Financial Statements Analysis and Reporting
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Lecture - 44
Liquidity Ratios- Grasim Industries Part-III

Welcome students. So, in my previous lecture or till the previous last part of discussion we were talking about the ratio analysis or analyzing the financial statements with the help of ratios, and so far we have discussed five ratios about this Grasim industries limited; which was current ratio, quick ratio, super quick ratio and the then the turn over ratios two turn over ratios that is debtors turnover ratio, and the creditors turnover ratio; that means, the debtors is collection period, and the creditors payment period and in this five ratios we have seen that the liquidity position of this firm is very good it is excellent and that they are doing very well, they are keeping optimum amount of the liquidity.

And when we looked at the current ratio we found it that it is well within the say expectable range means rather less than the standard rule of thumb of 1.33 is to 1 and as a company is managing this liquidity by having such a low current ratio, where the cost will be very much under the control. Second ratio we looked at is that is the quick ratio and quick ratio was is according to the standard rule of thumb that is one is to one, and when we try to know about the cash ratio that was just 8 percent.

So, company is keeping 8 percent cash, maybe if you talk about the total current liabilities so they are keeping only 8 percent cash. So, it means it say it say wonderful liquidity position there are maintaining not less not more level of the liquidity and in that case you can make out you can understand that the firm will be never default and will never would be technically insolvent.

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When we use the term technical insolvency, technical insolvency means that when any short term liability or any liability becomes due to be paid to the source from where the funds have been arranged, and the firm is not able to pay. May be the firm is not insolvent firm is having a good position if you look at as a liability position, then there are enjoying the good position it is a profit making firm also what the firm is not having sufficiently liquidity. Profits are there, but the profits are not in the form of cash. So, when there is a lack of liquidity, when the there is a shortage of cash with the firm it means firm is not able to make the payment on the due date. So, how strength full you are, but if you are not able to make the payment of your creditors on the due date, it means that means, the strength is of no use.

So, it means that a situation when the firm though it is solvent, it is having a good financial power financial strength, but it is liquidity is lacking or it does not have the subtend liquid funds in that case that is called as the situation of the technical insolvency. That firm is not able to pay for it is obligations, pay for it is liabilities on the due date on the time so there is a technical insolvency. But we have seen that in case of Grasim industries and they short term debt they have taken entirely that is in the form of the working capital limit WCL CL or the you can call it as the working capital line or CC call it as a working capital line or the CC limit. So, in the form of cc limit entire short term debt is in the form of the CC limit, and CC limit is not considered as a debt kind of we keep on receiving this (Refer Time: 03:59) withdraw the one way as when we needs

the funds and we deposited back when we have the surplus funds. So, is on the daily basis you can say.

So, technically insolvency is not expected in the firm like Grasim industries, because it has a very optimum amount of the liquidity, because I am using the term optimum; optimum amount of the liquidity, optimum means when you do not have the more liquidity you do not have the less liquidity. If you have more liquidity means level of the current assets that is the inventory, that is the debtors and then it is the say cash, and then it is a prepaid expenses or you call it as marketable securities, you have a very high level of the current assets. So, sometime the current ratio is to 2 is to 1 or sometime even it is more than 2 is to 1. So, when the firm is a very high current ratio, in that situation is a consider as a over capitalized firm as well as the working capital is concerned as per as the short term fund situation is concerned, and I tell you that if we keep the high amount of the current assets, I discussed with you that keeping high amount of the current assets increases the financial cost; and when the financial cost is going up your profits are getting affected.

I when you reduce this level of current assets, investment in the current assets to the optimum level. Means I do not say that you to bring it to the minimum level if you bring it down to the minimum level, in that situation what will happen? The firm will be technically insolvent, because you do not have the sufficient cash here sufficient liquidity to pay for the liabilities of this side. So, you should not be neither too low or too high, it should be in between that is a optimum amount that how much amount of the capital is required to be maintain the firm is maintaining that amount, and it is not keeping very high.

And whatever only thing is that only in short term funds what happens that whatever saving you do here by investing less in the current assets or optimum in the current assets whatever the savings we make here, those all savings directly result into the increased profitability. They directly result in to the increased profitability; because time period is very short it is in a few days or months maximum it is months, you keep inventory for the few months, you keep the debtor for a few months, and you keep the cash on daily basis.

