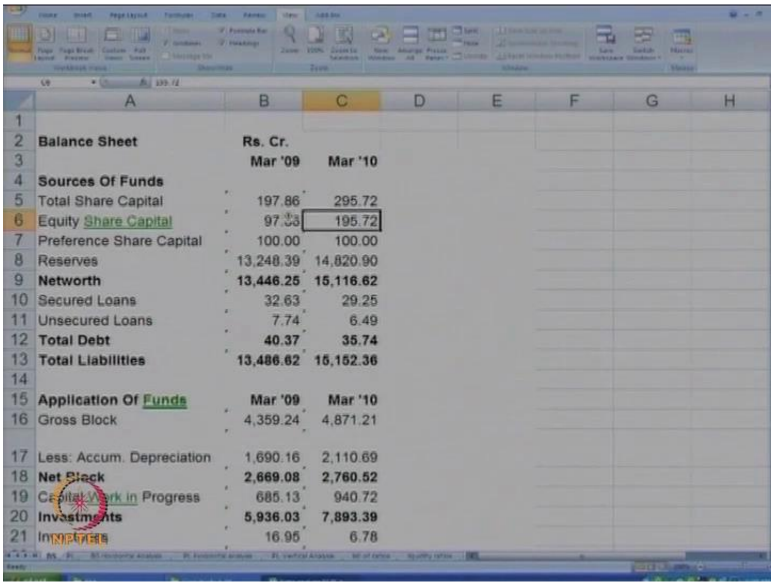
Managerial Accounting
Prof. Dr Varadraj Bapat
School of Management
Indian Institute of Technology Bombay

Lecture - 16
Comparative Common-size and Ratio Analysis

Dear students in last 2 sessions, we have been discussing about ratio analysis; we have already discussed horizontal and vertical analysis, were in we prepare a common size statement or a comparative statement. And then we go for more detail analysis in the form of ratio analysis today, we are going to take 1 more case because, as more and more cases we solve we also get inside into how to interpret this ratios ok. So, let us immediately start with the case today, I hope now you remember the formulas because, the ratio is relationship between the 2 items.

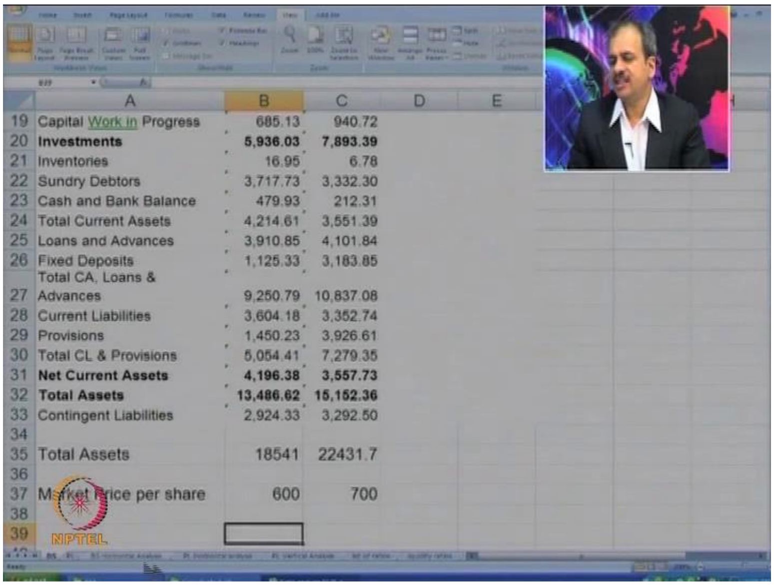
So I will request you to go through the formulas again and again, so that you know that the linkages and you know that which item should be related to which item giving us required relationship and required a interpretation from the same ok.

(Refer Slide Time: 01:18)



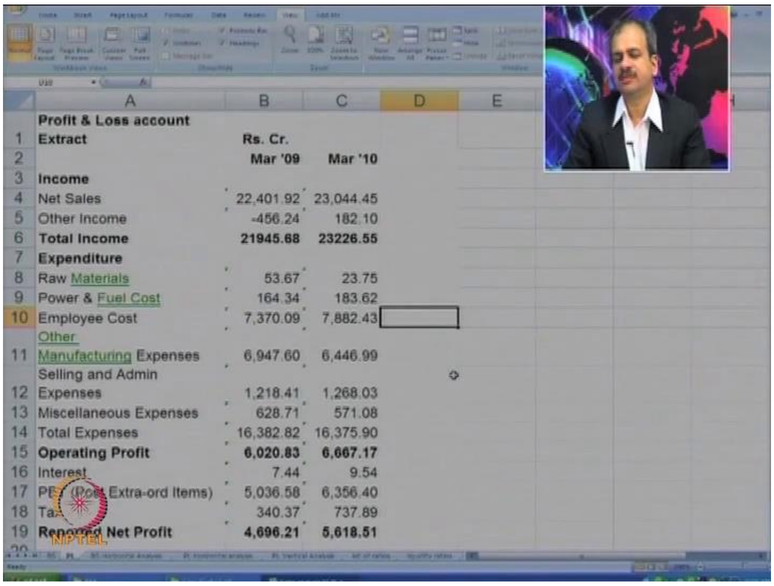
So, here is a balance sheet please observe the balance sheet you will find that equity capital has more or less doubled from 97 to 195, there is also preference capital of 100 which is remained constant.

(Refer Slide Time: 01:57)



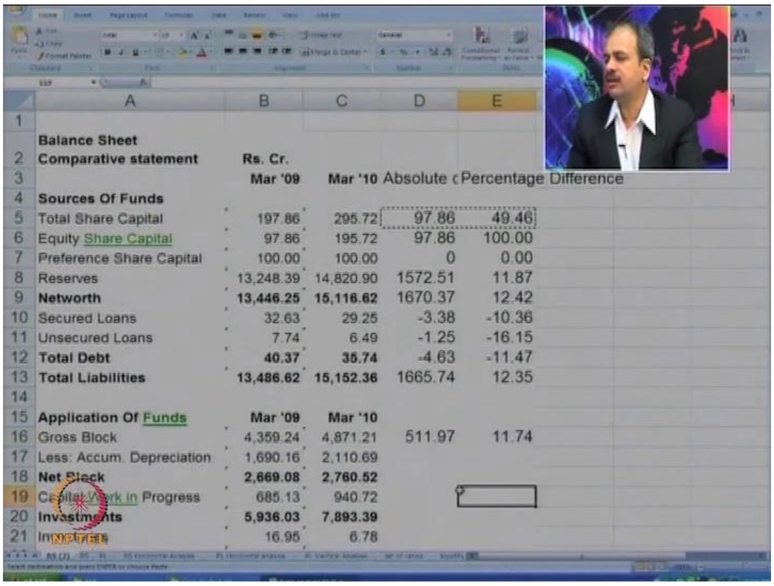
Then a reserves have increased, but they have increased marginally if you go down you will realize that total debt is pretty low gross block as slightly gone up, then there is net block followed by investments inventories and so on.

(Refer Slide Time: 02:00)



Observe the balance sheet carefully, in the next sheet we also provided profit and loss account, which also you can take a look now, using both these we will have to first go in for common size comparative. And next we will also try to make the ratios. Now this is the given balance sheet please; let me know, how to analysis it what is the first step since we have done last 2 3 times. I think you will easily understand what is to be done yeah. So, how to go ahead for balance sheet what we do is we for horizontal analysis try to compare the balance sheet of 2 years and make a comparative balance sheet.

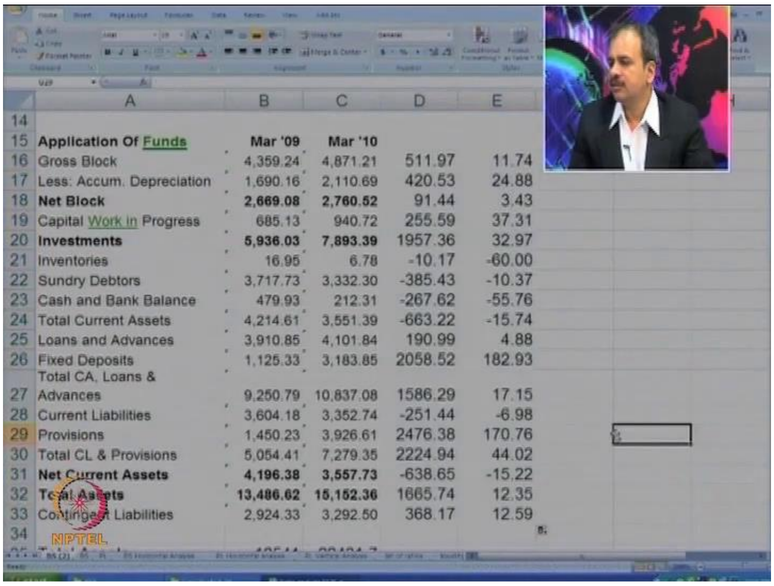
(Refer Slide Time: 03:00)



So, will start with that now, you tell me how to go ahead what should be done in a comparative balance sheet, I hope it is now pretty clear now to you. We compare this year’s figure last year’s figure to get the absolute difference as I told last time I am going pretty slow, I expect you also to solve with along with absolute difference. We will also try to find percentage difference or percentage change. So, we a increase of 97 on the base of 197 into 100, so that we get in percentage terms, I will to reduce the decimal points.

