; then comes the share holders part and when the share holders have to be given back the money the first preference is given to the preference share holder, that is why they are known as preference share capital.

Preference share capital holder they have got two preferences - two cases - one is regarding dividend payment, another regarding the principle repayments; that is why they are called preference share capital.

Next, we have got the equity share capital which is known as owners capital; it is a popular source of finance and equity capital is - first thing is called paid up capital; if the company...let us say for example, if the company has issued 1000 crore shares of rupees one each face value then 1000 into - that comes to 1000 crores paid up capital; if the

company has put the money into different assets and then the assets have generated some sales and sales have generated profit and subsequently if the profit has accumulated, then this accumulated profit is known as accumulated reserve; this profit gets transferred to other different reserves also. All those things are called reserves and surplus which includes something like retained earnings.

Retained earnings mean - the company has made a profit of 100 crores; this profit, after paying all the tax and all the obligations are taken care of, then that hundred crores now belongs to the share holders; assuming that the company has no preference share capital, in that case, all the hundred crores belongs to the equity share holder and out of this hundred crore the company may choose to transfer certain amount to some reserve like general reserve or other reserves as the company **feels right** or maybe it is **(( ))** that instead of keeping all the hundred crores as profit they can transfer to certain reserve and...let us say they have transferred like hundred crores rupees of profit; profit after tax to the company is rupees 100 crores and they have transferred, let us say, 10 crore rupees to certain reserves - that is 90 crores and out of 90 crores possibly the company can declare a dividend of 20 crores for the equity holders; then, 70 crores is known as retained earnings that is the balance of your income statement or profit and loss account that is left over now - profit left over for the owner.

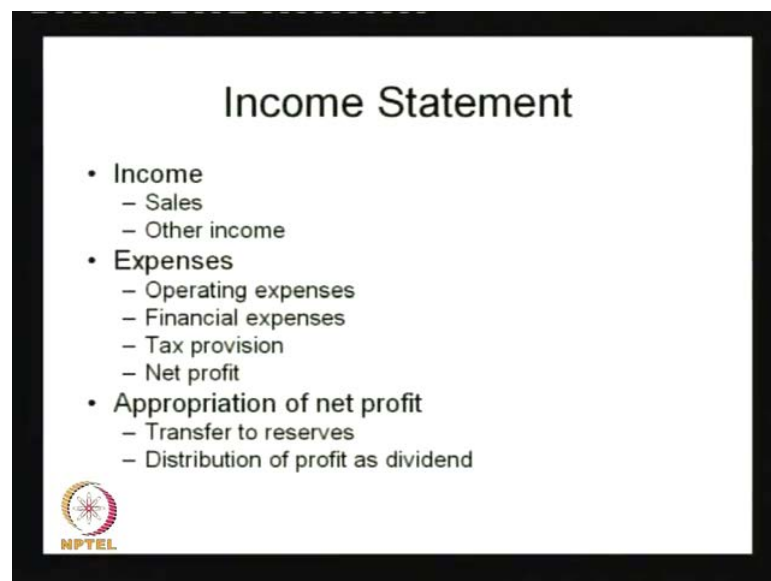
Typically, what happens is that, this earnings return means that this profit is getting ploughed back in the company and the company generates surplus and surplus and surplus like that the company goes on; this is categorized in the reserves and surplus of the company; equity capital essentially consists of paid up capital and reserves and surplus; if the company has issued some shares at a premium, let us say, 10 rupees face value, but the shares are issued at let us say at another 10 rupees premium; that means, 20 rupees has been collected from the investor per share; that 10 rupees is also known as securities premium or share premium, that is also part of the reserves and surplus.

Whatever money the investors have put that is the share capital **(( ))** surplus as well as if there is any profit owned by the company on the investors money after taking care of all the obligations that also belong to share holders; that is called the internal equity or reserves and surplus of the company.

Then, we go to the next financial statement called the income statement; income statement has the major part - that is income; then, they have got sales; is something which is from the main line of activity of the company; if the company is into selling automobiles, automobile parts - whatever the company has got revenue from selling - automobiles, cars or whatever that may be; those things are called the sales of the company; net of anything that has been returned by the customer; net of excise duty; all these come as a net sales of the company.

Besides sales, the company has got other sources of revenue, but the company is not meant for that particular activity - the company might have got some interest on deposits, interest on investment, dividend on investment, that comes under the category of other income.

