Managerial Accounting
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Lecture - 13
Common – size, Comparative Statement Analysis

Dear students, so far we have discussed various aspects of Management Accounting. Today we are going to discuss a very interesting topic. That is on Analysis of Financial Statements. So, we will try to analyze and interpret the accounting statements, we have already seen how to record the entries. We have discussed various accounting statements, particularly balance sheet, profit and loss account and cash flow.

Now, various stake holders as you know are interested in reading and interpreting the accounting statements. Can you imagine who those stake holders ? The most important are of course the owners, who want to know the performance of the company? So, they want to know the profitability, they also want to know the financial position of the company. Lenders who give loans to the company, like banks or like financial institutions will be more interested in capacity to repay their date.

So, they will also look at profitability and cash flows available with the company. Outside people like creditors, employees, managers all of them want to know about how is company performing? And that can be analyzed looking at the financial statements of the company. Today we are going to discuss a little bit on, what are the techniques of interpretation? We will also see we will also in a way revise what were the format of balance sheet? And we will solve one or two cases, where in will actually see how is the analysis done?

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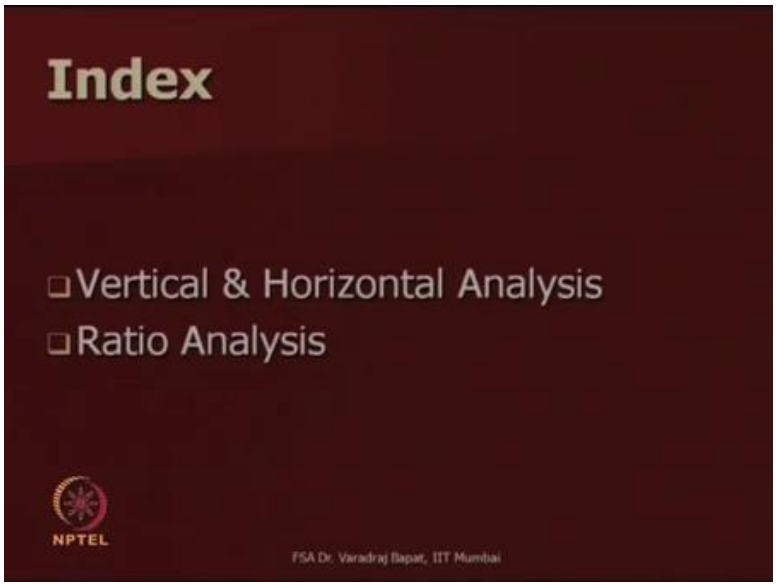

Now, let us see what is going to be covered in this? We will be starting with two techniques in analysis. That is vertical and horizontal analysis. And then, we will go for ratio analysis.

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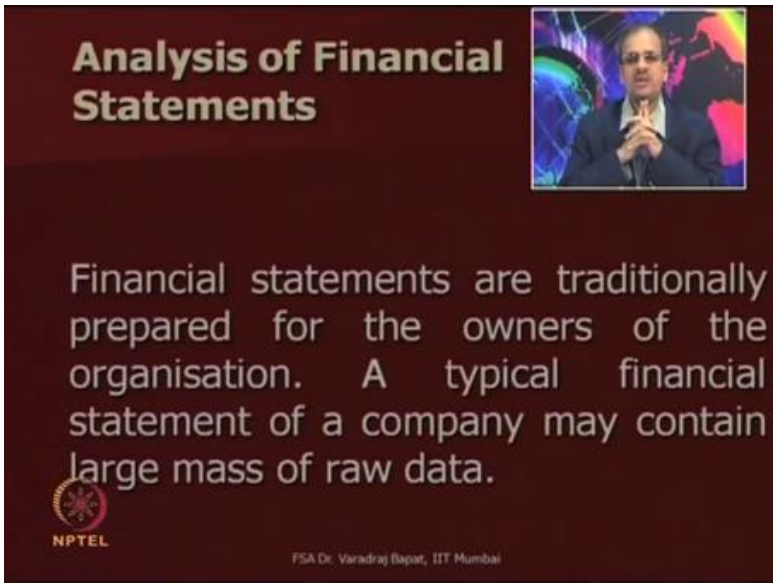

You know that traditionally financial statements were prepared for the owners from the owner's angel. And a raw statement contains lot of raw data. So, you will know what are the assets, you will know the liabilities, you will know the details of various assets. You will also know the income, expenses inflow, outflow sources. But, to exactly get what

you want, you will have to relate that information analyze that information. You may want to compare this information with other companies, you may want to compare this information with the earlier year of the same company and so on. This is something which is going to be discussed more in this topic.

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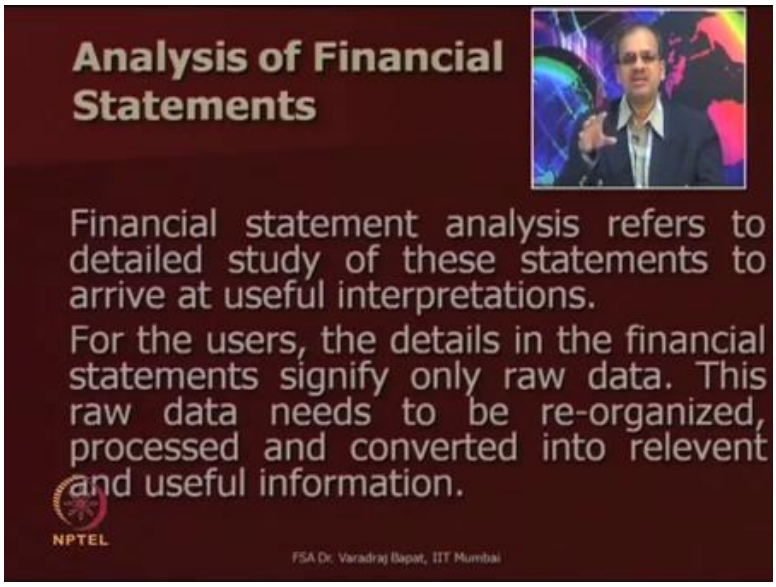

So, financial statement analysis refers to the detailed study of this statements. The objective is to arrive at useful interpretation. Unless the statements are properly reorganized processed and converted into useful information. They just remain lot of unwanted details. So, that is an attempt in this discussions, where we will see what can be done to meaningfully understand a financial statement.

And interpret on whatever aspect you are interested? As we were discussing. For example, lenders may be interested to know, what is the interest paying capacity of the company? Employees may be interested to know what is the profit? What is going to be trends in profit? And what are their chances of getting incentives or bonus? So, according to the view of the user or the stake holder, various types of tools techniques can be used. Let us see some of the techniques today.

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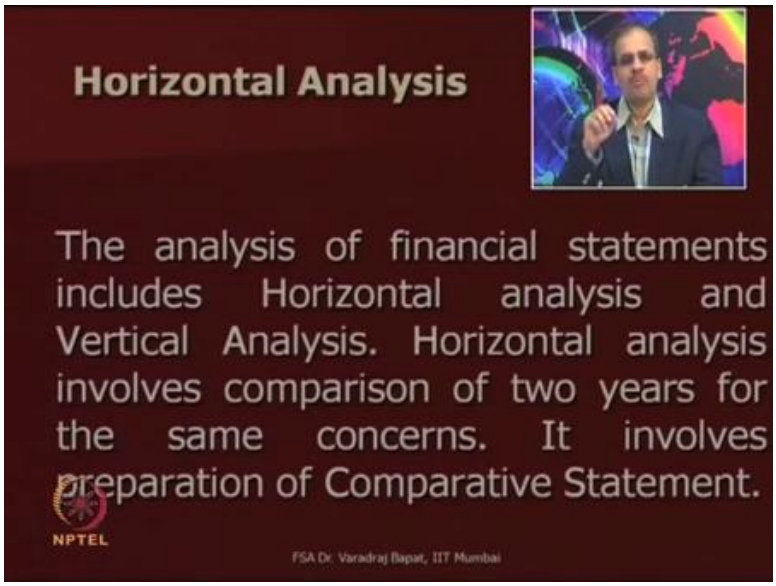

One technique popularly used and very simple in nature is horizontal analysis. There is another technique known as vertical analysis, these two are the main techniques. Horizontal analysis is the basic very simple thing, which everyone does, moment we see the figure we will try to know, what was the position last year. Or what was the position last quarter.

So, this involves comparison of two years or two periods for the same concern. For this usually a comparison statement is prepared. In a comparative statement we see this year's figure, we compare them with the last year figure, difference is found. To know how much is a increase and difference is also calculated in percentage terms. So, that we know, what is the percentage increase or decrease in the current year or current period.

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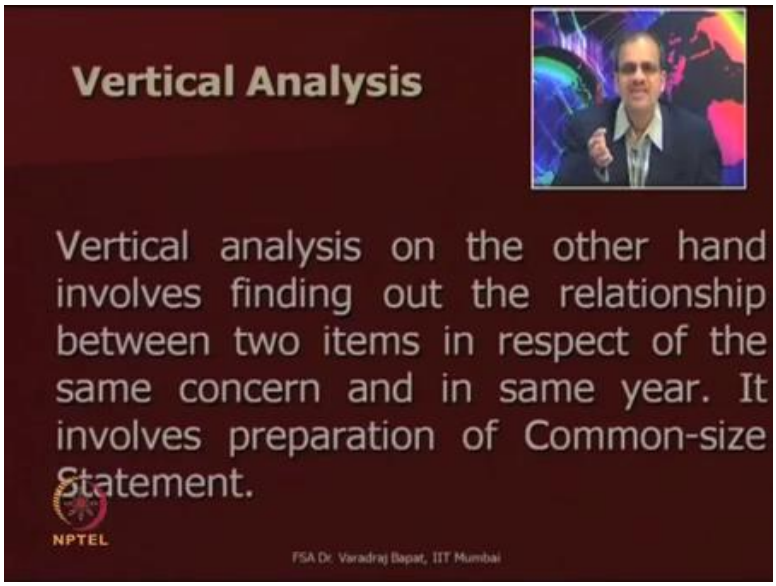

There is a another type of analysis, that is known as vertical analysis. In vertical analysis, as the name suggests within the statement the relationship is found. So, if we know sales we know profits, one may be interested to know what is the percentage of profit on sales? Or incase of balance sheet, we know the total assets, we know fix assets. One may be interested in knowing, that what percentage of total assets is represented by fix assets.

