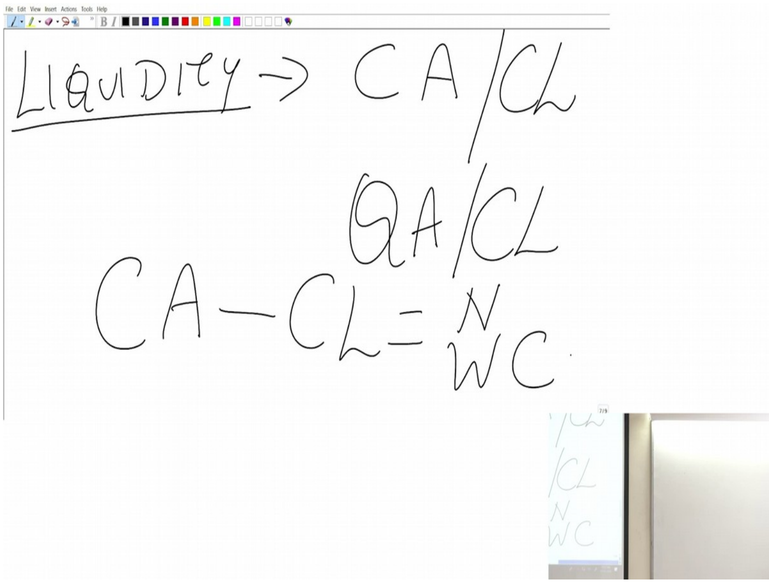
Decision making using financial accounting
Prof. Arun Kumar G
Department of Management Studies
Indian Institute of Technology, Madras

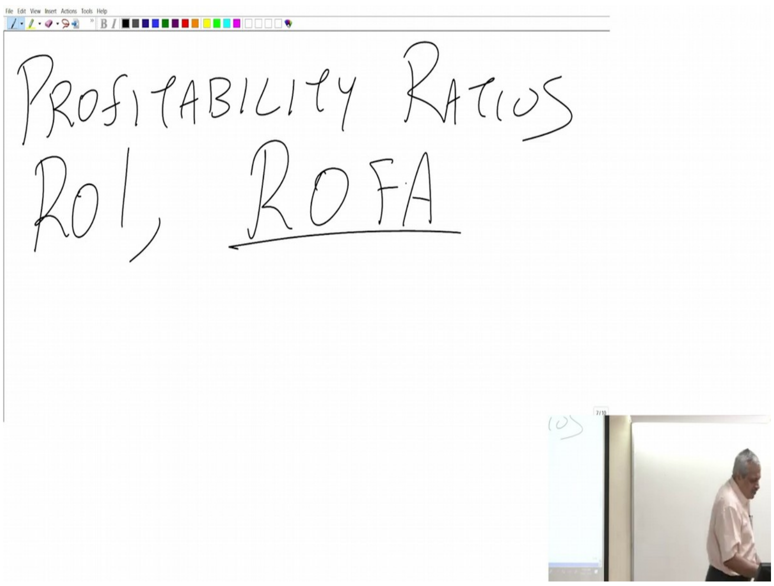
Lecture - 31
Financial Statement Analysis - 4

(Refer Slide Time: 00:13)



Now, having said that the next aspect, the last aspect out here, if I have to look at in this particular case is what we look at is profitability issues or I will say profitability ratios.

(Refer Slide Time: 00:21)

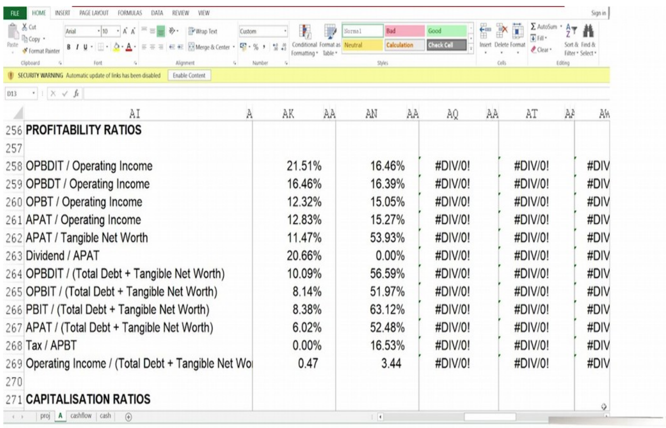


We look at of course, profitability ratio, somebody can argue, what is the return on investment? Yes, return on investment is a profitability ratio basically, it talks about profit. There can be other forms of profitability ratios also. When I say other forms of profitability ratio, I will say what is the return on my total assets out there. I have total assets invested; total assets out there or I can even say instead of total asset, I can say return on my fixed assets out there.

Why you return on fixed asset? Fixed asset is for core operation on my investment and fixed assets out there. Imagine my total capital in the company 50 million, 30 million is in fixed asset, 20 million is basically, in what is called as my investments, other investments out there. If I look at my total return and investment it will be lower, whereas, if I had look at the return on the fixed asset, return on fixed asset will be far higher in that particular case, because I am looking at, because why, what are you interested as an investor? You are interested in the core operations of the company.