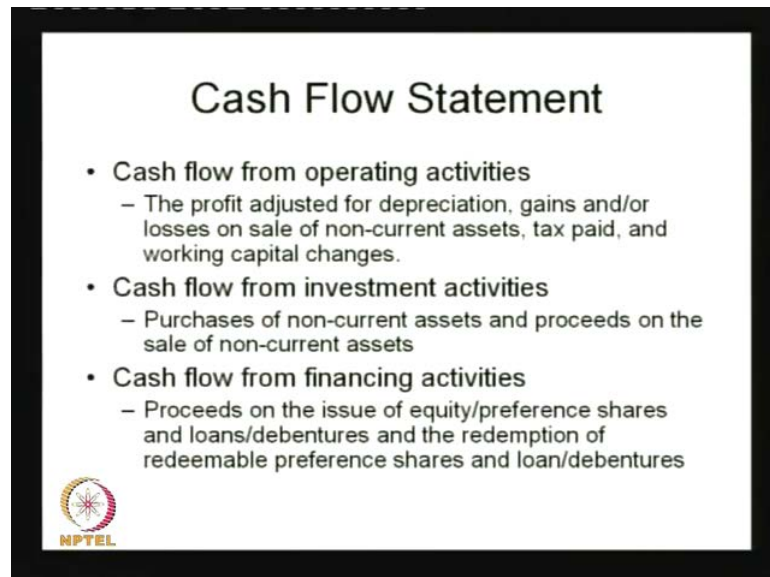
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That is the total income, then the company can have expenses - something called operating expenses; operating expenses those expenses which are essentially required for the operation of the business. If you take the example of an automobile company, those machines use...machine expenses, labor expenses, raw material expenses or the spare parts they have purchased or marketing expenses, distribution expenses - all those are **totally** totally called as operating expenses and having done that if the company has borrowed some money - that is, if the company has to pay interest on the loan - that is called financial expense.


After that, whatever the profit is left the company pays the tax and then after paying the tax there is a net profit and this net profit is appropriated as we discussed earlier; it will be appropriated by transferring some amount reserves and distribute some profit or dividend, whatever is left over that is called retained earnings of the company.

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### Cash Flow Statement

- **Cash flow from operating activities**
  - The profit adjusted for depreciation, gains and/or losses on sale of non-current assets, tax paid, and working capital changes.
- **Cash flow from investment activities**
  - Purchases of non-current assets and proceeds on the sale of non-current assets
- **Cash flow from financing activities**
  - Proceeds on the issue of equity/preference shares and loans/debentures and the redemption of redeemable preference shares and loan/debentures



What we have next is a very prominent statement these days - that is called the cash flow statement; what happens in a preparation of income statement is that certain accounting principles, accounting assumptions are actually followed. In that case, what happens is the expense recognition by a particular company can have different aspects, different rules as such.

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Fixed asset - Rs. 10 cr.  
 Life of 10 years  
 Salvage value of asset = Rs. 1 Cr.

$$\frac{Rs. 10 cr. - Rs. 1 Cr.}{10} = \text{Depreciation of Rs. 0.9 Cr.}$$

Straight line method

Written down value method

10%	SLM	WDV	Year 2	SLM	WDV
Year 1	10	10	Depn.	9	9
	1	1		①	10%
	<u>9</u>	<u>9</u>		9	①
				⑧	⑧.1
2nd year	SLM	WDV			
PBDT	6	6			
	1	0.9			
PBT	<u>5</u>	<u>5.1</u>			

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Let us take a simpler example; there is a company that has something called a fixed asset of rupees 10 crores and the asset has a life of 10 years **at the** at the end of the tenth year the salvage value of the asset is, let us assume, rupees 1 crore; that means, rupees 10 crores minus rupees 1 crore has to be spread over a life of 10 years - this is actually called depreciation of asset, that is, **of rupees 0 point 9 crores.**

This method of depreciation - when you reduce the salvage value from the original cost and divide by the number of years of life that is called the straight line method of depreciation; the company can also follow - subject to the accounting rules - the company also can follow another depreciation method called written down value method.

What happens in this case is the company, let us say...in this method also there is a ten percent rate of depreciation, but...in the first year - year 1, in both the methods the depreciation is straight line method as well as in the wdv method - the method depreciation is ten percent, **then is also 1** at the end of the year the value of the asset is 9 crores as per both the methods.

In year 2 as per straight line method the value of asset is 9 crores, as per written down value method the value of the asset is also 9 crores; but, in straight line methods **(( ))** amount depreciation is same across the time period - whatever has been there it is 1 rupee; 1 crore is 10 percent, original cost is taken as depreciation - so, 9; in this case also

again 10...9 9 minus 1 it becomes 8; whereas, in case of written down value method it will be ten percent of nine that become 0 point 9; so, now it becomes 8 point 1.

There is a difference in depreciation amount, that is, 1 crore versus 0 point 9 there is a difference in the value of the asset that is 8 versus 8 point 1; you have taken a different example here there is an asset of 10 crore and there is no salvage value - in this case you have assumed - and we have taken 10 percent depreciation method; depreciation (( )) both the method and the 1 year 1 crore 1 crore 9 crore 9 crore is the at the end of the value, then in the year 2 you have 9 crore versus 9 core also in written down value method, but depreciation amount is different in straight line method and W D method.

What happens in this case is, if the company has made a profit before depreciation and tax of 6 crores in second year, in that case depreciation has to be taken out - in this case we take out depreciation of 1 in s l m and in w d method we take out depreciation of this much amount that is 0 point 9 - so, the profit before tax as per this is 5 whereas, as per this is 5 point 1.