So, like this in vertical statement relationship between the two items of the same statement are found. Of course, this data can be used for comparison later on with the earlier year data or with the data of some other concern. For vertical analysis the popular statement, which is prepared is known as common size statement.

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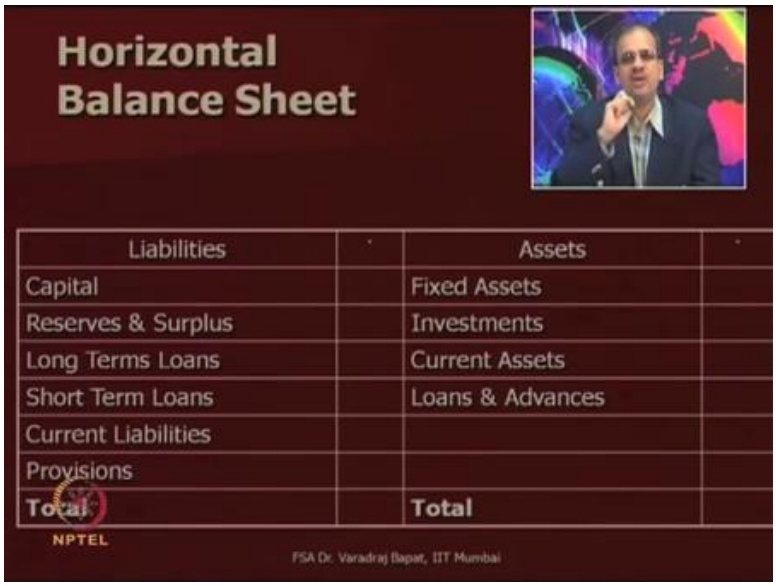

Once again to remind you about the balance sheet formats. We have learnt horizontal format, we have also learnt vertical format. Let us have a look at it again, here I have shown you horizontal format, as you can see on one side the assets are shown. Assets are listed into categorize, like fix assets, investment, current assets, loans and advances, liabilities are also listed. So, you have capital, reserves, various types of loans, current liabilities, provisions.

Now, this horizontal statement may not be so much useful to analysis. Because, we would like to know what are the total owners funds. We may like to know what is the total capital employed and so on. So, usually horizontal balance sheet is converted into vertical balance sheet, so that a better analysis can be done.

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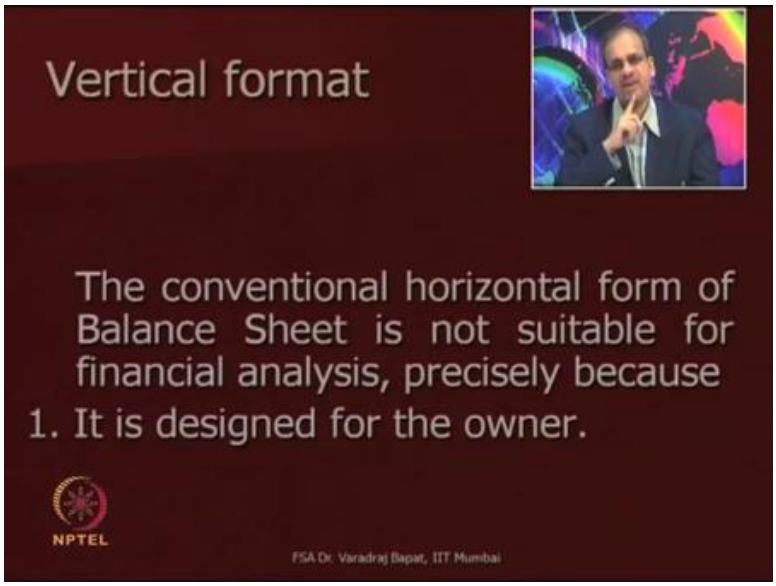

These are some of the advantages of this conversion. So, what happens with horizontal balance sheet is it is mainly designed for the owners.

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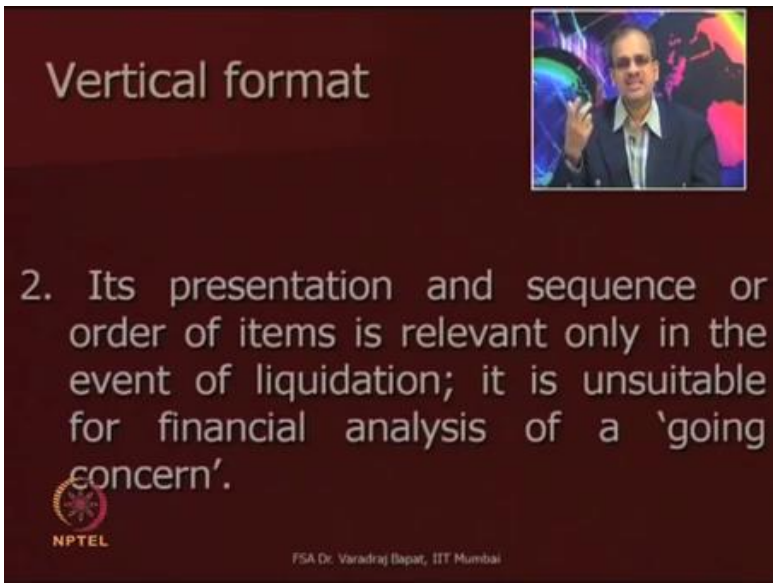

The sequence, in which the items are presented are mainly useful in the event of liquidation. But, when we are going to study the company as a going concern, then it is better to convert it into vertical statement.

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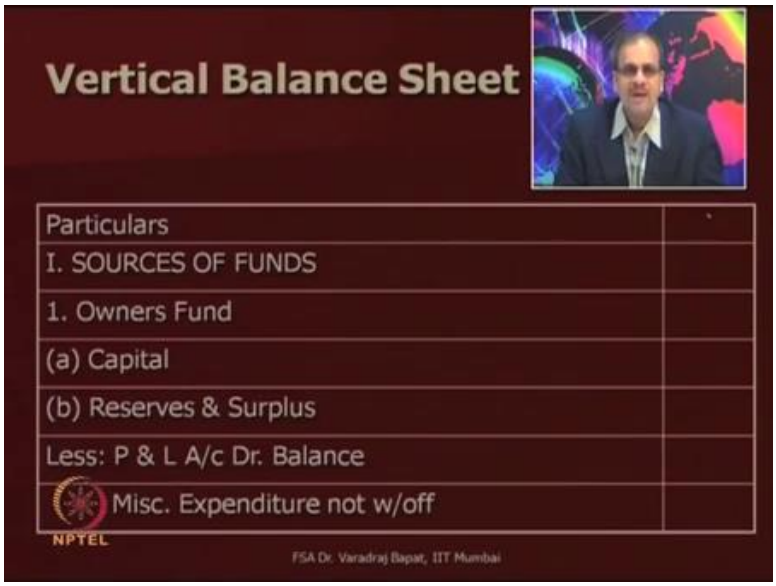

So, you already know the format, but have a look at it again. So, in vertical statement generally we start with sources of funds. This is more or less the liabilities, but not exactly the repetition of liabilities. So, in sources of funds we take owner's fund. This is the money, which belongs to the owners. Again intern it has interns two parts a capital, b reserves and surplus minus profit and loss account, debit balance which represents the accumulated losses and misalaneous expenditure if it is not returned off. So, the total of a and b is the total money, which belongs to the owners or which enterprise should pay back to the owners. So, this is the owner's fund.

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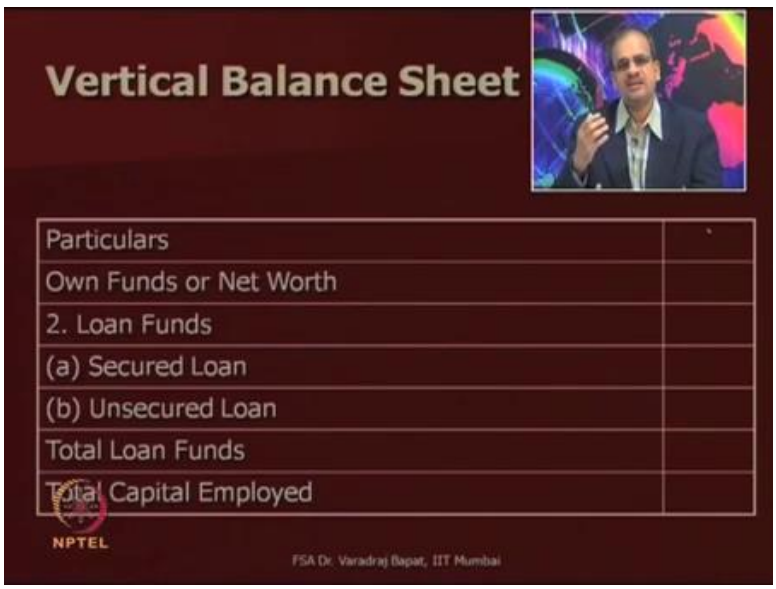

The send one is loan funds. Loan fund consists of secured and unsecured loan, the total is the total loan funds, which is also known as borrowed funds. The total of one plus two that is owner fund plus loan funds is known as capital employed.