So, you can see it is difference of 970000000, which turns out to be 49 percent increase in the total share capital. Now, I can drag down this figures, so overall you will see that all the changes attributable only to equity share capital, which is increased by 100 percent were as a increase in the reserves is comparatively marginal. It is only 11 percent so on. The whole net worth has increased by 12 percent in case of loans, there are no increasers in fact there is a decrease in the loans. Now, let us go to application of funds.

(Refer Slide Time: 04:54)

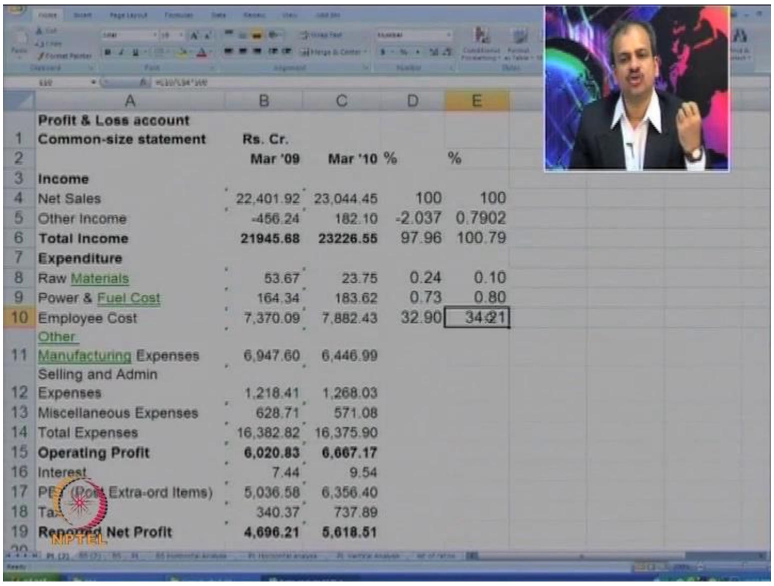


	A	B	C	D	E
14					
15	**Application Of Funds**	**Mar '09**	**Mar '10**		
16	Gross Block	4,359.24	4,871.21	511.97	11.74
17	Less: Accum. Depreciation	1,690.16	2,110.69	420.53	24.88
18	**Net Block**	**2,669.08**	**2,760.52**	91.44	3.43
19	Capital Work in Progress	685.13	940.72	255.59	37.31
20	**Investments**	**5,936.03**	**7,893.39**	1957.36	32.97
21	Inventories	16.95	6.78	-10.17	-60.00
22	Sundry Debtors	3,717.73	3,332.30	-385.43	-10.37
23	Cash and Bank Balance	479.93	212.31	-267.62	-55.76
24	Total Current Assets	4,214.61	3,551.39	-663.22	-15.74
25	Loans and Advances	3,910.85	4,101.84	190.99	4.88
26	Fixed Deposits	1,125.33	3,183.85	2058.52	182.93
27	Total CA, Loans & Advances	9,250.79	10,837.08	1586.29	17.15
28	Current Liabilities	3,604.18	3,352.74	-251.44	-6.98
29	Provisions	1,450.23	3,926.61	2476.38	170.76
30	Total CL & Provisions	5,054.41	7,279.35	2224.94	44.02
31	**Net Current Assets**	**4,196.38**	**3,557.73**	-638.65	-15.22
32	**Total Assets**	**13,486.62**	**15,152.36**	1665.74	12.35
33	Contingent Liabilities	2,924.33	3,292.50	368.17	12.59
34					

So, first item is gross block you will find that the amount of gross block has not increased much it has increased only by eleven percent, I will try to drag down the figures you can see that there is a increase in the depreciation to significant component capital working progress increased by 37 percent which is a good sign that shows that company is on a growth path. All other items you do not see much changes however, the provisions you can see has increased by 170 percent, which is again a major increase.

So, this is the overall position can you guess which sector this is or which company this is just try to guess it, now this was the comparative statement. Now, we have also been we can also calculate a common size statement, but I would not repeat it we have done it many times. Let us go to p n l account observe the profit and loss account carefully these are the figures in the p n l I will make a copy of this, so that we can go for solving it.

(Refer Slide Time: 06:00)

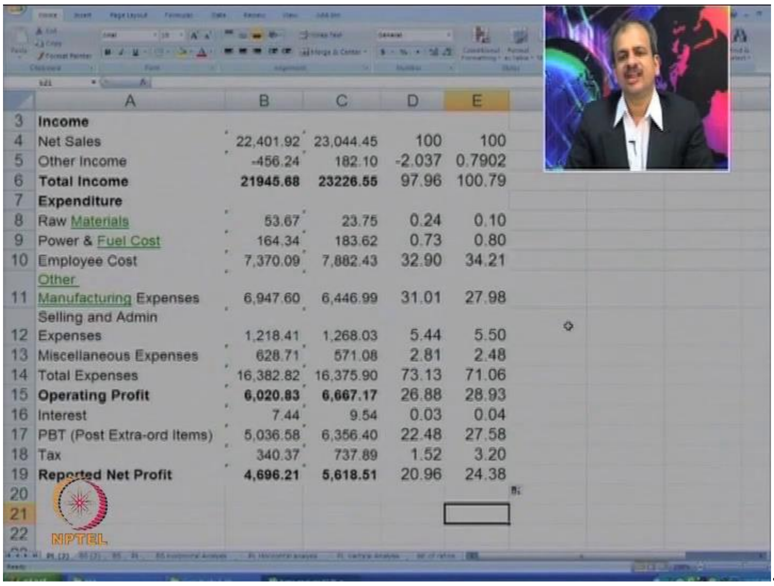


Now p n l account, we can again do both the analysis we can do common size we can also do comparative. Since, we have done just now comparative for balance sheet p n l account. Let us do p n l account common size statement how is common size statement done do you remember what is done in calculating the common size statement yeah you are right, we will try to the total as 100.

So in this case we will take the total sales as 100 and all other figures, we will try to calculate as the percentage to the total. So, titles I will just say percentage and try to linked item to this total. So, currently it is b 4 upon b dollar 4, so any way I will get 1 I will multiply by 100. So, that I get in percentage terms if you drag down you realize that now you are able to make I will just reduce the size. So, what do you observe now if you try to do in this fashion, you will realize that each item how important it is as a percentage to total sales as we are trying to calculate.

So employ cost is a significant cost it is 32 percent it has further increase to 34 percent were as items like: raw materials and power hardly matter there negligible as percentage to the total.

(Refer Slide Time: 08:10)



	A	B	C	D	E
3	**Income**				
4	Net Sales	22,401.92	23,044.45	100	100
5	Other Income	-456.24	182.10	-2.037	0.7902
6	**Total Income**	**21945.68**	**23226.55**	97.96	100.79
7	**Expenditure**				
8	Raw Materials	53.67	23.75	0.24	0.10
9	Power & Fuel Cost	164.34	183.62	0.73	0.80
10	Employee Cost	7,370.09	7,882.43	32.90	34.21
11	Other Manufacturing Expenses	6,947.60	6,446.99	31.01	27.98
12	Selling and Admin Expenses	1,218.41	1,268.03	5.44	5.50
13	Miscellaneous Expenses	628.71	571.08	2.81	2.48
14	Total Expenses	16,382.82	16,375.90	73.13	71.06
15	**Operating Profit**	**6,020.83**	**6,667.17**	26.88	28.93
16	Interest	7.44	9.54	0.03	0.04
17	PBT (Post Extra-ord Items)	5,036.58	6,356.40	22.48	27.58
18	Tax	340.37	737.89	1.52	3.20
19	**Reported Net Profit**	**4,696.21**	**5,618.51**	20.96	24.38

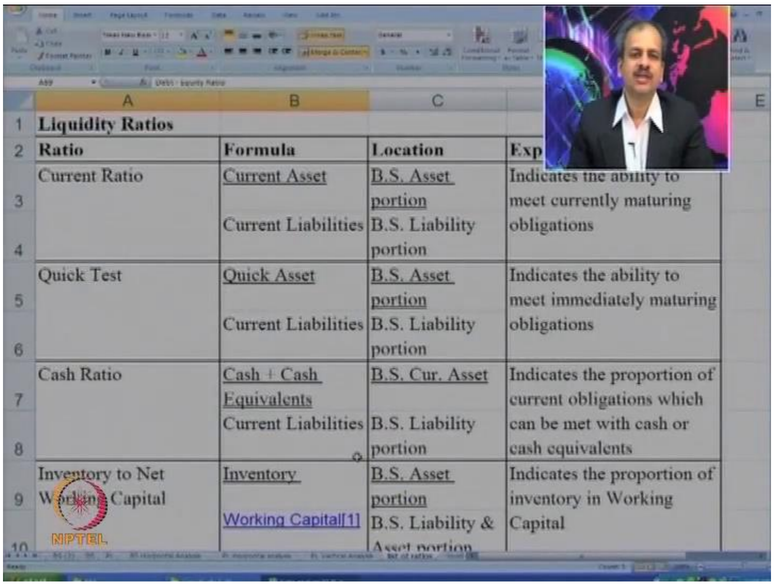
.

