

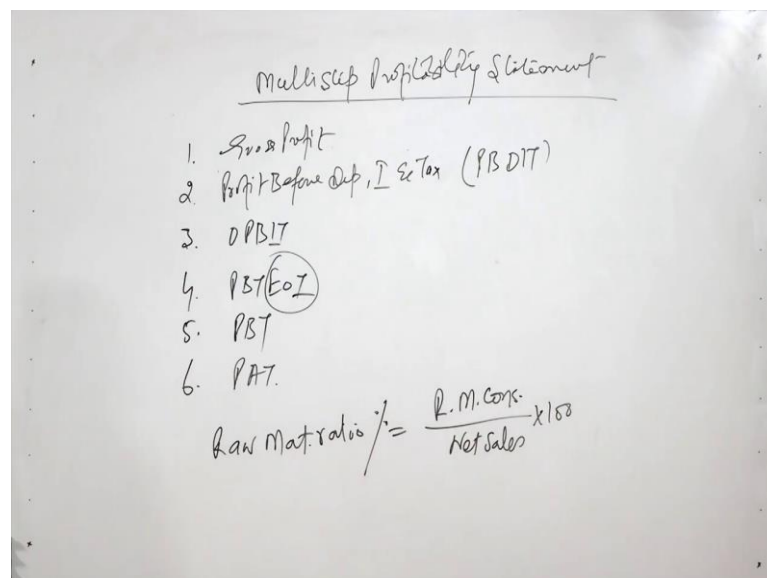
Financial Statements Analysis and Reporting
Dr. Anil Kumar Sharma
Department of Management Studies
Indian Institute of Technology, Roorkee

Lecture - 46
Profitability Ratios- Grasim Industries Part-II

Welcome students. So, we were talking about in my previous part of my discussion. I was talking to about the ratio analysis, and we are in the process of analyzing the profitability position of the firms. And then there I talked to you about that for analyzing the profitability position of the firms, we will have to serve the 10 purposes that one is that, we should be knowing the distinct level of the profitability of the firm, and the second thing is that, to know the composition of the cost. So, that if we have to increase the profitability and reduce the cost, we know that we have to put the effort. So, that the benefit is maximum. So, two steps now we have to complete.

One is, that is the learning, how to prepare the multistep profitability statement, and then is the second one is the, cost composition, knowing of the cost of the products and then having the cost composition of the firm. So, this is the way we are going to learn about the overall profitability, existing profitability, and scope to improve the profitability of the firm. So, when we talk about the scope to improve the profitability of the firm, we will be first preparing the multistep profitability statement.

(Refer Slide Time: 01:44)



Multistep profitability statement, and this statement will automatically facilitate the analysis of the profit and loss position of the firm. So, when you take the, prepare the multistep profitability statement. first we take into account is the first thing which we are going to take here is, the gross profit, first thing will be gross profit, will be calculating, will have to calculate the gross profit. For example, now in this case gross profit is not calculated, they have directly prepared the income statement. So, gross profit is not calculated. So, we have to calculate the gross profit of the firm. Then the second step would be profit before depreciation, profit before depreciation, interest and tax, which is called as PBT, PB profit before depreciation interest and tax, which is called as profit before debt appreciation, interest and tax, this is PBDIT. This is step wise profitability calculation. gross profit we will be able to find out by taking into account five items; sales and closing stock minus the raw material cost, labour cost and the other direct expenses cost.

And then next thing we have to calculate is that, from the gross profit if you subtract the depreciation interest cost that is the financial cost, and then the tax part. So, we will be this tax part, you will be able to find out that the PBDIT; profit before depreciation interest and taxes, this much. Then we will be knowing about this, these three components depreciation and trust and tax part, and then we can calculate the other things. So, then we will be subtracting at this level, the depreciation, and we will be calculating operating profit before interest and tax, profit before interest and tax that is OPBIT; operating profit before interest and tax. If you subtract the depreciation at the say third step, you will get the OPBIT, and then at the fourth step, fourth step will be calculating the there is a profit before, you now you subtract the interest also. So, it will be profit before tax and extra ordinary incomes. They will be calculating the next item, next part that is the PBT profit before tax. If you take into consideration the extra incomes now you will calculate the profit before tax.