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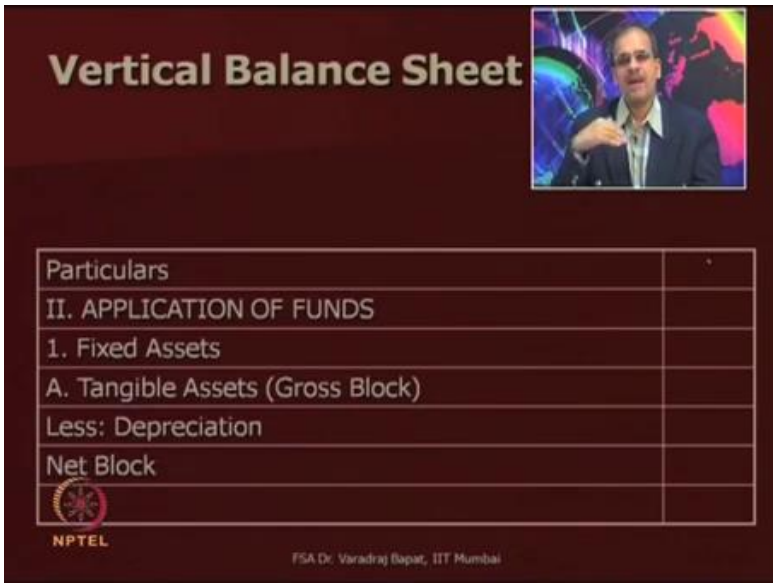

Now, let us go to application of funds. This is more on assets, first one could be fix assets, which can be again divided into tangible and intangible. So, tangible assets are known as gross block minus depreciation, we get the net block or the current value.

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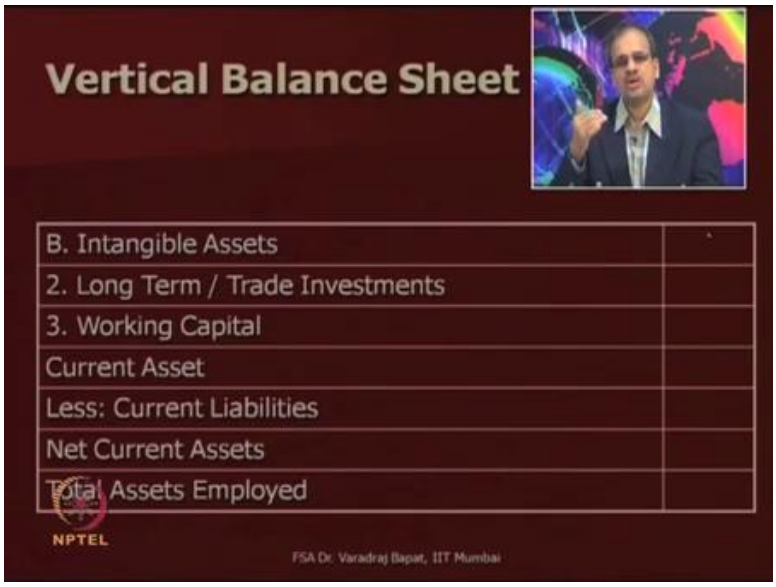

Apart from tangible, we also have an item called as intangible assets. Then, second one could be long term or trade investments. The third one is working capital, this consists of current assets less current liabilities. So, fix assets plus long term investment plus working capital, this total is known as total assets employed. So, total of funds employed should match with total of assets employed. Of course, we have discussed this earlier, but I am trying to have a recap.

So, that now we can proceed for analysis. So, this is what a brief was about what is a vertical statement and what is a horizontal statement. And also about the format of balance sheet. Now, let us try to take a real case, where we will try to have a raw data and then, use it for making vertical and horizontal analysis. So, here the data about real life company Venkatesh industries presented of course, this is a raw data right now I have also changed the name of the company.

But, it is very close to the real data I hope it is clear now. So, the format of balance sheet is given and the data relates to here 9 and 10 balance sheet is already in the vertical format.

So, you can see capital, loan unsecured, mortgage loan, P and L account and assets. Now, you are required to prepare both common size and comparative statement, below you are also given the income statement. And in the end you are also given certain ratios, we will go to ratios later. First let us concentrate on common size and comparative statement.

Now, given this data you are required to prepare first a comparative statement. Now, what will you do? How will you start? Before starting for making a comparative statement, it make sense to rearrange the balance sheet and P and L in a more systematic format. So, you can see the rearrangement I have already tried to do it for you.

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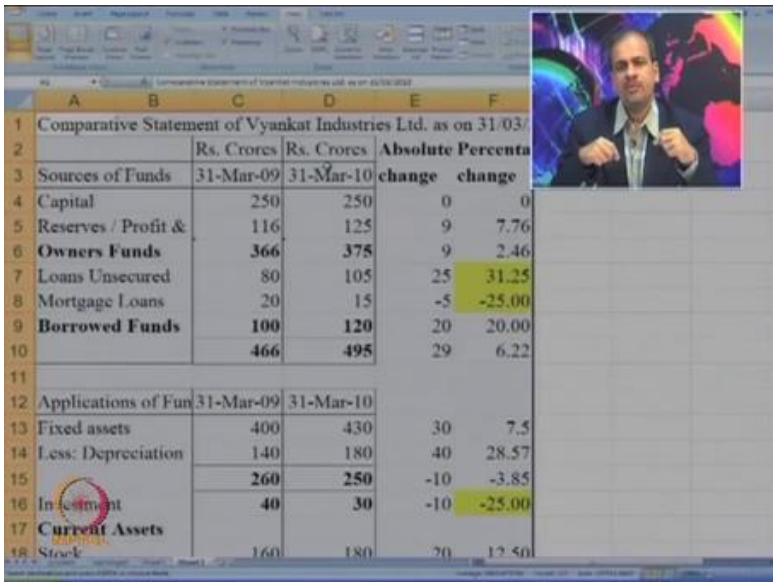

	A	B	C	D	E	F
1	Comparative Statement of Vyankat Industries Ltd. as on 31/03/					
2			Rs. Crores	Rs. Crores	Absolute	Percenta
3	Sources of Funds		31-Mar-09	31-Mar-10	change	change
4	Capital		250	250	0	0
5	Reserves / Profit &		116	125	9	7.76
6	**Owners Funds**		**366**	**375**	9	2.46
7	Loans Unsecured		80	105	25	31.25
8	Mortgage Loans		20	15	-5	-25.00
9	**Borrowed Funds**		**100**	**120**	20	20.00
10			**466**	**495**	29	6.22
11						
12	Applications of Fun		31-Mar-09	31-Mar-10		
13	Fixed assets		400	430	30	7.5
14	Less: Depreciation		140	180	40	28.57
15			**260**	**250**	-10	-3.85
16	Investment		**40**	**30**	-10	-25.00
17	**Current Assets**					
18	Stock		160	180	20	12.50

So, what has been done now, you can compare the earlier one and this one. In the earlier one, just the information about capital, loan, excreta was given. Now, it has been rearranged systematically. So, you come to know what are the owners funds and what are the borrowed funds. So, capital plus reserves are taken and loan, unsecured loan, mortgage loan, you get the borrowed funds.

Same way in the assets also slight rearrangement has been done. So, you know the working capital, investments and fix assets. Now, using these we are required to make, let us first start with comparative statement. As I have already told you, comparative statement essentially tries to find the increase or decrease in the current year. So, we will try to make using the same thing, comparative statement, now the balance sheet as rearranged I will try to change it and make a comparative statement.

I will request you all also to do it along with me. So, that it will be clearly understood by you. Now, we will make comparative statement as on 31st March 2010 we have a data for 9 and 10. First step in the comparative is to find the change or the difference. So, let us highlight it as a change, change in the current year. So, 250 minus 250 incase of capital, there is no change I will try to drag it down.

So, you can see that reserves and surplus has increased by 9. Overall owner fund has increased by 9 unsecured loans are increased by 25. Mortgage loans have decreased by 5. So, on the whole borrowed funds have increased by 20, total increase in the liabilities is

29 instead of liabilities, now I will re change it to sources of funds. So, that it makes more sense to you.

Assets now we will start with again I will rename it as application of funds, this is a better title. Because, I am not going to exactly write the same assets, this is already including assets minus current liabilities, the first part is same we will find the difference.

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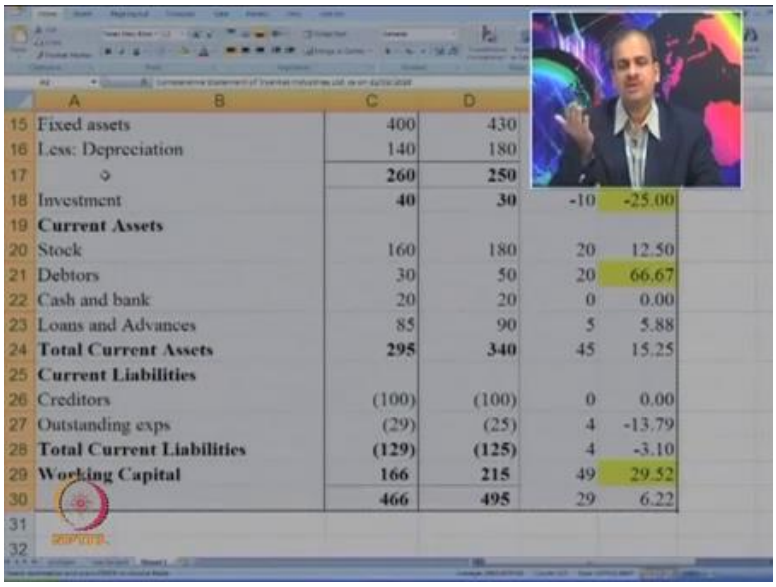

	A	B	C	D		
15	Fixed assets		400	430		
16	Less: Depreciation		140	180		
17			**260**	**250**		
18	Investment		**40**	**30**	-10	-25.00
19	**Current Assets**					
20	Stock		160	180	20	12.50
21	Debtors		30	50	20	66.67
22	Cash and bank		20	20	0	0.00
23	Loans and Advances		85	90	5	5.88
24	**Total Current Assets**		**295**	**340**	45	15.25
25	**Current Liabilities**					
26	Creditors		(100)	(100)	0	0.00
27	Outstanding exps		(29)	(25)	4	-13.79
28	**Total Current Liabilities**		**(129)**	**(125)**	4	-3.10
29	**Working Capital**		**166**	**215**	49	29.52
30			**466**	**495**	29	6.22
31						
32						

So, you can have a look at how the assets look like, fix assets at gross that is at cost have increased by 30. Depreciation has increased by 40. So, net increase in fix asset is minus 10, current assets investments have also decreased by 10. Current assets you can see each current asset, stock there is a increase of 20, debtors there is a increase of 20. Loans there is a increase of 5. So, total increase of current asset is 45, in case of current liability there is a increase of 4.