So, I want to look at the return fixed assets out there. Am I with you on this? So, basically, these ratios can basically, what you call it as one can keep on devising many of these ratios out there.

(Refer Slide Time: 02:02)



	AI	AK	AN	AQ	AT	AW
256	PROFITABILITY RATIOS					
257						
258	OPBDIT / Operating Income	21.51%	16.46%	#DIV/0!	#DIV/0!	#DIV
259	OPBDT / Operating Income	16.46%	16.39%	#DIV/0!	#DIV/0!	#DIV
260	OPBT / Operating Income	12.32%	15.05%	#DIV/0!	#DIV/0!	#DIV
261	APAT / Operating Income	12.83%	15.27%	#DIV/0!	#DIV/0!	#DIV
262	APAT / Tangible Net Worth	11.47%	53.93%	#DIV/0!	#DIV/0!	#DIV
263	Dividend / APAT	20.66%	0.00%	#DIV/0!	#DIV/0!	#DIV
264	OPBDIT / (Total Debt + Tangible Net Worth)	10.09%	56.59%	#DIV/0!	#DIV/0!	#DIV
265	OPBIT / (Total Debt + Tangible Net Worth)	8.14%	51.97%	#DIV/0!	#DIV/0!	#DIV
266	PBIT / (Total Debt + Tangible Net Worth)	8.38%	63.12%	#DIV/0!	#DIV/0!	#DIV
267	APAT / (Total Debt + Tangible Net Worth)	6.02%	52.48%	#DIV/0!	#DIV/0!	#DIV
268	Tax / APBT	0.00%	16.53%	#DIV/0!	#DIV/0!	#DIV
269	Operating Income / (Total Debt + Tangible Net Wo	0.47	3.44	#DIV/0!	#DIV/0!	#DIV
270						
271	CAPITALISATION RATIOS					

Let me take you take you through what is called as a simple excel out there what I have, what we basically, have looked at. I am just going to increase the font size, I mean do not copy this ratios, do not I am not expecting the entire thing out there, these just to give you an idea. Yesterday, somebody talk to me about credit rating that is a word somebody used. If I am not wrong somebody used credit rating, how do we decide debt somebody said credit rating. How do you decide whether invested a company in the form of a debt somebody said credit rating immediately? So, credit rating agency basically, do this kind of a stuff, because I, so work for one of them, that is only now what I have done? I have rewind with device various forms of ratios out there.

I have not, I did not a standards, I will looked at profitability, when I am looking at profitability, where various aspects what I am looking at? I am looking at what is that O P B D I T nothing, but operating profit, because I am interest in the operations of the company. I am looking when I am say operating profit, what I have done? I have knocked out other income, I have knocked out other expenditure, I have taken only operating income. When I say operating income, there is only sales plus basically the income from the core activity, expenditure related to the core activity, recast the balance sheet and calculated the profit out there.

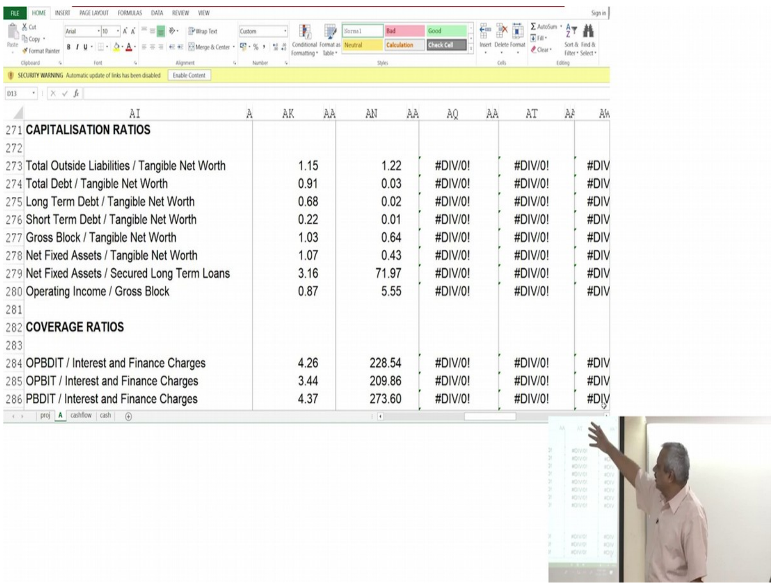
So, I am looking at operating. What is the operating profit? Before depreciation interest and tax. Why? D I T depreciation non-cash expenditure not worried, interest because of capital structure not worried, taxes mandatory keep it aside. So, I want to look at bare minimum what is the kind of operation at various levels I have done. I have looked at I have knocked of interest and I have knocked of taxes etcetera and then done it. The same thing what I have done is when I say return and investment out there at the operating level, at the before the interest, after the interest, etcetera out there then debt plus tangible net worth, debt plus tangible net worth is basically, your total capital in the form out there. So, these basic aspect what we have done in the process.