Next thing is the profit before tax, we will be calculating, because when you add this extra ordinary income and everything into it, then you calculate the profit before tax and that the next step will be calculating the pat; that is the profit after tax. So, this as whole is going to give us the overall profitability position of the firm, but it is step bias. First is the gross profit, then we are talking about that which is the profit before three items; one is depreciation, second is the financial expense, and third is the tax. And then we will be

calculating operating profit before interest and tax after subtracting depreciation. Then we subtract the interest also, but add the extra ordinary items, and then we will arrive at the profit before tax; that is after subtracting the interest component, profit before tax will be calculated and once you subtract the tax also then you will get the profit; that is the profit after tax.

So, this is the means all the different items, we are going to take into consideration, and we are going to calculate the multistep profitability of the firm. And then you talk about the expensive part, I told you in my previous discussion that at the same time means, when you are calculating the profitability of the firm you are talking about the cost part also, cost composition also. So, only one item one ratio we calculate is, that is the raw material ratio, and for calculating the raw material ratio we calculate it in percentage terms. So, it means we calculate it in a way; that is raw material consumed divided by the net sales, raw material consumed divided by the net sales into hundred. So, this way we are going to calculate the raw material ratio, raw material as a cost, because raw material constitutes about the 60 percent of the total production, which is always better and other cost components like your wages, then your other direct expenses, then the indirect expenses tax depreciation everything; that is the remaining 40 percent of the cost and different components.

So, if you concentrate on the one component that is raw material only, and if you are able to reduce the raw material cost you know by 10 percent, we are going to be able to produce the total cost of the product by six percent. So, it means we should put maximum focus on the raw material, and we should try to bring the cost of raw material as low as possible also. One ratio we calculate that is the raw material ratio and then in percentage terms then the profitability are the different levels and at the different stages, and by preparing the multistep profitability statement, we can easily try to find out that what is the profitability level of the firm, and how the profit can be increased or decreased, when we know about the cost component or the cost compositions.

Now, we will move further and learning how to prepare the multistep statement of the further Grasim Industries, the case which we are discussing, and if you prepare the multistep profitability for the Grasim Industries, you would come to know the very interesting information that how this different levels of profitability of the firm at different level is getting affected, and what we can do to improve the profitability.

(Refer Slide Time: 07:56)

Multistep Profitability Statement

Particulars	2006-07		2005-06	
	Am't (Cr)	Ratio	Am't (Cr)	Ratio
Gross Sales	9607.97	111.67	7638.41	114.82
less Excise duty	1024.38	11.67	985.80	14.82
Net Sales	8603.59	100.00	6652.61	100.00
Mat. Cost	2556.92	29.72	2106.58	31.66
Manu. Exp.	1744.33	20.27	1580.72	23.76
C.O.G.S	4301.25	49.99		
Gross Profit	4302.34	50.01		

So, we will prepare the profitability, multistep profitability statement for the Grasim Industries, and here we will be preparing it for the 2 years that is 2006 and 7, and here it is for the 2005 and 6. For 2 years we will be preparing this ratio, and we will be taking two columns we will be making here. One is in value in crore and then it is the ratio, and then it will be we will again take the value in crore, and then it is the ratio. So, we will see that what is the ratio and what is the change in the ratio, that way we will have to prepare this ratio

So, we will start with the first of all. What we do here is. we take the sales that is the net sales net sales is the common denominator, and against the sales we try to compare the different types of the items, and we try to get to know the different level of the profitability, and then the different levels of the cost in the total cost composition, and then we can easily find out that, at what level the profitability is more or less and we will have to improve the profitability how we can reduce the cost.