So, working capital on the whole has increased by 49, in case of current liabilities there is a decrease of 4. That is why net effect on working capital is 45 and minus 4. So, it becomes increase of 49 and total increase is 29. Now, this first column just shows absolute change, now let us try to also understand the change as a percentage ((Refer Time: 16:00)). So, this change is in absolute right now to better understand the importance.

Let us try to find the change in the percentage terms. So, percentage change what will try to do is, this change divided by the base figure into 100 first one is of course, 0. So now, I think it will make more sense to you, you can see that there is no change in the capital. However in case of reserves and surplus, there is a change of 7 percent. Major change is in mortgage loan, which has gone down by 25 percent, while unsecured loan has increased by 31 percent.

Over all the company looks fairly stable, there is neither significant increase or major decrease, it is a marginal increase of 6 percent on the total values. Same way, let us try to do it for la assets. So, in assets you can have a look, you can see that investments have decreased by 25 percent, depreciation has increased by 28 percent, stock there is a major increase, which perhaps you can note there is a increase in the debtors by 66 percent.

Increase in the stock is not very high, it is just 12 percent. So, in absolute terms both the increases are same it is just 20. But, if you look in relative terms, you will realize that increase in the stock is just normally increased from 160 to 180. So, it is a 12 percent rise not much to worry. But, increase in the debtors from 30 to 50 though the increase is only of 20 in absolute terms, it is 66 percent in percentage terms. So, what does it mean for an interpreter?

So, what perhaps is shown is, there is some issue. Because, now there may be some items which are accumulated unpaid for a very long time. Or there is also a possibility there are some amounts, which are unlikely to be received. But, they are just continue to be shown as debtors. These things you will come to know, when you see in percentage term this major rise.

Other things are more or less same, you can see that there is a increase in working capital by relatively higher amount. That is 30 percent around, that is also mainly because of increase in debtors. So, major increase and decreases are just marking to draw your attention. So, you will realize that investments have gone down and to an extent, there is an increase in debtors.

Now, have a look at the whole statement, this is known as comparative statement. Now, let us also try to make one more statement, that is known as common size statement. So, what comparative statement tries to do is? Comparative statement is mainly for

comparing the same companies financial, comparing the same companies financial with the earlier year.

But, now if you want to compare with other companies or if you want to compare with the industry averages, this comparison may not be enough. So, you may like to go to next step. That is known as a common size statement let us try to do, it then it will be more clear to you.

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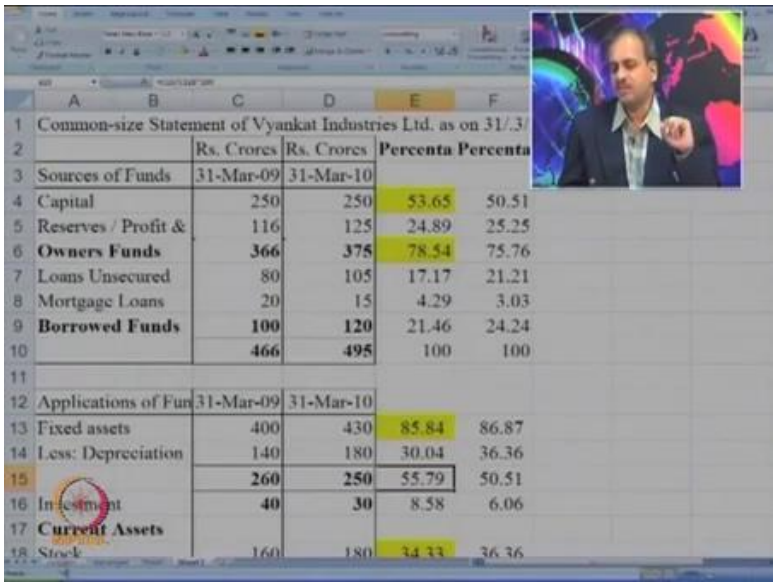

So, this is a just copied what we had earlier. Now, instead of comparing form last year to this year, we are going to compare the figure of the same statement. So, when we look at 250 as capital, we will try to see what percentage it is of the total? That is 466, then it is known as common size statement. Let us try to make it, again my request is to you try to solve it with me. So, that you really understand.

So, we are now making common size statement as on both 31st March 2009 and 2010. Now, in stand of absolute and relative changes, we are going to calculate both in percentage terms. So, nothing to do with change now, but it is a more percentage of total. So, you can see this 250 I will try to relate the total of sources which is 466. So, it is C 4 divided by C dollar 10 which makes it 55.

So, now, I think it will be clear to you, I will just try to reduce the decimal places, does it make sense to you now. So, 53 percent of the total funds is contributed by capital. 78

percent is the owners fund, these type of interpretations are possible. First let us do it for both the years, we will also try to do it for the assets. In case of assets we are going to compare it with the total of sources of funds.

Now, the whole data is ready with you. So, what we have done is, we have taken the total. And we have compared each item as a percentage of total. So, you can see that the major contribution in case of this company, actually comes from capital. So, owners have put in a significant amount of money. May be the company has still not grown they have do not have very high amount of accumulated profits, as compared to owners fund.

And the loans which they have taken are much lesser, may be they have a policy not to rely on borrowed funds, which you can see from here. What you can observe, if you try to compare you will realize that, now the percentage of unsecured loan has slightly increased or the total loan has increased from 21 to 24. But, still the company is largely financed by owners fund.

So, vertical analysis or a common size statement, as you can see here helps, you to find each item in relative terms. Now, it is not so much useful for comparing with the same company. Because, you can see we do not see much difference in the percentage, where it is much more useful is? If you want to compare this company with some other company, then common size statement data is extremely useful.

Because, two companies are at different sizes, one company would be small, another may be big. So, it does not make much sense to compare them, without adjusting the figures. In common size statement an attempt is made to bring all the figures in relative terms, as a percentage to total. So, that this data can be compared with any other company. So, even if the company is large, we can say that as a percentage how much is contributed by, let us say capital, let us say how much is contributed by loans and so on.

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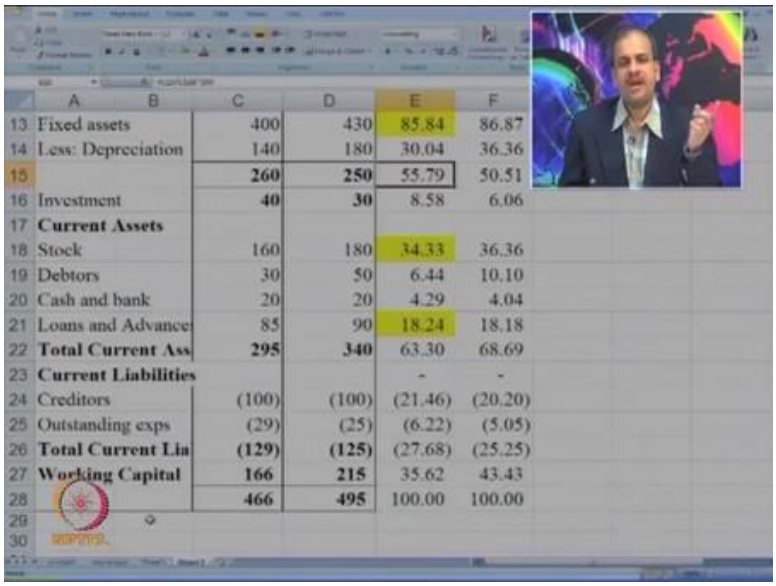

	A	B	C	D	E	F
13	Fixed assets		400	430	85.84	86.87
14	Less: Depreciation		140	180	30.04	36.36
15			260	250	55.79	50.51
16	Investment		40	30	8.58	6.06
17	Current Assets					
18	Stock		160	180	34.33	36.36
19	Debtors		30	50	6.44	10.10
20	Cash and bank		20	20	4.29	4.04
21	Loans and Advance		85	90	18.24	18.18
22	Total Current Ass		295	340	63.30	68.69
23	Current Liabilities				-	-
24	Creditors		(100)	(100)	(21.46)	(20.20)
25	Outstanding exps		(29)	(25)	(6.22)	(5.05)
26	Total Current Lia		(129)	(125)	(27.68)	(25.25)
27	Working Capital		166	215	35.62	43.43
28			466	495	100.00	100.00
29						
30						

Now, have a look at assets you will realize that out of the total assets, bulk of the assets are coming from bulk of the assets are in the nature of fix assets. It looks like the company is a manufacturing concern or a company is a service entity. But, which has lot of reliance on asset. Even, if you look at WDV it is still contributing to 55 percent. The next very big amount consists of stock which is 34 percent, which has now increased to 36 percent.

So, what it shows or what it means is, probably companies are manufacturing or a trading concern, maintains a large quantity of stock. So, it is it does not look like a service entity, from high amount of fix assets you may feel, either it is manufacturing or it involves intensive services. Like, say railways or airlines, intense capital intensive services. Now, once you look at stock you will realize that, it is not a service company, it has a high component of fix assets, it also has a high component of stock.

