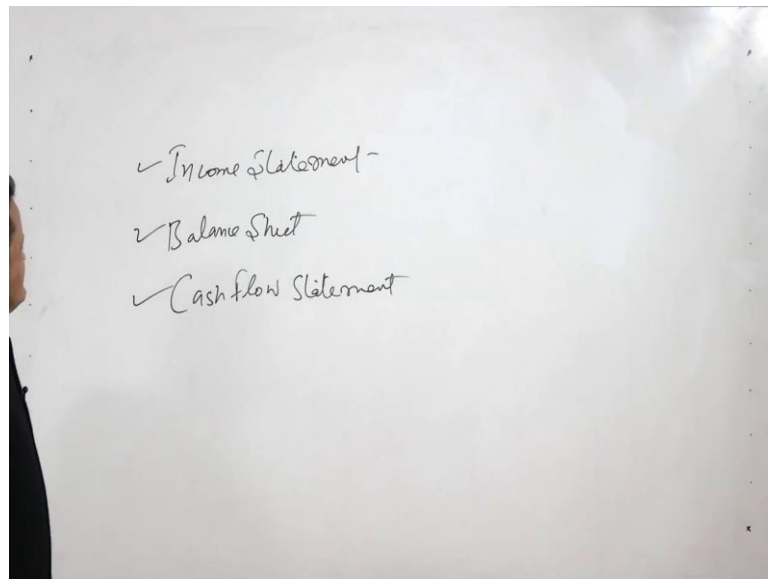


**Financial Statement Analysis and Reporting**  
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**Lecture – 34**  
**Financial Statement Analysis**

Welcome students. So, as I told you that in my previous lecture that we have completed the process of learning about preparing the financial statements. So, that is over we have learnt about the preparation of the trading and profit and loss account and balance sheet of the different forms of organizations. If you recall sometimes back I told you that earlier there were the two financial statements which were required for the company form of organization especially the public limited company like Sanjay industries and Mamta fashions limited case we have discussed.

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So, only two statements were required that is income statement; that is the income statement and balance sheet, income statement and balance sheet they were required to be prepared. But from 97 onwards 1997 onwards third statement has also become mandatory statement that is the cash flow statement, cash flow statement, cash flow statement. So, so far while preparing or learning about to prepare the financial statements we have learned how to prepare the income statement that is trading and profit and loss

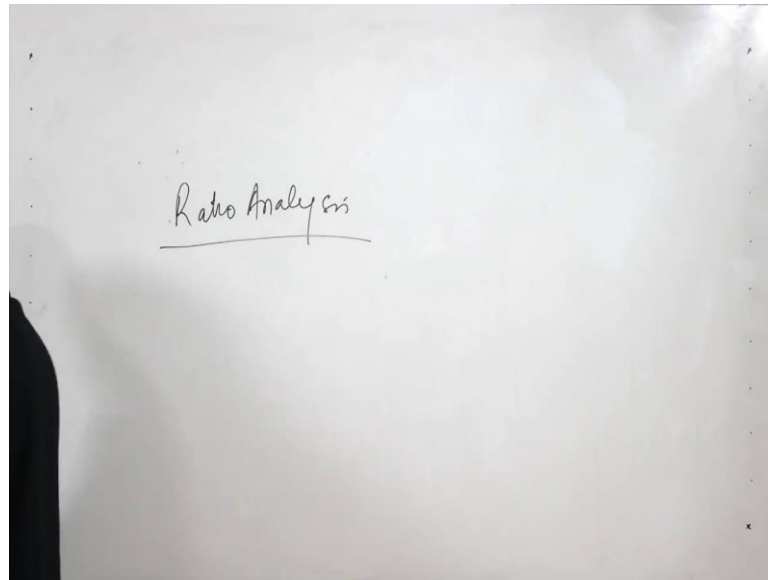
account, we have learned about how to prepare the balance sheet, but we have not learned so far how to prepare the cash flow statement.

