Decision making using financial accounting
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Lecture - 28
Financial Statement Analysis - 1

What we did was we completed the cash flow last week; last Saturday, revisited and completed the cash flow. And then I took care of what you call it as going through the entire at least the balance sheet part of the annual report there is a P and L part of the annual report also which is their which I asked you guys can sort of go through it etcetera.

Now, there is a company's present your balance sheet, companies present your P and L statement etcetera. And I said you can get to know about the health of the company by looking at the schedules and the whole lot of things perfectly fine, but there are certain other things which you basically sort of can interpret from that kind of a data that is there.

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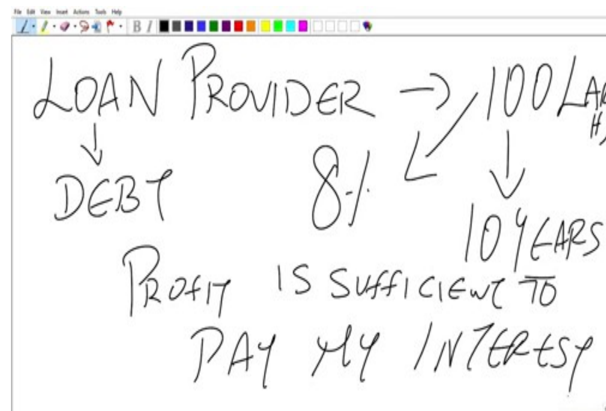

For example let us say that you are a creditor; you are simple; you are a loan provider for the company. You are basically what you call it as a loan provider; if you are a loan provider or what we typically use in finance basically what we say a debt provider in the company, what are you interested in knowing? What are we interested in; if you are a debt provider in the company what do you look for in the company?

Student: Credit.

Huh.

Student: Credit rating.

Credit rating; agreed credit rating to arrive at a credit rating.

Student: (Refer Time: 01:37).

They will have to look at that some things to arrive at credit rating; we will talk about credit rating.

Student: Profitability of the (Refer Time: 01:41).

Profitability of the company agreed; perfectly alright yes, Rishab.

Student: Ability to pay back the loan.

So, ability to pay back the loan etcetera.

Student: Balance (Refer Time: 01:49).

Balance sheet; what aspect in the balance; balance sheet is too big.

Student: (Refer Time: 01:53).

Profit or loss of the company.

Student: As (Refer Time: 01:56).

Perfectly fine.

So.

Student: (Refer Time: 01:58) turnover.

Assets, turnover a lot of things now if I have to.

Student: Cash.

Cash is fine; cash is one aspect of it cash will result in to cash.

Now, let us see if you are a debt provider what are the two aspects as most of you said; I am interested in the servicing of the debt. When I say servicing of the debt, the timely payment of interest and the principle back; supposing I will say that there is what is called as there is a loan provider to the extent of about 100 lakhs. Now, these 100 lakhs is to be repaid over a period of what do you call it as let us say 10 years and this 100 lakhs has an interest rate as a coupon rate let us say of 8 percent.

Now, what are you interested? If I have to provide that loan, I am interested in two things; whether your company has the ability to service the loan as of now. Service the loan in the sense let us say your company has the ability to pay me the interest first of all. Now, you can say that sir, we cannot do it from the past record because past record you had an investment and you had x amount of profit; moment you make this 100 lakhs investment; then what happens?

The profit is going to increase further and somebody can get more profit and we can look at it. Perfectly fine, but moment you make an investment day one the clock is not going to tick there; in the sense in terms of performance, the clock is going to tick for you because money is gone out for you whereas, for the company the clock is going to tick only when they start getting written.

Because for example, I will borrow 100 lakhs to put up a factory. So, for me to entire create that establishment it takes about a year and a half, for me to reach a steady state it will take another year and a half. So, 3 or 4 years is what am looking at. So, I as a debt provider I am not interested in that; I am interested in what is called is recovering that kind of thing. Imagine there is no what do you call it as a interest holiday or any of those things are there.