So, probably it is into a manufacturing entity, you can also see here that the debtors percentage has increased, though it is a very small as compared to total. But, still from 6.44 it has gone to about 10 percent. Loans and advances also are fairly high, because 18 percent of total assets is reasonably big amount. So, as an analyst we may have to enquire into why such high instance of loan and advances?

There could be a possibility that some of them are dummy. Or there could be a possibility that some money from this company is being used by some other entity,

which is owned by the same owners. So, you will have to look at it. So, on the whole you can see that the 33 percent, 35 percent is finance by working capital. 35 percent is used to finance working capital and 55 percent about was used for fix assets.

So, this is what a comparative balance sheet looks like. Now, let us try to do both comparative income statement and balance sheet. Let us try to make both common size and comparative, but for a income statement.

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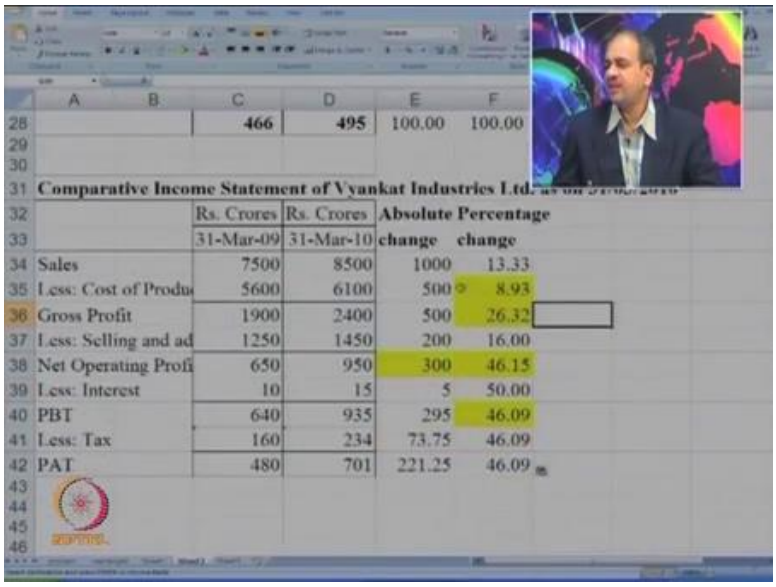

		466	495	100.00	100.00
Comparative Income Statement of Vyankat Industries Ltd.					
		Rs. Crores	Rs. Crores	Absolute	Percentage
		31-Mar-09	31-Mar-10	change	change
34	Sales	7500	8500	1000	13.33
35	Less: Cost of Produ	5600	6100	500	8.93
36	Gross Profit	1900	2400	500	26.32
37	Less: Selling and ad	1250	1450	200	16.00
38	Net Operating Profi	650	950	300	46.15
39	Less: Interest	10	15	5	50.00
40	PBT	640	935	295	46.09
41	Less: Tax	160	234	73.75	46.09
42	PAT	480	701	221.25	46.09

Now, this was a income statement which was given to us. Now, let us try to make a common size and comparative statement using these data. So, here you had a comparative, balance sheet. Now, using the similar technique we will try to make a comparative income statement. Now, in income statement as the name suggests, we have taken the income statement information.

And similar to balance sheet we will find a absolute and percentage changes, now you know the technique. So, it should be much easier for you. So, you have the data on sales cost of production, selling marketing, admin expenses, interest and profits. So, what we have tried to do is? We have seen the percentage change. So, you can see that the sales have increased by 1000 and in absolute sense it is 1000 and in percentage term it comes to 13.33 percent.

Production cost there is a increase of 500 which does not tell you much information. But, in percentage term you can understand well. That production cost have not increased significantly, they have increased only by 8.9 percent. So, though the sales have increased by 13 percent. The production cost have increased by only 8 percent, this is a good sign, it shows that company was able to contain the increases in the cost, that has help them to increase the gross profit margin.

This difference is known as gross profit or gross margin, as it sometimes called... So, now you will realize that, there is a good increase in gross profit. And it is mainly because of savings in the cost of production. Now, have a look at selling expenses they have increased by 16 percent, which is because it is almost in tune with sales. There is a increase in operating profit by 46 percent.

Now, why has this increase happened? It is mainly, because though the sales are rising the cost of production is controlled. That has helped them to have a significant increase on the net profit margin I mean not the net profit margin. But, the net operating profit as a percentage over last year, shows a good increase of 46 percent. Interest cost has also increased by 5. But, the profit before tax could be increased by 46 percent. Again this rise is mainly attributable to savings in the cost of production.

We will also try to find it for the remaining. So, you can see that tax remains at a similar percentage. So, there is a 46.09 percent increase in both PBT tax and PAT. So, is it clear to you? Here, we have tried to learn making of a comparative income statement. Now, let us try to make a common size income statement. So, we will go to next sheet, where we are already made a common size statement for the balance sheet.

Now, you know that in common size we take the total. And find each item as a percentage to total. Now, here again we again try to do the same thing, right now I have just copied the comparative income statement.

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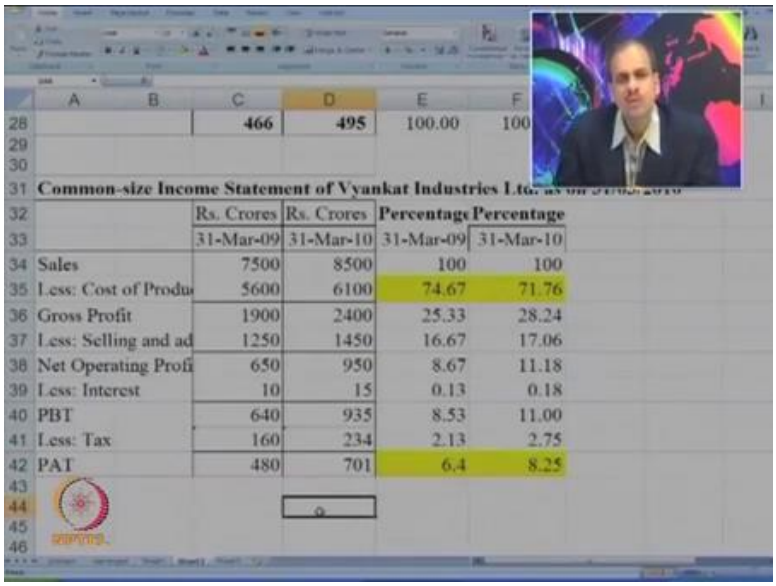

Let us make a common size statement from it. So, how you will proceed for a common size statement? Yes try to remember. So, here there is no ((Refer Time: 33:43)) of comparing between the two figures or two years. Here, we compare with the total. So, we will try to convert all the figures into percentages. Now, in case of income statement, we take the sales as the total amount with which it will be compared.

So, here you have a data, sales is compared with sales. So; obviously, it is 100 percent and then, other figures you get now as a percentage of sales, you will also do it for 2010. So, are you getting? So, from here from the same income statement, you get some other in site. Because, you were able to see the cost of production GP and other information, but now you have a view were.

You know that, how much of the percentage of sales is your cost of production? How much percentage is your gross profit and so on. So, you can see here, that cost of production is your major expense, it consists of about 75 percent in 09. Now, it has slightly come down, still it is 72 percent. So, this is one of the important cost for the company.

Selling cost have remain constant, they are around 16 to 17 percent. Their net profit net operating profit is 8.67. Now, it has slightly increased to 11.18 percentage of sales, PBT remains more or less same from 8 or 9 percent it is now 11 percent. And net profit after

tax was 6.4 percent, it has slightly increased to 8.25 percent. Now, here we have tried to make a common size income statement is it clear to everyone?

Now, let us try to understand. So, two major techniques we have done, first we learnt comparative statement and second we have also learnt common size statement. I hope it is clear to you? Let us try to understand the third technique, which is known as ratio analysis. Now, in both these statements we have tried to relate one item with other. In ratio analysis the same thing, we will do more systematically. So, we will pick up various items from various statements and we will try to find the relationship.

So, ratio is nothing but a relationship between one item with the another item, we are talking of financial ratios. But, ratios are also common and they can be used with comparing one data from financial statement with some other data with some other statement or you can also have a qualitative ratio. So, where we will compare input with output to know the productivity and so on. So, let us try to look at the ratio analysis.

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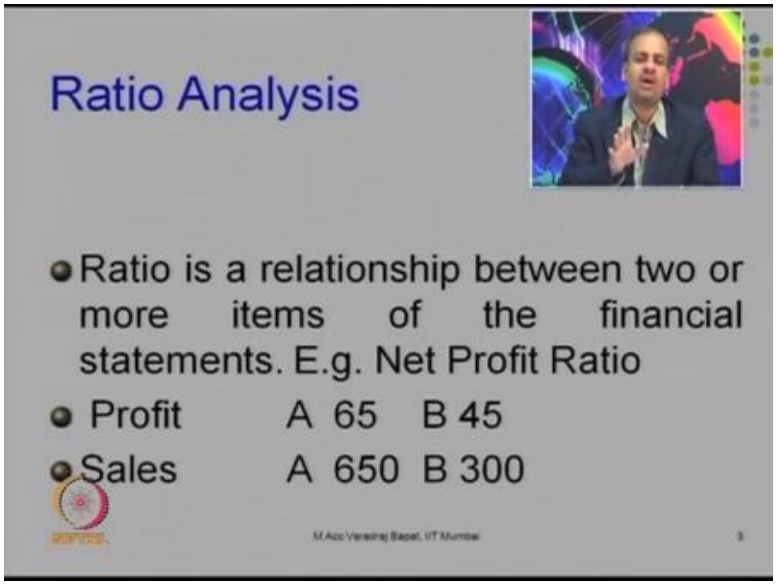

This is one of the most important statements, one of the most important tools in the financial statement analysis. As we have already seen, here we are trying to see the relationship between two or more items. Now, we have seen this in the last comparative statement. But, have a look at it again, now if there are two entities A and B.

