Financial Management For Managers
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Lecture 58
Capital Structure-Part 5

Welcome all, so as a last lec of discussion on the capital structure, I will do one problem now and we will try to understand that the if we change the capital structure or the composition of the different sources of the funds, then see how the cost of capital can be say affected or can be increased or decreased. So because ultimate purpose of the capital structure is that we want to have the optimum capital structures where the cost of capital of the firm is within control or the optimum, neither too high nor too low.

And ultimate say, value of the firm to the equity shareholders is the maximum. So we have discussed conceptually till the pre say, previous class all theories, almost all the theories we have discussed in detail, all the capital structure theories starting with the net income approach, net operating income approach, traditional approach, then the Modigliani Miller both the propositions we have discussed, then we say discussed something about the say pecking order theory and the signaling theory.

So after all these theories though even today you can say that there is not a clear cut answer with regard to the capital structure that what helps to design a optimum capital structure. But still, even the Modigliani and Miller second proposition also has concluded that the amount of the debt in the capital structure helps to bring the overall cost of capital. So certainly now there should be the proper mix of the debt and equity.

And if there is a proper mix of the debt and equity in the capital structure of the firm so what will happen? Your cost of capital will also be within control and risk of the firm as a whole will also be under control. And the objective of the maximization of the value of the firm will also be attained. So after discussing conceptually all the say concepts and the say relevant theories of the capital structure, now I will say close the discussion in this class.

But after discussing one practical problem with you that how the capital structure makes a difference and how the debt capital being a cheaper source of finance because of the tax deductible advantage. How it affects the overall cost of capital, because ultimate objective of any capital structure is to minimize the cost of the capital right. Because if there is no say effect on the cost of capital of the different sources of the finance, then there is no point thinking about whether the fund should come from the equity or the fund should come from the debt.

But if we are, say getting the clue from the different theories, for example we started with the net income approach and net income approach has say helped us to understand that the movement you increase the amount of debt in the firm, the cost of the debt being lesser as compared to the cost of equity, overall cost of the capital gets down and say that objective of maximization of the value of the firm can be achieved.

And reverse to this was the net operating income approach. And both these approaches were means finally tested and presented by the Modigliani Miller also. In the first proposition of their theory, they supported the net operating income approach and they themselves have argued that because of the arbitrage argument, capital structure has no meaning, right. Whether you bring the say capital from the say equity or with the help of debt ultimately, it is not going to impact the cost of capital.

So that was a first proposition of the Modigliani Miller. But in the second proposition, they themselves have agreed and empirically proved it, scientifically proved it that yes, debt being the cheaper source of finance, if the amount of the debt is included in the capital structure of the firm then because of the effect of the corporate taxes and the personal taxes, both the taxes, the overall cost of say capital can come down. Overall cost of capital of the firm can come down.

And because of that, say existence of the debt when the overall cost of the capital comes down, the value maximization objective of the firm can be attained. So in the first proposition, they supported the net operating income approach. But in the second proposition, they supported the net income approach. So it means after talking about all these theories, then we talked about the pecking order theory, which says that it is not the tradeoff theory which is the second proposition of Modigliani Miller theory.

But the pecking order theory says that there is no question of equal amount of debt and equity or having the funds from both the sources largely say studying the capital structure of the firms. The person who propounded the theory he has say concluded, observed, remarked that there is a pecking order of the different sources of the funds and first the firms make use of the internal sources. Then they borrow the funds from the market because that is not mispriced and it does not dilute the control of the existing equity shareholders.

So that is a second option and third option is the equity capital because of so many hassles associated to the equity capital, the equity capital is ranked as the third source of the finance right. So later on then the, we discussed another theory given by the Myers that was a signaling theory and Myers also said that if there is a market asymmetry or the say, there is not homogeneous expeditions of all managers and investors and the market information is not complete, it is not transparent, then certainly the pecking order theory is the better to use.

But finally, they said means extending the pecking order theory they gave their own theories, signaling theory and they said that you can if you are not able to find out anything because of the lack of the proper information available from the market with regard to the capital structure of the companies, then you can make out from the signals coming out of the firms because whatever that capital structure is designed by the managers of the companies.

They are the internal stakeholders and whatever the capital structure is designed by them that gives us a signal that, for example, if more funds they are say arranging from the internal sources and then they are moving towards the debt and then they are moving towards the equity. So you can draw a signal that firm has lot of retained earnings available and they first want to make use of that.

Then they prefer the debt over the equity because equity sometimes, when you issue the equity in the market it creates a problem that it has the issuing cost and the flotation cost, these two costs are very high and when we issue the fresh equity in the market it gives a signal in the market that the adjusting equity of the firm is overpriced. That is why more number of shares are being issued in the market.

So signal does not go as well and cost associated to the issuing of the fresh equity is also high. So it is better to say raise the funds. First after the retained earnings, first from the debt, which is

not mispriced at all, does not dilute the control of existing equity shareholders and then once these two sources are exhausted, so third one we should go for the equity because the another limitation of the equity capital is fresh equity capital is that it dilutes the control of the existing equity shareholders.

So you can draw the signal in the absence of the symmetrical information, you can draw the signal from the existing capital structure of the firms which is designed by the internal stakeholders who are the managers of the company. So you can draw the signal that how the existing firms in the industry have designed their capital structure, same way we should also be means trying to go ahead and form the capital structure of the new company or maybe any new project of the existing company.