So, I have dragged it down till the end, so what do you observe. Now, you will see that there are 2 major costs 1 is a employ cost the other is manufacturing expenses selling and admin expenses have remain constant at above 5 percent manufacturing expenses have gone down. And profit after tax has increased by 24 percent this is attributable increase in the operating profit, which is also increased by above 3 to 4 percent. Now, observing this you can what you got from a common size statement are figures in the percentage terms, which are comparable across which from this company compare with other company or you can compare with the industry average.

That is the advantage having relative figures actually, get in the common size statement now can you guess which will be then sector, in which the company operates I think you are guessing it right. This cannot be a production oriented or manufacturing company as raw material cost is almost 0, it has to be an consulting or a IT company, because significant amount of employ cost, you can see here there are some manufacturing cost, but they are not manufacturing in to sense even the cost of pre making a software are treated as manufacturing cost because, they are for establishment offices excreta.

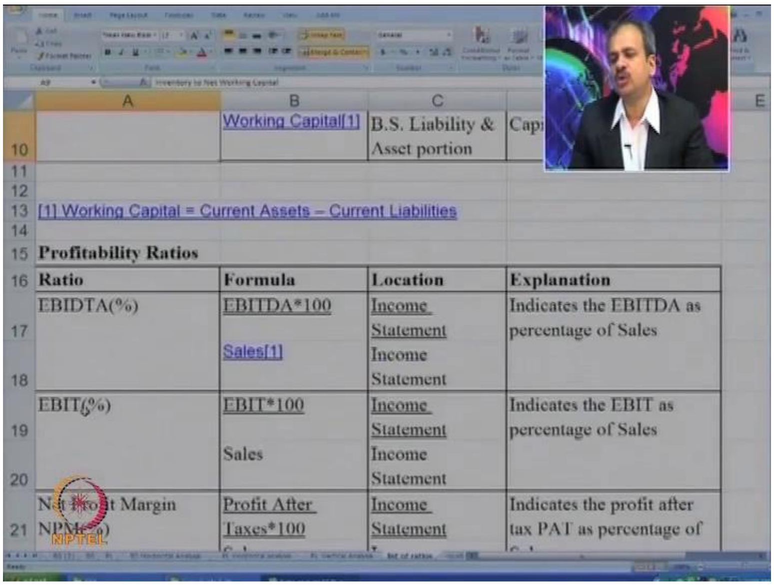
But, there is no raw material so employ cost form about 32 percent and another 30 percent are manufacturing cost. These are the main cost the selling cost are only 5 percent, so this the overall structure of p n l account.

(Refer Slide Time: 10:10)



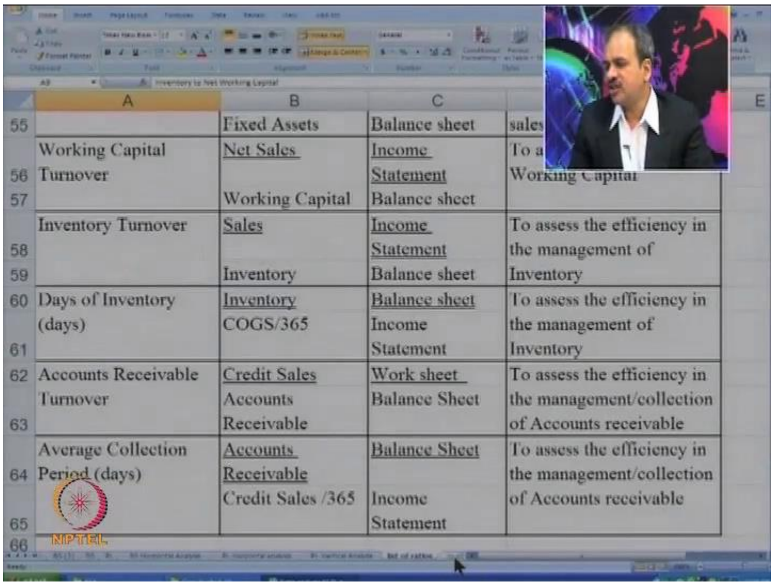
Now, let us go to various ratios. here again I have tried to show the important ratios which already, we have learnt, but for your revision so under liquidity category we have got current ratio quick ratio cash ratio inventory to net working capital ratio.

(Refer Slide Time: 10:20)

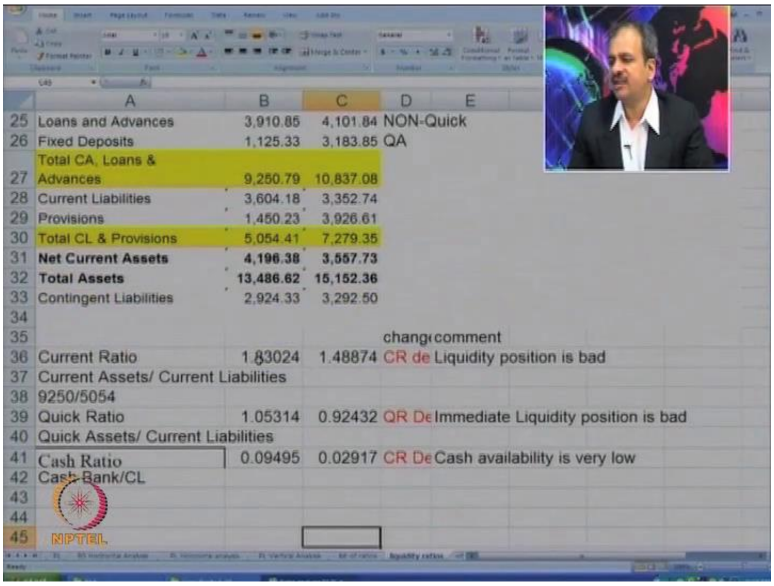


Then there are profitability ratios and so on. Now, let us try to actually calculate each of the ratios here the balance sheet is a copied again just for clarity and.

(Refer Slide Time: 10:26)



(Refer Slide Time: 10:36)



Now, we will try to go for calculation of each of the ratios it has already been done, but we will do it again. So, you have current ratio as the first important ratio about liquidity the formula is also known to you it is current assets upon current liabilities. Now, go up this is the balance sheet you have now, which item would like to link to which item as you know this the total current assets loans and advances is the figure which is important 9250, which is divided by the total current liabilities.

Hence our current ratio is 9250 upon 5054. So, 1.84 and if you dragged it to the next year it becomes 1.49. So, what we can see is there is a decrease in the current ratio that is the comment it is not a very good sign that is why it is shown in the red. So, we can also see what is the comment so what will you infer from this what does it show it is apparent that liquidity position slightly gone down ok. Now let us go to the next ratio that is quick ratio. So, what does the quick ratio calculate it tries to focus on immediate liquidity. So, whether company can pay its debt immediately.

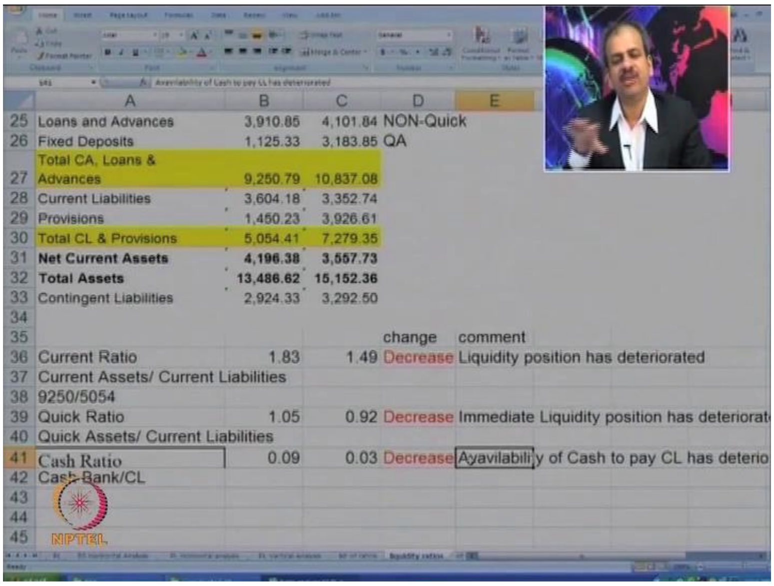
So, the formula is quick assets upon quick liabilities, in this case all current liabilities are quick. So, you can say it is quick assets upon current liabilities. Now, you have to identify from amongst the current assets, which are the quick assets. So, this is the list of quick assets, I have tried to identify we can have a look at it again. So, inventory is non-quick asset because, it cannot be sold that immediately debtors could be treated as a quick asset cash and bank again could be treated as quick asset loans and advances are non-quick fixed deposits are we because, probably they can be a converted into cash very easily thus we have got this 3 assets are quick assets.

So, we will try to take the total of these 3 assets divided by all the current liabilities. So, 1.05 and in the current year the ratio has gone down to 0.92 again, we can say that there is a decrease in the ratio. So, immediate liquidity position as deteriorated though we are making a comment that immediate liquidity as slightly gone down, we exactly do not know whether it is sufficient or otherwise for that we need to know industry trends because, it will change from industry to industry, but definitely there is a slight fall in the liquidity that much we can comment.

The next ratio which, we will try to calculate here is cash ratio this ratio tries to see what is the availability of cash balance for payment of current liabilities; so the ratio is cash balance cash and bank balance is divided by current liabilities. So, we have got cash and bank balance here, we will divided by the total of c l plus provisions so you can see that the ratio has again decreased significantly it was 0.09. Now, it has become 0.03. So, there is g-decrease what decrease shows is that availability of cash has fallen.