A earns a profit of 65, B earns a profit of 45. Now, which one is more profitable, A is more profitable or B is more profitable? You may immediately feel that A is more profitable. Because, in absolute terms A has earnest a profit of 65 verses B's profit of 45. But, if you really try to know profitability or profit earning capacity of the entity, we should compare the profit with sales. And then, only come out with the conclusions.

Now, this sale data is given to you, now what do you feel which is more profitable. So, A has sale of 650 while B has a sale of 300. So, what do you know now? Now, here it can be seen that, if you calculate the ratio of profit upon sales, which is popularly known as net profit ratio. We will come to know that 65 upon 650. That means, the net profit ratio is about 10 percent for entity A. Entity B you can see 45 is earned on a sale of 300.

So, this gives a net profit ratio of about 15 percent. So, in other words B is more profitable than A. If you look at more profit in absolute terms, yes definitely A is better. But, if you look at the profitability, then B is better I hope it is clear. So, this was an example of a ratio. Now, this type of ratios can be calculated for profit and loss, for balance sheet from across one statement to another or from one item of financial statement to with some other quantitative information and so on it is a really interesting area. Now, let us try to look at few ratios and then we will go back to our problem. And try to calculate the ratios for the Venkatesh industries, which we have been already studying.

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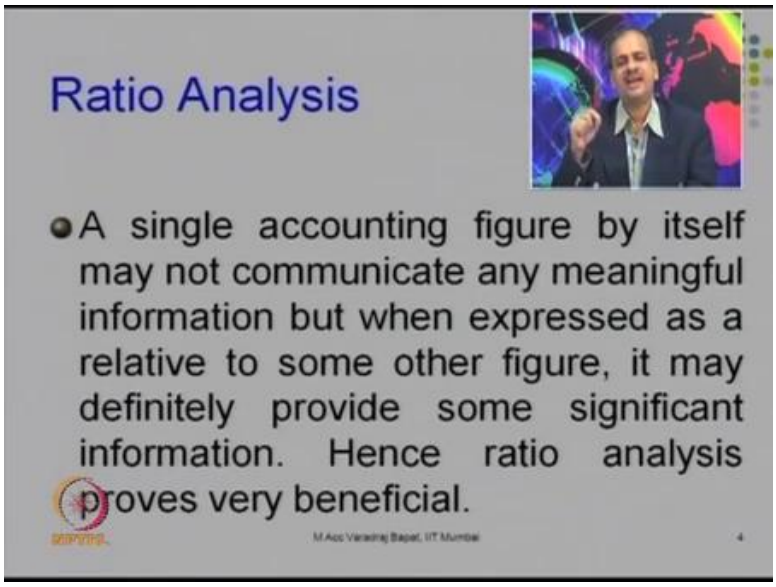

So, what happens is a single statement does not give you that much of an information. If you pick up a single accounting figure from one statement, it really does not tell you what it tries to explain? So, we will have to relate it with some other statement, some other statement or some other item. And that is something which is run or attempted in ratio analysis.

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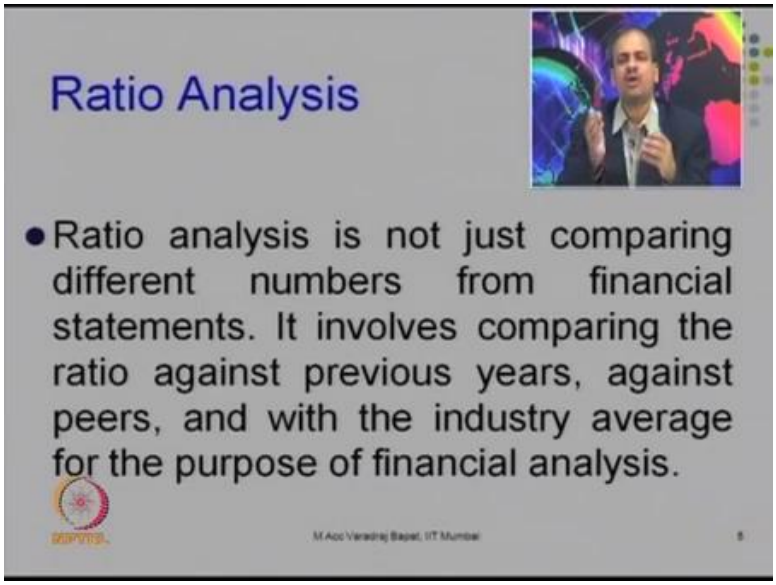

So, here we are not just comparing different numbers from the same statement. As we do in common size comparative statement. So, here we may compare with previous year. So, you calculate the ratio and compare with the ratio of the last year. Or you can calculate the ratio for this company, compare with the ratio of another company, like we have done in A and B. Or you can also calculate the ratio and compare with industry average. This is the way ratio analysis is versatile, it can be used for comparing for the same company, earlier year for one company with another or for one company with the industry.

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So, it helps all the stake holders, it helps owners, managers, investors, lenders, employees and so on. So, you may want to get various types of conclusion. Somebody may be interested in performance of past, present, future. So, you may be interested in calculating ratios like net profit ratio and so on. It also there are also certain ratios, which talk about strength and weaknesses.

And you can take certain decisions about the firm using ratio analysis. That is why ratio analysis is the most popular of all the techniques of financial statements. So, though we have learnt various techniques, whether it is common size, comparative or ratio. All of them should be used together, that gives us a better look of the whole position of the company.

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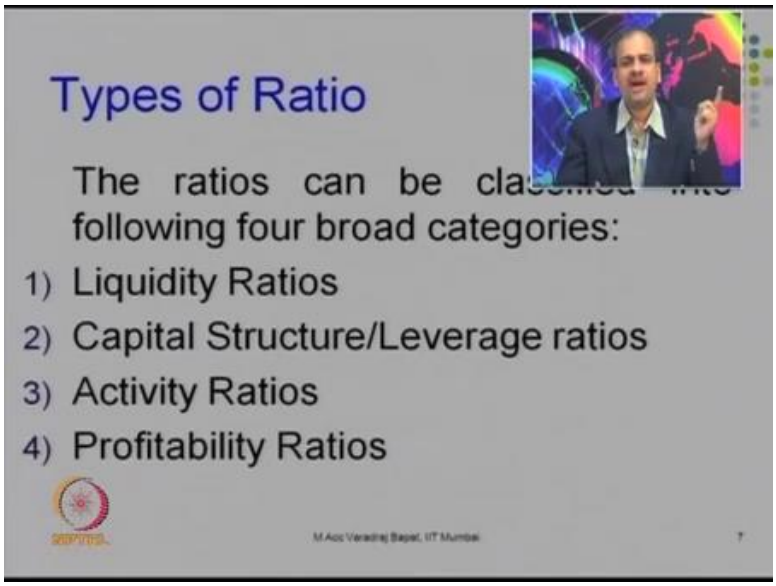

Now, try to study different types of ratios, ratios can be categorized broadly into liquidity, capital structure, activity and profitability. Actually there are hundreds and hundreds of ratios which can be calculated. But, considering that availability of time, will try to calculate understand a few ratios. Then, you can try and make more and more ratios as per your need. Let us first look at the liquidity ratios. And then, we will go back to the problem and try to apply them on the industry or the company, which we are studying.

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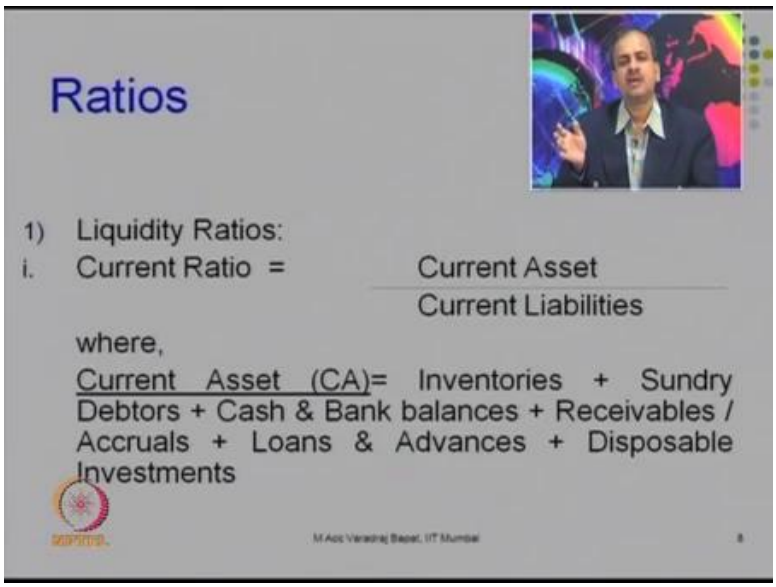

So, first example of liquidity ratio is current ratio. This is a very simple ratio, which links current assets to current liabilities, you all know what is a current asset. So, in this examples are given, that it includes inventories, sundry debtors, cash balances, loans, disposable income an so investment and so on. These are those assets, which can be liquidated in maximum one year.