So, when we talk about the cash flow statement rather than talking it as a financial statement is more interesting and better to learn it under the financial statement analysis because cash flow statement does not come from the primary information, primary information means that information which comes from the journal and ledger. What whatever the transactions business do or businesses do they are first recorded in the journal we have seen then they are posted in the ledger and from the ledger it goes to trial balance and from trial balance we prepare the profit and loss account that is income statement and then the balance sheet. And when this statement we talk about cash flow statement this statement is prepared from this and this statement income statement and balance sheet cash flow statement.

So, we have learned the two primary statements that is income statement and balance sheet which is to be prepared from the primary records of the firms and as far as this third statement is concerned it is better to learn under the financial analysis, financial statement analysis rather than learning it along with the income statement and balance sheet. So, now, I have started discussing the financial statement analysis part where we will be discussing and talking about the different techniques of the financial analysis and then we will talk here about the cash flow statement also.

So, the first technique which I am going to talk to you is in this lecture as well as we will be continuing for the future part also that is the ratio analysis, that is ratio analysis.

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Financial statement analysis with the help of ratios, financial statement analysis with the help of ratios that is the ratio analysis is very important tool is very important technique. And if we do if we learn how to do a proper analysis with the help of ratios, in the normal circumstances no other kind of the analysis is required. Ratios is such a strengthfull and powerful tool that if we know how to select the ratios which are useful for that particular purpose for which we are analyzing the financial statements of a company and if your able to calculate those ratios from the information which is available in the profit and loss account and the balance sheet then we do not need to have any other tool for the further financial analysis we can understand about what is the overall financial position of that company. So, is a very powerful tool it has very important objectives it is really very rational objective means this analysis and very interesting also.

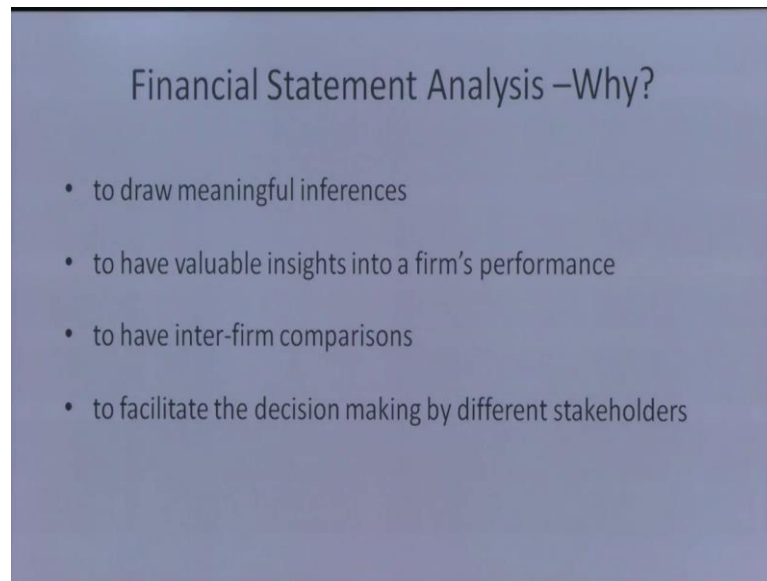
Now, the question arises how many ratios are there in literature and which out of the total ratios available are important for us. If I tell you would be say it would be really strange for you to know that we have 365 ratios in the literature, 365 ratios in the literature, but all are not important in all the circumstances for all the firms and all kind of analysis is the understanding of the analyst, is the understanding of the financial manager that which ratios he want to use, which ratios are important for him that depends upon what is the objective in his mind what for the financial analysis is going to be done is somebody going to be a potential or the new shareholder of the company. So,

he wants to buy the shares of that company, for that reason he want to make the analysis or is somebody or maybe it is a financial institution who is going to lend a large amount of resources funds to the firms. So, they want to know about the overall performance of the company before lending any money to the firm or is it a group of suppliers who want to have a long term relationship with the firm, who want to supply the firm material long term raw material and the other kind of material on the long term basis. So, is that the objective what is the objective.