I mean you do not have to copy all these, I am not expecting this, just to give you an idea. So, what I am trying to do; text book will give you a set of ratios, but these ratios can be device depending on the companies, what you are looking. If you are looking at a bank the kind of ratios what you will have to look at will be completely different, compare to a manufacturing firm. If you are looking at service industry the kind of ratios what you have to look at will be completely different out there, because these you will have to decide that is how do I asses the performance of the company. Performance of the company can be asses by profitability part of it.

Now, profitability if for example, you will imagine a company, where the second aspect in the balance sheet that is the investment E 0, there is no investment out there other than where is minimal are negligible part. Then looking at a separating, the operations part of it and the profit part of it, the operating profit at the profit there is no return, there is going to be not much of difference. It will be basically going to be the same in the process. So, it depends on the company that is why, what(Refer Time: 05:12). This is basically what I did for Unilever I was just looking at comparison. Now, if I in this particular case, I will say at the operating level compared to the previous year. This year there is an improvement it was 16 percent last year. Now, the return is 21 percent well, it has improved by 4 percent out there. Now, the analysis stops here, no analysis is only begins here.

Now, why is that 4 percent? What is breaking that an efficiency of 4 percent, that we will go ahead, that is not expected at this stage. We will worry about it, as we at the later stage at the stage looking at these basic aspects. What is required for your analysis that is all what is basically required in the process?

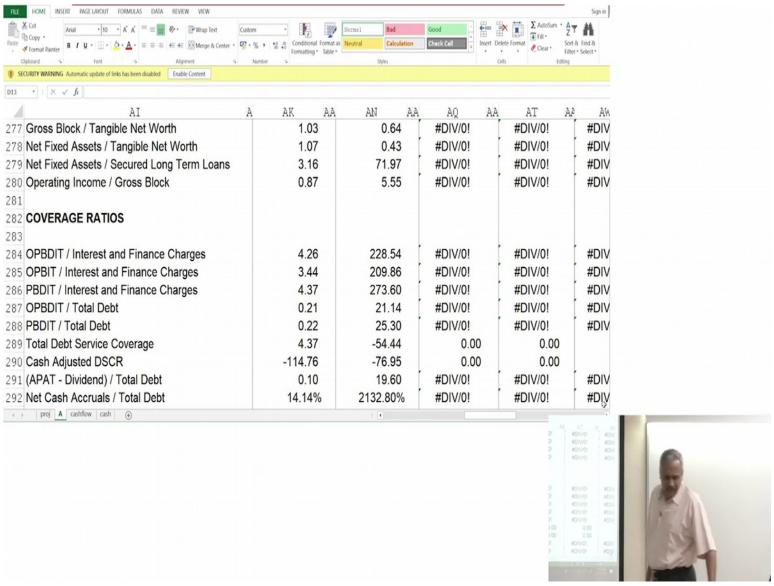
(Refer Slide Time: 05:50)



	AI	AK	AN	AQ	AT	AW
271	**CAPITALISATION RATIOS**					
272						
273	Total Outside Liabilities / Tangible Net Worth	1.15	1.22	#DIV/0!	#DIV/0!	#DIV
274	Total Debt / Tangible Net Worth	0.91	0.03	#DIV/0!	#DIV/0!	#DIV
275	Long Term Debt / Tangible Net Worth	0.68	0.02	#DIV/0!	#DIV/0!	#DIV
276	Short Term Debt / Tangible Net Worth	0.22	0.01	#DIV/0!	#DIV/0!	#DIV
277	Gross Block / Tangible Net Worth	1.03	0.64	#DIV/0!	#DIV/0!	#DIV
278	Net Fixed Assets / Tangible Net Worth	1.07	0.43	#DIV/0!	#DIV/0!	#DIV
279	Net Fixed Assets / Secured Long Term Loans	3.16	71.97	#DIV/0!	#DIV/0!	#DIV
280	Operating Income / Gross Block	0.87	5.55	#DIV/0!	#DIV/0!	#DIV
281						
282	**COVERAGE RATIOS**					
283						
284	OPBDIT / Interest and Finance Charges	4.26	228.54	#DIV/0!	#DIV/0!	#DIV
285	OPBIT / Interest and Finance Charges	3.44	209.86	#DIV/0!	#DIV/0!	#DIV
286	PBDIT / Interest and Finance Charges	4.37	273.60	#DIV/0!	#DIV/0!	#DIV