So, here we will start with the. So, you can call it as the particulars, you can make this column as the particulars particulars, and this is the column of amount, this is the column of amount, not crore. This is amount in bracket you can put it as crore and this is the ratio. So, we will be writing this as amount, and this is in crore and will be calculating the ratio for this amount now. So, this is the multistep profitability statement we are

going to prepare. So, first we will take the gross sales. First we will take the gross sales, and if we take the gross sales for this firm we will be taking the gross sales.

(Refer Slide Time: 09:46).

Upboard	Slides	Font	Paragraph	Drawing	Editing
Profit before Tax & Exceptional Items		2,189.26	1,201.90		
Surplus on pre-payment of sales tax loan			4.13		
Write back of provision for diminution		37.10	---		
Profit before Tax		2,226.36	1,206.03		
Provision for Current Tax		(692.38)	(369.82)		
Deferred Tax		1.83	27.00		
Profit after Tax		1,535.81	863.21		
Debt Redemption Reserve No Longer Required		38.56	8.62		
Investment Allowance Reserve No Longer Required		0.05	0.25		
Balance brought forward from Previous year		878.37	815.35		
Profit available for Appropriation		2,452.79	1,687.43		
Appropriations:					
Interim Dividend		252.10	-		
Proposed Dividend			183.15		
Corporate Dividend Tax		35.36	25.71		
General Reserve		1,200.00	600.00		
Balance carried to Balance Sheet		965.33	878.37		
		2,452.79	1,687.43		
Basic and diluted earnings per share (In Rs.)					

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Upboard	Slides	Font	Paragraph	Drawing	Editing
GRASIM INDUSTRIES LIMITED					
Profit and Loss Account for the year ended					
AS ON 31 st 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	297.64		

And if you look at the gross sales now, because income statement is of use to use, so we talk about the gross sales, but the level of gross sales, it is 9607.97 and it is 7638.4. So, let us take the gross sales figure and it is 9607.97, and then it is the, in this case it is 76 this is the ratio and then it is 7638.4. And now we will have to subtract the less excise duty, we will have to subtract the excise duty. So, if you subtract the excise duty how

much is excise duty it is 1004.38 crore, it is 1004.38 crore, and then we are left with the figure.

So, here in this case it is 985.80 crore. So, we are left with this figure. So, finally, we are here with the net sales. and net sales are 8603 8603.59 and then it is 6652.6, and this is how much it is if you take thing into account and if we call it as this is the, this we are calling it as the 100 percent, this is the 100 percent, this we have to going to take it as 100 percent, let us say it is going to be 100 percent. So, how much is the gross sales .Gross sales are 9607 and the net sales are 8603. So, if 8603 is the 100 percent how much is the 9607, and this is again 111.67 111.67. And if you take the excise duty is 11.67 percent, and then it is the 114; 114.82, and excise duty is for 13.82 percent.

So, now you can easily find out, how interesting is this information is going to be for all of us, that we are having a comparative information, and when you are having a comparative information we are going to find out what is the level of profitability and how we are going to improve the profit ability, that statement is going to help us to learn. So, this is a net sales which is 100 percent, gross sales is 100 and 11.67 percent in the year 2006 and 07, and in the year 05 and 06 it is 114.82 percent. So, excise duty 11.67 percent and then it is 14.82 percent. This is the net sales.

Now, you come down to the different items here, we will be preparing like a statement, where we can calculate the gross profit also we calculate the net profit, and we take into account all the expense and the income items. So, now, we will be taking the material cost, material cost, and if you calculate the material cost here material cost for us will be. we have to calculate the material cost I guess, it is not given to us directly if you talk about the material, different types of the materials are being used, and if you talk about the materials cost we will have to calculate the material cost here. So, when you talk about the material cost, it is the cost in three things. It is taking into account three things, and these three things are 2219.32 is the material consumed, it is direct material.

Then is the purchase of the finished goods 32.36, and third item we have to add into this is the 16.44 crore. So, three items we will have to say add. One is that is the raw material consumed is 2219.32, then it is the finished goods we purchased from the market and sold in the market; that is 321.16 crore, and then the say decrease in stocks that is 16.44 crores. These three items are going to make us the material cost, and this total material

cost if you calculate this works out as, 255 2556.92, and for the other here this is going to work as 2106.32.

