

**Decision making using financial accounting**  
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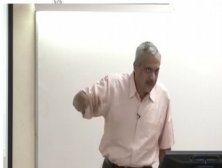
**Lecture - 30**  
**Financial Statement Analysis - 3**

(Refer Slide Time: 00:13)

Handwritten notes on a whiteboard:

$$ROE = \frac{PAT = 10,000}{NW}$$
$$EPS = \frac{60,000}{100}$$

100e 1/-




I will say yesterday I talked to you about what is the return on equity. What is the money that the equity holders are getting out here?

(Refer Slide Time: 00:26)

Handwritten notes on a whiteboard:

$$ROE = \frac{PBIT(1-T)}{E+D}$$

Dual



In this particular case also please note, there is a small difference out here, in the return on investment also when I say E out here equity, equity means it includes.

Student: Share capital.

Share capital.

Student: Equity includes reserves and surplus.

Thus, reserves total reserve sir, make it note do not take only retained earnings.

Student: Yes sir.

Total reserves and surplus. So, what we call it as basically net worth of their, net worth in the process, whether it is return on investment or return on equity, it when I say equity all the money belonging to the equity holders out there. Anshuman need some water sure? I think. No, it is no problem change of weather, Bangalore is equally hot in last week I was there, I think it was equally hot or even worst anyway. Now, let us come back, I talked about, yesterday we talked about equity holders also we started with equity holders.

When I look at equity holders, we looked at couple of aspect out here, I said first the equity holder will also be interested in debt equity ratio, why because if the debt component is very-very high, the equity holder will be worried. Why? Because lot of risk is assuming, because why what happens, for imagine you are you are going to the company has advertised, what is called as you say I am gathering 10th I am issuing 10000 shares to the public of 110 dollars each.

You want to invest you will also look at what is the debt equity ratio already. There is 80 percent debt, 20 percent equity in the company damn it that fellows who are provide debt providers will continuously keep getting the interest and the entire risk will be borne by the equity holder. So, you will also be worried about debt equity ratio as a equity holder also. Am I with you on this? So, that part of it is over. Then the second aspect what you will be worried, you will be return on equity, yes.

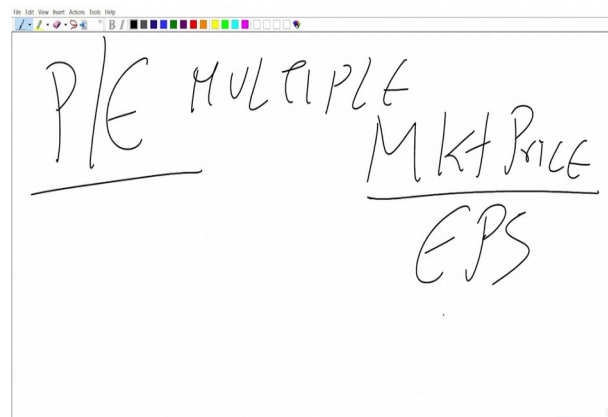
Student: The other way around.

Which one, both will be worried that is where we talked about a optimal capital structure which you will learn in finance 1 in Q 3; optimum combination of debt and equity and let us look at return on equity. When I look at the second aspect what they will be written is return on equity, return on equity is whatever is the PAT basically by net worth out here. Second aspect what they will be interested in. I will put up the slide on Moodle by tomorrow so you can look at it.

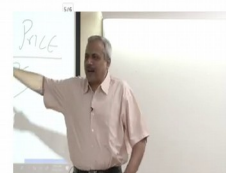
So, third aspect as an equity holder what are you worried about? You are worried about what you call it as EPS is, it is we are looking at? Earnings Per Share. When we look at earnings per share what am I looking at, but when I say what is the earnings per share let us say for example, the company as a PAT in this case of 60000 dollars. The number of shares in the company has is about 100 shares at what is called as 10 dollars each.