So after talking about these theories basic 5-6 theories of the capital structure, I think if you say listen to the lectures carefully and then consult the book also, the financial management by Prassana Chandra or any other book on the financial management, then you will be clear that whether capital structure has any meaning or not. And what are the different theories say till now which are in existence which can help us to design the say optimum capital structure of the firms.

So before I conclude the discussion on the capital structure, I will do one problem and we will try to find out that if you have some existing firm and some existing capital structure, you must have some existing cost of capital, weighted average cost of capital. But if you want to go for the expansion, growth, diversification, then as a student of finance, the leaner student of finance, how you should expand from there the funds should come and how this extended capital structure should be financed.

So ultimate objective of every good finance managers should be to minimize the cost of capital, so let us see how that capital structures are decided by the firms, how they influence the say overall cost of capital of the firm and how the capital structure can contribute in the maximization of the firms value. So let us discuss this problem and then we will close the discussion on the capital structure right. So it is a very simple problem, is this nothing complex about it.

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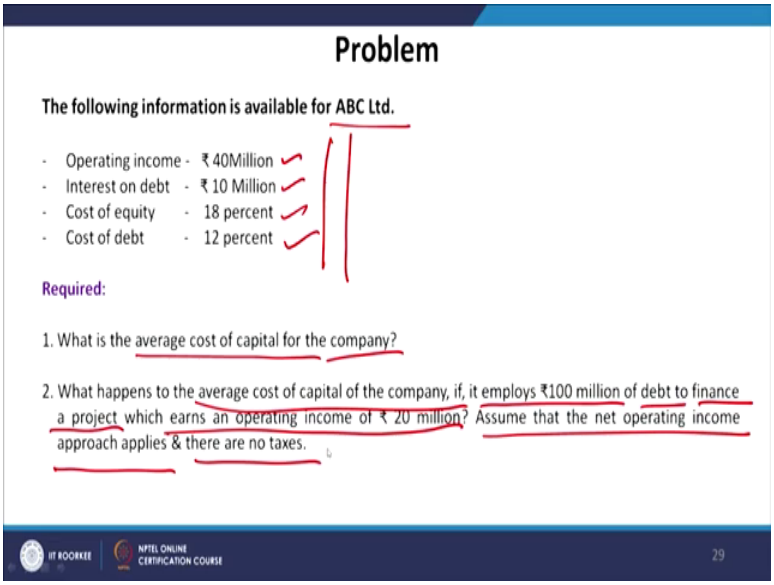

I have brought very simple problem here and the problem is the following information is available for the ABC Limited and the information is 4 point based information. First information given to us is the operating income till now existing operating income is the 40 million rupees interest on debt. It means we have the two sources of the fund in the existing capital structure because we are given the cost of debt and we are given the cost of equity.

Interest on debt is 10 million and the cost of equity is 18 percent and the cost of debt is 12 percent, right. So it means these 4 point information is given to us so we can draw some clue from this information that say both the sources of the funds long term sources of the funds, debt and equity have been used by the firm and now what we are required to do? We are required to do is the first thing, what is the average cost of capital of the company.

Looking at the existing situation, existing say composition of the debt and equity first question we have to answer is what is the say average cost of the capital of the company for the existing capital structure? And then the second question is what happens to the average cost of capital of the company? If it employs 100 million of rupees, 100 million of debt to finance the project, which earns an operating income of 20 million rupees.

So in the existing capital structure, they want to add up 100 more million rupees and they want to go for the expansion by, say, initiating a new investment proposal so the investment requirement of that proposal is 100 million and the operating income is 20 million. Assume that net operating

income approach applies and there are no taxes, right. Assume that net operating income approach applies and there are no taxes.

So net operating income approach applies means that you can assume you can draw the signal here that the cost of equity will be more as compared to the cost of the debt. And what should be our intention here that we should in the expansion project that is why maybe the intention of the companies managers is that for the expansion of the say companies operations, when they want to invest an additional 100 million rupees. They want to invest it with the help of debt right. Not with the help of equity because debt is cheaper than equity.

And it is given clearly that the cost of equity is 18 percent, cost of the debt is 12 percent this is the maybe the, say after tax, but since there are no taxes given to us, so it means no impact of the taxes has to be taken. So whatever the 12 percent cost of debt is given to us is, that is the after tax cost of the debt, we can assume it like this.

Cost of equity is 18 percent and then operating income of the existing operations is 40 millions and interest on the debt is 10 million. So first we will answer the first question by calculating the average cost of capital basically, it will be the weighted average cost of capital and then we will see that when we add up 100 millions more by borrowing it from the market in the form of debt, which has the earning capacity of increasing the operating income by 20 million.

So how the cost of capital will be responding so or will be becoming like right. So let us do this and try to understand that is there any impact of the debt capital on the cost of capital of the firm or not, right? So the first question is what is the value of sorry, what is the average cost of capital of the company? Right, this is the first question. What is the average cost of capital for the company or the say weighted average cost of capital for the company?