Because of change in depreciation method the profit before tax has actually changed; in that case, what happens is...actually depreciation does not involve any cash flow, but there is a method that has to be followed and depreciation has to be allowed; it is an allowed expense; by having allowed different amounts of depreciation different methods the company is able to show different amount of profit as per different method, but the company can choose only one among them.

There will be lot of subjectivity that could be involved in preparation of income statement balance sheet; in that case, the actual profit can be different from one person to another person - the way they actually calculate; that is why somebody say that profit is an opinion because like an opinion can change from person to person profit also can change from one person to another person - the way they calculate.

To take care of this particular problem there is a statement called cash flow statement; cash flow statement talks about how much cash has come to the business during the period and how much cash has gone (( )) besides telling anything else it also talks about how (( )) liquid the company is, what is the liquid source of money for the company and how it is able to honor the obligations, where has the money been put - all those can be there.

The cash flow statement takes care of certain limitations as a balance sheet and income statement; in the cash flow statement what happens is...in that case, the cash flow is classified into three major activities; first one is called the operating activities; in operating activities what happens is that whatever cash has been generated by regular business operation which does not consider any income from other sources, rather from the main line of activity - like sales, whatever cash has been generated - net cash having taken care of all the expenses - that is called the cash flow statement; as it is mentioned this in this, profit is adjusted for depreciation - gains or loss on sale of non-current assets.

That means, if the company has got a profit after tax of rupees 5 crores and the company has charged depreciation of, let us say, 1 crore earlier, in that case, because the depreciation does not involve any cash outflow this depreciation gets added and that means that company has actually made a cash profit of cash profit or cash (( )) operation of 6 crore; it has been actually showing 5 crore profit because of the depreciation that has been deducted; now, depreciation does not involve any cash flow and the depreciation has been added back.

Similarly, if you presume that this profit after tax has also considered certain other income from other activity - it is not the main line activity of the company - let us say, another rupees 0 point 8 crores; in that case, there will be reducing effect to find the cash because this profit after tax which typically should be profit from the operation includes 0 point 8 crore of income from, let us say, investment; that means, if the 0 point 8 crore income was not there the profit would have been something less.

So, this will be having a negative effect and possibly now it becomes 5 point 2 crores; if there is any such income or expense which is not operating in nature which does not involve any cash flow like depreciation, in that case, those things have to be adjusted for and the cash flow operation is actually found out.

Next thing that we have is the cash flow investment activities; in this case, the cash flow is purchase of non-current assets like fixed assets and if the fixed becomes cash out flow and if the fixed assets have been disposed and some cash is generated that becomes the inflow of the company; that is called the investment cash in flow.

That means, the company is putting money into the assets which is going to generate revenue or income over a period of time so that the company can sustain on its own over



a period of time, because they can meet the expense - expense and projects, activation of fixed assets, activation of building, activation of land for expense and all those things they come under cash flow applied in investment activities.

If these assets have been disposed and sold and some cash is realized that becomes cash inflow for the company; next thing that cash flow statement has is cash flow from financing activities; financing activities mean whether the company has gone for raising any loan, the company has gone for initial public offering, or further public (( )) public (( )) I p o for that matter company has raised certain loans from some financial institutions - short term, long term, medium term whatever that may be; these are the financing ways of the particular company; that becomes the financing inflow for the company.

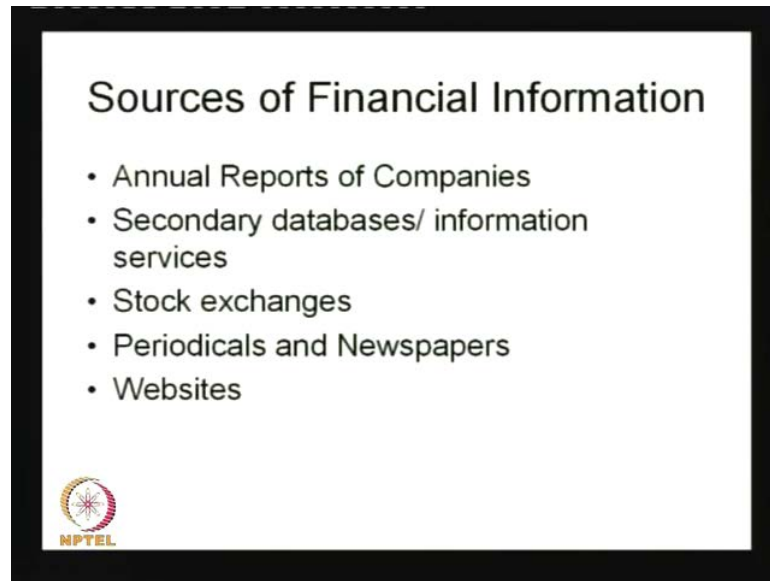
At the same time, if the company has paid interest, company has paid the dividend back to the share holders, company might have repaid the loan, company might have paid back the debentures, redeemed the debenture, redeemed the bonds, whatever has been given back to the investors because they have financed earlier that is called the financing out flow.