So, what we do? What is the earning per share that is nothing, but 60000 share, 60000 is the PAT by how many number of shares I have? I have 100 shares per share, what is the earning per investment, what is the kind of return that what we are getting that is what we are call it as the earnings per share. Now, I so far I am not touch the market part of it. The next aspect out here, you would uninvitably look at this stage.

(Refer Slide Time: 03:54)



A screenshot of a digital whiteboard showing the handwritten formula for the Price-to-Earnings (P/E) multiple. The formula is written as 
$$\frac{P/E \text{ MULTIPLE}}{P/E \text{ MULTIPLE}} = \frac{MKT \text{ PRICE}}{EPS}$$
 The text 'P/E MULTIPLE' is written on the left side, and the fraction  $\frac{MKT \text{ PRICE}}{EPS}$  is written on the right side. The whiteboard interface includes a toolbar at the top with various drawing tools and a menu bar.



Basically, when we will talk about is the next is basically the price to earning multiple, the price to earning multiple. When I talked about the price to earning multiple out there, we are looking at now we bring in what is called as the market price out there. Whatever

is the market price of the share, market price of the share that I sort of divide by basically by my earnings per share will give me what is the price earning multiple. Now what is this price earning multiple let me talk about it, what is this price earning multiple. Now this itself will be sufficient for me to explain out there.

Now price earning multiple is nothing, but your way of predicting the share price based on the profit earnings the company is making per share repeat, your way of predicting what is the value of the share. I will not even use the word market price here, what is the value of the share based on the earnings each share is getting. I repeat your way of predicting what is the value of the share based on the earnings each share is getting. Now please focus here on this board out here, what am I doing, there is a earnings per share. Now, if I have some multiple out here, if I am basically sort of looking at multiplying my EPS and my price earning whatever is the multiple out there I am getting some kind of a value or the market price.

In short let us take Wipro is the closely held company. Infosys what is called as very (Refer Time: 05:44) pictures and (Refer Time: 05:45) widely held company. Now I need to know, forget about the market price I need to know what will be the value of Wipro equity shares out there, I am just taking one day come. You look at, what are you looking at? I look at the company which is basically comparable in terms of size, operations etcetera to Wipro. So, I will say Infosys could be possibly if not may not be now may be for 10 years back there would be almost near and comparable to Wipro. So, what do I do? I need to have the value prediction of Wipro.

So, what do I do? I look at I can find out what is the EPS or let us earnings per share from the annual report out there of Wipro, but I need to know what is the value, market price is different. Market price may not predict may not be a may not be a clear real picture of the value of the company, it might be more or less out there. So, what do I do? Now I will keep looking at, I will say comparable in these particular cases what is called as your Infosys. I know the market price of Infosys is reflecting the value of Infosys.

So, I will find out what is the price earning multiple of Infosys. Simple I will know what is the market price of Infosys, I will know what is the EPS earnings per share of Infosys, I know what is the multiple what is the kind of numbers I have that is market price is

equal to how many times the earnings per share. Very simple market price is equal to how many times the earnings per share, I have that rough number.

Now I will take that rough number, because I know that is the intrinsic value of the company I will just take that number and then apply it to Wipro. If I apply it to Wipro what happens, I know the Wipro's EPS that is earnings per share I will multiply with the same multiple what is there for Infosys; I will get some rough value of what is called a bulk per figure value of what is called as Wipro out there. I am with you on this that is what we call it as earnings multiple.

Earnings multiple when we say price earning multiple. What is the price? Price is the value of the stock, earning is what is called as this that multiple of that what is the number what you will basically look at. Now can that change? Yes it can change. Will it change every minute? It will change every say microseconds are because share prices keep changing every microsecond, but what you are looking is a bulk per figure out there. Am I with you on this?