So for calculating the weighted average cost of the company, you need to point information, One information is the cost of the respective source of the funds and amount generated from that source of the funds. And finally, we will be summing up the all the funds coming from different sources, making it as the total amount available and then deciding the proportions of the debt and equity multiplying it by the respective cost of debt and equity.

You will be able to find out the weighted average cost of capital. So in this case we are given the cost of equity and we are given the cost of debt, but we are not given the amount of equity and we are not given the amount of debt. Without that, you cannot afford to calculate the weighted average cost of capital. So you have to calculate, first of all, the market value of the debt and the market value of the equity.

And once you have got the market value of debt, market value of equity, you will be able to find out the total value of the firm in the financial terms and the cost of these two sources is given to us. So proportionate amount if you multiply by the respective cost of the source of the finance, you will be able to find out the weighted average cost of capital. So let us find out the say market value of debt and equity.

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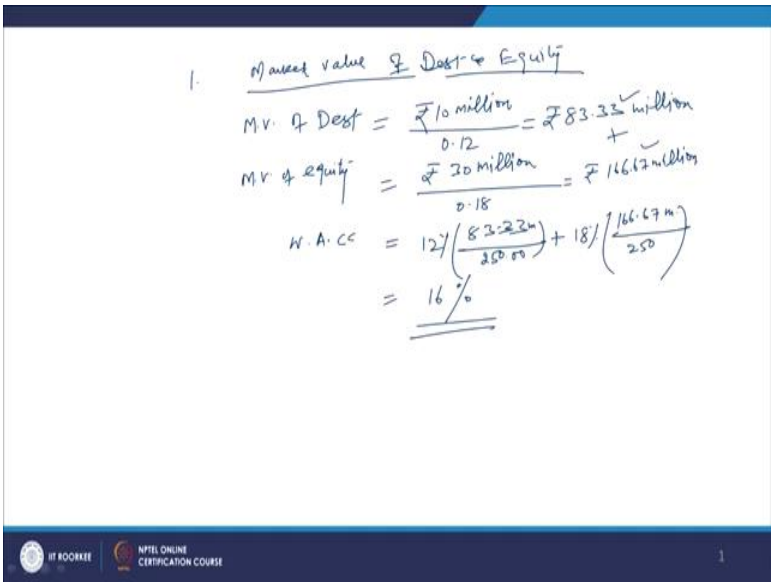

So first point, what you have to do is first question we are going to answer. So you have to find out the market value of debt and equity so which we need right, because without proportions what component you will be multiplying with the cost. So market value of debt and equity. So first of all, we calculate the market value of debt and that is equal to how much? You can easily calculate it. That is the, what is the debt amount, total amount of the debt is given to us and that is the say cost of the debt is this.

Interest on the debt is 10 million. So it means we have to find out the, we are given the amount of debt. So interest on the debt is it is given to us here, interest on the debt is 10 million and the

cost of the debt is 12 percent right. So if you see here the for calculating the market value of the debt, you have to divide the say, interest on the debt, 10 million by the cost of the debt and the cost of the debt is how much? It is 12 percent. If you try to solve it, you will be able to find out the final amount comes up as 83.33 million.

This is the market value of the debt by dividing the total amount of the interest paid on the debt with the by this means dividing the total amount of interest paid on the debt by the cost of the debt. You will be able to find out the market value of the debt. And in the present case, we have found out is 83.33 million. Now let us calculate the market value of equity.

So if you calculate the market value of equity, how we can calculate the market value of equity? For calculating the market value of equity we will have to now again follow some process here. And for this purpose we have to again move the same way. We are given the cost of equity, market value of equity it is given to us. So for calculating the market value of equity, you are given the total information that is what is operating income? 40 million, right and what is the interest on debt? 10 million so the remaining amount available is to the equity shareholders.

So the amount available or the cost of, or the amount available to the operating income available to the equity shareholders if it is divided by the cost of equity we will be able to find out the market value of the equity. So what is the total amount? Operating income is 40 million and after paying the interest of 10 million, how much is left with us 30 million. We are left with the 30 million. So you have to divide it by the cost of equity and the cost of equity is given to us is 18 percent.

And if you follow this approach so the amount of equity works out as the value, market value of the equity works out as 166.67 million. Now you have got all the four components, you have got the amount of debt, you have got the amount of equity means the, market value of the debt, market value of the equity. You have got the cost of the debt. You have got the cost of equity. So now calculate let us calculated the weighted average costs of capital. So how much it works out as?

We are going to take as the first of all the cost of the debt, which is 12 percent and you multiply with the help of this 12 percent. You have to find out what is the amount of debt market value of the debt is 83.33 rupees, 83.33 million. And what is the total amount? This plus this, this plus

this, if you sum these up so you will find the total amount and total amount works out as 250 million and then you have to take the second component.

Second is the equity. Equity cost is 18 percent. And what is that equity composition market value of the equity? This is 166.67 million. It is also million divided by 250, so you can if you solve this, you will be able to find out that the weighted average cost of capital is the 16 percent that in case of existing capital structure.

This is the cost of say, capital weighted average cost of capital for the firm ABC Limited is for the existing operations because out of the 250 rupees total market value of the 250 million rupees total market value of the firm, that component is the 83.33 million and equity component is the 166.67 millions. So and the cost of the debt is 12 percent, cost of the equity is 18 percent, so weighted average cost of capital is the 16 percent.