So, if you saved any cost on account of these current assets, there is no leakage of this savings there is no leakage there is no full phase of these savings, these savings can be transfer to a profits and profitability of the firm increases. So, those firms for keeping the optimum amount of the working capital in that case what is happening that, they are not going to be technically insolvent and second thing is they are not going to increase their financial cost. So, because there are maintaining the level of the current assets, which is actually required in the firm so profit is also protected and the technical insolvency is also avoided.

So, we have seen in the five ratios so far, that the current ratios, quick ratio, super quick ratio and then debtor collection period DCP, when we calculated solve the FCP the firm be found that the debtor collection period in this firm is about 20 days, which is very very you can call it as low period, it means that talks about the strength all the firms products, demand for the funds products, market for their funds products who (Refer Time: 07:28) is the less credit in the market, whose product is easily sellable in the market; and when the product is easily sellable in the market either you tell to sell that on cash, and if an any how if you have to required the credit required to get the credit period also, that credit period is minimum or you can call it as low as possible.

But when we compare with the credit payment period CPP, credit payment period was very high 180 days, it means this you look at that they are getting the credit for 6 months, where they are giving the credit for a period of less than even 1 month. So, this is the strength of the firm, this is the liquidity position of the firm, firm is maintaining the sufficient amount of the liquidity neither they are investing too much in the inventory nor in the debtors, nor in the cash, no prepare expenses and marketable securities are also not there. So, it means very normal level very optimum level of the current assets they are keeping.

Now, we will calculate the next ratio that is the last ratio in the liquidity ratios and that last ratio is the inventory turnover ratio.

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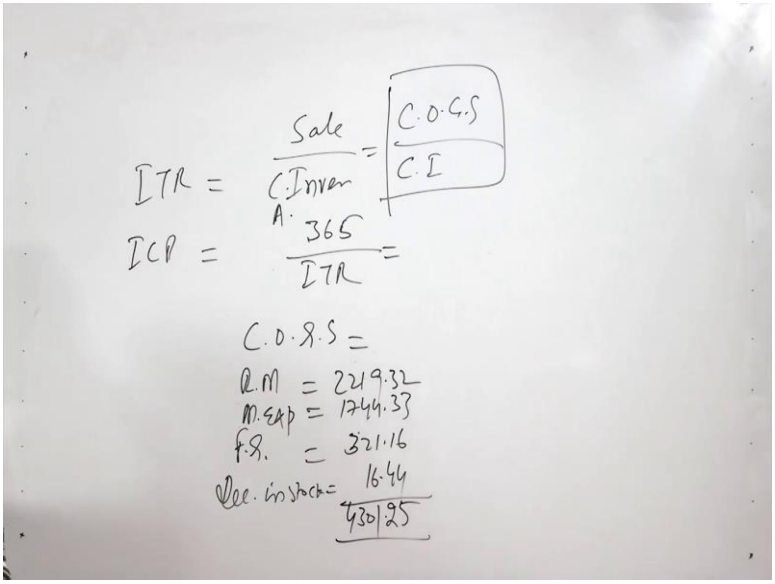

Let us see that how far that invents for how many days the inventory is staying in the firm, and in how many days that inventory is convertible into cash, in how many days the inventory is convertible into cash that is inventory turnover ITR; inventory turnover ratio ITR inventory turnover or the ICP inventory conversion period. So, when you calculate the inventory turnover ratio, I had discussed when we are talking about the see formulas and basis of calculating this different liquidity ratio, I discussed with you there the inventory turnover ratios has to be calculated like this sales divided by the inventory; for closing inventory you can share may be the average inventory.

So, sometimes you can take the average inventory or sometimes it can be taken as closing inventory, but when we talk about the numerator, it is better to take this as the cost of goods sold COGS. If you take the cost of goods sold it better, because though the cost of goods sold is not directly given in the profit and loss account, we will have to calculate their cost of goods sold, but we can calculate it and divided it by even closing inventory.

So, may be the closing inventory or the average inventory whatever it is, it is not going to make a big difference much difference, but the it as to be calculated like this and for this for calculating the inventory conversion period, again we have to use this term period 365 divided by the inventory turnover ratio. 365 divided by the inventory turnover ratio is going to as the inventory conversion period, and we are going to find out that for

how many days the firm is keeping the elementary as inventory, and in how many days the inventory is converted into cash.

So, we will use this formula for calculating the inventory turnover ratio that is cost of goods sold divided by the closing inventory; and for the Grasim industries if you look at the see cost of goods sold it is not given to us. So, we will have to calculate the cost of goods sold closing inventories I think it is given to us.