Or if I am going to be the employee of the firm or if I am the present employee of the firm and if I am going to negotiate with the firm about the enhancement of my salaries, perks, wages, bonus or other kind of financial incentives then I should and I have to talk to the management then I should do the analysis try to talking and indulging into any kind of discussion so that I have the logical figures with me, logical arguments I can make out based upon the financial analysis that I have done. So, depending upon the objectives if I am a shareholder present or I am going to be the potential shareholder or the future shareholder of the company ratios are different. If I am the banker or any other financial institution my objective is different, so my ratios are also different. Focus on which the focus the ratios on which I should have the focus they are different, if I am going to the supplier of the company the focus is different and if I am going to be if I am the present employee of the company or if I going to the potential employee of the company my focus is different.

So, depending upon the objective you want to do the financial analysis with different ratios are there and we should make proper use of that. Now means that is the intelligence of the analyst what is objective and what are the ratios available for that he should be able to identify those ratios.

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Now, when we talk about the ratio analysis why do we do the ratio analysis; there is a question mark why do we do the ratio analysis this is the question mark here why? And I have given the four reasons - number one to draw meaningful inference, two to have a valuable insight into the firms performance, three to have inter firm comparison and four to facilitate the decision making by different stakeholders.

Now, to draw the meaningful inferences what does it mean? Meaningful inferences we want to know about the profitability of the firm. So, we want to draw the conclusion about that or I am going to be the future lender for the company. So, I want to draw some conclusions about the safety and security of my funds if I lend the funds to this company. So, different inferences can be drawn by selecting required and certain type of the ratios and these ratios can help to understand the overall financial performance of company in a much better way.

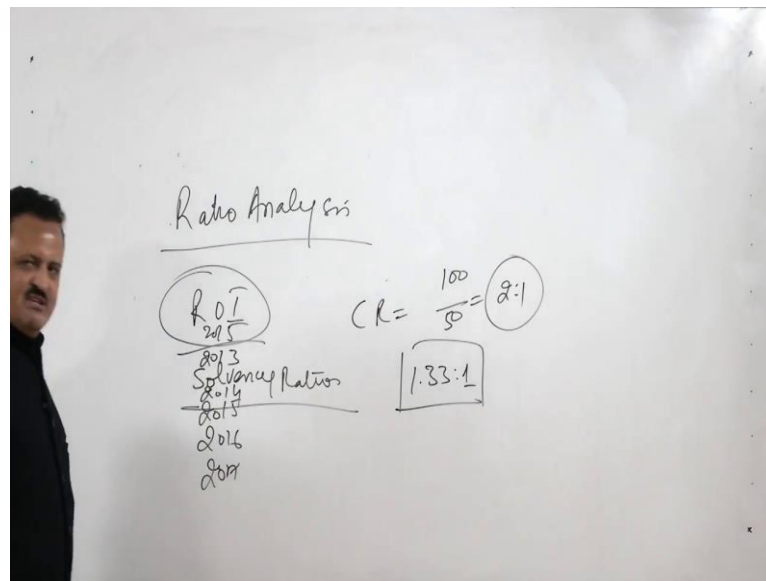
Then to have valuable insights into the firms performance, valuable insight about the firms performance which a layman cannot understand, but a financial analyst can understand, layman cannot understand if he looks at the balance sheet he want to able to understand what this is all about. Till this point you go through this course and you have learned something I think you also will not be able to understand if you look at the balance sheet that what is this balance sheet all containing about.

Then third objective is to have inter firm comparisons - one firm is doing better as compared to the other or the vice versa - how you are going to conclude inter firm comparisons, how are you going to conclude performance of the firm ranking of the firm for example, there are 10 firms in the industry. Now in the 10 firms we have to rank on the basis of the financial performance that this is number one firm number one, two, three, four, five, six, seven or may be two firms are the same level, three are same level, four are same level how you are going to say about that and if one is doing better others is not doing. So, if other want to also start doing better they have to look at the first one and they have to analyze the performance of the first one when if how what are they doing. So, that we do the same thing we will also be reaching up to their level or sometime we can cross their position or their level also. So, inter firm comparisons are also possible with the help of ratio analysis.