Now next question we have to answer is and we want to answer the next question.

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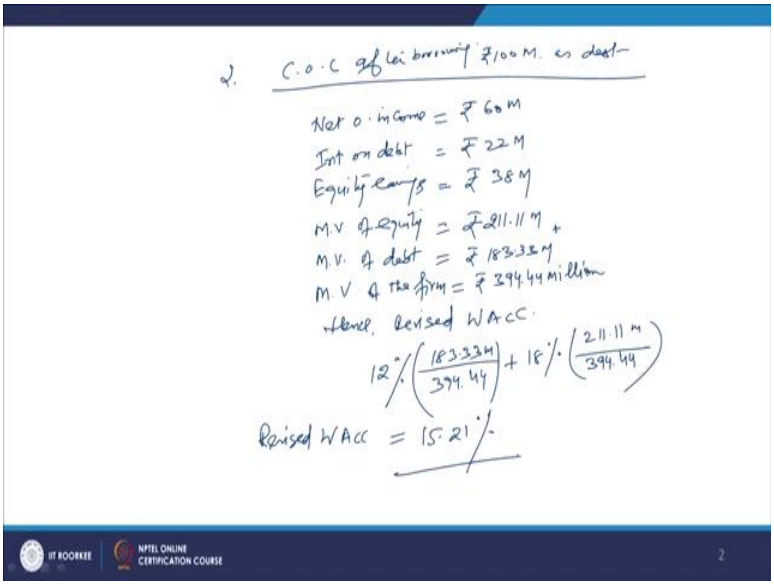

What is the next question that what happens to the average cost of capital of the company if it employs 100 million of debt to finance a project which earns an operating income of 20 million? Assume that the net operating income approach applies and there are no taxes. Now let us find out how much is now, the weighted average cost of capital once company employs another 100 million rupees by way of borrowing it from the market or as a debt from the market right.

So in this case, once 100 million means borrowed from the market, cost of capital after say borrowing, after borrowing 100 million as debt from the market right. So we have to calculate the revised weighted average cost of capital, cost of capital after borrowing, so cost of capital after borrowing the 100 millions, rupees 100 million from the market.

So you can easily find out this is rupees 100 million after borrowing the rupees 100 million from the market, so we can find out here. Now what will be the net operating income? Net operating income will be how much? It will change now because when you are bringing in the (20) 100 millions of the debt in the market now in the new project and if we make investment, so your income will become now what was your earlier income, 40 million and this new investment is going to give us a income, 20 million. So this income will become as 60 millions.

So this is the net operating income, this is 60 million rupees. Net operating income is 60 million rupees, right. Interest on debt, let us see now the interest on debt. What is the new interest on debt because we are infusing the additional amount of debt of 100 million, which is costing us at say, something like 12 percent. So we will have to think there is cost interest on debt. How much is the interest on debt now?

Total value of the debt, total value of the interest is earlier we had how much? 10 millions and now we are borrowing 100 million at the rate of 12 percent. So total interest on the debt will become 22 million and then we have got the equity earnings. We have to find out the equity earnings. If we calculate the equity earnings how much, 60 million is the total operating income interest on debt is 22. So equity earnings are only left with us is the 38 million. This amount will go to the equity shareholders, 38 million right.

Now, let us see the market value of equity. So if we take the market value of equity, you can see here what is the market value of the equity? Is there any change in the market value of the equity? Yes, there is a (mark) change in the market value of the equity. And the market value of the equity is now going to be how much? You can recalculate it. How we have calculated the market value of the equity earlier because now the equity earnings have been increased from say, whatever that amount was earlier 238 million.

So market value of the equity can easily be calculated and if you calculate this how we calculated previously same way if you do it, it will become 211.11 million. This is the market

value of the equity and now similarly the market value of debt. If you calculate the market value of debt, you can easily calculate the market value of the debt and this amount market value of the debt will become is how much?

It is already given, earlier we had the debt component 83.33 and now we are borrowing 100 million more. So this amount will become as 183.33 millions. So this is going to be the market value of the debt. This is the market value of the debt. So we have got everything now. We have got the net operating income of 60 million. We have got the interest on debt 22 millions. We have got the equity earnings 38 millions, 38 means 60 minus 22 is 38 million. So again, be revised the market value of the equity because now the equity earnings have changed.

So we have to find it out 38 when you say upscale the market value of the equity. So it has gone up. Earlier, it was 166.67 million, but now it has become 211.11 million. Market value of the debt is same that is 83.33 was earlier and 100 million we have borrowed freshly from the market. So this becomes 183.33 million, so now market value of the firm as a whole, so if you take the market value of the firm, market value of the firm as a whole if you take how much it becomes? It becomes now this plus this right.

So this will be how much? This will become as 394.44 million. This is the market value of the firm and now on the basis of this information. Hence, you can calculate that the revised cost of weighted average, cost of capital hence revised weighted average cost of capital, so you can easily calculate it, the rate of interest cost is the same 12 percent, interest cost is, borrowing cost is 12 percent into what is the market value of the debt, 183.33 divided by 394.44. So this is the way you can calculate the cost of the debt composition.