So, what are you looking at? You are looking at some aspect like what we call it as first thing whether the profit what the company is earning is sufficient; sorry to basically to pay my interest first thing. Let us look at a principle later because principle is splits again is a particular asset. So, what do you do?

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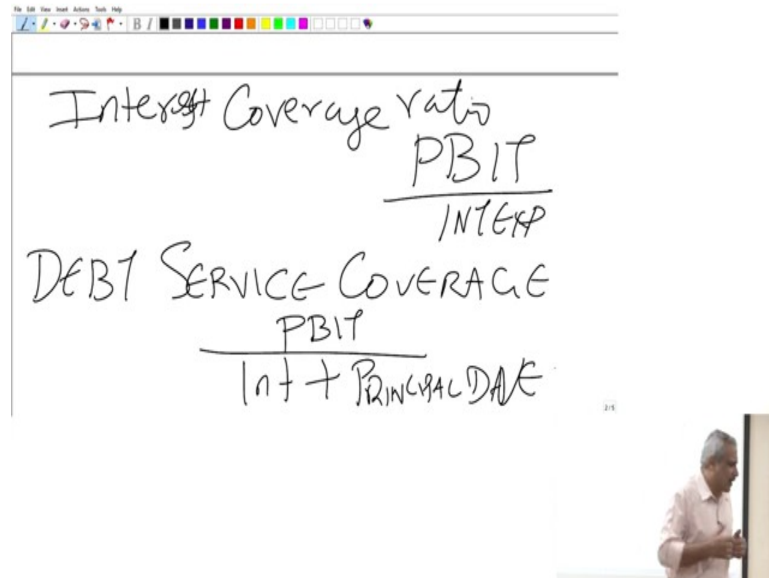

You will say I will always look at what we call it as typically the interest coverage ratio that is whether the profit what the company is earning is sufficient enough to pay the interest or how many times; what is the kind of question. For example, in the past year I will say the profit before interest in tax; I divide that basically by my interest expenditure.

Now, this will tell me how many times is the profit for example, my profit is 10 lakhs, my interest is 1 lakh. Now, I will easily say my profit as of now I am earning is about 10 times the interest payment ability. If the profit is 10 times the interest payment; then even if there is a little bit of a problem in the company, even if the profit goes on sufficient little bit, but still my company will be comfortable enough to sort of service the loan; service the interest part of it that is what we typically call it as interest coverage ratio; my writing has become little legible today, but still you know.

So, we call it as interest coverage that is the profit sufficient for you to cover that particular interest part of it? That is what we see. Now, the other aspect what I look at this we will look at even further if I have to say what we call it as debt service coverage or what do you call it a DSC or Debt Service Coverage. So, when we said debt service coverage is what?

In principal repayment also, so I will say either the profit before interest and tax is sufficient enough to repay my interest plus whatever part of the principal due whatever part

of the principal amount that is to. Because out of the 100 lakhs part of it is due this year whatever part of the principle due that is you plus the interest is my profit sufficient enough to pay that? So, I will say that is what we call it as DSCR that is Debt Service Coverage Ratio; whether your company has the ability to repay that debt whatever is due.

Now, now I will say this is based on the past record? Yes, this is based on the past record. Now, in based on the past record itself if you are comfortable then if I infuse more money; if you are expanding, if you are making more profit then the probability of paying higher it is going to be more far higher; so I am looking at the past record and making an estimate whether you have the ability to pay or is it little risky?

Supposing, you make an 100 lakh investment and the project is not taking off at all and the project is not taking it off at all. Then what happens? You may not even service. So, at least are you able to service? As a debt holder, I am interested in getting my money back from the company and the interest from the company. So, that is what I will look am I with you on this agreed.

Now, we will move further on this we will I am going to tell you; what I am trying to talk about is the basics of analysis what we call it as typically we use it something called as ratio analysis that is what you would have understood.