And then the forth point is to facilitate the decision making by the different stakeholders, should I if I am going to be supplier or if I am the present supplier, should I continue supplying to this firm and the employees, should I continue working with this firm I am the financial institution I have already lend the funds to this firm and the firm is asking for additional funds should I lend them some more funds and if I am the existing shareholder should I continue as a share all of this company or I should selloff the shares of this company in the market and then become the formal shareholder because this company performance is going to go down in the years to come and I am my share price will also go down. So, I have to be very very careful.

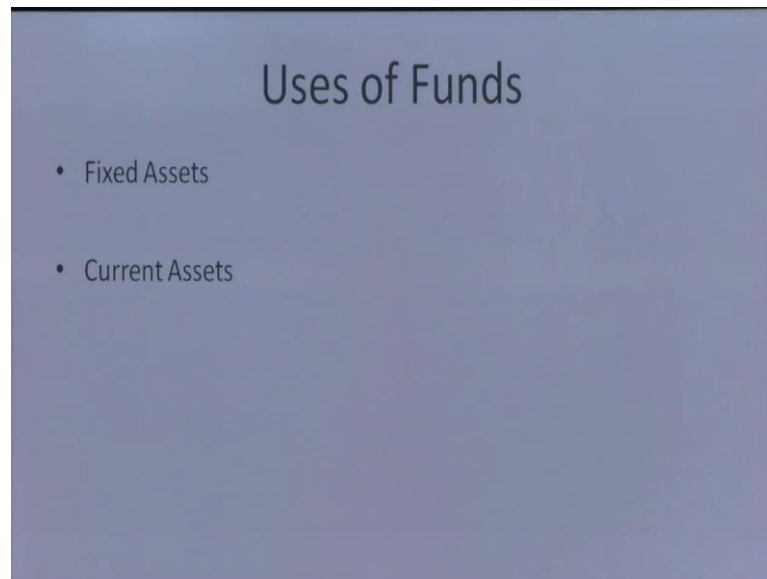
So, these are the four important reasons that why the financial statement analysis is important.

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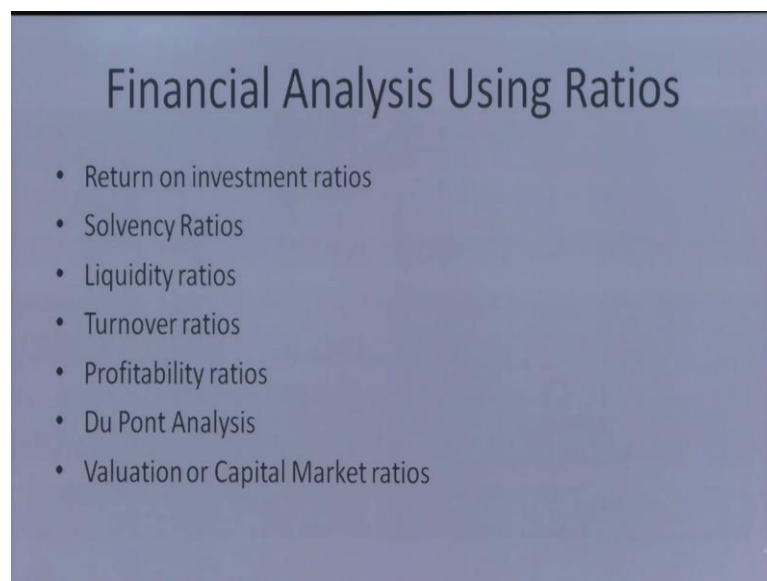
Now, what facilities a financial statement analysis you have here sources of means when we talk about the financial statement analysis and using the ratio analysis as a one important tool of the financial analysis. Then these all the sources which are in the liability side of the balance sheet share capital, reserves and surplus, debentures, long term loans, short term loans and current liabilities are of great importance to us we should be careful about; that means, we should be knowing about it. And if you have the complete knowledge of these different sources of the firm then yes it is going to be very useful information for our financial statement analysis through ratios.