Net of this cash from operating activities - net of inflow and outflow, then net of investment activities - net of inflow and outflow, similarly net of financing inflow and net of financing out flow these three figure will be there; if the company has got a net operating cash flow as rupees 7 crores - that means 7 crores has been...net of that is inflow is more than outflow, then financing is, let us say, there is 2 crores - within brackets - means that is a net of net outflow whereas, investment there is another 3 crores of also outflow.

Then, net cash flow during the particular period - combination of this is - 2 crores and this is the 2 crores cash that has come to the business in a net having - that means, the 2 should be the net of all cash receipts and all cash payments during a particular accounting period.

That means, if the cash balance in the beginning of the period was rupees 7 crores - assuming that - then the ending cash balance should be rupees 7 crores plus this rupees 2 crores - that should be rupees 9 crore; net of the cash flow statement will be reflected in the net of the different cash flow, that is, operating financial or investment cash flow.

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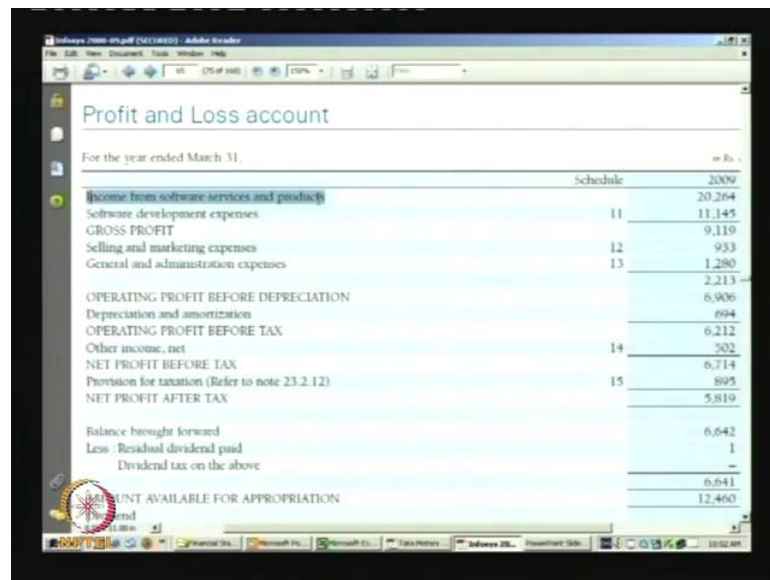


We can go to look at different sources of financial information - where do the investors get this - because all this information is required for the investor to make a decision - whether the company's shares should be bought or not, to hold on to the investment or not, to sell this or not; because, these sources of information - these financial statements - give very vital information to the investor about the performance of the company so that the investor can decide whether to hold on to an investment or not.

This information can be found out as you discussed at the end of every year; the company publishes something like annual report; the information is also available from different secondary data base by subscribing to that or there are certain information services for a particular subscription for a particular payment they can also give; there are also stock exchange that... also, because there the company is supposed to disclose the information and **stock is** also publish that information on the website or some other document.

At the same time, there is a very good print media where the company's reports are published, certain periodicals...there are exclusive reports that are also published by different research agencies; then, the companies own website or website of different analyst companies from where this information can be found.

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The image shows a screenshot of a Profit and Loss account for Infosys Technologies for the year ended March 31, 2009. The account is presented in a table format with columns for 'Schedule' and '2009'. The items are listed on the left, and their corresponding values are on the right. The total amount available for appropriation is 12,460.

	Schedule	2009
Income from software services and products		20,264
Software development expenses	11	11,145
GROSS PROFIT		9,119
Selling and marketing expenses	12	933
General and administration expenses	13	1,280
		2,213
OPERATING PROFIT BEFORE DEPRECIATION		6,906
Depreciation and amortization		694
OPERATING PROFIT BEFORE TAX		6,212
Other income, net	14	502
NET PROFIT BEFORE TAX		6,714
Provision for taxation (Refer to note 23.2.12)	15	895
NET PROFIT AFTER TAX		5,819
Balance brought forward		6,642
Less: Residual dividend paid		1
Dividend tax on the above		-
		6,641
AMOUNT AVAILABLE FOR APPROPRIATION		12,460

What we can do now we can now is we can look at a certain example of annual report; this is an annual report of the company called Infosys Technologies and the annual report is for 2008-09.

The annual report has got the content of whatever the company has been doing; it talks about the company's performance, it talks company's activities - who are the main players, who are the employees - major employees, talks about everything in this case; at the same time, the company also publishes what the company talks about, what the management thinks about - that is called management discussion analysis - called m d a; they talk about how they feel about their (( )) financial performance, operating performance of the company; this company company also has something like risk management report getting published as a part of annual report - what is the risk of this company where they have been exposed to.