Ratio analysis is one important aspect in basically financial accounting. Now, analyzing the health of the company all this all these days till date, I was telling that you look at the P and L and their balance sheet; you look at there you have the health of the company. Actually no, when you do the ratios you get the first cut what do you call it the first cut you get only the first cut idea about the health of the company out there because why were in a balance sheet everything looks balance sheet is balanced. But whether the company has the ability to repay the debt; nobody knows only if you do these kind of things at least it gives you some rough idea ballpark figure, then you go ahead do the further analysis as you go along out there; that is what we call it as ratio analysis out there.

Now, let us look at as a debt provider I am interested in something else also, we will come to that part of it later.

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Now, let us move to what is called as your equity provider; your equity provider if you are an equity provider what are you interested in knowing?

Student: Profit.

Profit agreed sir.

Student: Company value.

Our company value; value; how do you know the value?

Student: (Refer Time: 09:10) sir (Refer Time: 09:13) be based on the performance of (Refer Time: 09:16).

How do you analyse that? That is what we are I am asking how do you analyse that?

Student: (Refer Time: 09:19).

See these are qualitative statement; convert that is to numbers.

Student: About (Refer Time: 09:26); these are the assets I have.

Profit, asset I have simple things sir.

Student: (Refer Time: 09:31).

You have put a for example, I will say based on what Anshuman said; I have a profit of 10 crores in the company is it good is the company good, worth investing or not worth investing?

Student: Liabilities sir.

Student: Liabilities.

I am saying profit is 10 crores; forget about liability, liability why are you bothered profit is 10 crores.

Student: (Refer Time: 09:51) good.

It is worth it? The capital is 10000 crores, profit is 10 crores; is it worth investing?

Student: (Refer Time: 09:59).

So, what you look at? You look at return on your investment right. Now you understand the reason because there is a profit alone absolute figure does not give you the entire picture. Now, I will look at what we typically call it as return on equity ROE; Return On Equity; that is I am talking about equity holders. What is the return for the equity holder? The return for the equity holder basically when we say is nothing but net profit whereas, equity holders get what? Only the profit out there.

Now, what is their investment? Their investment is; whatever is the amount of equity they have invested; now there was a question in the quiz also. I think the b part of it; what is the investment of the equity holder is it the money they have invested in the shares or is it something else also?

Student: Profit acknowledged (Refer Time: 11:01) beginners.

Basically what you said you are right; equity contribution plus all the money that belongs to the equity holder that is the entire pool of the reserves and surplus, what we I click that includes your retained earnings and so on and so forth. I had a question, tangible net worth is; net worth of the equity net worth is nothing but whatever money you have invested in share capital plus all the reserves and surplus ideally I would expected reserves and supplies if somebody has written retained earnings also I will give you a marks do not worry about it. So, it is perfectly fine.

That is not a problem right. So, that way what we are looking at? In the, because the idea is you do understand the concept; yes now you have understood the concept? So, that is all what I am looking at I am not looking at the precise; what do you call it as spellings and other things. So, do not worry about that now what we are looking at is we are looking at the total investment. Investment when we say if you look at a recall if you visualise a balance sheet; equity equity is let us say 10000 shares of 10 rupees each, capital is; share capital is 1 lakh.

But what is the investment of the equity holder? Investment of the equity holder is not only that 1 lakh the past over so many years whatever money that has accrued to him, but not paid to him that is getting added to the capital what we call it as a reserves and surplus. So, when we say in this particular case what is his investment return to his equity we will say he is basically the share capital plus what do you call it as reserves and surplus out there. Or if I have to put it in one simple word I will say the total net worth of the company.

Of course, you express in a percentage; you multiply it by whatever 100 or whatever it is you can get a percentage out of it you express it in the form of a percentage. So, what will give you? Supposing, I say my profit in the company net profit in the company is 10 crores, my investment in the company is whatever my share capital in the company is about let us say 60 crores; the accumulated reserves and surplus so far is about 20 crores. So, the total investment becomes 80 crores 10 crores is the capital 80 I mean; sorry 10 crores is the profit 80 crores is the capital now you know what is the return on your investment out there; that is what we call it as return to equity holder not an investment return to equity holder.