So this is 183.33 and we have similarly got the value of the debt. So this is 183.33 and total market value of the firm is 394.44 plus you have to now calculate the cost of equity, which is 18 percent into, what is the market value of the equity now? 211.11 I am not writing rupee, so it is in the rupees, millions. I can write here millions. It is millions. So this is 394.44 right, the total amount.

So this composition if you total it up 183.33 plus 211.11 million. If you sum it up, this becomes as 394.44. So finally if you calculate the WACC by this say solving this equation. So WACC you can call it as the revised, revised WACC is how much? Revised WACC is 15.21 percent.

Earlier how much was that weighted average cost of capital? 16 percent but now as we have brought in the more amount of the debt in the firm additional 100 million we have brought in the firm and that say amount has been brought by we have the borrowing from the market.

So in this case, the ultimate cost of the capital, revised weighted average cost of capital has gone down because that is cheaper as compared to the equity cost of equity is given to us is 18 percent. And the cost of the debt is say 12 percent, which is there. There is a difference of clear cut difference of 6 percent. So when you are going for the expansion and diversification or the further investment in the firm we are making in the new project. We have decided to invest funds by borrowing it from the market because cost of the borrowing is lesser by 6 percent as compared to the equity and the effect of that we have seen in the revised capital structure.

And now the revised weighted average cost of capital has come down from 16 percent earlier to 15.21 percent. So you can see that the ultimate purpose of doing this problem was that whatever we conceptually discussed, what different theories of the capital structure we discussed, how means practically they are going to be helpful and we wanted to find it out that is the debt capital truly cheaper as compared to the equity and looking at the in this case, we have assumed, for example, that say there are no taxes.

But had the taxes been there? Either you assume that this 12 percent is the after tax cost but if you say still feel that taxes are also there and this cost is tax deductible, so you can say the overall cost of capital weighted average cost of capital of the firm will further go down. So you can understand that by doing this problem, what was the capital structure we had seen the cost of capital was 16 percent.

But when we expanded operations by borrowing funds from the market rather than say bringing additional equity in the firm our overall cost of capital revised weighted average cost of capital has gone down from 16 percent to 15.21 percent. So you can easily understand that whatever the theory say though even today, we are not able to concretely conclude that yes, there is a standard formula of deciding the capital structure of the firms that you cannot say with that much of conviction or that much of the say belief.

But still there is a indication and almost all the theories also say that debt is cheaper as compared to the equity. But the limitation of the debt we have discussed is that say number one, it increases

the risk and risk comes in the form of that distressed cost. It comes in the form of the agency cost right. So if you do not consider these limitations of the debt or especially the risk component, which is brought in by the debt in the firm.

The moment you bring that amount of debt in the capital structure of the firm. So ultimately the objective of minimizing the cost of capital can be attained by having the sufficient amount of the debt in the capital structure of the firms and equity capital can be there has to be there in any case, because debt equity ratio has to be something. So equity has to be there but if you have the amount of debt at least equal to the equity or maybe little more than the equity.

So we are going to understand that risk profile of the firm is going to change, but the cost of capital is significantly going to go down. And ultimate objective of the maximization of the value of the firm is going to be achieved.

So with this discussion, I am going to close discussion on the capital structure. I hope you have understood the things clearly and still if there is any doubt after listening to the lectures on the capital structure. If you still have any kind of the doubt, you can refer to the book and all the theories you can understand there.

You can say do some practical problems also. And finally, you can form your own opinion that what is the capital structure? How it should be normally decided by the firms and how it impacts the market value of the firm, right? So this is all about the capital structure. And I close the discussion on the capital structure and the market value of the firm. Now, the next part is the next topic is the last topic in this course plan, which I have given with regard to this say subject of the financial management for the managers.

And the last topic is that is dividend decisions. We are going to now talk about the dividend decisions in detail and whatever the leftover time is with me, I will be talking about the dividend decisions. I will introduce you with the concept of the dividend decisions. What is the importance of the dividend decisions, how normally companies take the dividend decisions and from the shareholders point of view, how important the dividend decisions are and from the companys point of view, how relevant the dividend decisions are and what should be the say you can call it as rational dividend policy.

How it is decided all about the dividend decisions I am going to discuss with you now in the say subsequent discussion. So dividend decisions when we talk about, or we say talk about the term dividend, you all understand or must be clear about the dividend is basically the reward of investment by the equity and preference shareholders in the total capital structure of any company.

The say amount of the borrowing which we bring in the firm, the cost of the debt is paid as the first obligation, first of all. And means there is no second thought about that because it is a fixed obligation on the part of the firm and first from the total revenue of the firm by way of sales or any other source of income; we subtract the cost of debt in the profit and loss account itself.

And after that, whatever the profit is say left with us after paying the taxes and everything, the profit available to us is called as the divisible profit and from that profit we normally divided it into 2 parts or 3 parts sometimes. One part is paid as a dividend to the shareholders, both equity and preference. Normally preference dividend is first paid but after this we pay the dividend to the equity shareholders and then we say creates some specific reserves.

For example, debenture redemption reserve we have to create or for any specific purpose which is foreseeable purpose. We have to create some reserves from the profit after tax available with us. And third component is that is retained earnings which are added into the existing capital of the firm. So broadening the capital base of the firm, so dividend decisions are very-very important decisions because if you want to keep the morale of the investors high in the firm and even the overall reputation of the firm better high in the market.