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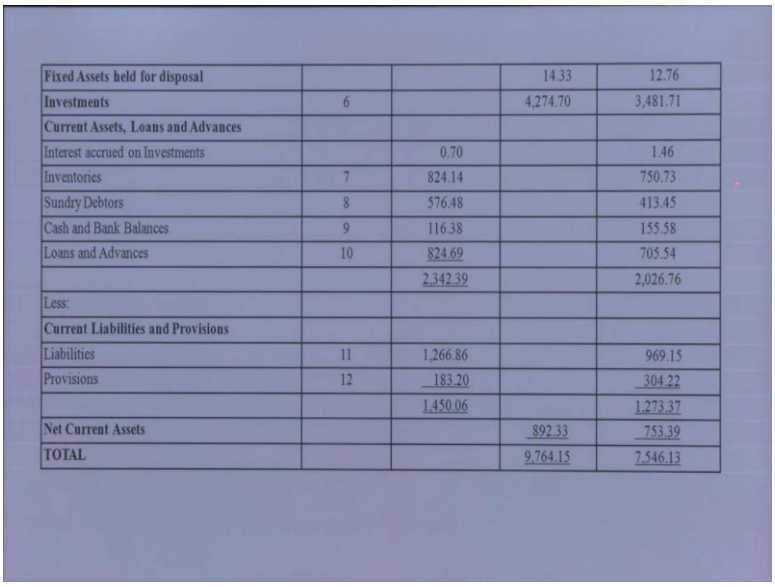

Fixed Assets held for disposal			14.33	12.76
Investments	6		4,274.70	3,481.71
Current Assets, Loans and Advances				
Interest accrued on Investments		0.70		1.46
Inventories	7	824.14		750.73
Sundry Debtors	8	576.48		413.45
Cash and Bank Balances	9	116.38		155.58
Loans and Advances	10	824.69		705.54
		2,342.39		2,026.76
Less:				
Current Liabilities and Provisions				
Liabilities	11	1,266.86		969.15
Provisions	12	183.20		304.22
		1,450.06		1,273.37
Net Current Assets			892.33	753.39
TOTAL			9,764.15	7,546.13

If you look at the closing inventory, that is given to us and that inventory figure is this is the inventory figure that is 824.14 is a closing inventory for this year, 2006 and 7 and 750.73 is the (Refer Time: 11:03) crores for the year 2006.

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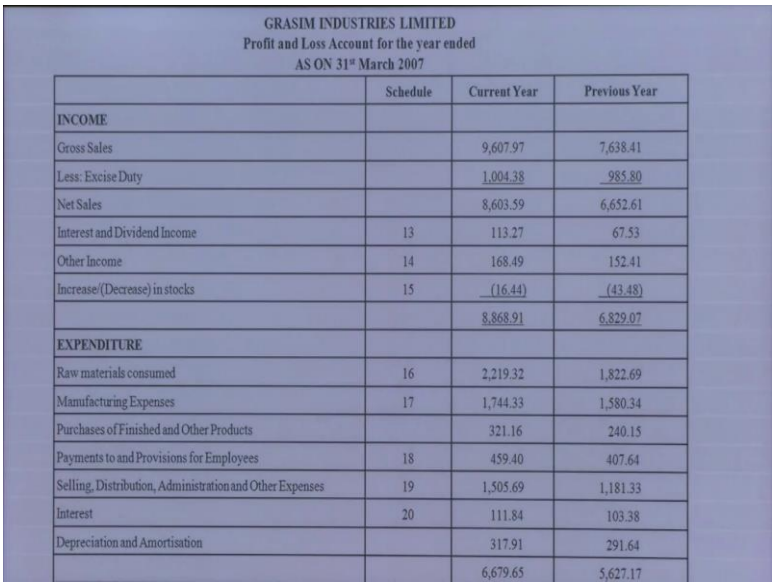

GRASIM INDUSTRIES LIMITED
Profit and Loss Account for the year ended
AS ON 31st March 2007

	Schedule	Current Year	Previous Year
INCOME			
Gross Sales		9,607.97	7,638.41
Less: Excise Duty		1,004.38	985.80
Net Sales		8,603.59	6,652.61
Interest and Dividend Income	13	113.27	67.53
Other Income	14	168.49	152.41
Increase/(Decrease) in stocks	15	(16.44)	(43.48)
		8,868.91	6,829.07
EXPENDITURE			
Raw materials consumed	16	2,219.32	1,822.69
Manufacturing Expenses	17	1,744.33	1,580.34
Purchases of Finished and Other Products		321.16	240.15
Payments to and Provisions for Employees	18	459.40	407.64
Selling, Distribution, Administration and Other Expenses	19	1,505.69	1,181.33
Interest	20	111.84	103.38
Depreciation and Amortisation		317.91	291.64
		6,679.65	5,627.17

What the cost of goods sold is not there. Let us see whether the cost of goods sold is given to us no it is not given, we have given the material cost, we have giving the manufacturing expenses, we are giving the purchase of finish products, and we have to take one more item into a count that is the decrease in the of the stock in rate, that we decrease in the stocks. So, to calculate the cost of goods sold we have know that we need the material that is the raw material. So, we have to take the cost of raw material, this is the raw material consumed.