So, what is the percentage of the material cost here. Now you calculate the material cost is the percentage of the sales, and this material cost here. Total material cost here works out to be that is the 29.72 percent, 29.72 percent is the material cost; that is 2556 of the sales. Sales is the common denominator, net sales is the common denominator that is 100 percent. So, 2.2 1556.92 crore against 8600 and 3.59 crore, if you calculate the cost that is about 30 percent, cost of material in case of the textile industry is 30 percent in the current year that is 06 and 07, and in the previous year this cost was little more. This was 31.66 percent. This material cost was 36. 31.66 percent, this was little more little on the higher side. So, the total cost here to calculate and that is the material cost you find it about, that material cost is 30 percent around, revolving around 30 percent. This is one component.

Then we take into consideration the manufacturing cost or the manufacturing expenses, manufacturing expenses, and if you try to find out the manufacturing expenses here. The manufacturing expenses are what? This figure is 1744.33 and 1580.34. So, this figure is manufacturing expenses is 1744, and then it is the 33, and next is 1580, 1580.34. So, this is the manufacturing expenses cost, and if you take this a percentage of sales. So, manufacturing expenses are also not less in this case in the textile industry. This works out as 20.27 percent and 23.76 percent. So, you see automatically the percentage is being worked out, it is coming out and we can easily find out. So, after this we will have to we have to calculate now the cost of goods sold CAGS.

Cost of goods sold, total cost of goods sold we have to calculate. So, if you take the cost of goods sold, how much it is going to be. We have to calculate the cost of goods sold, and for calculating the cost of goods sold we will have to take certain things into account. Total of these two items, let us see here how much it is the CAGS; cost of goods sold is 5. then we are going to find out the cost of goods sold is 2 ,which means it is a we can put a line here that will be better to distinct. So, cost of goods sold is material cost and manufacturing expenses these two things. So, it is going to be 5 12 2 1 10 and 1 11 1, then it is 10 1 then it is 7 5 13 1 and then it is 2314, it is 4301.25, 4301.25, it is the manufacturing cost. 4 3 we have already calculated manufacturing cost, somewhere we have used. So, this is 4301.25 is the manufacturing that is the cost of goods sold or the

manufacturing cost you can say, which works out as 49.99 percent, and it is 3686.66. So, this works out as 55.42 percent.

So, how wonderful, means how meaningful conclusion we are able to draw here. you see that the cost of production, manufacturing cost, direct cost it is which was about say more than 50 percent previous year it has come down to about 50 percent, 55 percent, more than 55 percent, it was in the previous year, this has come down to 50 percent, almost 50 percent in the present year that is 2006 and 07.

It means the firm has been able to reduce the cost, and you see this statement might have guided the firm that look their material cost was 31.66 in the previous year they have brought it down from 32 percent to around 30 percent. So, 2 percent reduction, and your manufacturing expenses is also about from 24 percent they have been brought down to 20 percent, say 21 percent. So, 3 percent reduction in the manufacturing cost, manufacturing expenses and 2 percent reduction in the material cost. So, these two costs have seriously brought down the total cost of the goods sold, down by 5 percent from about say 55 percent to the 50 percent.

It means reducing the 5 percent cost, means in the look at the volume of sales. When you talk about the volume of sales even after excise duty which is 8000 crore 8000 plus crore or 8600 crore 5 percent of that you can easily understand how much it is going to be, it is going to be more than 300 crore, 10 percent is going to be somewhere 860. So, it means the 300 crore of the cost they have brought down. Very good achievement wonderful achievement, and if you make the analysis over the, say further years, you will find it down, find it up maybe the cost is further reduced.