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Similarly, when we talk about the uses of funds we have application side we have two kind of assets fixed assets and current assets. So, how much funds are invested into the fixed assets, how much funds are invested in the current assets, how the company is managing the total sources given in the liability side and what is the state of affairs of the asset side this is again very important meaningful information for us.

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And when we talk about that yes, now we are sure we are convinced that ratio analysis is a very important tool if we have the right kind of information available in the balance



sheet in the profit and loss account we can calculate different type of the ratios and they can help us to draw very meaningful and valuable conclusions and we do not need to think about any other financial analysis this is the strength of the ratio analysis. Once it is clear to all of us that yes the ratio analysis is a very useful tool I would like to be an expert in the ratio analysis then yes we have to proceed further and will have to know about that what are the different ratios which are generally calculated. All 365 ratios are not of use to one single say a stakeholder or one single purpose, different purposes different ratios different stakeholders different ratios.

But lastly for a general analysis of the overall operating and financial performance of a company or any business organization these are some ratios if you say these are the 7 categories of the ratios which can be calculated, these are the 7 broad categories these are the 7 broad heads and different ratios are tied together, clubbed together, similar categories of ratios are clubbed together and they are given one single name. And we can calculate these seven categories of the ratios one category involves more than say 2 3 4 ratios and then when we have the total ratios information under these 7 categories with regard to a company we can understand what is overall position of the company, how the company is doing, how the company is performing.

Now, first set of the ratios is RoI ratios they are return on investment ratios or we call them RoI ratios. By calculating these ratios in different way different style different manner we come to know about the profitability position of the firm or return on investment position of the firm it is a broad item it is not profitability, profitability is very narrow. Term return on investment as a whole is the bigger term RoI is a bigger term is a broader term and by calculating different ratios under the RoI we can get to know that whatever the total investment is made in the company from different sources borrowed and owned sources share capital and the loans what is the return on those sources, that is we are going to talk about discuss identify the ratios under RoI category and we are going to calculate about three ratios which will facilitate the return on investment process or the level of return on investment.

Then is the solvency ratios, solvency ratios solvency ratios under solvency ratios we calculate different set of ratios which solvency means strength of the firm, how strengthful the firm is, how strengthful the firm is how, how means financially how powerful the firm is. On the one side we have liabilities means sources other side we

have the assets. So, what is the level of assets the firm has and what is the value of those assets. So, it means solvency if you understand financial strength of the company overall how powerful the company is, how strengthful the company is, it may be possible that RoI of the firm is low currently, but the solvency is very very high. So, today they are not doing very well, but tomorrow in the time to come they will improve the performance.

So, some ideas we can draw some conclusion some clues we can draw from the solvency ratios, then we have liquidity ratios. Liquidity ratios means talking about the liquidity position of the firm liquidity means availability of the liquid funds, liquid funds means which can be used to make the short term payments, short term payments. We have prepared the balance sheet, so we have kept top is the share capital on the liability side top is the share capital then is the long term loans and then we come to the lower part there is the current liabilities and provision and of the assets side we take long term assets then we come to the current assets.

So, when we talk about the liquidity ratios we calculate these ratios from the lower part of the balance sheet by taking the information from current assets and current liabilities. So, how much current liabilities are there in the firm if all the liabilities become due to be paid on the same date how much current assets firm has. So, we have different means ratios under the liquidity category liquidity means you might have say for example, somebody has the huge land or a big house, but he has no cash in the pocket if he goes to the market if he want to buy the food stuffs for him if he want to buy some say clothes for him if he want to buy some other kind of the necessities for him, he may be a big landlord, but if he does not have that cash available out of that property is what is the use of those fixed assets with him what is use of the huge land, what is the use of that big building. Similar is the case with the company, so company is having huge fixed assets, but the current assets are not available with the liquid cash is not available in that case they cannot make the payment.