So, let us calculate the COGS. COGS can be calculated by that what we have to take here? First of all we have to take the raw material, raw material consumed is the cost of goods sold and raw material consumed is a 2219 in the 2006 and 7, 0.32 and then you have to take the manufacturing expenses. So, if you take the manufacturing expenses how much is the manufacturing expense? Manufacturing expenses are 1744.33 and then we take the third item that is purchase of finished goods directly finished goods, and purchase of finished goods means 321.16 and then decrease in stock, if you take it has come down to 16.44.

So, there is a decrease in the stock by 16.44. So, if you take these items this works out as how much; this will be 10 13 and 5 and then it is 1,4,7,8,12,1 and then it is 10, 14, 15 and then it is 16. So, it is going to be 9, 21 and 6. So, it is going to be how much that is 6, 7 and 7 and 4, 11, 12, 1, 10, 14, 15, and 621. So, it is going to be like this. So, finally, the

total cost of goods sold is going to be 4301.25. So, cost of goods sold is this much inventory directory given to us. So, 4301.25, cost of goods sold is 4301.25 and divided by the closing inventory.

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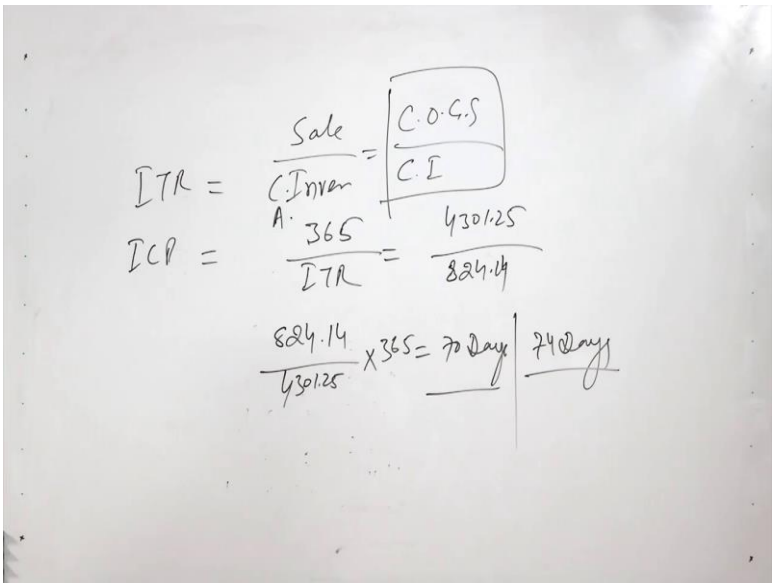

If you take the closing inventory we have already seen the figure of the closing inventory is that is 824.14 this is a closing inventory figure, and in this case for calculating this you take the reverse of it. So, it is a 824.14 divided by the 4301.25.

So, I multiplied by thre365. So, this ratio works out as 70 days, 70 days is for the year 2006 and 7 and 74 days for the year 2005 and 6. So, we have calculated the inventory turnover ratio inventory conversion period actually; and when you find the inventory conversion period it is 70 and 74 days is roughly in the range of 70 days. So, I we can be understand it was. So, because this firm is in to the textile industry, and textile is basically dependent upon the agricultural material, cotton and then it has a long process means that process is very long.

So, buying the raw material and then converting that in to the finish product or if you talk even that the selling the fished product in the market, it is a textile product and you have to keep a sufficient stock of the textile so that there is no out of stock situation, and you can convert that closing stock. Then we should talk about the material, raw material it is because it is the long press process it is requiring because it is as a bleaching, dyeing, means converting cotton into yean, there bleaching dyeing and so many other

things have to be done to it is going to take a long time. So, conversion of raw material into finish product is taking much time and then converting the finish product into sales is also taking some time.