So, I will try to make a comment that availability of cash to pay current liabilities as slightly deteriorated as I said we cannot immediately say it is to good or too bad.

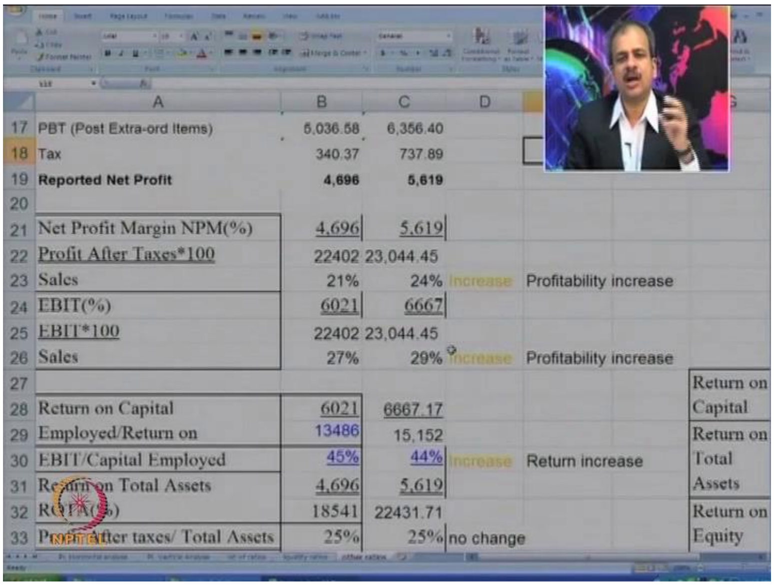
(Refer Slide Time: 15:16)



But, overall the liquidity position slightly in it is not so easy right. Now, for the company to pay its debt now let us go for calculating this was a liquidity ratios. Let us go for calculating for other ratios first we will try to go in for profitability ratios. So, I have copied the p n l account in the ratios are calculated, but we will try to calculate them again. So, the first important ratio is net profit margin or net profit ratio which tries to link the profit after tax to sales. Now, we know that profit after tax is nothing but this reported net profit divided by the value of sales into 100.

So, more clarity again this figures are repeated here, so you can see actually it is 96 4692 divided by 22402, which is the figure of sales. So, the answer is 4692 divided by 220402. So, 21 percent are you getting same thing will try to drag to next year. So, next year we get 24 percent so on. The whole there is a increase in the profitability there is a good amount of change positive change for the company. Now, if you go to next ratio which tries to calculate the percentage of ebit. So, we can see there is a figure of operating profit that is nothing but ebit divided by again by sales turn over. So, 27 percent was the figure in the first year.

(Refer Slide Time: 17:35)



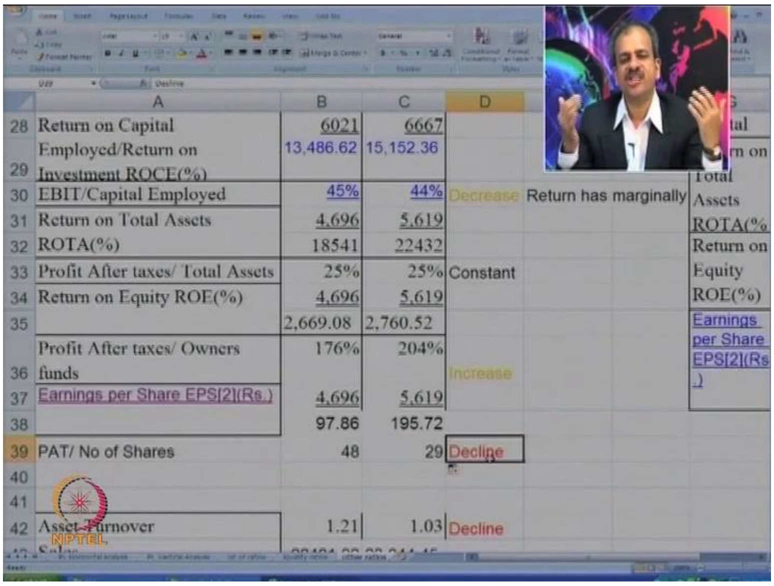
now it has gone down to 24 percent I am just trying to reduce them decimals. So, that is more clear to you, so I hope you are getting so 6021 is a profit on a sale of 22000 that shows that companies overall profitability position has been improved by 2 percent which is sales. Now, we try to look at profitability from the angle of return, so the first formula is return on capital employed which is also known as return in investment popularly known as ROCE the answers are already calculated. So, I will just cut them.

So, now you know the formula ROCE is nothing but ebit divided by capital employ. So, look at the ebit figure ebit we have just now calculated we have just now taken 6021 and for capital employed we need to go to balance sheet. So, if you go to balance sheet you will realize that this total liability is nothing but a capital employed. So, 6021 divided by 13486, which is the total funds employ next year I try to drag the answer is 45 percent and 46 percent. So, in the current year you can see there is a slight decrease in the return we will try to reach it the figures.

So, that is more clear to you can see that there is a increase in the total liabilities, but there is not proportionate increase, in the profit that is why the profits have slightly gone down. So, there is decrease so the return has marginally gone down, so who is interested in this return ROCE, which are the group of stake holders those who are long term investors or those who want to acquire the company they will be more interested in

ROCE and also at ROTE. So, return on total assets this is the total profit after tax divided by total assets you know the figure of PATE.

(Refer Slide Time: 20:40)



Total assets again, we have to take from balance sheet. So, balance sheet we have got the figure of total assets will try to that figure. So, PAT upon total assets 121 percent same figures will try to calculate this side is the current year you can see there is a decrease because, the profit has not increased much however overall profit after tax remains at 4000 think there is some mistake in linking it I will try to link it to sales yeah. Now, it is more appropriate so you can see that the profit after tax has increased from 4600 to 5600. And assets have also increased more or less in the same proportion. So, the profit has remained almost constant.

So, those who are looking earning potential of the assets for them, we will realize that the amount has more or less remains the constant. Now, let us go to the next ratio which is return on equity as the name suggest this is the view point from the owners. So, here we try to calculate the profit after tax as a percentage of owners funds. So, profit after tax is you it is 4696 and for owners fund we have to go to balance sheet. So, the balance sheet figure of net worth is nothing but the amount of the owners fund. So, 176 percent is the amount and now it has significantly increased it has become 204 percent.

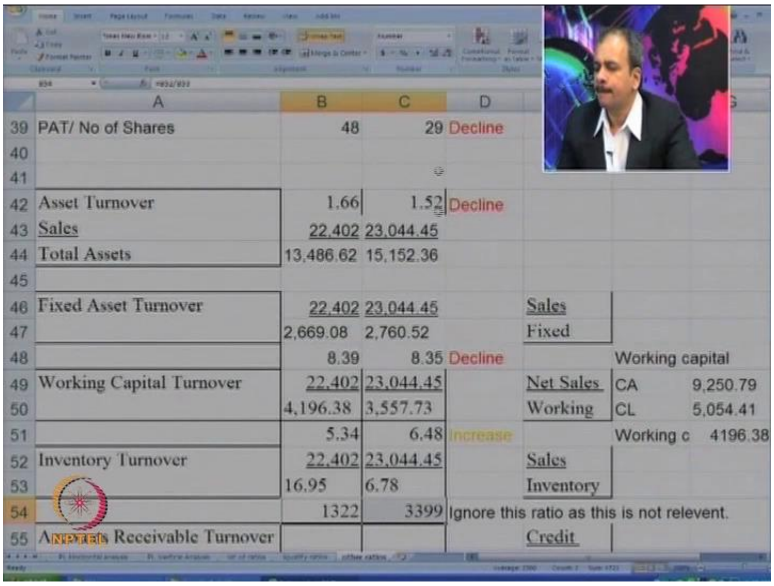
So, there is a positive change for the company that the profit has gone up as far as the owners are concerned. So, which is owners fund the profit has increased the next is earning per share you know the formula it is profit after tax divided by number of shares. So, again we will link it to profit for number of shares we have to go to balance sheet in the balance sheet we are aware that whatever, the equity share capital shown will represented by number of shares. If the phase value is 1 if the phase value is 10, it will be 110, but it will be in that proportion. So, 48 is the EPS and current EPS as significantly gone down to 29.

So, there is a decline now, why is this decline happen profit has not gone down in fact profit has increased, but if you see the share capital has doubled since, the share capital has doubled the earning per share is fallen. Now, let us go to ratios regarding utilization of assets I will try to cancel the existing figures. So, that we can re do it, so you know these are called as turnover ratios the first important ratio is total asset turnover ratio which tries to link the total assets verses total sales. So, total sales you can you know here and the total assets you have to get from balance sheet. So, balance sheet total assets and this ratio tries to relate assets verses sales.

So, it has gone down from 1.66 to 1.52, so to what is this decline attributed you can see the amount of assets has increased to that tune their sales have not increased, but it could be a good sign because in future company may make more sales since, they are on expansion mode on the whole you can see there is a slight decrease if you want to more in detail know the use of fix assets we try to calculate fix assets turnover ratio. Now, what is the formula for the same fix assets turnover ratio try to guess?