So that people are all the times inclined to buy the shares of the company, not through IPOS or FPOS. But even in the secondary market. So dividend plays a very important role. So companies have to pay the dividend. There are the companies who are not paying the dividend at all or who are paying a very lesser amount of dividend. But people are still satisfied with their dividend policy because they know it that whatever the, say profit is being earned by the company that is being reinvested back.

That is being reinvested back in the business may broadening the capital base. So they may be the shareholders who do not want the regular income as the dividend income. So they can get the entire income by the way of the capital gains by selling the stock in the market when they feel

that now it is appropriate time to sell the stock in the secondary market. So net gain to any investor comes in the two forms.

One is the dividend which is the annual return on the investment made in the companys equity. Second is the capital gain. So we will talk here largely about the dividend decisions or the dividend part how the dividend is decided. And what are the important reasons why the dividend is given by the firms. So first question arises why firms pay dividend to the shareholders, why firms pay dividend? If the firm not pay dividend to the shareholders, what will happen, right?

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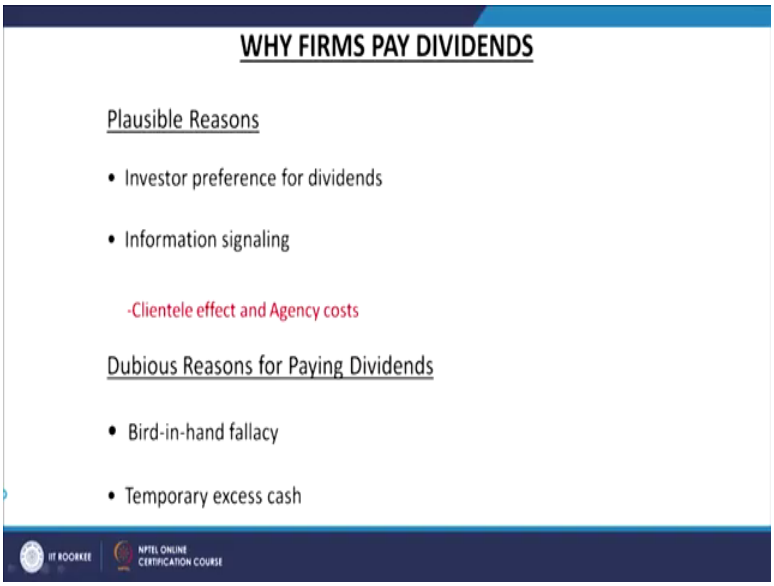

So we have divided the reasons into two parts. One is the plausible reasons, second is that dubious reasons of paying the dividends? Plausible reasons and second is the dubious reason for not paying the dividends and the plausible reasons which are clear cut reasons which are possible reasons are investor preference for dividend and second is that information signaling.

Investor preference is very clear that investors always prefer normally hardly there is any investor in the market who is of the view that I do not want any dividend and whatever the total profit is being earned by the firm that should be reinvested back into the business operations. And only I want to get the return by way of the capital gains, nothing in the form of dividends. Very few people there are the people in the market but very few people are there right. So largely people expect dividends and if the firms do not pay the dividend, it sometimes creates the problem.

So because of the investor preference for the dividend as a regular income on their investment in the companies and stocks, companies declare dividend. Information signaling is a very-very important information about the companys performance. Because if the company is not paying any kind of dividend, it means it conveys a message in the market that maybe the shareholders who are basically the agents of the sorry, not shareholders, but the managers who are basically the agents of the shareholders.

They may be misappropriating with the say the profits available or they may be investing the profits into that kind of the projects which are not worthy of investment. So why they are not paying the dividend? Sometimes the say the signal may go in the market will not be a good signal. So that information signaling you can divide into two parts, first is the clientele effect and second is the agency cost.

So when you talk about the clientele effect, clientele effect is means that say investors choose those kinds of companies which fulfill their investment requirements. So you can divide normally the investors in the market into 3 broad categories. One is those kind of investors who want the dividend and who want the capital gain also. Means largely first category is that who want dividend.

Second category of the customers who want only capital gains and they do not want any kind of the dividends right. And third category of investors could be who want both dividends also and the part of the say, appreciation in the share prices also, so both. So it means when the investors choose the companies for the investment of their surplus savings into the stocks of the companies. They fit into the, the dividend policy of the company and they means basically called as the investor clients.

They are called as basically the investor clients for the companies because all the investors are not suitable for all the companies. So largely their choice of the company or companys choice of their investors depends upon the dividend policy or the return policy on the investment of shareholders. So the different type of clients go to the different type of the companies for the subscription of the shares. So you have to pay the dividend and that is a clientele effect.

Second is agency cost. Agency cost is means as I told you, managers are the agents of the shareholders. They are only agents and there is always a lack of trust between the managers and

shareholders right because shareholders, all the shareholders are not means involved into the affairs of the company or managing the company.

So always there remains a say source of suspicion that if we do not ask for the dividend or we are not been paid any dividend. I do not know or we do not know how the say surplus funds of the company are being used by these managers because the shareholders themselves are not managing the companies. Managers are managing their companies for shareholders. So it creates the agency relationship and agency costs is say something which is sort of that they do not trust their managers to the fullest possible extent.