So, it is about 70 days which is not big time, they have to keep inventory for 70 days around 70 days. Last year it was 74 days, but in 2006 in 7 it is come down to 70 days. So, you can say it is in the range of about 70 days little more than 2 months which may be optimum better estimates will be whether it is high or low, it will depend upon if you compare the ratios of the other forms in the textile industry or you compare with the industry average, then you would be able to.

But if you look at the other indicators like current ratio, quick ratio, super quick ratio or the debtors turnover and creditor payment; in that case we can easily make out that this period does not seem to be much longer this seem to be the optimum period, because in one ratio the company cannot be left behind we must be having, it and less than this or more then this are not advisable, so they are keeping inventory for 70 days.

So, this is over all liquidity analysis of the firm if you look at the overall liquidity position of the firm, we can easily understand that all the 6 ratios 3 ratios based upon the current assets and current liabilities and 3 ratios based upon the turnover of the debtors, creditors and your inventory, even the turnover position is also very good it is excellent it is wonderful, and the firm is maintaining a very good amount very optimum amount of liquidity and is a wonderful organization, is a wonderful firm they are maintaining a very good financial position, very good liquidity position and it is reflected into their overall financial positioned in the balance sheet, in the profit, and loss account and overall result if you look at they really good they are wonderful.

After this we will be talking about the next set of ratios, and we have seen there. Now whatever we discussed as the triticale composition so far, we discussed the three sets of ratios, and in those three sets of ratios we will talk about their different components, and in those different components we first we talked about the RY ratios, then we talked about the solvency ratios, and then we talked about the say liquidity ratios.

So, these three ratios we have discussed the so far, and we try to understand these three ratios with the help of a case of Grasim industries. And when we calculated the return on investment of Grasim industries or when we try to understand the solvency of the Grasim

industries, in that case we found where the Grasim industries is containing a very good having a very good turn or investment, similarly the Grasim industry is having very good solvency, and the Grasim industries is having the very good liquidity. Next set of ratios is called as the turnover ratios; next set of the ratio is called as the resource efficiency or the turnover ratios.

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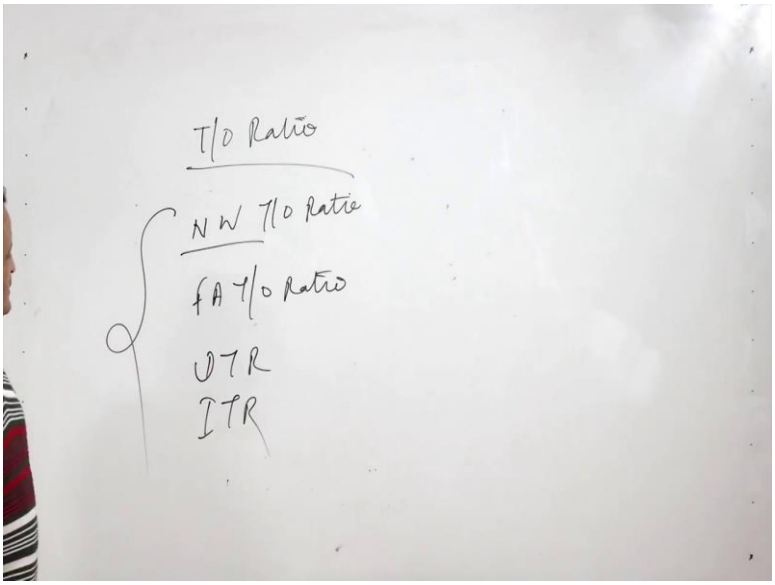

Turnover ratios; when you calculate these ratios these ratios again can be seen that when you talk about the resources, first we have the financial resources and these resources are like your liability side of balance sheet. There we are talking about the capital that is the equity and preference capital, we are talking about the reserve and surplus, we talking about the say then the external sources. But first we are more concerned about is that is about the internal funds or the net worth the firm has, and then you can see efficiency of the assets side, that the turnover of the ratios can be calculated with the help of the assets side.

So, we will calculate compare the turnover of the firm or the efficiency resource efficiency means; turnover means or the resource efficiency means with what efficiency the firm is using it is adjusting a resources and resources if you look it at you can look at the resources from both the sides. First is from the liability side of balance sheet, and if you look at the liability side of balance sheet you call it as a net worth that whatever the internal funds because external funds we borrowed from the market whenever we have

the need; but initially we invest the fund from our own resources, and if we are investing the fund from own resources we will have to compare that whatever internal funds fund firm has, with what efficiency these funds are been used. So, that will be called as the net worth and net worth turnover ratio we will be calculating.