So, it is the linkage of sales verses fix assets, so sales upon fix assets. So, sales is this figure for fix assets again we may have to go to balance sheet in the balance sheet, we have 2 figures we have gross block and net block generally, we take net block which is current value of fix assets. So, sales is this divided by the fix assets were in we take net block so the ratio is sales upon fix assets. So, you can see there is a marginal decline from 8.39 to 8.35. So, it shows that the utilization of fix assets as slightly gone down. But, the difference is not too high to comment negatively the next ratio which is again on a activity is working capital turnover ratio which tries to see how effectively company is utilizing, it is working capital. So, what is the formula?

(Refer Slide Time: 27:00)

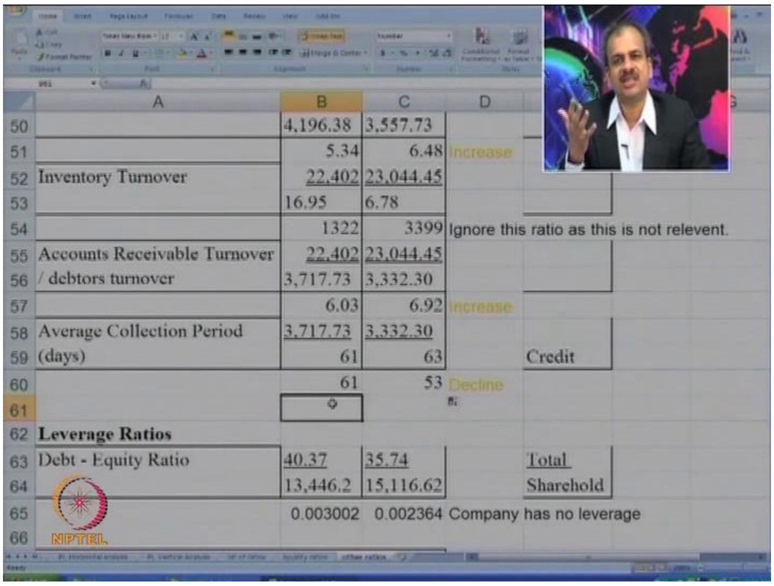


Now, here we try to find net sales verse working capital net sales is the figure, which anyway we know working capital we will get from the balance sheet. So, will go to balance sheet balance sheet you can see we have numbers of items. So, which 1 we should pick up they have clearly given net current assets that is the amount of net working capital so we try to link sales verses working capital well just reduce the decimals. So, you can see there is a increase from 5.34 to 6.38.

So, if you look at the figures you will realize that the working capital figure as decreased and that is why what has helped the company in increasing the utilization of working capital, in other words they are able to generate more sales by using less working capital which is a positive sign next is inventory turnover in inventory turnover, we try to link sales to inventory or the stock actually this ratio is irrelevant because, as you know ours is a IT company, which does not have any significant amount of inventory still we try to calculate.

So, you know the sales figure look for the inventory figure in the balance sheet so inventory is very small amount that is why this ratio will be high actually, it is very high ratio does not have any meaning that is why I have said ignore this ratio as this ratio is irrelevant. Now, this is next ratio is important ratio debtors turnover or account receivable turnover as it is called were in we try to relate. Account receivable to sales figure we already know let us try to find out the debtors figure from the balance sheet. So, in balance sheet they have given the figure of sundry debtors.

(Refer Slide Time: 29:30)



So, sales divided by sundry debtors and I will also calculate it for the current year. So, you can see there is a increase from 6.3 to 6.92. So, company has managed to reduce their debtor which is a positive sign that despite increase in the sales they are able to collect the money and reduce its sales position. So, a reduce its outstanding a with the costumer that is the debtors and that is why there is increase which shows that the efficiency in collection of debt has improved.

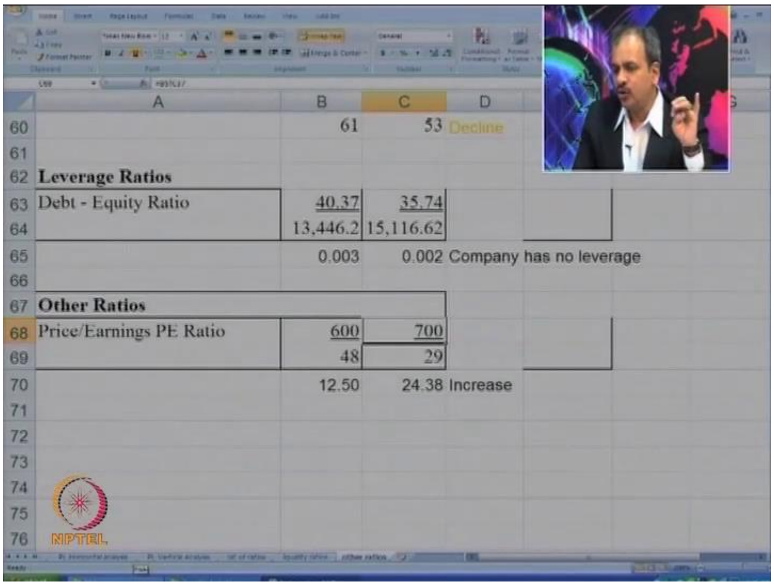
Now, this is better understood if we convert it in terms of number of days. So, here what we try to do is instead of taking sales upon debtors we will reverse we will take debtors upon sales. So, this is the figures figure of debtors, we will try to divide it by sales, but while calculating sales instead of taking a only debtors upon sales. We will try to calculate debtors on per day bases. So, debtors upon 365, so we have I am sorry; what I was trying to say is: we will take the figure of debtors we will divide it by sales, but we will just not take sales, we will take sales upon 365.

So, that we get daily sales so the figure of debtors upon the figure of daily sales, I get 61 will drag to the next year. So, next year you can see the average sales per day has increased from 61 to 63 that is why the collection period has gone down. So, collection period which was 61 days earlier has now, gone down to 53 days this is the positive sign it shows that company is able to collect it is debtors in shorter time earlier, it was taking 2 months. Now, it is able to collect little faster the next is leverage ratio in leverage ratio I will just delete whatever, is been done so in leverage ratio you all know that company we try to link to borrowed funds to owner funds or we try to take debt upon equity.

Again it is a balance sheet ratio, so will have to go to balance sheet. So, here we have got the figure of total debt which will try to link to I am sorry I will just do it again. So, we have got the total a debt and we will divide it by total net worth. So, here we have got the figures, so as you know basically the company does not have any significant amount of debt it is equity finance that is why the total debt verses equity is almost negligible company has no leverage that is the comment. We can make now very important ratio were in we try to link the market price verses the debtors.

So, price earnings ratio let us find out what is the market price of company, in the balance sheet we had been provided with the market price divided by earning per share which we have just calculated.

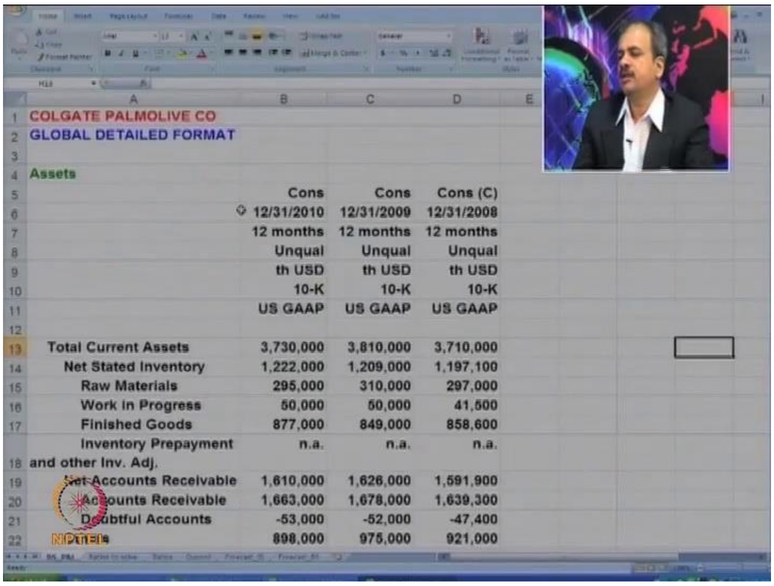
(Refer Slide Time: 33:20)



So, you can see there is a major increase from 12.5 to 24. So, what does it show what does this increase show as the earning per share s gone down from 48 to 29 it would have been expected that the market price of the company also would have gone down, but in fact market price has increased to 600 to 700 that is why the EPP ratio has increased. So, what does it show is it a good sign or a bad sign actually, it is a very positive sign for the company it shows that investors have more faith in the company and more people are now, going for buying a share at a higher price perhaps investors are pursuing that company as a good feature future and they are expecting further increase in the market prices so this is a good sign.

So here we have try to calculate a 4 types of ratios first we have done liquidity ratios then we have done profitability ratios then return ratios turnover or activity ratios and right now we also looked at leverage ratio and price earning ratio so these are the important ratios from the companies view point so i hope the concept of the ratio analysis is quite clear to you Now let us try to 1 more problem that is more in the context of a foreign company. So, it is slightly complicated I request you to first read it is p n l and balance sheet cum carefully.