So, we should have the liquidity, liquid cash available liquid funds available and by calculating certain number of ratios we get to know about the liquidity position of the firm.

Then the forth category are the turnover ratios. Turnover ratios are talking about the operating performance of the firm how quickly we are converting raw material into finished product and finished product into sales. So, it means turnover is talking about the efficiency of the use of fixed asset with which what efficiency we are using the fixed assets, with what efficiency we are using the resources. So, you can calculate the turnover ratios from the liability side also, you can calculate the turnover ratios from the assets sides turnover of the assets, how many times the sales are as compared to the fixed assets the firm has. So, larger the amount of the sales larger the means say higher is the turnover of the firm, how many sales how much sales are there as compared to the total funds invested as being shown by the liability side.

Turnover is the efficacy the efficiency of the firm by converting means maximum, ensuring the maximum use of the assets and making maximum amount of the sales then we talk about the profitability ratios they are related to RoI ratios, but the profitability is a narrow term profitability is a narrow term. When we talk about the gross profit or net profit or some expenses which increase or decrease the profit some expenses and income which increase or decrease the profits, but RoI is a in a different sense, it is a broader in the broader sense we calculate the RoI, but if you want to know the quick profitability of the firm then we can calculate the profitability ratios.

Then is the Du Pont analysis, Du Pont is a company you must have heard about which is into different fields they are into agriculture, they are into chemicals, they are into consultancy, they are into so many areas it is a US firm.

So, they have also done some ratios certain ratios and not more ratios just means 3 4 ratios they have given and they are of the view that if somebody is able to calculate these three four ratios efficiently, no need to calculate any other ratios you can have a very good idea about what the firm is all about, how the firm is going to perform, how the firm is going to behave in future and what is the future of the firm, what is the potential of the firm.

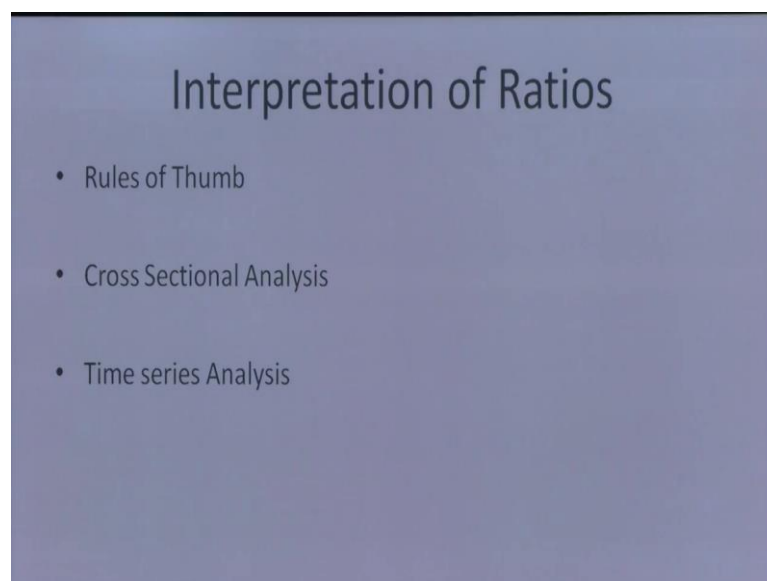
And the lastly we talk about the valuation or the capital market ratios. In the capital market ratios we talk about what is the market value of the firm they are the two values of the firm you must of have heard about two values of the firm one is book value which is shown by the balance sheet because land we purchase long time back for 20,000 today

that land for 20 lakhs, but which keep on showing it at 20,000 plant and machinery is we have bought for 10 lakhs today it is of 50 lakhs, but we are showing in the balance sheet for 10 lakhs minus depreciation.