So that creates the agency cost and agency costs becomes another reason that to satisfy their investors. It becomes a prime duty of the say agents or the managers to pay the say regular dividend to the shareholders. So information signaling goes out or the information signal goes in the market that if the dividend is being paid, companies doing very well and all kinds of needs, of this investors are going to be taken care of.

So two reasons are first is investors preference, prefer dividend. Second is it gives the relevant information, very information, very important information signal in the market. So that is the second reason for giving the clear cut reason for giving the dividend. Dubious reasons for paying the dividends are bird in hand fallacy. People say that who knows, the company will grow in the time to come. So whatever you have in your hands, normally we see that a bird is in hand is better than two the bush.

So sometimes investors also that kind of the policy that who has seen the time to come that our investment will grow and by say earning through capital gain will maximize our returns. First you whatever is possible to be, say, pocketed by way of getting the liberal amount of dividend first to enjoy that and lateral on if some capital gain also comes. Fine, let it come and second is temporary excess cash.

If there is some temporary excess cash available, so certainly means if you do not need that cash within the firm, you not need the cash within the firm then it is better that means there is no policy as such but sometime the firm may decide management of the firm, board of directors may decide that let us use this cash, for paying the dividend to the shareholders. So it is not a

clear reason that we have to pay the dividend because we are going to pay the dividend because we have the surplus cash.

So rather than using it somewhere else, we do not need it internally also. So let us use it for paying the dividend to shareholders. So these are the two dubious reasons. So some total, there are the four important reasons. Two are very clear reasons and two are means out of the situation. Dubious means they are not doubtful. You cannot take the meaning as doubtful but out of the situation dividend is paid by it is not the policy of the firm sometime. But out of the situation, situation emerges something like this that dividend comes through the shareholders.

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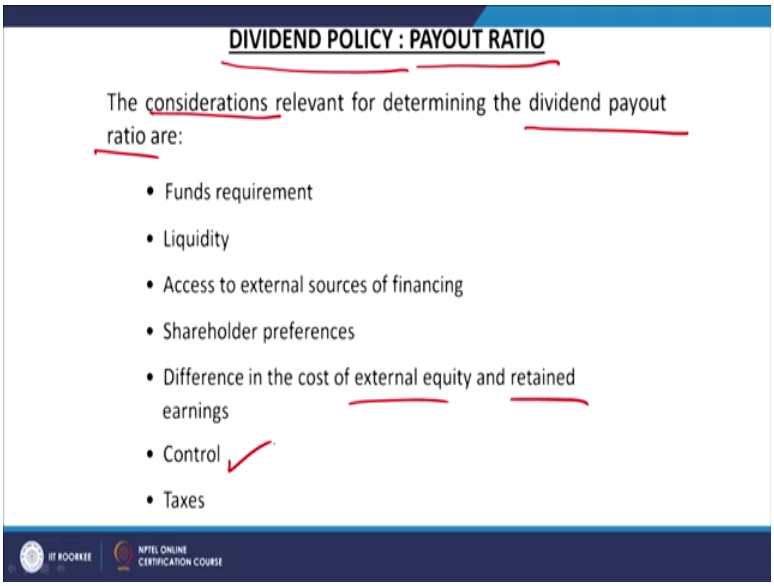

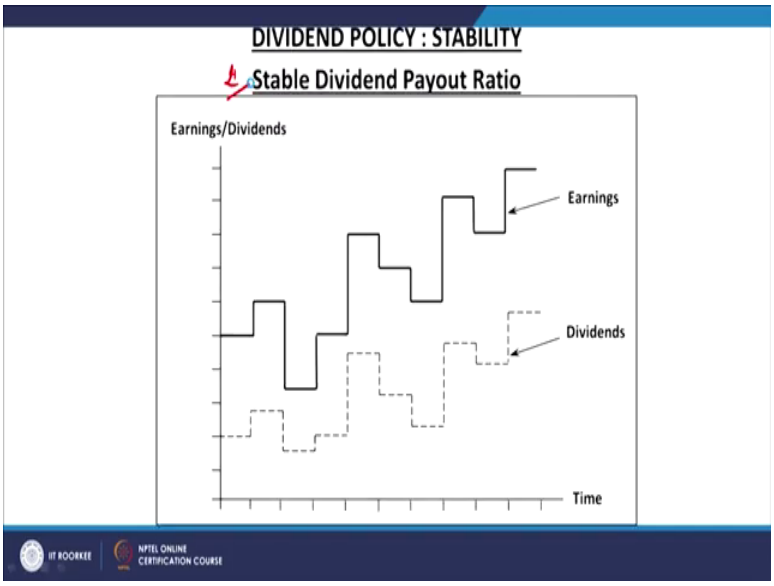

Dividend policy payout ratio, so it means we will talk about the important things here, dividend policy right. Dividend policy, so first is the dividend policy. How the dividend policy of the firm is decided. It has two components. Number one is deciding about the average payout ratio. And second thing is the stability of the dividend payout ratio. This is the second component. So dividend policy when you talk about it has to be a stable policy.