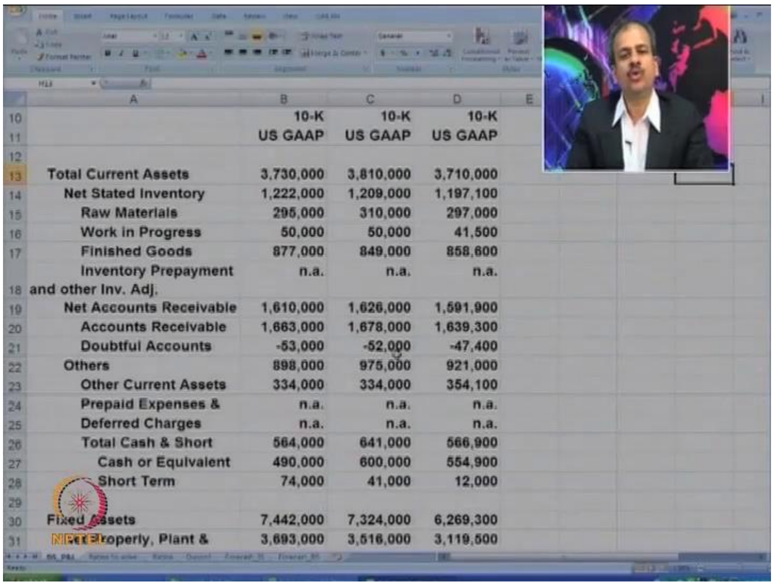
(Refer Slide Time: 35:27)



COLGATE PALMOLIVE CO			
GLOBAL DETAILED FORMAT			
Assets			
	Cons	Cons	Cons (C)
	12/31/2010	12/31/2009	12/31/2008
	12 months	12 months	12 months
	Unqual	Unqual	Unqual
	th USD	th USD	th USD
	10-K	10-K	10-K
	US GAAP	US GAAP	US GAAP
Total Current Assets	3,730,000	3,810,000	3,710,000
Net Stated Inventory	1,222,000	1,209,000	1,197,100
Raw Materials	295,000	310,000	297,000
Work in Progress	50,000	50,000	41,500
Finished Goods	877,000	849,000	858,600
Inventory Prepayment and other Inv. Adj.	n.a.	n.a.	n.a.
Net Accounts Receivable	1,610,000	1,626,000	1,591,900
Accounts Receivable	1,663,000	1,678,000	1,639,300
Doubtful Accounts	-53,000	-52,000	-47,400
[illegible]	898,000	975,000	921,000

So, here we have got the p n l and balance sheet of Colgate Palmolive this for the consolidated position for the whole of Colgate Palmolive gloom for the whole world the figures are as per US gap.

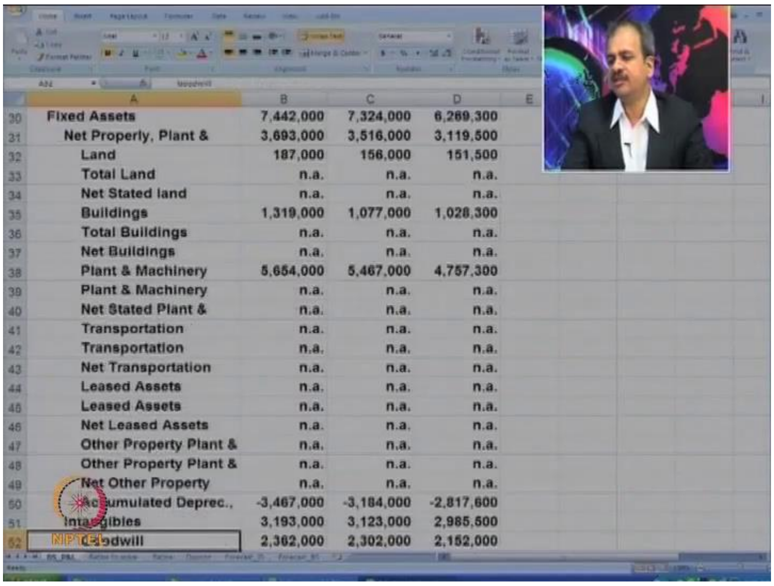
(Refer Slide Time: 35:46)



	A	B	C	D
10		10-K	10-K	10-K
11		US GAAP	US GAAP	US GAAP
12				
13	Total Current Assets	3,730,000	3,810,000	3,710,000
14	Net Stated Inventory	1,222,000	1,209,000	1,197,100
15	Raw Materials	295,000	310,000	297,000
16	Work in Progress	50,000	50,000	41,500
17	Finished Goods	877,000	849,000	858,600
18	Inventory Prepayment and other Inv. Adj.	n.a.	n.a.	n.a.
19	Net Accounts Receivable	1,610,000	1,626,000	1,591,900
20	Accounts Receivable	1,663,000	1,678,000	1,639,300
21	Doubtful Accounts	-53,000	-52,000	-47,400
22	Others	898,000	975,000	921,000
23	Other Current Assets	334,000	334,000	354,100
24	Prepaid Expenses &	n.a.	n.a.	n.a.
25	Deferred Charges	n.a.	n.a.	n.a.
26	Total Cash & Short	564,000	641,000	566,900
27	Cash or Equivalent	490,000	600,000	554,900
28	Short Term	74,000	41,000	12,000
29				
30	Fixed Assets	7,442,000	7,324,000	6,269,300
31	Net Properly, Plant &	3,693,000	3,516,000	3,119,500

So, just go through it carefully because, it is a very longest balance sheet there we have provided data for 3 year for 31 December 8, 9 and 10. So, you can look at the format which is also slightly different from the indian format which we have seen first it is starting with the assets in assets also usually we start with fix assets they start with current assets. So, you can look at first there is a total current asset then net stated inventory raw material working progress and so on. After a current assets the fix assets starts.

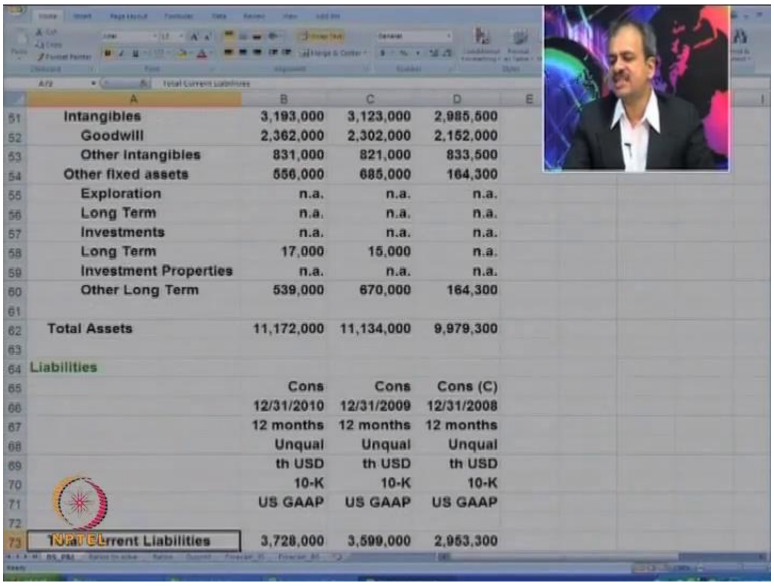
(Refer Slide Time: 36:31)



	A	B	C	D
30	Fixed Assets	7,442,000	7,324,000	6,269,300
31	Net Properly, Plant &	3,693,000	3,516,000	3,119,500
32	Land	187,000	156,000	151,500
33	Total Land	n.a.	n.a.	n.a.
34	Net Stated land	n.a.	n.a.	n.a.
35	Buildings	1,319,000	1,077,000	1,028,300
36	Total Buildings	n.a.	n.a.	n.a.
37	Net Buildings	n.a.	n.a.	n.a.
38	Plant & Machinery	5,654,000	5,467,000	4,757,300
39	Plant & Machinery	n.a.	n.a.	n.a.
40	Net Stated Plant &	n.a.	n.a.	n.a.
41	Transportation	n.a.	n.a.	n.a.
42	Transportation	n.a.	n.a.	n.a.
43	Net Transportation	n.a.	n.a.	n.a.
44	Leased Assets	n.a.	n.a.	n.a.
45	Leased Assets	n.a.	n.a.	n.a.
46	Net Leased Assets	n.a.	n.a.	n.a.
47	Other Property Plant &	n.a.	n.a.	n.a.
48	Other Property Plant &	n.a.	n.a.	n.a.
49	Net Other Property	n.a.	n.a.	n.a.
50	Accumulated Deprec.,	-3,467,000	-3,184,000	-2,817,600
51	Intangibles	3,193,000	3,123,000	2,985,500
52	Goodwill	2,362,000	2,302,000	2,152,000

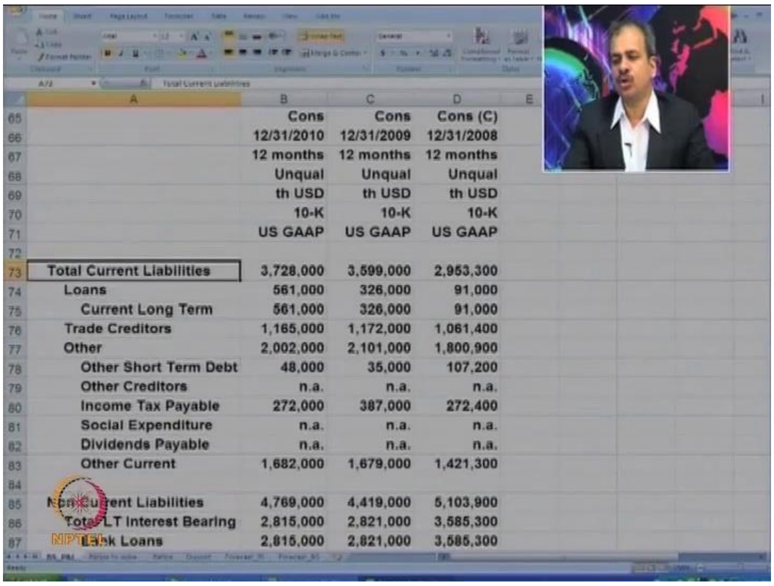
Which are again given, in detail after fix assets? There are figures for intangible assets like good will which are stated exclusively.