It also publishes the information that we are discussing - that is called the balance sheet and income statement; one can look at it...these are the different sources of funds, they are called liabilities; we have the share holders' funds, then we have share capital and as we discussed and we have reserves and surplus.

What happens in this is that they give for two years - this is for the year ending 31<sup>st</sup> March, 2009 and this for the year ending 31<sup>st</sup> March, 2008; that means, one can compare the differences easily - what was there in previous year, what is now in this year and

each major item has been supplemented by something to the schedule which is given at the end of the particular statement as a part of this particular report.

If you can see here, the share capital of this company was 286 crores earlier it is also 286 crores this year; the reserve surplus of the company has gone up from 13,204 crores to 17,523 crores - like that, these are the liabilities; then the company has got the application fund that is called the assets of the company - it has got fixed assets, it has got investments, then it has got certain assets called deferred tax assets net, then it has got the current assets, loans and advances where debtors...cash and bank balance loans and advances; these current liabilities - instead of showing as a part of liability of the company - these have been shown as a deduction from the current assets.

These current assets minus current liabilities is called net current assets and then the company has got total assets of 17,809 which was actually earlier 13,490 crores in the previous year; similarly, the company has also got the income statement that is called profit and loss account **and this the income** major activity like software - whether the company is in software development - software expenses, income from software products, then it has got software development expenses - it is a major expense.

Next line is called the gross profit; it has got the next expense called selling and marketing expense; then they have got general expenses; after that they have got operating profit before depreciation; then depreciation taken out we have got operating profit before tax; then what they have done is they have added the other income and then they have got net profit tax; then, they have made a tax provision of whatever amount; in this also they have got the provision of **89045 crore which was 634 previous year.**

In this statement also, alongside you have got the previous year's values so that the investor can compare about what has happened before and what it is now - as a part of income statement; balance - we have net profit after tax - and whatever the balance was there in the previous it has come and then the amount has been distributed like dividend - company has paid dividend, interim dividend, final dividend or special dividend, total dividend and some amount has been transferred to general reserve.

Now, whatever is left over that is 12,460 crore is the reserves and surplus of the particular company; this can be checked here also in the balance sheet that as a part of

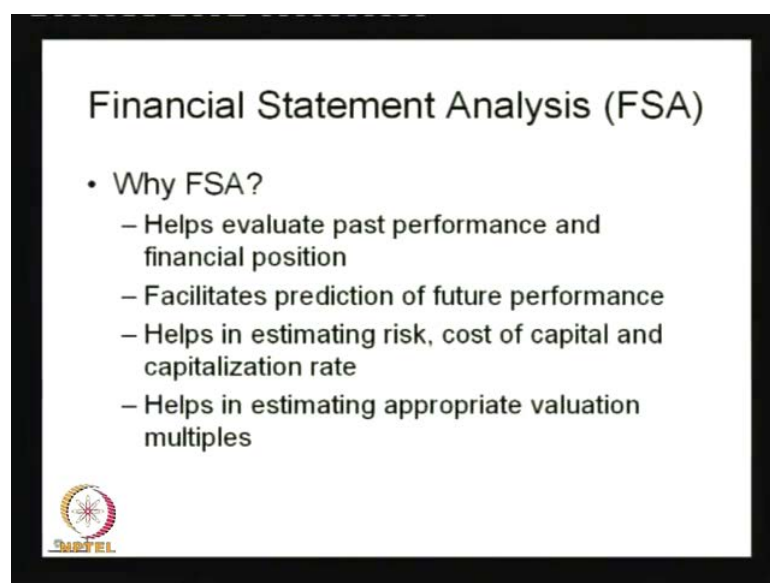
reserves surplus this 12,460 is the part of reserve surplus - that is 17,523 crore - and the details of the reserve surplus is given in a (( )) at the end of the financial statements.

Next thing that we have is the cash (( )) particular company; as you discussed it has got first the cash flow from operating activities, then cash flow from investing activities and cash flow from the financing activities; net of all these three different cash flows is this amount that is 73; net of the cash flow has been increased by 73 crores during the particular year which was 18 crores in the previous year; this is the way the companies publish their financial statements as a part of their annual report.

Next, we move on to the unit that is called the analysis of financial statement; having got this information from different sources or this annual report from this cash flow statement or from this balance sheet from income statement one can make an analysis of the financial statement - with different tools and techniques - how this particular company is actually doing. Why you should go for the financial state analysis is that it helps us evaluate the past performance and the past financial positions.


How has this company been doing in the previous period and what has been the particular company's position, what are the strengths, what are weaknesses of this particular company and those things can be found out with the help of financial statement analysis.