When we say investment, the total money that is invested in the company when we say total money invested in the company; it includes your debt holder also we will come to that a little later; we will not touch upon that as of now. Now Anshuman also mentioned one more aspect out here; he said when we are looking at the return profitability part of it; I will also look at what is the return on the asset out there.

Now, your equity might be huge; part of the equity is part somewhere that is it is comes and if you visualise your balance sheet the asset side of the balance sheet what happens? Fixed asset, then the second head is?

Student: (Refer Time: 14:00) investment.

Who said investment? Second head is investment, third head becomes your current asset, fourth head becomes your.

Student: (Refer Time: 14:09).

Miscellaneous expenses and losses that we will leave it there; again let me repeat. First head is your fixed asset; fixed in nature, second head is where you are parking the money; investments out there or all your investments. Third head becomes your current assets out there let us keep only three heads as of now. So, you have raised about 100 crores capital; I do not need the 100 crores as of today, so I am parking all the money in various investments out there perfectly alright. Then when I am looking at the return; what is the effective money that is invested in the assets for you to actually get operational return out there.

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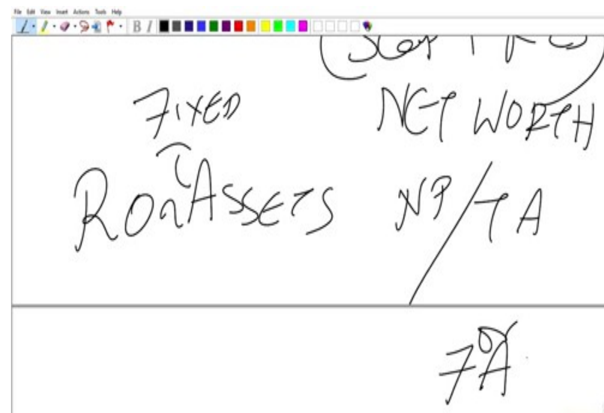

So, what do I do in that particular case sometimes I also look at return on assets out there or return on what I call it as fixed assets also I may do. Basically, what I do? I am looking at basically your return that is the net profit and then your denominator will be either total assets; if you want to do it for total assets or if you want to do it for fixed assets it will basically be for the fixed assets; that will give you.

I bought invested 10 crores in the machinery, fixed assets I am getting 10 lakhs as profit now for the investment that I have made; suppose you want to take over that business and then run the business, you are not taking over the investment, investment is a separate thing. You are taking over the core aspect of the business when you want to take over that business; you are interested in knowing what is the return you are earning at a fixed asset that is the investment that has gone directly into the core operations of the business I am I with you on this?

So, these are some of these what do you call it as typically we look at the ratios per say. So, I will tell you; I will compare what is the return on asset, what is the return on equity; return to equity holders etcetera and then basically analyse what is the performance of the company. I can take two companies imagine you have the option of investing in one of the 3 or 4 companies out there. When you have the option of investing in one of the 3 companies out there; I can do these kind of ratios out there and see which has given me a better return, one company might give 100 crores profit another company might give only 5 crores profit.

But the return on investment in the 5 crore profit might be far higher compared to your 100 crore profit per say. Am I with you on this? So, this is what will give you some kind of a picture. So, what we looked at? We looked at for the debt provider, we looked at for the equity provider also some of them; am I with you on this?

Now, further that we go on; we will continue this in the next class also tomorrow also a little bit; tomorrow please bring the annual report please bring the annual report we will try and see if we can calculate from there. The next aspect what we are looking at an annual report is what is there in the yellow manual what I have given out there.

Student: (Refer Time: 17:00).

Now, the next aspect out here is for example, we said I looked at the return I looked at the equity holder I look at it from the debt holder etcetera.