(Refer Slide Time: 036:40)



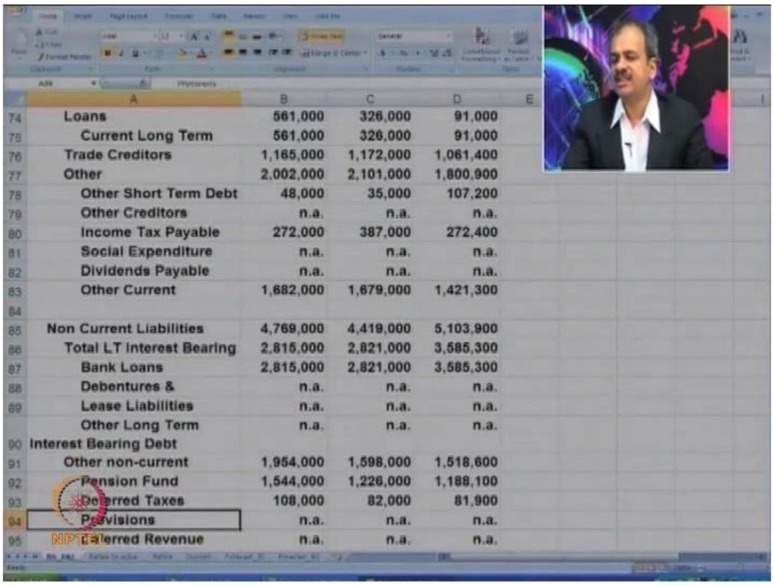
So, this is the figure of total assets then in liabilities again, we have first.

(Refer Slide Time: 36:46)



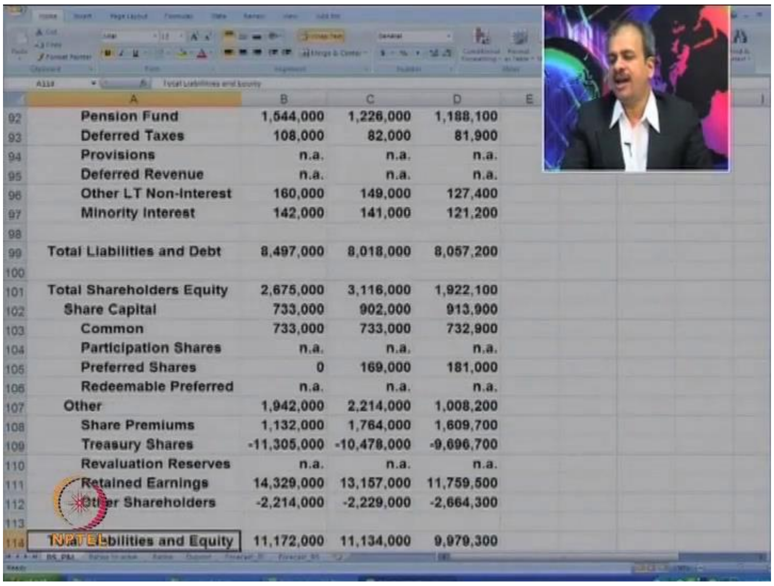
We start with total current liabilities, then there is a concept of noncurrent or long term liabilities.

(Refer Slide Time: 36:52)



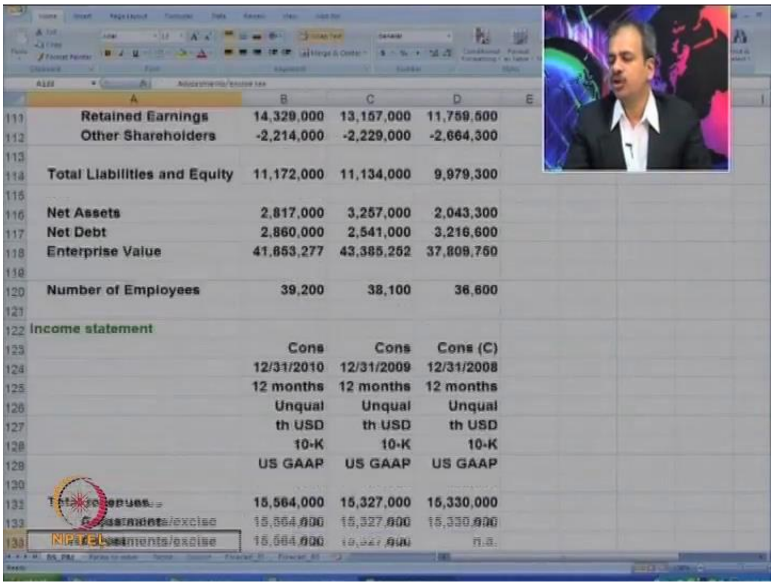
The last heading is total share holders equity or share holders funds as it known as which is again divided into a share capital.

(Refer Slide Time: 37:09)



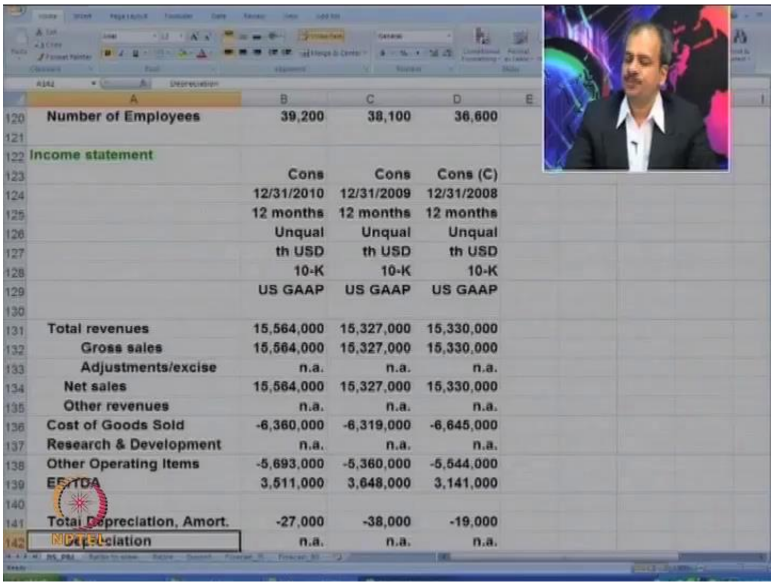
Basically, represent various types of reserves. So, here you can see here we have a share premium treasury shares retained earnings and so on this is the share.

(Refer Slide Time: 37:27)



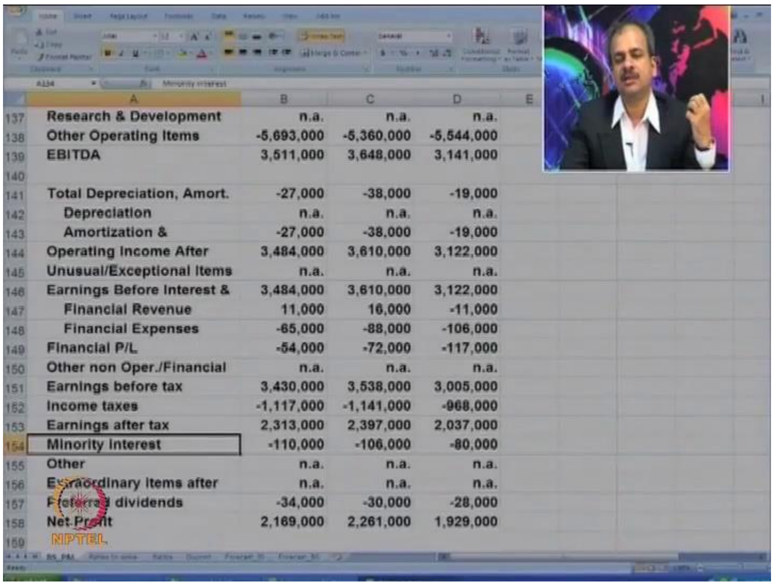
Balance sheet below the balance sheet income statement is given income statement or p n l account.