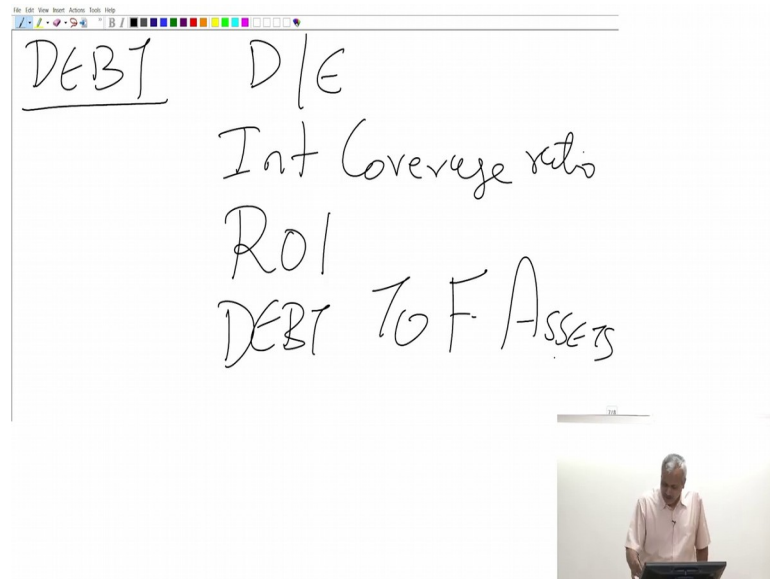
Student: Sir. So, EPS will be different from the face value of the share.

EPS will, always will be different from the face value of the share, it can be lower or higher EPS is dependent on what on the profit that you have made from the company. Face value of the share is what is did denominated here, face value nobody worries about it only yesterday I worried about it in the quiz; otherwise nobody worries about the face value right.

Student: (Refer Time: 8:37) buying at the market value right.

You are looking at buying at the market value, if somebody is we want to give it at a discount that is your luck, face value forget about it. Ok in kingfisher airlines face value is 10 rupees, what is it worth now, less than a rupee, nobody is buying it. So, face value is nothing only face value is required when they denominate it after nobody bothers about it, only people like me when they teach me brother about it; that is all. Fine, now we move on, now I look at the equity holder equity holder when I looked at let us let me list down out here what all so far what all I have done.

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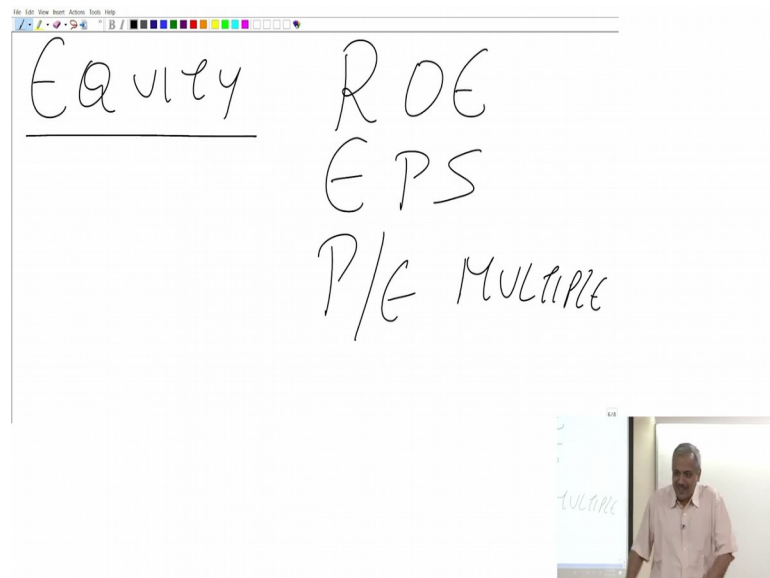
The screenshot shows a whiteboard with the following handwritten text:

- DEBT      D/E
- Int Coverage ratio
- ROI
- DEBT TO F ASSETS

In the bottom right corner, there is a small video inset showing a man in a light-colored shirt standing in front of a whiteboard.

For the debt holder let me say, let me listed out I did debt by equity, I did interest coverage yesterday, I did return on investment; that is all right only 3.