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**Financial Statement Analysis (FSA)**

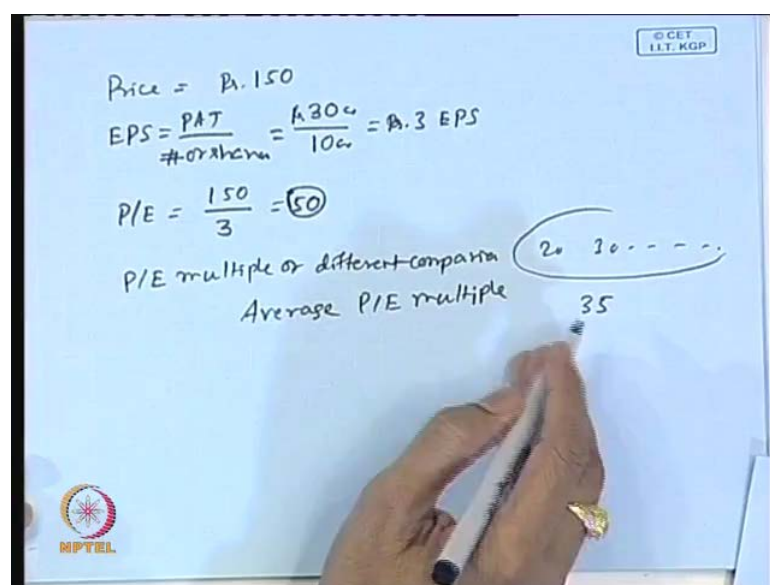
- Why FSA?
  - Helps evaluate past performance and financial position
  - Facilitates prediction of future performance
  - Helps in estimating risk, cost of capital and capitalization rate
  - Helps in estimating appropriate valuation multiples

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It also helps us in predicting the future performance and it also helps in estimating risk. So, we have already discussed in risk and return what is the risk involved these particular companies and possibly this information source - these financial statement analyses can give an indication to how risky the business is with certain tools that are being applied; also, financial statement analysis can help us finding out what is the cost of capital of a particular company.

When we say cost of capital we mean the return expected by the investors; it could be equity investors, it could be debt investors this financial statement analysis can also help; because, we always expect the company to outperform the expectation of the investors if the investors overall expect, let us say, twelve or fourteen percent return the company - let us say, fourteen percent return - in that case company should earn a return more than fourteen percent then it is says it has made the investors requirement in terms of what they have required as per return is concerned; then, capitalization - that is also same thing like cost of capital and it also...this financial statement analysis also helps in estimating the appropriate valuation multiples; we will discuss that in a subsequent session when you talk about valuation of shares; in that case, what would be the different methods (( )) price multiple, possibly one will be aware of a multiple like price to earnings (( )) called p e multiple; p e multiple is actually found out by dividing the price of particular share with something like earnings per share.

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Say, the price of a particular company is rupees one hundred fifty and the earnings per share, which is known as profit after tax divided by number of shares; let us say, it is thirty crores is the profit and ten crores number of shares are there, then rupees three is the earnings per share; price earning multiple is now 150 by 3, that is 50.

That means, multiple...the price is fifty times of the earning per share; this is called a relative valuation method technique also; because, one can find out the p multiple of different companies like this; this is 50, there could be 20, 30 like this and taking an average like that and this average p multiple can be taken as a base of say p multiple of this target company that you one is evaluating is high or low.

If the average p multiple of this, let us say, comes to thirty five and if you have (( )) that this company's is 50 obviously, this company's share is overvalued. So, this is called relative evaluation; relative to other companies p multiple what is this p multiple here and accordingly is it over valued or undervalued?

These valuation multiples can be found out with the source of information that is there in the financial statement; with the help of financial statement analysis tools and techniques one can help, one can estimate the value of the particular company; by using this valuation (( )) p multiple is one of the value multiple there can be different valuation multiples which one can discuss in subsequent valuations of the share session.

Then, coming to the next thing - what are the different tools, we have got the first thing that is called a trend analysis; in trend analysis what happens is that the company's major financial figures are compared over a time period and then one can observe a particular trend in the same; let us say, for 5 years the company sales are observed and how these sales have actually moved (( )) for a particular period of time.

Sales might have gone up from hundred crore 1 20 10 30 like that up to 5 50 or figure might have reached, and what is the trend - whether the sales is declining, sales is fluctuating or sales is continuously increasing like that; similarly, this trend can be observed for any major financial figure of the particular company; it can be observed for major expenses, raw material consumption, labor expenses electricity expenses other operating expenses; similarly, financial expenses like interest, how this interest expense is going up or coming down what has been happening.

Then, at the end in the income statement the company's profit after tax - whether it has gone up or come down, whether the sales have gone up by certain percentage over a period of time, whether profit after tax has also gone up by that percentage or more than that or less than that of the profit **is after tax of the (( )) company is declining or increasing.**

All those things can be observed with the help of a trend analysis; essentially, one can take a **period of (( ))** and see how these particular major financial figurese are changing; beside income statement the trend analysis can be applied for the balance sheet how the **(( ))** total assets have been decreasing or increasing or increasing for some period then declining or the other way around.

Total asset is increasing or decreasing, whether the fixed asset of the company is increasing or decreasing, then current assets - how do they trade in that; all those things can be observed by comparing these figures over a period of time - that comes under trend analysis; analysis of that company - the analyst can do or **(( ))** financial statement can do is to make comparative statement also.