(Refer Slide Time: 37:32)



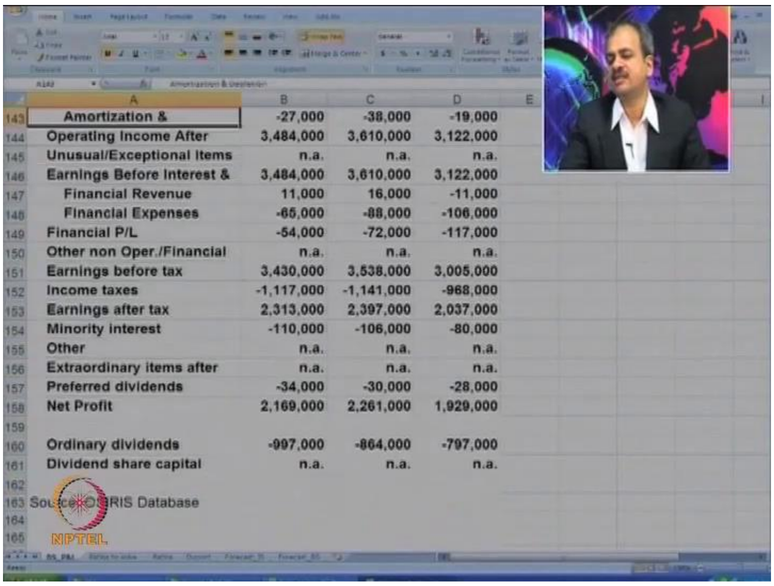
So, it is starts with total revenues gross sales adjustments then various expenses are given e b t e d a earning before depreciation and taxes depreciation and amortization ebita as it is called is given after that depreciation is reduced amortization is reduced. Then we get earnings after depreciation before interest, then interest is charged last income taxes are calculated, and then we get earning after tax which in India popularly we call as profit after tax from that again minority interest is deducted.

(Refer Slide Time: 38:17)



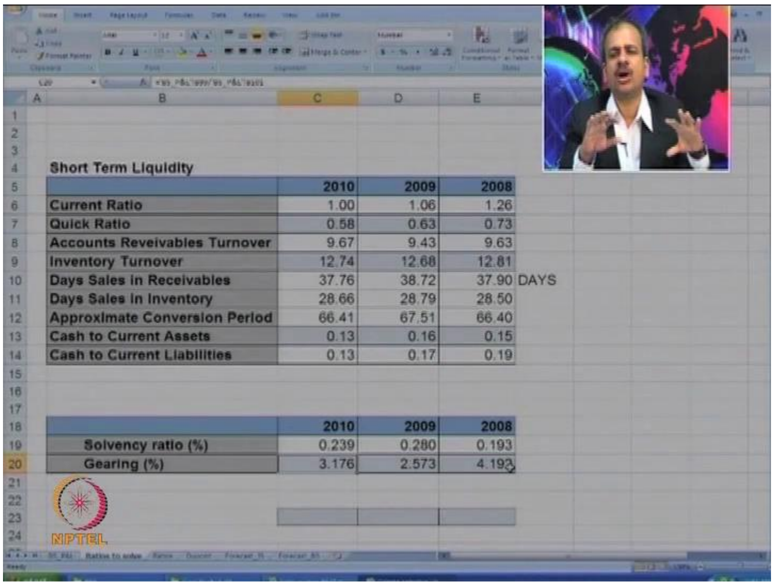
This represents the profit a which is fable to the small share holders of non a outside share holders, in case of subsidiary companies finally, we get net profit attributable to the owners followed by ordinary dividend this is taken from Osiris data base an international data base.

(Refer Slide Time: 38:48)



So, are you able to view the whole thing it is a longest balance sheet because, the detail format is given showing the whole of assets liabilities also the data from income statement. Now, let us try to do important ratios.

(Refer Slide Time: 39:00)



So, I have try to create a structure, so that it is easy for you now you know the most of the important ratios. So, the first ration in the category of short term solvency is current ratio what is the formula for current ratio you are right. It is current assets divided by current liabilities, I would not repeat the formula, I hope you know it. Now, so in the balance sheet first let us go, to assets side we have been given already current assets take the total current assets and divided it by liability the first item itself is total current liabilities. So, exactly 1 is a ratio I will drag it down.

So, you can see that over the 3 years the ratio has fallen it has come down from 1.26, in 2008 to 1.06 to 1. We do not know exactly it is a good sign or a bad sign it is good because, they are able to manage with less current assets, but as far as the short term liquidity position is concerned they are slightly in tight position because, it is now ratio is exactly 1 the next is quick ratio how to calculate quick ratio yeah you are right. It is quick assets divided by quick liabilities. So, go to quick assets now this whole list of current assets from which first of all you have to identify which are the quick assets.

So, first item you can see loans could be considered as quick assets the answer is no because, loans are not quick assets current long term are also a current long term loans naturally, they are not quick assets trade carters sorry I am looking at liabilities actually, we should look at assets. Because first we are looking at a current assets, so in current assets you can see the first item inventory, which is divided into raw material wip finish goods nun of it qualifies as a quick assets. Then we have got receivables which are again divided by into account receivable and doubtful accounts.

So, only account receivables minus the doubtful accounts could be taken as net account receivables, which is a q a I will try to mark the item as q a first. So, that it is easier for you, so this is 1 quick asset prepaid expenses cannot be taken as quick total cash and short term I will just expand it so that you can see full. So, total cash and short term investment which could be treated as a quick asset because, it is a short term in nature and liquid in nature then fixes assets starts. So, we have got 2 quick assets similarly, let us go down and mark the quick liabilities.

Now, here the figures of current liabilities are given which includes loans which further they say current long term debt. Since, it is current in nature we will treated as quick liability then trade craters which again treated as quick liability, then there are some other current liabilities which also we treat as quick liabilities other short term debts again, we will treat as quick liabilities income tax payable also quick liability and then we have got other current liabilities which are also quick liabilities.

In other words all the current liabilities except perhaps loans could be treat a, but loans are also since, current long term a current portion of long term debt that also westated as quick. So, we can say that all the current liabilities are also quick liabilities, so we have to divide simply the total of current liabilities from the quick assets. So, again let us go back so quick ratio is nothing but here we have to take total of 2 items divided by the total current liabilities I hope you are getting it now.

So, what we have done is out of the total assets only 2 were identified as quick. So, those divided by total current liabilities, so we get quick ratio as 0.58; you can see that the position as again decreased over a period of 3 years. This decrease has mainly happened because there a current account receivables are going down. So, we do not know whether it can be treated as a good sign on the whole from liquidity angle, it is not a good sign next is now from a activity side which is current receivables turnover. So, what will be the formula you are right; it is turnover divided by account receivables.

So, we have to go down in the income statement we were we get the net sales divided by the receivables, which we get from current assets. So, we get 9.679 0.43 and 9.63. So on the whole you can see more or less stable were as not been any major increases or decreases, in this on the similar lines; we can calculate inventory turnover what is the formula for the same. So you are right it is sales divided by inventory, so again we go down to income statement pick up the net sales and divided by the total inventory again you see the ratio is more or less stable.

So, it has remained almost constant sales and inventory as increasing more or less in the same proportion next is days sales in receivables. So instead of calculating the account receivables in terms of turnover that is sales upon receivables, we try to calculate in terms of number of days. So, here we try to reciprocate we take 1 upon this ratio and multiplied by 365. So, we get 37 remember this represents days. So, earlier their account receivables for about 37 days, then it increased to 38. Now, again it has gone down to 37.

So, it is more or less constant at the same level same thing we can do for inventory. So, in terms of number of days again about a month's slightly less than a month. So, it was 28 now; it has gone down to a it is almost slightly increase 1 can say to 28.66. So, there is neither major increase in the performance of management of debtors nor there is any decrease next is approximate conversion period. So, by conversion period what we try to see is we try to link the total of current assets verses sales. So, we know that in each of the current assets how many days.

The money is blocked, in this case we have got 28 days in inventory and another 37 days in receivables. So, this is the total of the number of days which we have just calculated again it is about to remain more or less constant, it takes about 66 days to convert by conversion what we are trying to see is from the time. We put the money in the current assets how many days it takes to get it back in the form of sales next is more strict ratio that is cash to current assets. We are trying to see what is the proportion of cash as a proportion of total current assets? So cash and cash equivalent we divided by the total current assets.

So, it is 0.13 it is almost constant, but slightly it has gone down. Now, higher ratio will indicate that the current assets are more liquid they have a higher proportion of current the cash. We also try to calculate cash as a proportion to current liabilities. So, here we got cash and cash equivalent let us divided by current liabilities. So, here we see that the ratio is going down from 0.19 in 2008 it is now 0.13. This is not a very good sign that means that the company has relatively less cash to pay back, it is current liabilities this was the overall position of short term liquidity.

Now, let us go for some relationship between their capital structure. So, there are 2 popular ratios 1 is solvency ratio and other is gearing ratio. So, in solvency ratio as you know we try to find the proprietors funds verses the total funds. So, let us go to balance sheet we can see here total share holders equity will try to divide it by total liabilities and equity. So, it shows that company has a predominant financing by debt only about 20 percent is financed by equity a earlier the portion was even less than 20. Now, it has slightly increased to 0.23.

Gearing also tries to find similar thing in gearing, we try to link the total debt verses total equity. So, let us calculate it the total debt liabilities and debt we will divide it by the total owners fund is it fine. So, you can see it was about 4 which does not show a very good position because, company has 2 high outsiders funds verses their own funds. Now, the proposition then came down to 2 and again it has increased to 3. This shows that company is not long term solvency is not that good they are heavily dependent on outsider's funds for financing their business.

Let us stop here, will continue this in the next session. Today we have tried to do 2 sessions a 2 cases first, we have tried to do a analysis of IT company. Now, we are looking at a global a position of Colgate Palmolive, which is a famous manufacturing company were in, we can calculate a variety of fresher. Will stop here, in the next session will try to complete the cases.

Thank you.