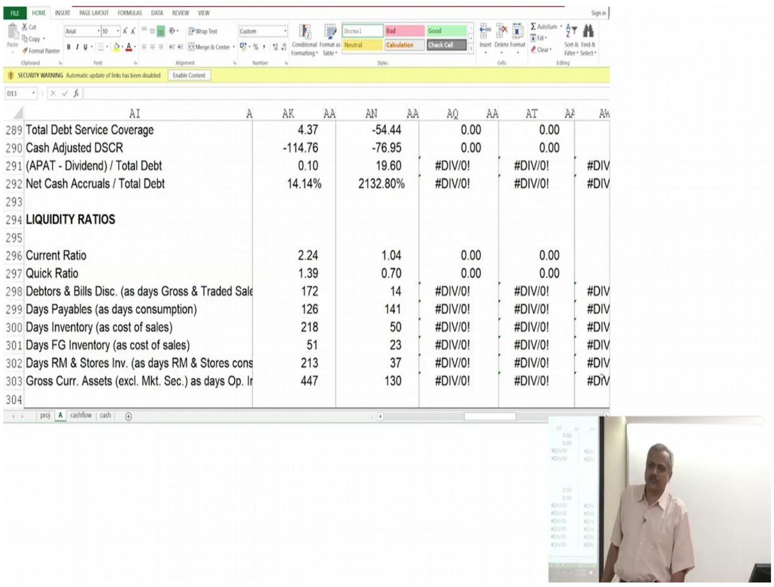
If I had to move ahead further I looked at the capitalization, the debt equity, you will say debt by tangible net worth basically, debt equity part of it. How does it vary what are the kind of aspects, how does it vary etcetera.

(Refer Slide Time: 06:04)



Then we looked at interest coverage ratios in the, we talked about interest coverage ratio that is interest and finance charges. How does it compare with the operating profit, before depreciation, after depreciation, average interest various combination. That is all, I have just arrived at what you call it as basically, various combinations out there and total debt service coverage. I talked about in the last class out there, debt service coverage in the process out there and then I also ratios out here, here current ratio and quick ratio and so on and so forth out there.

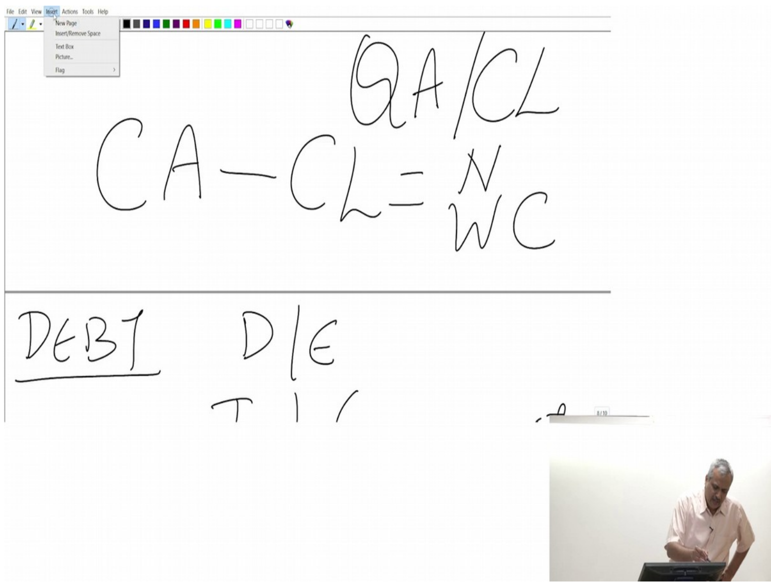
(Refer Slide Time: 06:30)



Do not worry about so many ratios out there. As of now there is only an indicator that is why we are not going in a structured fashion, because it varies from the industry to industry and the sector it which you are looking at.

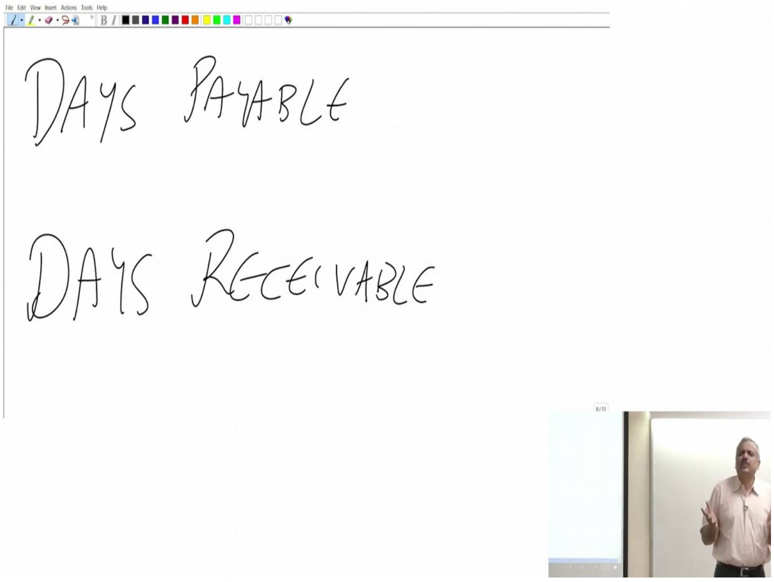
So, that is one of the reasons, I have not gone in for a very structured approach in this. This is basically to give you an idea and I will put up what is called as your a slides out there in the moodle which we can basically using. Now, I will coming back to this in the process. Now, the next aspect when we look at basically, the profitability part of it we looked at next aspect, what we look at is we look at in the liquidity part of it itself we sort of look at out here, yeah.

(Refer Slide Time: 07:18)



In the liquidity part of it itself when we look at the other two aspects what we looked at in the last class.