Then with what efficiency the net worth of the firm is being used. Second on the assets side of the balance sheet if you talk about, then we will be trying to know about the say fixed assets turnover ratios. Net worth turnover ratio and the fixed assets turnover ratio that whatever the fixed assets land, plant, building, machinery the firm has created, all efficiently the firm is using these fixed assets that is very very important. So, here two important ratios that is the fixed assets turnover ratio, and net worth turnover ratio and then we will be talking about the other two ratios also that is the debtors turnover ratio and the inventory turnover ratio. When we talk about the turnover ratios we include these four ratios into the resources efficiency or in the turnover category; and here we have fixed asset turnover ratio, net worth turnover ratio, debtor's turnover ratio and inventory turnover ratio.

So, it means how efficiently the firm is using it is net worth, how efficiently the firm is using it is fixed assets, how quickly the firm is converting the sundry debtors is in to sales a sundry debtor in to cash or collecting the sundry debtors, and how quickly the firm is converting the inventory in to cash or behalf selling the inventory in to the market.

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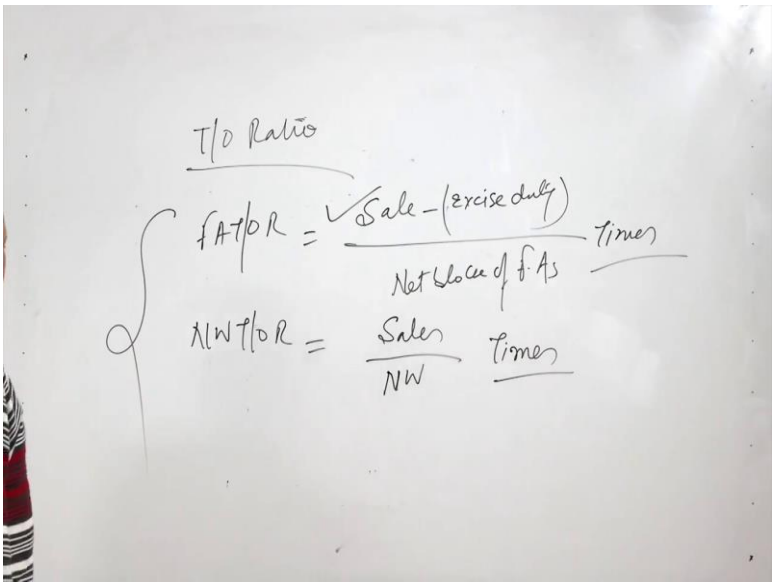

So, these are the four important ratio; first ratio is the fixed assets turnover ratio and we should talk about the fixed assets turnover ratio, it can be calculated will learn how to calculate the fixed asset turnover ratio, and for this we compare the fixed assets with the sales. The ratio is calculated here like a sale that is we can call it as minus excise duty; sales minus means they are net of excise duty, so sales minus excise duty divided by the net block of fixed assets. Sales minus excise duty divided by the net block of the fixed assets, with the help of this formula we can find out that finally, what is a level of sales.

How many times the ratio says, how many times the sales are of your total fixed assets? Net fixed assets means that is the total fixed assets minus appreciation, we will have to take the net fixed assets. So, how many times the sales are of the net fixed assets this ratio is going to tell us how efficiently we are using our fixed assets, so that the sales are maximum, and we are getting the maximum return from these fixed assets. Then we talk about the net worth turnover ratio, and when you calculate the net worth turnover ratio here we say that ratio will be sales, again sales that is again the net sales after excise duty has to be divided by the net worth, sales have to be divided by the net worth.

So, how many times the sales are of the net worth? How many times the sales are of the net worth we are going to discuss here, we are going to talk here about that, and this is the again very very important ratio. Sales is net of excise duty divided by the net block of the fixed assets we are going to take here, and that is going to tell us the times this ratio

has to be calculated in times not in percentage, in times terms; we are going to calculate this ratio, and we will be talking about this ratio with the reference to the data available from the Grasim industries.

Other two ratios that is the debtor's turnover ratio VTR and inventory turnover ratio we have already talked about. So, we have seen that what is a debtors efficiency conversion efficiency, and what is the inventory term over efficiency of the firm we have seen, and we will be calculating two ratios here that is a fixed assets turnover ratio and the net worth turnover ratio for the Grasim industries, and then we would see that how efficiently the Grasim industries is converting it is say fixed assets or they are using the fixed assets for maximization of their sales value.