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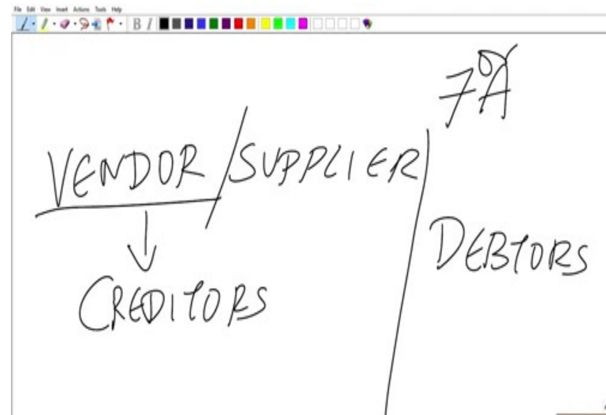

Now imagine, I am what is called as a vendor to the company; vendor we call it supplier whatever it is to raw material to the company; what are you interested in knowing?

Student: (Refer Time: 17:29) I will make a payment.

Whether, I will make a payment properly, beautiful. Now, how will I know whether I will make a payment properly? Now you are right Mister Bava, but how?

Student: (Refer Time: 17:39).

Ability to pick up assets; qualitative we convert it to number.

Student: (Refer Time: 17:44) assets (Refer Time: 17:46) what assets (Refer Time: 17:48).

Assets is you have lot of assets all fixed assets are there.

Student: Bank account.

Bank account is there; bank account will not have money when you will not, you will always not keep money in the bank because you should keep on 1 or 2 percent out there yes Rishabh 1 second.

Student: Accounts payable.

Accounts payable.

Student: How many days the company will take to pay?

How many days the company will take to pay?

Student: Creditors.

Creditors, yes Joel.

Student: Liquidity.

Liquidity accepted. Now, let us look at it now how do you pay your suppliers? Let, let us understand the logic see one is if you in a textbook I think; I am not really sure about the page number, I can give you the page number also it will have all the formulas listed you can one you can mug the formulas; if you can mug the formula then there is going to be a problem. So, understand the logic behind it easier for you to look at it that is the thing now that is the way.

Now, let us look at it how do you pay your suppliers? I will not pay my suppliers unless I get money on the sales out there; these suppliers are basically what you call it as creditors what happened?

Student: (Refer Time: 19:00).

Fine, no problem. Now the money people who have to pay me money are called as debtors, debtors or whatever called we call it as debtors out there, accounts receivable, bills receivable so on creditors etcetera. Now, I will have to pay only from these fellows only I get the money I will pay these fellows. So, what do I do? I need to know on an average how long does it take for your company to pay as well as what is that you might say; I will have a 30 day credit policy perfectly fine that is on paper, but on in reality how long do you take to pay?

For example, let us look at it; I will say in that problem itself whatever I had given; there was a sales figure out where is a paper one paper you give me no problem do not worry it is ok.

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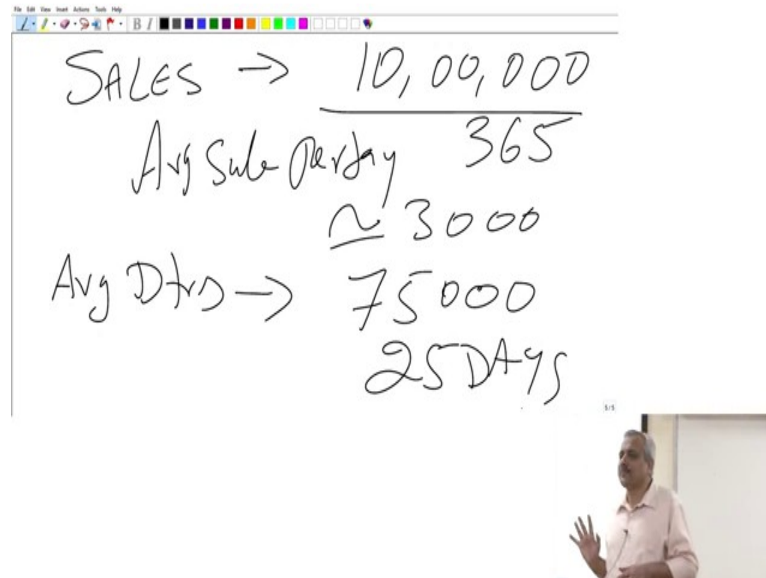

You do not want to let us say the sales in the company is about 10 lakhs through the year what it is. Now, first of assumption what I am trying to make out here simple; let us make let us not make it very complicated let us make a simple assumption.