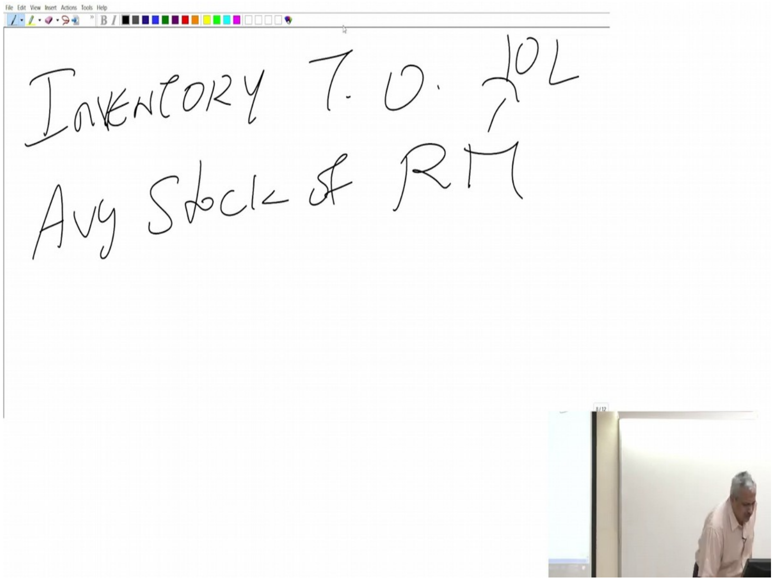
(Refer Slide Time: 07:24)



Now, the days payable and what we call it as days receivable, that is on an average how long due take to pay on an average how long due take to receive the money that will also talk about your liquidity part of it. Why? Because if you are taking more time to receive and more time to pay then what happens your company is illiquid. If the time is sort of matching that is the number of days you take to pay and the number of days you take to what is called as receive is almost the same, then your liquidity is taken care or if it is like Amazon, where you pay first where as, they pay after about 200 days then what happens?Your company is highly liquid, you have a problem of too much of cash flows out there, because please note, ideal cash does not mean anything cash has to give you return cash in, the cash does not mean anything in the process. So, they have to find avenues the invest which will keep on giving you return in the process out there. Am I with you, in all these things. Now, if it is 200 days then what is the problem in Amazon, please understand, because I know that you will pay me only after 200 days. When I sell the goods to you the markup, what I am going to have will always be for higher compared to. Because if you do a cash loan purchase, the price will be lower, if it is going to be higher credit period, then the markup will always be slightly higher in the process out there.

So, somewhere or the other, it basically gets even out. So, what about when we talk about ratios out there you can look at various forms of ratios out there. Somebody can even look at how long does the inventory stay in my company out there.

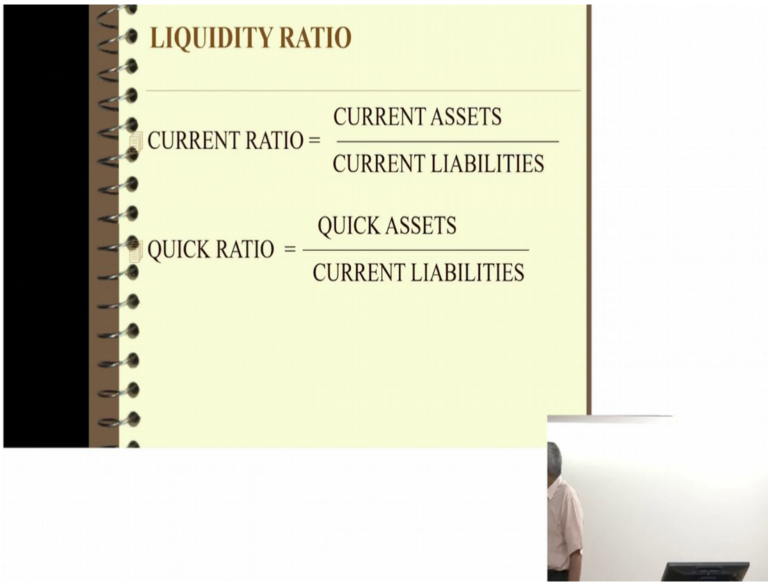
(Refer Slide Time: 09:12)



I can even look at what we call it as the number of days that is inventory turnover ratio. How long does the inventory stay? Simple, I will say what is the average stock of raw material? Let me say the average stock of raw material in my company is let us say 10 lakhs, what is the amount of raw material consumed through the year at in my company, what is the times of raw material consumed through the year in the company. Imagine, the kind of raw material that is consumed through the year in my company is about say about 500 lakhs out there. That means, on an average how many days raw material do you keep? 500 is what is consumed through the year divide by your 365. You know what is the consumption per day, you know what is the stock, what you are basically, keeping you know what is a number of times, it is getting turned over out there.