So, if you calculate these ratios we are we will be able to find out the efficiency with which these fixed assets are being used by the firm.

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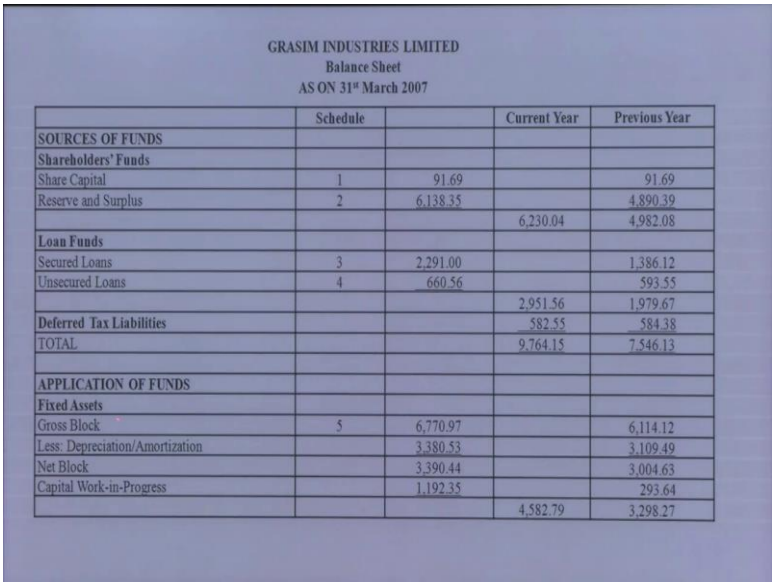

GRASIM INDUSTRIES LIMITED
Balance Sheet
AS ON 31st March 2007

	Schedule		Current Year	Previous Year
SOURCES OF FUNDS				
Shareholders' Funds				
Share Capital	1	91.69		91.69
Reserve and Surplus	2	6,138.35		4,890.39
			6,230.04	4,982.08
Loan Funds				
Secured Loans	3	2,291.00		1,386.12
Unsecured Loans	4	660.56		593.55
			2,951.56	1,979.67
Deferred Tax Liabilities			582.55	584.38
TOTAL			9,764.15	7,546.13
APPLICATION OF FUNDS				
Fixed Assets				
Gross Block	5	6,770.97		6,114.12
Less: Depreciation/Amortization		3,380.53		3,109.49
Net Block		3,390.44		3,004.63
Capital Work-in-Progress		1,192.35		293.64
			4,582.79	3,298.27

So, let us now talk about the and let us try to find out the fixed assets with the firm, and what is the level of the fixed assets here if you talk about the balance sheet, we look at the balance sheet here and the fixed assets are that is a gross (Refer Time: 24:57) of fixed assets is 6770.97 and then is a appreciation that is 3380.53, and the net block is 3390.44 is the net block of the fixed assets.

So, now we take the fixed asset that is the 3390 we will be taking for the year that is 2006 and 7. So, what is the amount of sales? We look at the sales at 9607.97, we have the excise duty 1007.38 and then net sales are 8603.59, this is the net sales.

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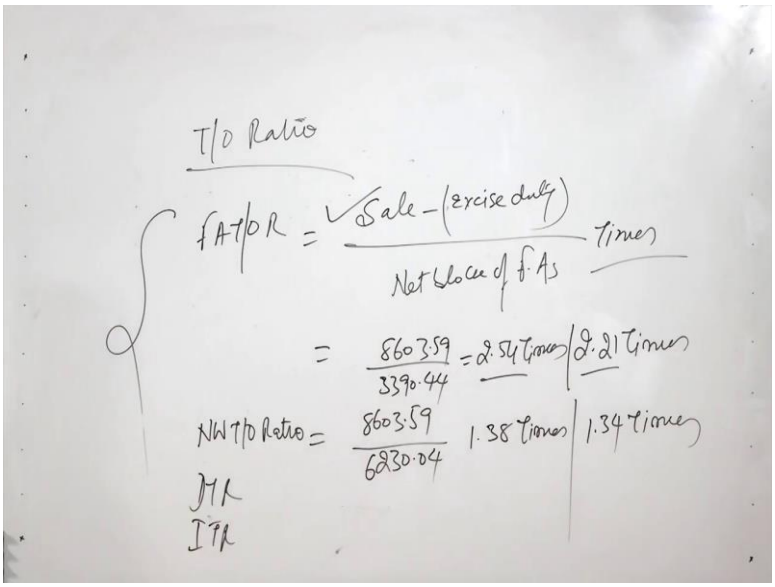

So, let us take this figure of 8603 divided by 8603.959 divided by the net block of fixed assets; and how many fixed assets we have? We have seen that fixed assets we have is that is 3390.44. So, this is the level of the fixed assets and the sales amount, and if you calculate this ratio this ratio works out as how much it is 2.54 times, this ratio is 2.54 times; it means in the year 2006 and 7 the fixed assets and sales as compared to fixed assets were sales were two point say two and half times of the fixed asset, investment in the fixed asset it is very good it is wonderful.