Now, we will talk about the other items, say after the cost of goods sold let us calculate the gross profit. This is the gross profit here, and if you calculate the gross profit, the gross profit is going to be how much. Cost of goods sold and then it is the, this and this. So, this say total this minus this is going to be the G P. So, G P is how much for us. In this case the gross profit is going to be 4302.34, 4302.34 is the gross profit. 4302.34 is the gross profit here, and it is. In this case it is working out as how much; 292965.95 crore, and in the percentage terms if you look at, this is the 50.01 percent and it is 44.58 percent.

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Multistep Profitability Statement

Particulars	2006-07		2005-06	
	Amount (Cr)	Ratio	Amount (Cr)	Ratio
Sales	9607.97	111.67	7638.41	114.82
Excise duty	1024.38	11.67	985.80	14.82
<u>Sales</u>	<u>8603.59</u>	<u>100.00</u>	<u>6652.61</u>	<u>100.00</u>
Cost	2556.92	29.72	2106.32	31.66
<u>Cost</u>	<u>1744.33</u>	<u>20.27</u>	<u>1580.34</u>	<u>23.76</u>
<u>Gross Profit</u>	<u>4301.25</u>	<u>49.99</u>	<u>3682.66</u>	<u>55.42</u>
<u>Gross Profit</u>	<u>4302.34</u>	<u>50.01</u>	<u>2965.75</u>	<u>44.58</u>

So, it means same reflection in the gross profit also. Same reflection in the gross profit also, gross profit which was about say 45 percent previous year, that same savings which the firm has been able to have in the material cost, and similarly in the say your manufacturing expenses they have reduced the cost by 5 percent. Similarly it is reflecting in terms of the increased gross profit, and the gross profit has increased same amount that is why 5 percent and finally, the gross profit is improved.

So, if you look at the gross profit, but in the previous year that was about say 45 percent, and here the profit is more than 50 percent or around 50 percent. So, it is a wonderful achievement, and it is really very good process if you talk about. So, in this entire process if you see; till now what we have been able to do, if you talk about this part if you talk about this statement, we were not getting any information from this analysis what is the gross profit level. You are not getting any information from this, what is the gross profit level here. We were only finding out that we have the raw material, we have the manufacturing expenses and then some other items, but you see if you want to find out the gross profit here you have to calculate yourself, means (Refer Time: 22:26) this information is not available.

So, some information you can easily find out, that this is very good profit and loss account you can find out from the profitability level as we find here. The profitability level of the firm is having a good amount of the profit after tax is 1535.81. And when we

have calculated the return on investment ratio, we have found that return on investment ratio was about say 26 percent. So, that is giving an idea if the profitability of the firm is very good, because that is the broader concept return on investment is a broader concept. So, we could easily make out that the profitability of the firm is very good, but what is the, say step wise profit how much is the operating profit.

Gross profit gives the idea about the operating profit, and then net profit gives the idea about the operating profit, and the operating structure of the firm, and that profit gives an idea about the financial structure of the firm, the lower part the financial structure of the firm, and what is the importance of the operating structure, what is the importance of the financial structure of the firm, I will be talking to you when we complete this statement, we calculate all the ratios we complete this statement, and we are able to find out what was the gross profit level, what was the net profit level for this firm, what was in 2056, what was in 2067, when we are able to know it, when we are able to find it out then I will discuss with you what is the importance of GP gross profit, and what is the importance of net profit and how means we should look at it.

While analyzing as a true financial analyst, while analyzing these financial statements how we should look at the GP, and how we should look at the NP; that is the net operating profit after tax, and how we should analyze and what conclusions we should draw out of it. So, the gross profit ratio which we have calculated is 50 percent, and here it was 44.58 percent. So, there is a significant improvement in the GP ratio what we have calculated so far. After this now we have to extend the statement and go further down and calculate, means take into account the other non operating expenses, indirect expenses, and non operating incomes, indirect incomes, and finally, adjusting the depreciation tax and everything has to calculate now the net profit after tax. And then we will come to know the profit after tax position, then it is the GP position, and then the different items of expenses. And then we will discuss the importance of GP and NP, and how to look at it as a good financial analyst, and this all I will be talking to in my next part of discussion.

Thank you very much.