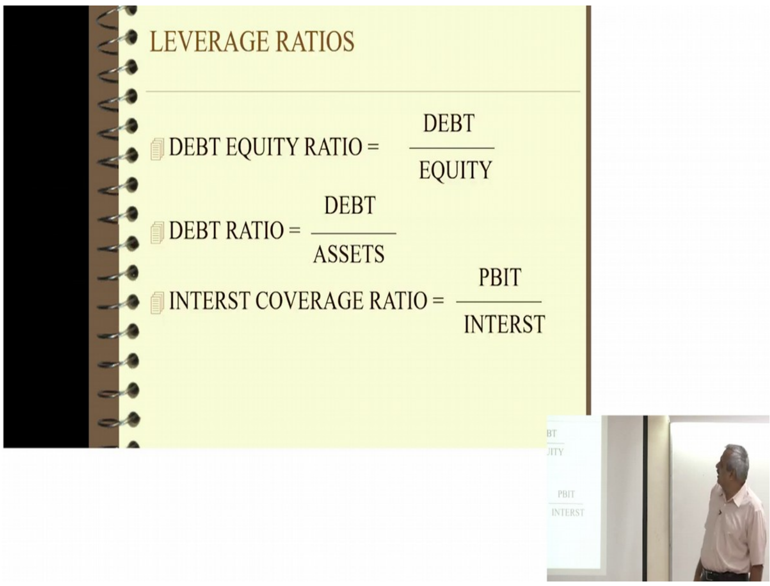
That is all, the all these will talk about what you let us efficiency in the company too much of raw material out there, then too much of money basically blocked out there. Less of raw material, then less of money block basically out there in the process. So, basically these ratios what we sort of look at.

(Refer Slide Time: 10:34)



These ratios one can basically decide when I talk about the liquidity I talk about I think this is the first time I am using slides in the class. Anyway, then we talked about ratios out there, we can talk about liquidity, I can talk about current assets, current liabilities, quick assets, quick liabilities, etcetera.

(Refer Slide Time: 10:50)



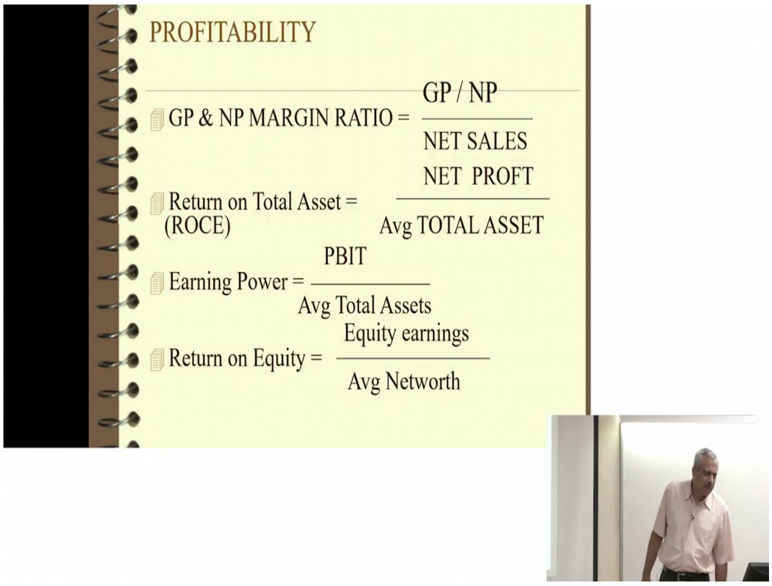
Then I can look at the leverage or we call it capitalization ratios, we talk it leverage ratio. Leverage means what? The company is highly levered that is the word many times, you would use in the see in the context.

Levered means what, highly debt out there very high debt component. A levered means more and more debt in the company that is what, we call it as leverage. I look at debt, debt issue and what portion of the debt is the asset, I look at the interest coverage, these are the basics of what we are looking at.

(Refer Slide Time: 11:24)

Further, I can even look at what is the kind of inventory turnover out there. Imagine, what is the average inventory? What is the sales out there? What is the account receivable out there in the process, what is the fixed assets, what is the total assets, what is the kind of turn over? You can device many of these kind of things out there.

(Refer Slide Time: 11:42)



I can look at the profitability, return and total asset, earning power that is a under return and equity and so on and so forth and then basically, keep going on in the process out there. Now, I will put up on moodle(Refer Time: 11:56) some rough, what you call it as slides with some ratios out there, it will not be do not ask me after, that the ratios what you have put up. I will exactly calculate and all the ratios what you have put up now, I should get maximum marks need not that is only indicative.

You will have to look at it based on your company and look at use your own imagination, use your own thinking, use your own logic to basically that is fine. That is that is indicative you can add more on all of it may not even be relevant. So, you might have to delete more, some also from that particular list out there become any text book, it is there.

Now, one thing you need to avoid, I will just go to money control, moneycontrol.com and I will type the name of the company P and L will be there, balance sheet will be there, ratios will be there, I will cut and paste in the excel sheet and dump it to you. No, do not do that, reason and I can you how can you find out, I can find out I will also tell you how I can find out, because money control what you have find in the P and L and balance sheet will be adjusted P and L and balance sheet.

The ratios what he has calculator and put up out there in money control, if we actually pickup the figures what is called as from the annual report and calculate you will never get that figure, you will never get that figure. So, I can easily make out.