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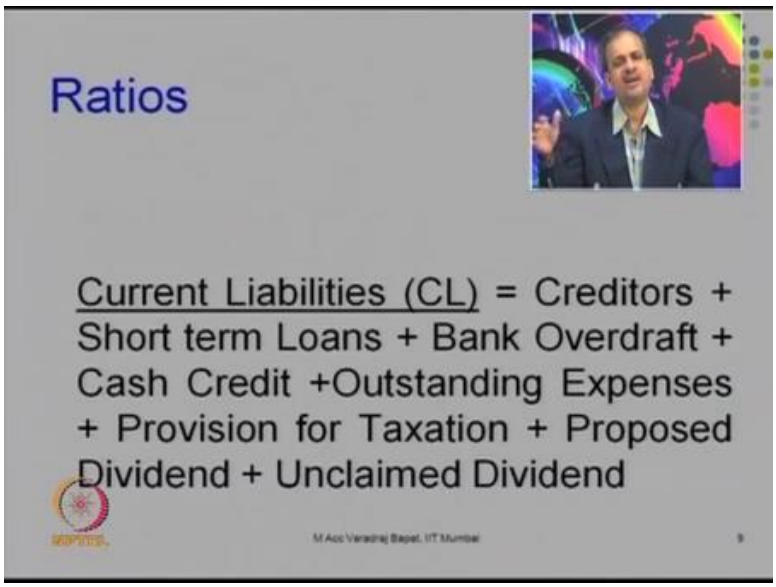

You also know what are the current liabilities? These are the items like creditors, outstanding expenses, provisions they are required to be paid within a short time. Say 3 months, 4 months, 5 months and not more than 1 year. So, in current ratio ((Refer Time: 44:06)) we tried to link current assets and current liabilities. So, what will the ratio tell can you imagine now, what is it you will know from the ratio? So, what we can find is how many times are the current assets lies upon current liabilities. Because, for a stable business in order that it can meet it is liabilities, it is very important that it has sufficient current assets. And this sufficiency is shown by current ratio.

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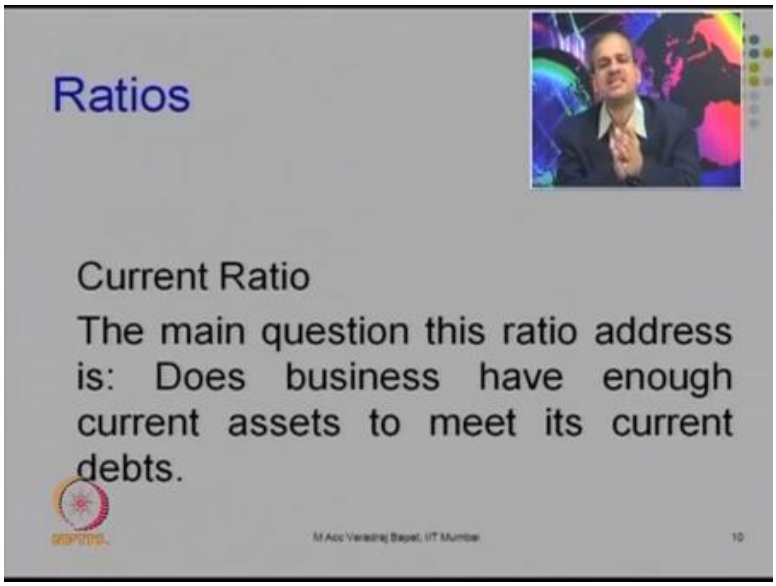

So, the main question that does the business have enough currents assets to which current debt is answered by current ratio.

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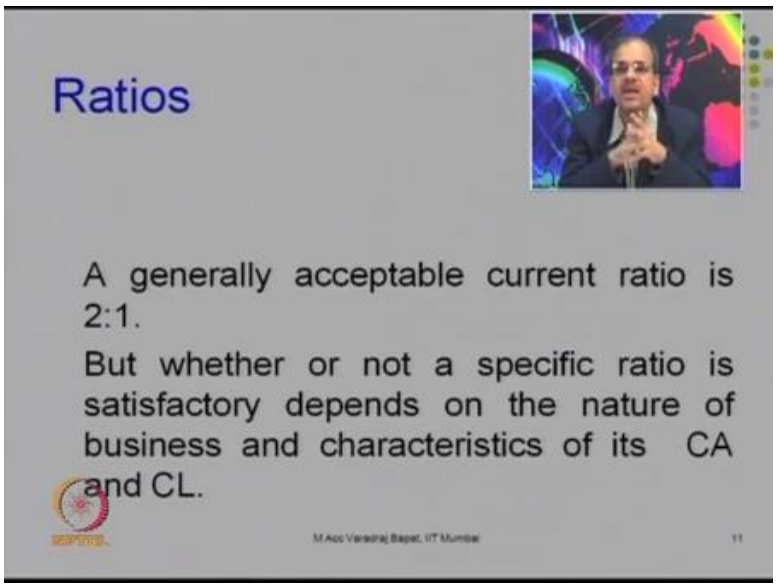

Usually 2 is to 1 is considered as a acceptable current ratio. But, do not take it as a fixed ratio are of standard 2 is to 1. It significantly varies with the nature of business and also the nature of current assets and liabilities, which you have. For example, let us say there is a manufacturing company, there is another IT company. Now, which company will have more current ratio, can you guess?

I think you are guessing it right, manufacturing company will have significantly high current ratio. Because, a manufacturing entity required maintain various types of stocks, like raw material, working progress, finish goods, it also have to deliver goods to customer and after some months it gets money. So, it also has significant amount of receivables. All these are high amount of current assets, which make it essential to have a high current ratio, whereas an IT industry there is no need of stocks. What they may have is only debtors or receivables. That is why usually their current ratio will be low. So, the standard of 2 is to 1 need not be applied blindly. For each industry to look at the standard and then apply. What happens is sometime the quality of current assets is also important. Suppose, your company has current assets, which cannot be liquidated very easily, they consists of let us say high extent of advances, it may make sense to have a higher current ratio in this case.

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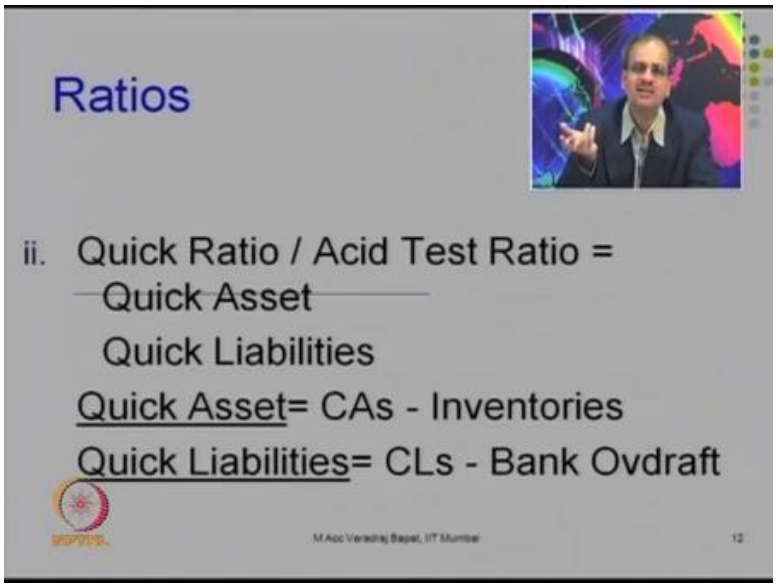

There is also another ratio known as quick ratio or acid test ratio, it is quick assets divided by quick liabilities. Now, what is a quick asset? So, quick assets are those current assets, which can be easily converted into cash. So, you can see the definition which is given here. Usually current assets minus inventory is defined as a quick asset. But, you have to look at the list of assets, which are given to you.

If there are some items which cannot be readily converted into cash, those have to be removed. So, for example, you may want to remove advances, because they cannot be

readily converted into cash, same way quick liabilities. So, those liabilities which need not be paid immediately will be removed reduced from current liabilities. The remaining current liabilities are quick liabilities. So, here I have given it as current liabilities minus bank overdraft. Generally bank overdraft is sanctioned for a period of say one year. So, that need not be taken as quick, other current liabilities are taken as quick. So, these were the two important liquidity ratios.

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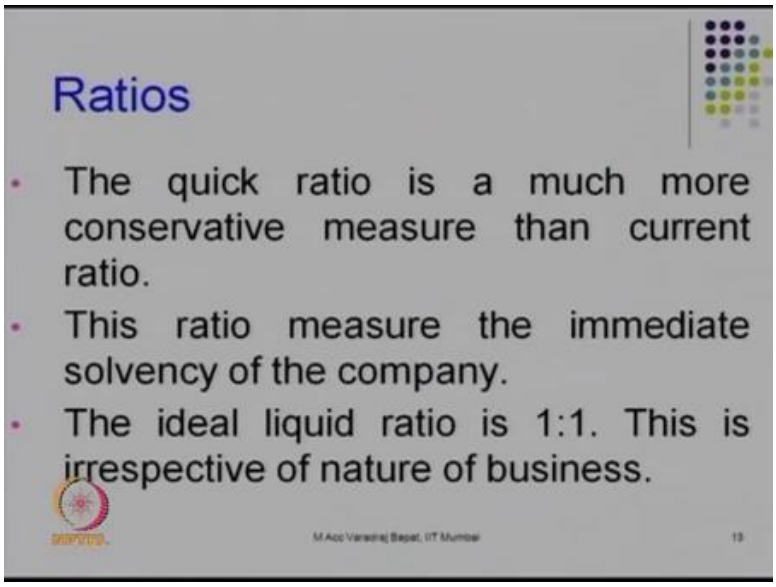

So, quick ratio is more conservative tool than current ratio, because this measures the immediate solvency of the company. Current ratio was more broader in nature, you can compare the two ratios ((Refer Time: 48:18)) you will realize that, in current ratio we were comparing current asset versus current liabilities, in quick ratio ((Refer Time: 48:24)) we are comparing quick assets versus quick liabilities.

So, quick assets are those specific assets which can be readily converted. And then, we are comparing with those liabilities, which have to be immediately paid. So, if you want to know the immediate liquidity, quick ratio will be a better tool. If you want to know over all liquidity, current ratio could be a better tool. Looking coming to the idle current ratio, generally a ratio of 1 is to 1 is considered better.