This is a sale which is happening throughout the year; first thing it is not seasonal let us assume this is; what is the average sale per day? Average sale per day if I say operating number of operating days is 365, I will say 365 whatever is the number of days you want to take that will give you the average sale; what is it? You have a calculator that will be about roughly give me some rough number.

Student: (Refer Time: 20:44).

Some 3 the.

Student: 3000.

3000; approximately 3000 per day approximately let us now look at the nth decimal and all I am not looking at it that is like an approximately this thing. So, approximately my sale per day is about 3000 rupees; now on an average what do you do? For example, on the 31st of March; supposing your accounts receivable or debtors in your books of account is let us say about 50000 rupees is about 50000 rupees is the debtors in your books that is equal to how many days sales?

Student: 5 days.

5 days now it is 3000 rupees it is not 5 days ma'am; that is about 16, 17 whatever; some rough number of days. So, on an average let us say if I say now I will say average on an average what is called as my average debtors out there in the year. Average debtors out there I have average is I have the opening debtors out there, I have the closing debtors out there, I have last two years my average debtors are an average the debtors in my books at any point of time on an average is let us say 75000.

At any point of time I have 75000 on an average as my debtors and my per day sales is about 3000; then what is the number of days amount that is pending out there and an average. On an average is 75000 rupees is the basic debtors out there average, my per day sale is 3000 then 75 by 3 will give you the number of days it is basically taking for you to receive the money; am I with you on this? You can give me some number whatever is 75 by 3.

Student: (Refer Time: 22:35) 25.

25 now on an average it takes about 25 days for me to receive my money am I with you on this? So.

Student: Yes collection period (Refer Time: 22:47).

Collection period that is what this is called as average debtors collection period; this is what we call it as average debtors collection period. Now, this gives me if I am a supplier to your company I know on an average how when do you get the money only; I know on an average you are getting the money on 25 days. So, I can expect payment around 25 days if I am supplying to you because that is under the belief that your company is not holding back the money right; your company is not going to hold back the money that is that under that assumption out there.

So, that is one of the first step, even or if I am a person who is basically saying who is purchasing from your company; who is purchasing your company and your company says our credit policy is only 15 days or 20 days it says. But by doing this kind of an analysis I know though your company says 20 days is the average is the credit policy I can extend it by about 3 or 4 days; make it up to 25 that also gives you a question every

day matters because every day there is a cost of interest that also matter. So, it is both ways it is basically workable sir am I communicating.

Student: Yes.

So far so good; so, that is what basically these gives you if you are a supplier out there this gives you some of these kind of what do you call it as; this it gives you some of these kind of what do you call it as a typically out there.

Now, on the other way if you if I sort of go ahead that is on the debtors side you look at it.

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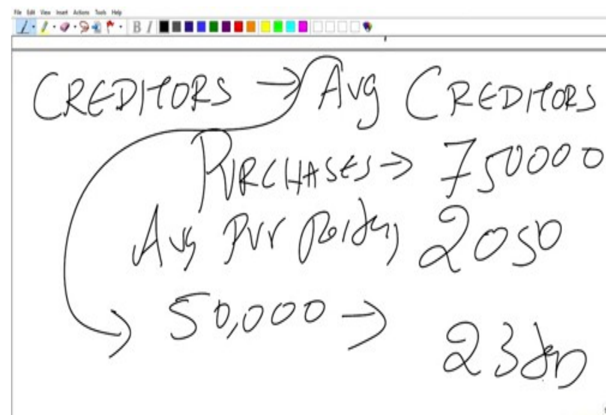

Now, on the creditor side I will look at you have what you call it as you have your average what do you call it as your average creditors; that is to whom you have to pay. Whatever yearly average I can take it average creditors out there. Now, I have what is called as my purchases for the year.