(Refer Slide Time: 09:51)



The screenshot shows a whiteboard with the following handwritten text:

- Equity      ROE
- EPS
- P/E MULTIPLE

In the bottom right corner, there is a small video inset showing a man in a light-colored shirt standing in front of a whiteboard.

Now, I talk about in the next page I will go ahead and I will talk about what is called as the equity. When I talk about equity holder I will talk about return on equity, I will talk about what is call it as EPS; the earnings per share. I will talk about the price to earning multiple, yes please.

Student: EPS is sold that on market price who return.

Market.

Student: Market.

Market, whatever.

Student: In case.

At this minute will be different by time we finish a class it can be different.

Student: If it is an unlisted company.

If its an unlisted company that is where you use the proxy, beautiful sir. Now if it is an unlisted company I do not know the PE that is where I what the example what I said imagine I am looking at unlisted company. I will look at a comparable listed company, I will take that PE multiple and then use this earnings and multiply that and get the approximate value.

Student: Reverse.

Reverse that is all approximate.

Student: That may get wrong one sir.

Approximate that is where I use the, I always qualify my statement sir, I always use it approximate, I always said bulk per figure. Well we talk about ITG valuation, corporate valuation right. I mean that is what I am doing for your senior. When we teach valuation, when we will arrive at a value; we can never arrive at a single figure. If you say if you arrive at a single figure and check this is what is the value nobody would believe, it will always arrange, it is around that is all, that is that around is how big a circle you draw that is up to you.

That is not up to you when I say that is based on asset what you have made, if the assumption what I made is exactly comparable then the circle is very small, is somewhat comparable then the circle can be bigger that is all. Now, I am going back to debt part of it out here. Sorry I am going back to debt part of it out here; one more aspect out here. Now, why do you borrow, why do you borrow from the, why do you borrow from a bank or financial institution or financial institution?

Student: Capital increase.

Capital. What do you do with the capital?

Student: Preference shares (Refer Time: 12:17) investment liquidity.

Invest liquidity is not you borrow for basically, when you make borrow you borrow for making a long term investment that is what it is called as that long term investment is you borrow for making an investment in a fixed assets out there. Supposing you also look at imagine a company, it keeps on borrowing, fixed asset is not increasing that is the top portion of the balance sheet in the asset side. Whereas, the second portion of the balance sheet is increasing; that means, what is happening there is a misuse of money; that is the purpose for your borrowing you are not basically.

Student: Utilizing.

Utilizing out there. So, as a debt provider I will also be interested in knowing whether my money is being invested in asset that is going to create value then what happened the security for me is higher; otherwise the security for me is lower in the process. So, what happens what do I look at. I will look at the kind of debt portion part of it to what we call it as the fixed assets part of it also. What portion of the fixed asset is finance by debt. Suppose, if fixed asset is say one million my debt is half a million. That means, I know at least 50 percent of the asset is invested based on my what is called as the borrowing what I have made.

So, I will be interested in that portion also yes sir.

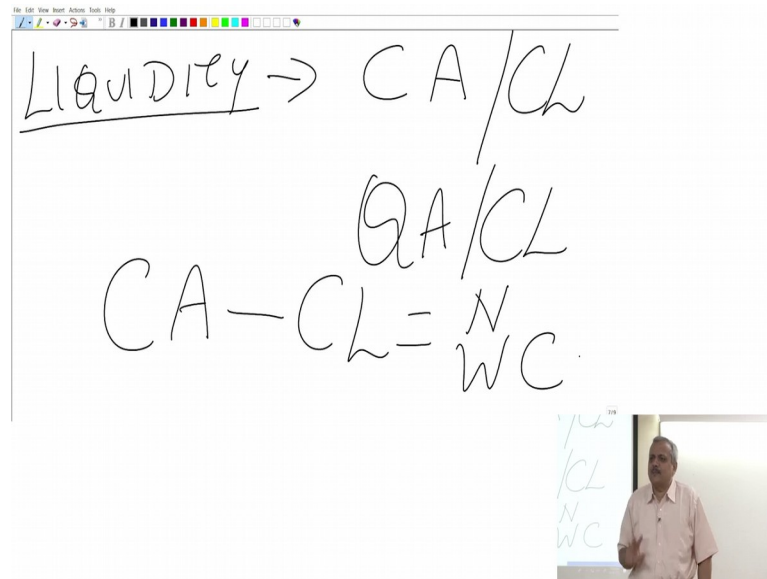
Student: (Refer Time: 13:34).