And the other important component here is that is the average payout ratio. So dividend policy is a very-very important thing for every firm to decide that how the dividend policy of the firm will be there. And when they decide the dividend policy, they have two broad components. One component is the payout ratio average payout ratio deciding the payout ratio. Second is the stability of the dividend being paid that is the stability of the dividend payout ratio.

How much dividend payout ratio has to be there? And second thing is should be stable dividend payout ratio so these are the two important components. So first part we will discuss and then we will move towards the stability, the consideration relevant for determining the dividend payout ratio what are the important considerations? These are 5-6 important consideration. First is the funds requirement. If we want to pay regular dividend to our shareholders how much funds are required? And I will be able to generate those funds from the profits.

Second, do we have the liquid funds available with us? Because in many cases it may be possible firm is the profit making firm, firm is earning huge profits, but most of the sales being on credit, the profit is also on the credit. And if the profit is also on the credit, it means there is a lack of

liquidity. So profit is there, but not the cash profit is there. So you cannot pay the dividend or if you want to pay the dividend from where the liquid cash will come.

Third is access with external sources of financing. How much access to external source your financing is there. And even if we have access to external sources of financing, it will not be a right approach that your internal funds you distribute as dividend and for your own investment requirements, you go in search of the funds from external sources. That does not stand justified.

So consider it carefully that though the funds are available but should be say pay our own funds as a dividend to the shareholders and then look for the funds from external sources for our needs. That is an, another important consideration shareholders preferences what the shareholders want.

Clientele effect we have discussed, in the clientele effect we have discussed that different type of shareholders are there. So do your shareholders are the clients kind of who want a regular dividend or the clients are or the investors are or shareholders are who do not want regular dividend. Look at that and consider it. Difference in the cost of external equity and retained earnings is a very-very important consideration, right.

Think it clearly and issue of the control because if you issue your sorry, if you pay your profit as a dividend to the shareholders, but for your own investment requirements, you issue the fresh equity so what will happen? As a result of that, your control of the existing shareholders will be diluted. And sometimes the existing shareholders may object to that. So they may allow the company that you do not pay us the dividend, first you fulfill your reinvestment requirements. And only if some amount is left after that, you pay us the dividend. So it is important consideration.

And last one is the taxes. If the component of the taxes is very high on the firms profits then you can think about, you can pay your own earnings as dividends. And you can borrow the funds from the market by way of the debt. But taxes are to be seen in two ways. One is the taxes on the your say dividend. Second one is the taxes on the say, the funds going to be borrowed from the market.

So enjoying that tax deductible advantage of the debt, when you talk about the taxes, for example, in the case of India if you talk about, taxes impact the firm in two ways. Number one,

when the firm pays the dividend to the shareholders right. So though the dividend up to 10 lakh rupees, dividend income up to 10 lakh rupees is not taxable in the hands of shareholders, is not taxable in the hands of shareholders but firm while declaring the dividend has to pay to the government, a dividend distribution tax.

They have to pay the to the government the dividend distribution tax and when you talk about the dividend distribution tax, that works out as somewhere around 17 percent. So whatever the debenture is going in the hands of shareholders, that is exempted up to 10 lakh rupees of the dividend income that is exempted. But company who is paying the dividend to the shareholders, they have to pay the dividend distribution tax to the government and that works out as 15 percent is the basic tax rate plus the surcharge plus the excess on that and total amount works out as somewhere 15, 16.995.

So approximately 17 percent tax firm has to be pay to the government as dividend distribution tax after that in the hands of equity shareholders, though, it is exempted but now the second tax has also come in the picture. That is a long term capital gain tax and any long term capital gain, which is the firm is, which the shareholders are getting beyond a an amount of rupees 1 lakh that is also taxable at 10 percent right.

So earlier there was a miss point of discussion that if the company declares a dividend, then the company has to pay the dividend distribution tax at the rate of 17 percent. But if the company allows the say, shareholders to enjoy or to have the appreciation of their investment by way of the say reinvestment of the profit back into the say, the capital base of the company, and to enjoy the appreciation of their investment, by way of the capital gain.

So capital gain was tax free but now that advantage is also gone. That any capital gain to any long-term capital gain especially, short term was already taxed. But long-term capital gain, which comes through the investor after say the one years period of time is also taxable now at the rate of 10 percent but beyond an amount of 1 lakh rupees right.

So it means now in both the cases the say firms or the say the dividend on the dividend, firms have to pay the tax. And on the, say in case of the capital gains, the individuals have to pay their tax. So it is a very important consideration how you want to make use of it this tax part, how you want to consider it, how you want to make use of it.

Whether we should pay 17 percent dividend distribution tax and then pass on the dividend to the shareholders or the shareholders should pay 10 percent long term capital gain tax and seek the appreciation of their investment by way of the say your capital gains, long-term capital gains. So that will be important consideration. Taxes are going to (pay) play a very-very important role and now after that is the second part, which is called as the stability of the dividend payout ratio.

So when you talk about the stability of the dividend payout ratio, this discussion and some other concepts with regard to the dividend decisions and dividend payout ratios, I will discuss with you in the next class. And if the time permits, I will do one or two problems also. But first my objective is to means clear you the different concepts of the dividend decisions and say how the dividend is decided.

How the dividend policy is decided and what are the important relevant concepts. So in the next remaining two classes I would try to cover on the dividend decisions as much as possible, till then thank you very much.