Supposing, I say my purchase is for the year is that I say is about 7,50,000. Now, I know what is the average purchase per day? What is the average purchase per day, this 7,50,000 divided by your 360; 360 or whatever number of working days if we say 350 is our working days 350, we say 300 is working day 300 whatever it is; how much is it?

Student: 20000.

20000.

Student: (Refer Time: 25:29).

Per day.

Student: (Refer Time: 25:30).

Per day.

Student: (Refer Time: 25:32).

Prateek

Student: (Refer Time: 25:33) 2050.

Now 2050 is the average purchase per day; now if an average purchase per day is there; now let us say my average creditors this number if he will say; on average I have average creditors is about 50,000 in the year; that means what? At any point of time that is 50,000 divided by your 2000; that is roughly about 22, 23 days? 22, 23 days is basically what it takes for you to pay.

Now, as a supplier if I do this analysis from your balance sheet in the past records I know; how many days you take to collect how many days you take to pay. And I will plan my activity accordingly though you might on paper indicate I will pay in 15 days, I will pay in 20 days, but I know on an average what is the name you will basically take out there; yes Navya.

Student: 50000 is (Refer Time: 26:29).

50000 is nothing, but average creditors that is what I have put that arrow out there average creditors average. For example, very simple average beginning of the year last year closing you had some creditors; this year closing you have some creditors just take the average that is all about. A year I take a yearly average only if you take two figures, you can take a monthly average also if you have all the 12 month figures etcetera.

Now, I just looked at if you mug the formula to say; what is the formulas it says that is opening debtors plus closing debtors divided by 365 into something I forget I do not

know. So, do not go by there making the formula understand the logic behind it; it is always easier for you to calculate them.

Now, further on this somebody said use the word observe that is what we call it as typically he said that; sir you look at the liquidity part of it, yes I require the liquidity part of it. How do I require the liquidity part of it? So, simple thing my liquidity is what? How easily the money can be converted out there. So, what is the aspects that you can look at the liquidity basically, the current asset and basically the current liability.

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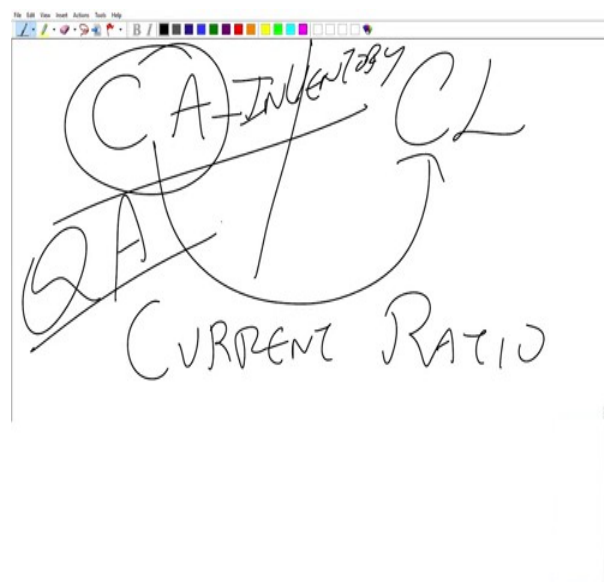

Whether my current assets are sufficient enough to pay my current liabilities. Typically, we call this as current ratio that is how much of your current assets, and that is your current assets is how many times your current liabilities? How will you pay your payables? Payable is a liability, you will pay money only if you collected from the receivables you will pay. So, how much of your current asset; current asset includes somebody said cash and how much money is there in the cash and bank.

Yes, everything money there that is there in the cash and bank, money there that is basically that can be easily converted to cash; your stock of raw material stock of rich goods because it is going selling. So, your entire current asset pool how many times is the current liabilities there; if it is that cushion is higher than liquidity is better that is you can always convert and pay.