See when you talk about the textile industry, one peculiar (Refer Time: 26:36) of the textile industry is that it is a capital intensive industry, it is not labour intensive industry it is a capital intensive industry, that you have to make the huge investment in the capital if you want to establish the capital say textile unit, there you have to have huge amount of land because we need the say more buildings. So, big land, big buildings, large amount of buildings we (Refer Time: 27:01) is also very typical, and because we have to look at the cost spite; cost of the textile product should be as to as possible because of the tough competitions. So, you have to have the excellent machine re, latest machine and re latest technology. So, the investment in the fixed assets is very high.

So, we cannot say here that if the ratios are coming out as to 2.54 times, which is not a big ratio it is not a big amount of the sales we are making as compared to the investment in the fixed assets. Because investment in the fixed assets is itself is very high amount, we are having a huge amount of investment in the fixed asset that is 3000 crores of the fixed assets they have. And when there is a high amount of the investment in the fixed assets, and they are having the sales that is say two point two and half times of the assets means first the denominator is very heavy, and still your numerator is two and half times of that. So, you cannot say that the sales is not very good, it is very good amount of the sales had the level been level of the fixed assets been low, you would have seen that this level of the sales would have been sometime 5 by 6 times.

So, investment in the fixed assets being very high, and even after that the firm is having high amount of the sales that is two and half times of the investment in fixed assets, is quite a good success and it is a very good performance and we have seen it is a (Refer Time: 28:20) in terms of profitability financial position everything. And the ratio for the previous year is let us check the ratio for the previous year, and that is 2.21 times, this ratio is 2.21 times. So, it means they are on the growth path, they had ratio that is 2.21times and now the second ratio is that is the 2.54 times so they are on the growth path, they are improving they are growing; and they are is wonderfully improving their position over the years. Then we talk about the second ratio and the second ratio here is the net worth turnover ratio.

So, if you look at the net worth turnover ratio, so in this case we will be calculating the again sales and sales amount is same, that is 8603.59 and then we have the how much is the net worth with us that net worth we have calculated already, and this amount is that is 6230.34. So, this is a total of the paided capital and the free reserves, and if we take this net worth which we have already used in the return on investment ratios return on net worth, we have taken the same net worth figure here.

So, if you calculate the ratio here. So, the ratio for this works out as that is 1.38 times, and if you look at the ratio for the previous year this is 1.34 times. So, again in case of the net worth also because now the denominator is again very heavy it is double of the fixed assets. So, net worth is very high, when you have the high amount of the net worth and when we to talk about the fixed assets after the appreciation they are left as this, but otherwise the fixed assets are double of whatever the amount we have showing here.

So, depreciation is about 50 percent. So, net worth is again a very heavy that is 91.69 crores of the capital and remaining is the 6,100 plus crores is of the reserve and surplus. So, total amount is 6230 for the year 2006 and 7, and if you look at this ratio this works out as 1.38 times, and not a bad because the denominator is very heavy, and even the previous year it was 1.34, it is on the growth path it has become 1.38 times, it means again the turnover of fixed assets, and the net worth is really very very good, it is wonderful and it is really performing very well. Other two ratios that is DTR and then the ITR inventory turnover ratio and then the debtor's turnover ratio we have already discussed.

We have already talked about the inventory turnover ratio and the debtor's turnover ratio; and if you see if you recall then we have seen that the debtors turnover ratio is just say collection period is 20 days and the inventory is 70 days, So, in 20 days they are converting the credit sales in through cash, and in 70 days they are converting the elementary in to cash. So, it means inventory in to sales and then in to cash. So, it means it is not a big deal, the overall turnover and resource efficiency of the firm is really wonderful, it is very good, and the firm is performing exceedingly well, and it is reflected from the financial statements also, it is reflected from the ratios also, what we have calculated the ratios 4 sets of the ratio so far.

Remaining ratios are remaining different types of the ratios I will be talking to you in the talking to you in the next part of discussion.

Thank you.