So, we prepare the financial statement on the historical basis and fall in the book value where as there is a different value which is called as a market value, capital market value say for example, now one company issues the shares 10 rupees share the company has issued long back that sure today is trading for 2000 rupees in the market. In the company books of accounts is only for 10 rupees, but the market value of share is 2000 rupees. So, that is the perception value that is the perception value what is the perception of the people about a one particular company; that is a perceptual value.

So, and by making the valuation or the by calculating the valuation of the capital market ratios we know about that what is the capital market position of the firm and if you compare it with the book value how much difference adjust between the book value on the market value of the firm, higher the difference you can say that a firm of 10 rupees has a market value of 2000 rupees. It means they are doing very well they value the perception, people's perceptions about that firm is very very good and that firm will never find a problem selling the stocks in the market any number of issues of the stock they come out people will be all out to buy the stocks.

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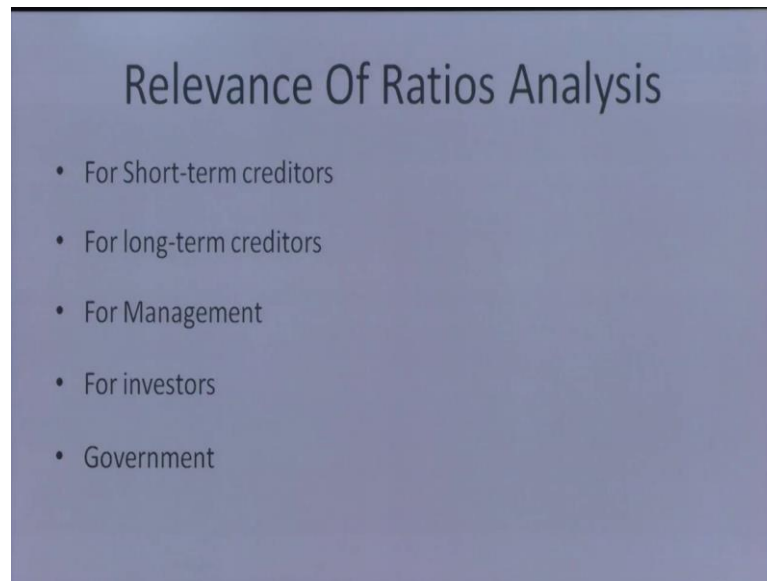


Then next thing we want to learn is interpretation of resource, one thing is that we calculate those figures those values we have calculated, we have calculated for example, one liquidity ratio is say current ratio and their current assets are 100 and current liabilities are 50. So, the ratio is 2 is to 1 we have calculated, but what is the meaning of this figure 2 is to 1. We should have some basis for interpreting those figures and we have some basis for the interpretation of those figures one basis is we follow the standard rule of thumbs there are standard rules of thumbs given in the literature that this ratio to be considered as acceptable has to be minimum this much or maximum this much for example, for the current ratio we have a standard rule of thumb is that it should not be more than or it should not be less than 1.33 is to 1 this is the standard rule of thumb.

So, interpretation is either on the basis of the standard rule of thumb or cross sectional analysis you calculate the ratios of one company in which you are interested and then you calculate the ratios of the other two companies for the leaders in the market one is a leader in the market, one is laggard in the market and then you compare the ratio of the three companies and then you try to find out how behind this company is from the leader and how had this company is of the laggard in the market and what is the scope of the further growth. So, comparison or then we have the already calculated ratios about the industry average industry ratios are also available. So, we can compare the ratio of one particular firm with the industry performance and then we can rate this firm where it lies as compared to the industry performance whether it is above the industry average, below the industry average and where it lies as compared to the leader in the market or the laggard in the market you can easily draw a conclusion about the performance of the company.

Then we talk about that other way is the time series analysis. Time series analysis that about this one company only you calculate the ratios for say 2016, 2017 or 2015 or 2014 and or may be 2013 also, 2012 also. So, by calculating the ratios for the past 5 years, 6 years or 10 years you can get to know how the line goes whether the ratio is stable is going up or going down we can easily find out that how the company is performing, how the company is doing and what is expected what has happened in the past 10 years and what is expected to happen in the next 5 years or 10 years, you can make a inter firm comparison that is a on the basis of the time series data or on the basis of the time series performance.