In this case, one compares the financial performance of the company for one year with another - that we have already seen in the example of Infosys - we have got the financial statement here and, we see the income statement - what has happened in this case is that the income from software service and products of Infosys for 2009 is 20,264 crorea which is actually 15,648 crores in the previous year.

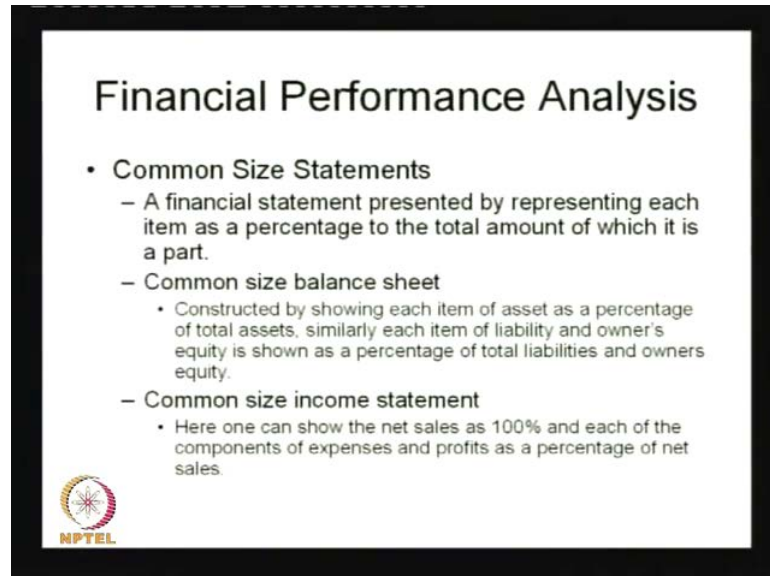
Where around thirty increase is there compared to the previous year - this called the comparison of particular company's financial performance over a two year period of time; at the same time, the comparison can be done with any other company; let us say, Infosys' performance can be compared with TCS or it can be compared with a company like Wipro any other company which is in the same software sector, that can be compared and one can find out which company has done better, which company has not done better compared to the other.

This is comparative finance statement; because, the investor is going to compare different instruments of different companies. Let us see equity share of different companies...they can take the financial **(( ))** different companies and compare which company has been doing better than the other company and make a decision whether to




buy or sell the share of the particular company or not; that is called comparative financial statement.

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**Financial Performance Analysis**

- **Common Size Statements**
  - A financial statement presented by representing each item as a percentage to the total amount of which it is a part.
  - **Common size balance sheet**
    - Constructed by showing each item of asset as a percentage of total assets, similarly each item of liability and owner's equity is shown as a percentage of total liabilities and owners equity.
  - **Common size income statement**
    - Here one can show the net sales as 100% and each of the components of expenses and profits as a percentage of net sales.



Next, what we have is the common size statement; in this case, the financial statement is presented by representing each item as a percentage of a major figure in that particular financial statement like income statement or the balance sheet; in income statement what happens is each of the item is compared with this net sales; taking net sales as hundred how other items have actually gone up or is more or less - is it hundred is in five or ten or eight something like that.

The common size statement essentially gives a breakup of the different items compared to the main item of the (( )) statement income statement called sales; similarly, common size balance sheet also can be prepared where the total assets of the particular company - total liability of the particular company - is taken as hundred and compared to that how the other assets or liabilities are there, that is explained.

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Balance Sheet

	200903	200803
Assets	200	180
FA	120	100
Investment	20	20
Current	60	60
	<u>200</u>	<u>180</u>

100/100	100%
20/100	20%
60/180	33.33%

NPTEL

That is what happens in this case, over a period of time one can find out if...for example, if in a particular year, let us say, we have a balance sheet of a particular company where we look at the asset side and asset side 2009 - 03 - 2009, March and 2008, March asset total was, let us say, two hundred crores - it was two hundred crore in 2009 - it was actually one hundred eighty in the previous year.

This 200, 180 respectively is taken as hundred; then, this 200 crores comprises of fixed asset of 120 and the fixed asset of...then we have a current assets like investments of let us say 20 and another other asset (( )) 60; total becomes now 200 which was there in this total; similarly, this 180 it was actually 100 as far as fixed assets is concerned then as far as investment concerned it was 20; similarly, current assets was actually 60; total is now 180.

So, if one looks at...the 20 of investment remains 20 current asset also remains 60 whereas fixed assets have gone up from 100 to 120.

This is a comparative analysis; this 120 has a percentage - 200 taking the total as hundred can be converted; this becomes like 60 percent, this becomes 10 percent and this becomes 30 percent; likewise, one can also find out hundred by 180, 20 by 180 and 60 by 180.

Like that one can find out the percentage and compare the percentage with this one. One can find out that, yes, whether they had more fixed asset (( )) total asset are less; how this fixed asset x percent has become sixty 60 percent; whether it is increasing or decreasing the (( )) asset is changing or not; that can be shown with the help of a common size statement. Both, common size income statement as well as common size balance sheet can be prepared and one can see that.