Now, it measures as we have seen immediate liquidity. That is why, it has a shorter or a smaller ratio is enough. Instead of 2 is to 1 is here current ratio of 1 is to 1. Usually the nature of business does not matter, so much. Because, whether it is manufacturing or IT

company, let us say the difference of one having stock, another not having stock does not matter, because in liquid ratio we are not going to consider stock in any case. That is why ratio of 1 is to 1 considered to be a reasonably a good ratio. So now, we have seen two liquidity ratios, now let us go ahead and look at some other ratios.

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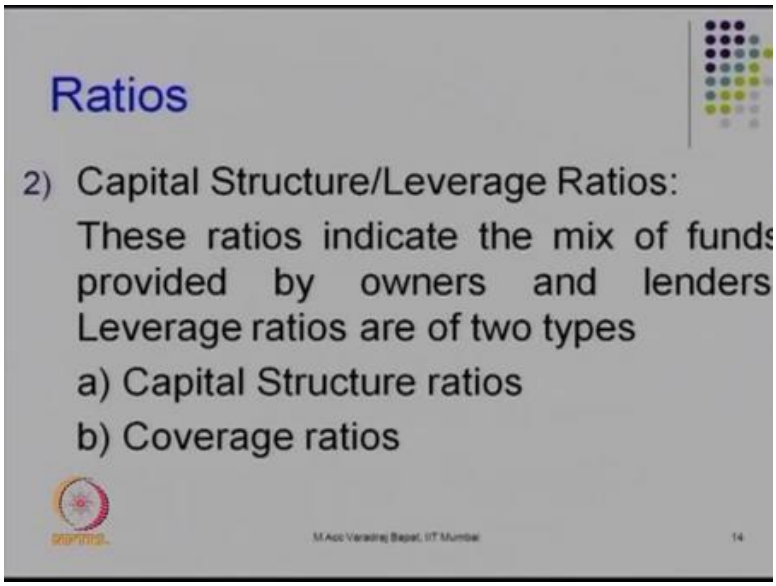

The other type of ratios the second type are known as capital structure or leverage ratios. They indicate, how is the financing of the business maid? So, if in financing a larger portion is provided by the owners. Then, the owners fund will be more as compared to outsiders fund or borrowers funds. So, in capital structure ratios, we tried to relate owners fund with the borrowed funds.

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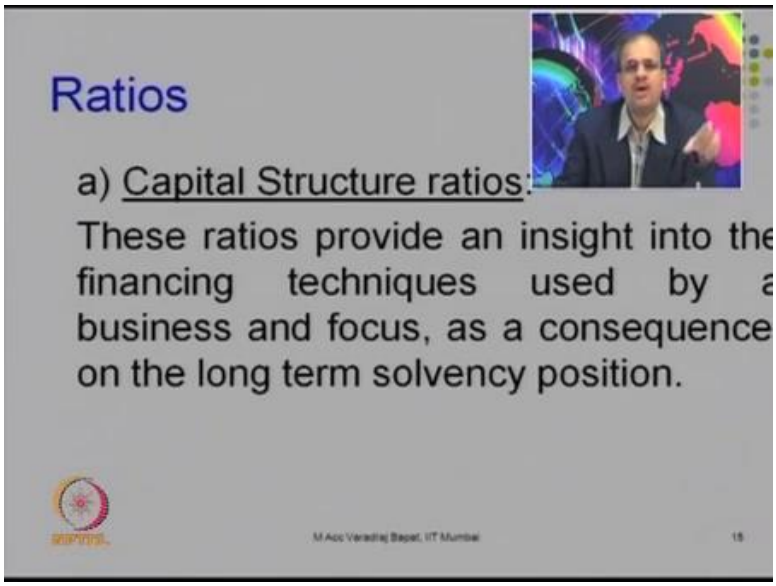

There are two major ratios, one are capital structure the other are coverage ratios. In capital structure we focus on how is the financing done?

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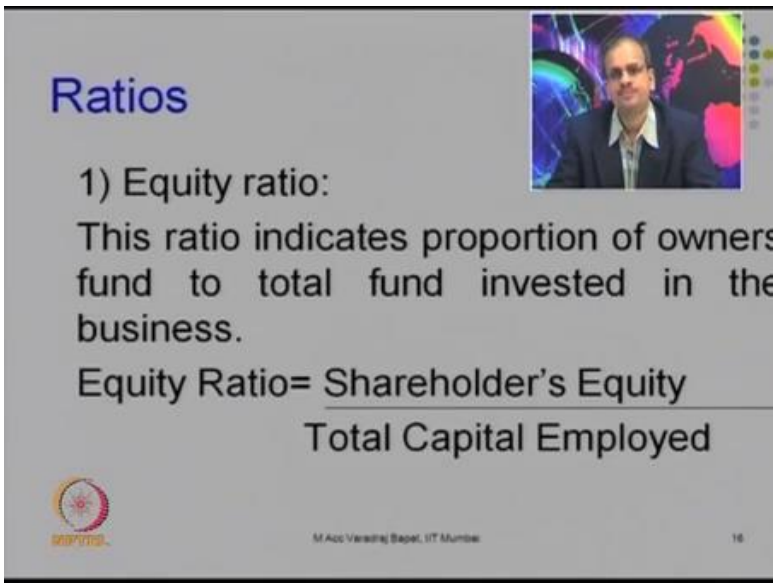

So, you can see the ratio here, one of the popular ratio is known as equity ratio, which compares the share holders equity with the total capital employed.

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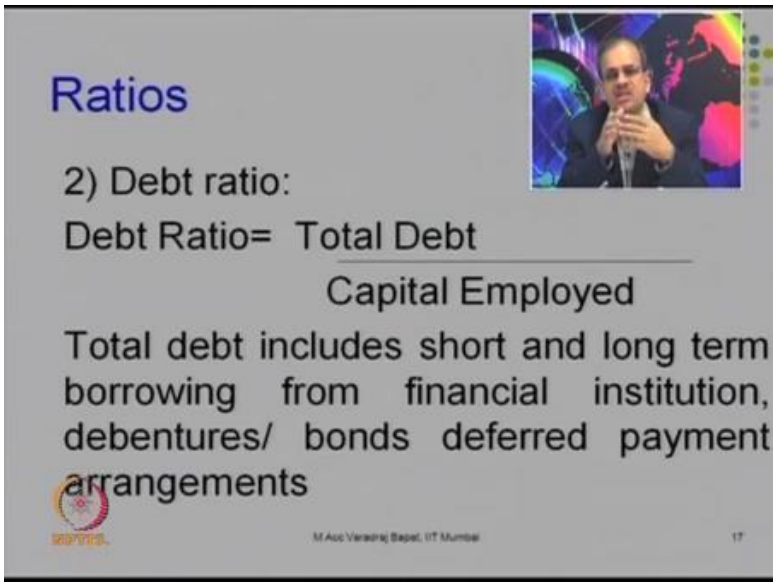

There is also another ratio, which is known as net ratio, where we compare the total debt with the capital employed. Sometimes, we also have a ratio you can have a look at it. So, in here we compare take the total debt, both short term and long term. It also includes debt in the form of debentures, bonds and so on and it is compared with the capital employed.

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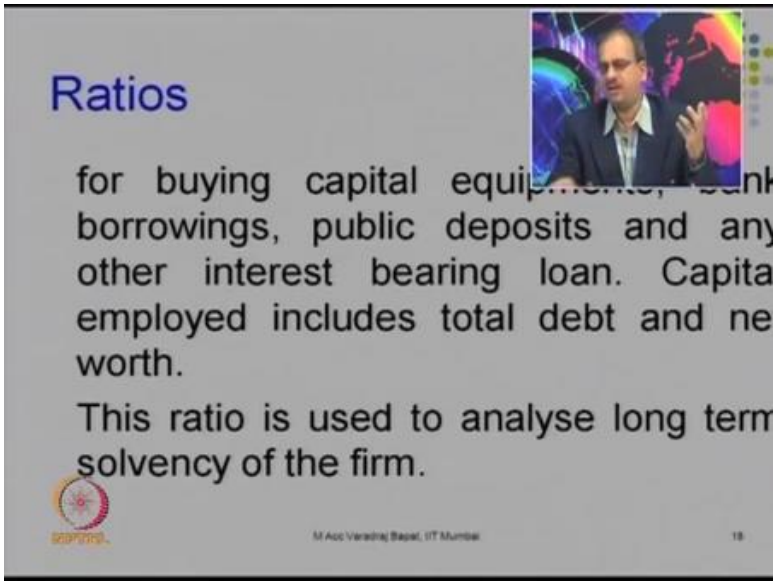

So, this tells us what is the long term solvency of the business? Now, is it better to have a higher ratio, let us say this is a debt ratio ((Refer Time: 51:22)) is it good to have a

higher debt ratio or a lower debt ratio. What happens is, if your debt ratio high, it means that more of your assets financed by outsiders borrowed money. So, it somewhat questions or somewhat affects the stability of the entity. That is why two high debt ratio may not be good.

But, if you do not have any debt, it hampers the growth of business, it may also hamper profitability. That is why you should have a decent level of debt ratio, neither too high nor too low. Again the decent level varies from industry, for a manufacturing company a higher debt ratio may be acceptable. For a IT company, because their business itself is volatile. Higher debt ratio may not be recommended, they also do not need very high amount of capital.

So, they did not reshot to debt funds. That is why, there are standard ratios for equity and debt, they may again vary from industry to industry. There are some more ratios like debt equity and some more coverage ratios. That we will see in the next session. And in the next session we will also try to actually apply them in the real life case. So, in today's session, we have understood horizontal analysis, which is generally done with a comparative statement. Vertical analysis which is done with common size statement. And now we are discussing the concept of ratio analysis. Let us stop here, we will meet in the next session.

Thank you.