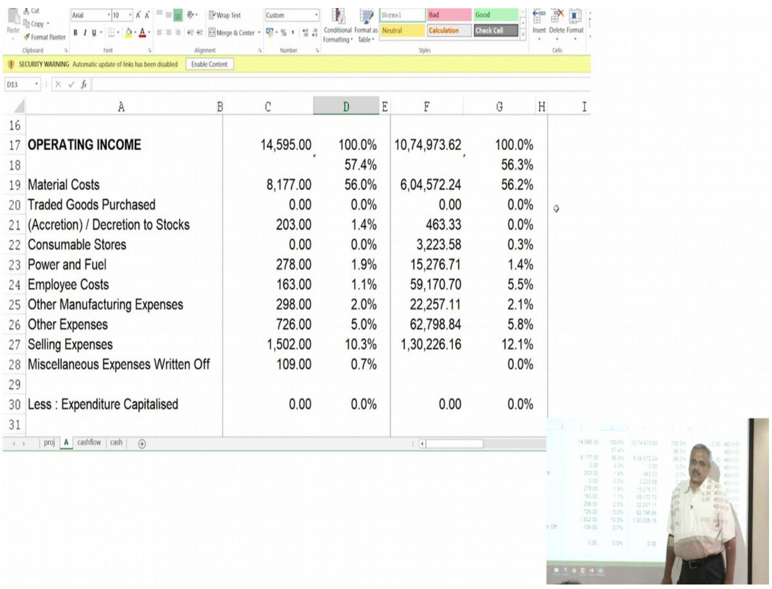
Student: What is the.

So, please.

Student: What is the adjusting.

Adjusting in the sense what happens is grouping. When we say in this particular case it will what is adjusting, I will come to what is adjusting out here. We saw this excel out here.

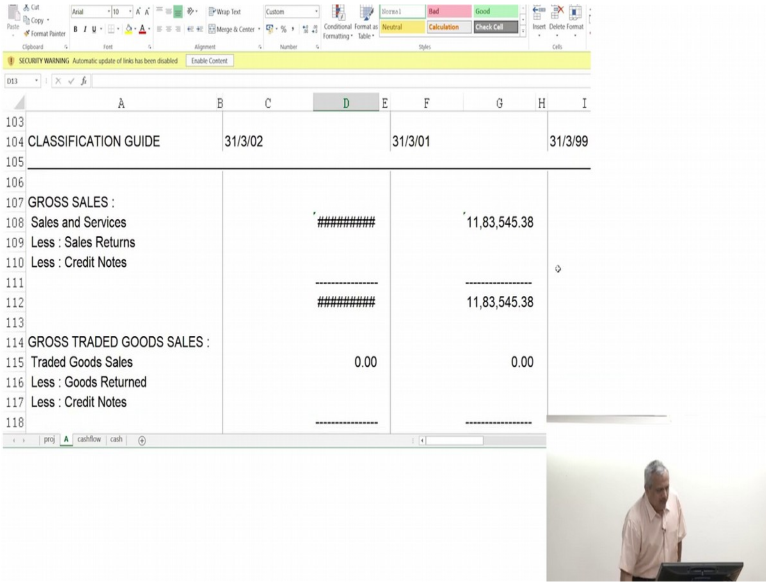
(Refer Slide Time: 13:42)



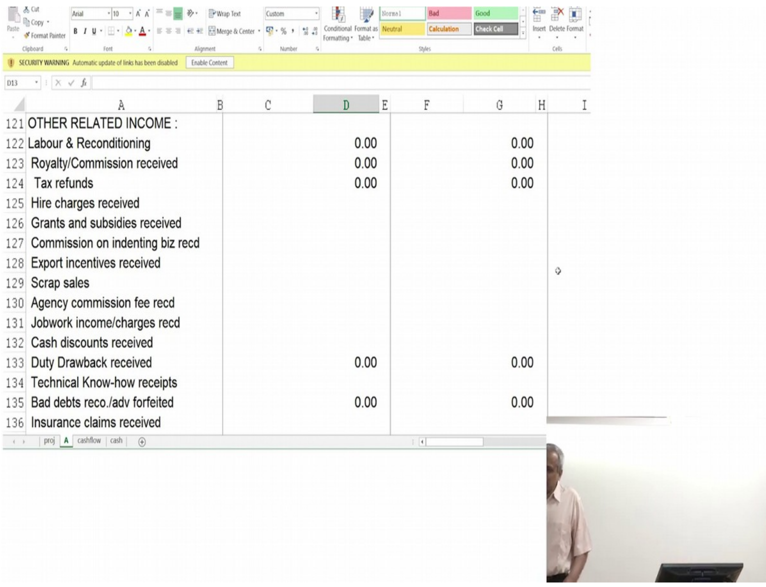
	A	C	D	F	G
17	OPERATING INCOME	14,595.00	100.0%	10,74,973.62	100.0%
18			57.4%		56.3%
19	Material Costs	8,177.00	56.0%	6,04,572.24	56.2%
20	Traded Goods Purchased	0.00	0.0%	0.00	0.0%
21	(Accretion) / Decretion to Stocks	203.00	1.4%	463.33	0.0%
22	Consumable Stores	0.00	0.0%	3,223.58	0.3%
23	Power and Fuel	278.00	1.9%	15,276.71	1.4%
24	Employee Costs	163.00	1.1%	59,170.70	5.5%
25	Other Manufacturing Expenses	298.00	2.0%	22,257.11	2.1%
26	Other Expenses	726.00	5.0%	62,798.84	5.8%
27	Selling Expenses	1,502.00	10.3%	1,30,226.16	12.1%
28	Miscellaneous Expenses Written Off	109.00	0.7%		0.0%
30	Less : Expenditure Capitalised	0.00	0.0%	0.00	0.0%