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Line #	Year	2008-09	2007-08	2006-07
1	INCOME :			
2	Sales Turnover			
3	Excise Duty			
4	Net Sales	100.00	100.00	100.00
5	Other Income	4.26	8.03	9.85
6	Stock Adjustments	2.63	1.77	3.38
7	<b>Total Income</b>	<b>106.90</b>	<b>109.80</b>	<b>113.24</b>
8	EXPENDITURE :	0.00	0.00	0.00
9	Raw Materials	35.82	40.14	43.93
10	Power & Fuel Cost	5.65	4.81	5.48
11	Employee Cost	13.23	12.78	13.56
12	Other Manufacturing Expenses	6.31	6.17	6.06
13	Selling and Administration Expenses	15.07	12.75	12.98
14	Miscellaneous Expenses	1.59	1.33	3.00
15	<b>Total Expenditure</b>	<b>77.67</b>	<b>77.99</b>	<b>84.01</b>
16	<b>Operating Profit (PBDIT)</b>	<b>29.22</b>	<b>31.81</b>	<b>29.22</b>
17	Interest	5.58	4.25	3.58

We can have a look at an example of one company that is called Natco Pharma; here, we have got the income statement of the company - this is sales turnover, excise duty, the net sales and other income; then we have a stock adjustments, total income - this comes at 288.29 for the year 2008- 09.

Similarly, we have got expenses for raw material, power and fuel, employee cost, manufacturing expenses, selling expenses, operating profit, depreciation like that; we have made a comparison here that in the net sales of this particular company for 2008-09 which is 269.69 crores it has been taken as hundred; accordingly, rest of the items in income statement have been covered and we can see here hundred, hundred and hundred for three different years the financial statement has been given. Take an example, the raw material which was 42.93 as related to sales it has now become 40.14 in 2007-08, it has now become 35.82 in 2008-09.

That means as a percentage of sales, raw materials has actually declined, which is actually a good sign for any company because the cost as percent of total sales has...this particular raw material cost has actually declined; similarly, power and fuel costs which was 5.48 in 2006-07 this declined 4 point 5 4 point 8 1 it has now become 5.65; like that, employee cost, which was 13.5 which has remained almost same 13.23 as a percent of sales.

Like that, all those expenses - everything has been categorized as a percentage of sales where sales is taken hundred (( )) item has been taken; similarly, it can also be done for common size balance sheet, where the total of the balance sheet, total liability or total assets have been taken as hundred, like 2006-07 339.65 is taken as hundred and similarly for 2008-09 total assets is taken as 494 is taken as 100; accordingly, how these other assets have actually moved or declined or whatever may be.

That means, if you look at it here the share capital which has 8.14 percent total liabilities it has declined to 5.67 percent; similarly, the total share holder fund which was 53 has become now 52 (( )) marginal decrease in the share holders fund.

Coming to the asset side, earlier (( )) 40 point on average the company has maintained some 40 to 43 percent total asset as net fixed asset; whereas, inventories which was 14.52percent which has now become 13.07 percent.

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Line #	Year	2008-09	2007-08	2006-07
42	Gross Block	40.66%	43.06%	40.51%
43	Less : Accumulated Depreciation			
44	Net Block	6.96%	4.49%	5.93%
45	Capital Work in Progress	4.20%	5.16%	5.44%
46	Investments	0.00%	0.00%	0.00%
47	Current Assets, Loans & Advances	13.07%	13.71%	14.52%
48	Inventories	9.64%	8.85%	9.46%
49	Sundry Debtors	4.06%	4.94%	7.09%
50	Cash and Bank	21.41%	19.79%	17.06%
51	Loans and Advances	48.18%	47.30%	48.13%
52	Total Current Assets	0.00%	0.00%	0.00%
53	Miscellaneous Expenses not written off	100.00%	100.00%	100.00%
54	Total Assets			
55	Contingent Liabilities			

Source: <http://www.capitaline.com>

Like that, all the assets have been now classified and the compositions have been given. This composition how it has been there in the earlier year, how it is in this year - it talks about - or this company has put more money and fixed assets, more money on investments or more assets are in term of current assets.

In current assets more in terms of inventory, receivables or like that this can be classified and show how this company is actually investing in assets and how this company also gets the different money from different source of liabilities; whether insiders source like owner source of money is more or the outsider source like liability is more like that can be analyzed.

So, up to this we have discussed financial statement, different types of financial statement, what are the major sources of financial statements, information like annual reports, secondary databases; have also started discussing about different tools of final statement analysis where we talked about the comparative financial performance, we have also talked about the trend analysis and then we talked of the common size financial statement.

In the subsequent session, we will discuss about the financial statement analysis with the help of receive analysis where we will find out different financial statements, receivers with the help of information from financial statements like balance sheet and income statement and judge whether this company is doing well as per different financial parameters or not.

Thank you.