If you look at it typical textbook it will say 2 is to 1, 5 is to 1 all kinds of ratios it will get; do not go by the ratios reason, Pratista is immediately thinking of 2 is to 1. Now, reason it varies from industry to industry for example, you are looking at a service industry your current ratio will be very very different.

For example, let us say you look at Amazon; how many of you buy in Amazon? All of you I think what is the current ratio of Amazon it will never be 2 is to 1; it will be the other way around. Because you pay first and then only buy whereas, that fellow will pay the supplier not immediately much later. So, current asset that is there is no receivable; current asset is 0, sorry no receivable out there very current asset is 0, there is no receivables no debtors payables will be huge.

Student: No.

So, it is not 2 is to 1; it is 0 is to some whatever it is it will be some 5 or 6 or 200 or whatever it is. So, if you look at Amazon that number of days they take on an average to pay on average to pay their suppliers is about 200 days is the kind of average whereas, when do you guys pay you pay immediately.

So, what happens there is a lot of liquid cash flowing around that is where Amazon cloud they can go ahead and invest and so on and so forth and so on.

Student: Yeah.

And this is done do not look at the textbook because that textbook ratio had its context when we were a typical manufacturing sector right. Typical manufacturing you had what you call it as all your reorder level, reorder quantity, economic order quantity which you learn all those things. But today that is kind of a hard and fast number is rule losing its relevance out there that is one of the reasons I am not giving you any number per say. But we are looking at the liquidity part of it this that is I will pay all my current asset liabilities through my current assets only.

A further refinement of this; what happens is I will say among all the current assets what all current assets? There is inventory, there is work in progress that is all the inventory part of it there is receivables there is cash and bank balances any kind of advance circuit. Now, of all these can I convert it to cash? Which are the assets that can be easily con-

verted to cash? I can convert receivables to cash that is for example, if it does not pay I can always go and get it discounted I can do a factoring out that we will explain about discounting and factoring as we go along; whereas, I can convert what is called as cash is already cash. The most difficult part of it to convert is basically the inventory which I had.

Especially the inventory, for example, if you go to the sugar mill; cooperative sugar mill out there they have stock of about 8 months or 9 months of sugar that is there; most of the corporate sugar mills out there in the country. Ease of conversion is not going to be very high especially where it is free goods stock raw material it is even worse especially. So, what we call it as when we say we will say current asset minus inventory.

We call it as what we call it as quick assets; we call it as quick assets QA quick assets. Now, I can say whether my liabilities, current liabilities can be backed by my quick assets itself; whether that is all my receivables that I can discount it from the bank. For example, I have a receivable of about 10 lakhs, I can go to the bank and discount it I can give the what (Refer Time: 31:57) note to the bank and then bank will give me 9 lakh or 50 or whatever is the amount out there.

Now, I have got a 10 lakh, the bank will recover 10 lakhs once it; once the payment happens, but as of today bank has given me 9 and a half lakhs that is I need that money; so that is what we discounted. So, whether your quick assets will be sufficient to meet your current liability. So, when we say liquidity position we will say a current ratio or we will say a quick ratio out there; quick ratio is only quick assets and my current liabilities am I with you on this?

So far so ok; so what we did we looked at? We looked at as a debt provider simple thing whether the company is sufficient to pay they has money to pay the interest and the principle; whatever repayment. As an equity provider you are looking at whether the company is sufficient and what is the kind of return on equity they are earning. Please note I have not touched the EPS still; Earnings Per Share and etcetera; we will do that little later.

Third, we looked at on an average how long do you take to pay your suppliers, how long do you take to receive money from your what do you call it as from the on the sales what you have made? We looked at the liquidity position of it. Now, we will go a little more

on this and spend some time with the; what do you call it is a manual tomorrow in trying to calculate for the companies whatever it is there ok.

Thank you, we will meet tomorrow.