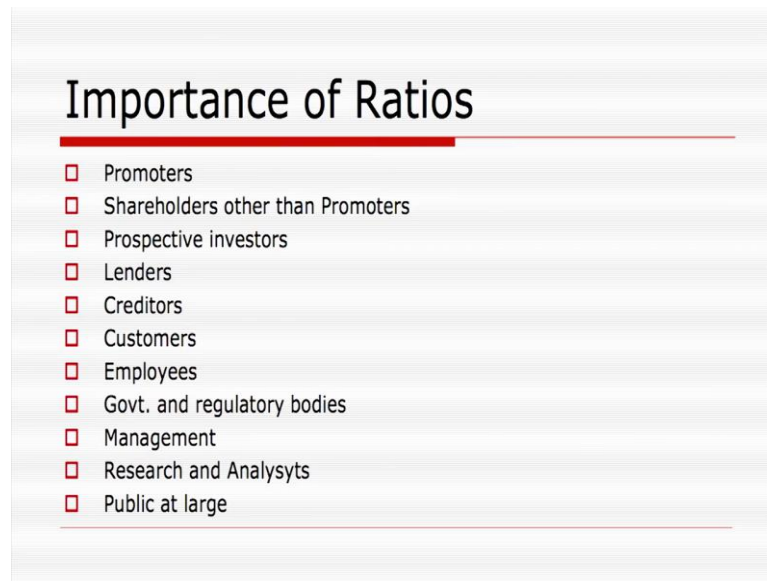
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Now, the next part is the relevance of the ratios. What is the relevance of the ratios to the different stakeholders and we talk about the relevance of the ratio to different stakeholders as I have already told you in the beginning of discussion that ratios importance is also for the short term creditors who are supplier on the basis of ratios they can say whether I should supply to this firm or not.

Then long term creditors financial institutions I told you already that we should means their objectives are different so their ratios are also different, for management to know their performance themselves they can calculate the ratio. Investors present as well the potential investors with the help of ratio they can decide whether to continue as the shareholders in the company or sell of the shares in the market and if somebody want to buy the shares of this company they can easily make out that whether to buy the share or not. And then the government many times government agencies keep on calculating with ratios and on the basis of that they keep on knowing about the performance of the firms and maybe the sometime regulator is also sometimes the other government agencies they can means these ratios are equally important for the government also.

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And last thing we are going to talk about is the importance of ratios, so the importance of ratios is also to the different stakeholders like promoters, they also want to for the initial 7 shareholders, they are there also interested in the company's performance then the general shareholders who are existing shareholders they also want to know about the performance of the company. So, they can know it with the help of ratios.

Prospective investors as I told you they want to invest into the shares of the company. So, they can get to know with the help of ratios lenders, creditors, customers, employees, government and regulatory bodies, management, research and analysis agencies. Many agencies like you have heard about moodys or standard and poor these are the international rating agencies. Then we have Indian rating agencies means who are working in India - Kasei care, ICRA they are Fitch. So, they are some rating agencies who are working with a focus on the Indian market, they rate the companies and their performance from time to time and they do largely with the help of the ratios and public at large anybody in the general public can be interested to know about the performance of the company and ratio analysis can be the best and the easiest and tool with the simple understanding very clear and very simple tool to understand the overall performance of the company.

So, this is just a theoretical foundation of the first technique of the financial analysis that ratio analysis and from my next lecture onwards we start learning about first how to

calculate these ratios we know about the different formulas and different means meanings of those ratios and then we will discuss a case where we will calculate the ratios of that particular company it would be a existing company and we will calculate those resources about that company and we will analyze that performance of the company and draw the meaningful conclusions about the performance of that company. So, this all, I will be discussing and talking about in my next lecture.

Thank you very much.