Student: (Refer Time: 13:36) working capital and investment (Refer Time: 13:37).

Sir normally working capital are always short term loan sir, we will not take it as a long term debt, they are all what is called a short term debt, I will not come to working capital, I come to working capital in about 10 minutes from now. So, that is what now we are talked about two aspect; that is we talked about the debt holder, we talked about what is called as a equity holder also out here. Now I am looking at the, there are couple of aspect other aspect what we talk about yesterday also.



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We talked about liquidity. Liquidity means nothing, but if I have to put it in a simple sentence, ease of conversion to cash, ease of conversion to cash out there that is what we call it as liquidity, ease of conversion to cash out there. When I say when I start talked about liquidity I look at what are the assets and liability, what are the assets that are ease that as a ease of conversion we will say all my current assets have a ease of conversion to cash out there. Why do I need liquidity? I need to pay off all my current liabilities also so I am looking at ease of conversion out there. I look at, I have to pay off all my current liabilities, so I look at ease of conversion.

Now, further part of it what is the among the current assets there can be some assets which has sticky, sticky in the sense which are what we call it as a raw materials and finished goods that can be little more sticky, so what you do? We look at basically quick assets and basically my current liabilities out there; that is that will give me the liquidity position; in short whether all my current liabilities can be met by my.

Student: Current assets.

Current assets out there that is what I am looking at in this particular case. Yes Malika.

Student: sir assets (Refer Time: 15:35).

Yesterday I mention briefly any way, do not worry I will do it again, I will sort of revisit now. When I talk about yesterday anyway I even I am would not have explained it

properly yesterday. So, when you talked about current assets what are current assets? Inventory is a part of current asset, it can be finished goods, raw material work in process

Student: Yes sir.

It could be what you call it as all your debtors; it could be basically all the cash and liquid as a I mean what you call marketable securities you could have. Now, if you look at this cash and marketable securities already equal to cash, do not worry about it. Debtors I can just go to the bank and discount it, I can discount and then that is easily converted to cash fine.

When I look at raw material and work in process inventory. Imagine in this particular case a Maruthi Udyog you have a semi furnished car; that is a car with a body which is no engine you will never be able to sell it right. The ease of conversion for it is slightly is more tricker compared to the other two. So, we are looking at assets which are quickly convertible. So, among the current assets minus the inventory whatever that is what is basically the quick assets out there; with you on this so far so good. Now second basically we will looked at this particular aspect also. Now let us take an example, he as a question let me sort of and address his, the question with through this particular current asset current liability.

Now, we always use the word what is called as working capital, working capital, what is this working capital? Working capital is nothing, but the money that is required for the day to day operations not for long term investment, for day to day operations. So, what happens, you will always look at the short term loans for meeting the day to day operations of the company, short term loan basically looking at short term loan for day to day operations of the company. When I am looking at short term loan I need to know how much of short term loan do I need, how much of short term loan do I basically need.

Let us take one very simple example do not even write. Imagine I am purchasing raw material on the first of April 2019 on a 30 day credit. I have purchased raw material; that means, raw material has landed in my factory on first of April, 30 day credit. I use it for whatever manufacturing a particular product on the 10th of April I am selling that good to somebody else again on a 30 day credit.

I do not need cash for doing this operation I have bought on credit I have sold on credit when do I need cash I need cash only on 13th of April when I have to pay the fellow and for how many days I need to cash, I need cash only for 10 days, because on the 10th day from what is on the may 10th I am getting money from on the sales what I have made. Am I with you or not.

Student: Yes.