For example, in this particular case I have said, what is material cost? What is traded goods purchase etcetera for the company what I have calculated. Now, I do what is called as classification further in the process, let me just go down a little bit.

(Refer Slide Time: 13:55)

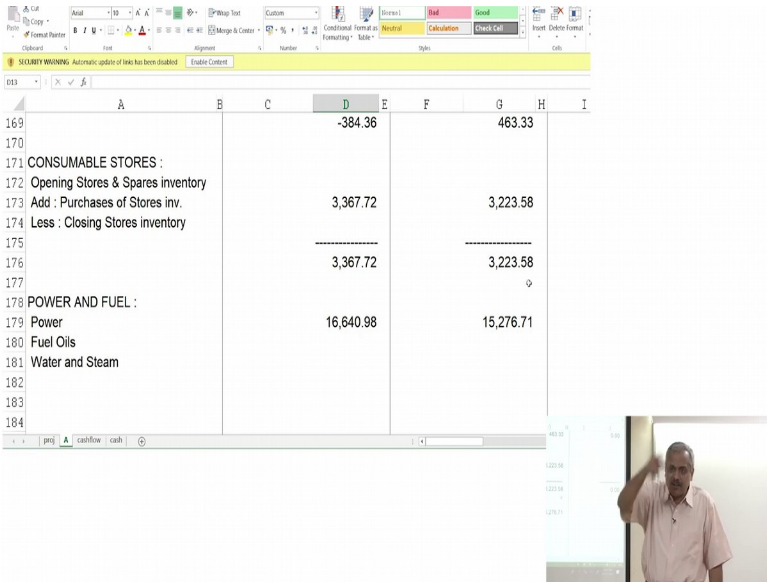


(Refer Slide Time: 13:59)



Now, what constitute draw sale? What constitute this thing, what all constitutes other related incomes. So, what happen what am I doing I am looking at the schedules of this company regrouping them. I am looking at regrouping all that basically schedule annual report I will take, I will regroup, what the company as claimed as a related income occurred it may as analysis is not a related income. I will take it out of that and I will put it somewhere else. So, will put it in what is called as other it will not a related, it will be putting at unrelated income these are the kind of adjustment. So, what I do we basically keep on doing what is called as classification out there.

(Refer Slide Time: 14:33)



Now, I will say manufacturing related cost will be power, fuel, oil, water and steam this is what I have looking at is basically for a sugar mill, basically what we are looking at sugar mill, etcetera.

Now, when I am looking at so what happens; if you look at the operating cost, they would be listing out separately. Now, when I am analyzing for a sugar mill, I am segregating this cost in to different brackets out there and regrouping them in the process, that is what we call it as adjust. And when we adjust it like that the ratios what you calculate will be very different and at this stage I do not expect you guys to regroup and do that calculation. Not necessary, we will sort of look at it as we go along. This is only an idea.

The reason why? The reason behind the project is the easier, reason, somewhere for due to score at least 30 comfortable is score the 30 percent part of it that is a one part of it let us ignore that part of it. The other major part of it the major reason, bottom line when is started this course as I indicated, objective of this course is somebody gives you an annual report you are not (Refer Time: 15:38) to it, you are not scared of an annual report out there.

You should be comfortable, holding the financial pages of the annual report and looking at it and make yourself a little more at least you should post yourself as you are very confident. The chartered accountant will run away the other side right. So, this is what is going to give you that kind of a confidence. Whatever you are learnt is fine, we have sort of spent a lot of time and everything. Now, when you actually hold the annual reports out there, if you can get a physical copy well and good. I mean ideally, if you want to pick up a company from the list away from the outside, the list what I have provided, still perfectly fine. It is still perfectly fine, I am going to give you, see you can even pickup your own company, because you will even get a hard copy of even annual report out there.

So, pickup that and basically what you do is when you read those numbers, when you read those schedules, when you calculate the ratios etcetera, somebody says oh the liquidity of the position is very bad. Immediately, strike what did you calculate for liquidity, you looked at current ratios out there. So, that you will be able to relate, but are you will be able to sit a little work confidently and have a conversation with the CFO or whatever who comes and talks to you that is the basic objective and this is what is going to give you that confidence, not whatever 10 weeks, what you have spent.