So, what is my requirement? My requirement is this money which is only for a very short term out there; that is for a 10 days that is what we call it as the working capital requirement. In a company it is not one purchase and one sale that is happening, there are continuously purchases happening, there are continuously sales happening every day.

So, what happens the difference basically now I would have sort of bought on first I would have sold on 10th, I would have bought on second I would have sold on 11th, I would have bought on third I would have sold on 14 and so on and so forth. And, you are what is called as payable keeps accumulating, receivables keeps accumulating and every day you are receiving money on some sale you have to pay money on some purchases what you have to made.

Now, what we look at most of your current what you call it is payment for, most of your credit what is call it as the as the sale credit sale is financed by whom, financed by the fellows who have provided credit to you when they have sold their raw material, most of your credit sale is finance by the fellows who have provided the credit to you when you have sort of purchase the raw material. So, what are you looking at? You are looking at financing only for a short period of time. So, what we normally look at when we say is current, when we look at working capital is, whatever is the current asset minus whatever is my current liability is what we call it as the net working capital requirement. This most of my current assets are basically what is called as my financing.

Basically looking at the difference is what it is. In the sense let us look at my receivables, my sales is 10 lakhs in the month and my what is called as my sales is 10 lakhs out there and my purchases, imagine let us not even, let us look at a trading form, let us sort of shrink it further. I am a trader I have bought raw material this morning for 7 lakhs, I have sold the good for 8 lakhs today. Bought for 7 lakhs sold for 8 lakhs today and both are on 30 day credit let me say or for example, or I have both on 30 day credit. Now, when I am

looking at on a 30 day credit may be today is the, today is what is called as forth third of March out there; that means, I will get money only on third of April out there.

Now, 3rd of April I will get 8 lakhs I can easily pay 7 lakhs perfectly all right, there is no problem, but on 30th of March I have employed one boy to sort of help me in the trading, I have to pay that fellow salaries. When I have to pay salary for that fellow I need money. So, what is happening my current asset is not being financed by my current liability there, though it is there, now for paying salary on 30th, I need money out there. I need money only for 3 days, because third when I gets I will pay that fellows purchaser 7 lakhs out of the 1 lakh, I will return the loan and I will also have profit. imagine I need to pay about 20000 rupees.

So, what do I do? I go out and borrow that 20000 out there. So, the difference between these two assets and current asset and current liability is what we normally call it as the working capital requirement in the process. quick asset is fine but.

Student: Inventory sir.

Inventory is not, but inventory is basically the major source of basically your current asset that is where major source of payment basically happens. Because for example, when I making a sale on a credit how do I give a credit to the fellow, because somebody has given me a credit when I purchase the raw material that is the major source, because somebody that is source of fund out there. I go back to source and utilization of fund. When I looked at the source of fund somebody, because creditor is also considered source of fund, why? Because that fellow instead of giving you cash as given you raw materials.

And because he has given you raw materials your utilization what have you done, you have sold it to somebody on credit out there in the process. So, this is when I say sir his entire source of fund should be taken in the liability side of the balance sheet. Well we are looking at working capital. working capital means day to day need. Day to day means need means what changes everyday, what is the requirement. So, we look at only current asset and current liability.

Student: Sir there will be cash out there.

Pardon me cash.

Student: Does not have to make cash.

It does not yeah any form which can be converted to cash, when we form which can be converted to cash. So, that is what we call it as the working capital requirement, that is the amount which you normally go and borrow from a bank that could again be two different forms out there. Of course, bankers will have a norm for calculating all that current asset and all that is not get into the norm. There is Tandon Committee, many Committee, Chore Committee, Tandon Committee etcetera. Let us not give a get into all the recommendations of it broadly this is how it is done.

Now, further this working capital itself will be divided into two parts; one is a short term loan, another is a overdraft part of it which I explained in the class out there when I sort of look at the annual report. Overdraft is, any time you borrow and sort of working capital where a short term loan is you have a fixed term and then you basically look at out there.