Project Management for Managers
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Lecture - 18
Financing of Projects

Hello friends, I welcome you all in this session and in this session we are going to talk about financing of projects. Once you have identified a project now you need to look for funds for that particular project. So, how to arrange funds what are different sources. So, we should look at all those things right. So, there are two types of decisions you get financial decisions and investment decisions. Financial decisions are relatively easy to make compared to investment decisions and because of there is more perfection in the market when you talk about financial decisions, while in case of investment decisions you have got more imperfections. Financial decisions most of the times they take place in capital markets while investment decisions they take place in real market.

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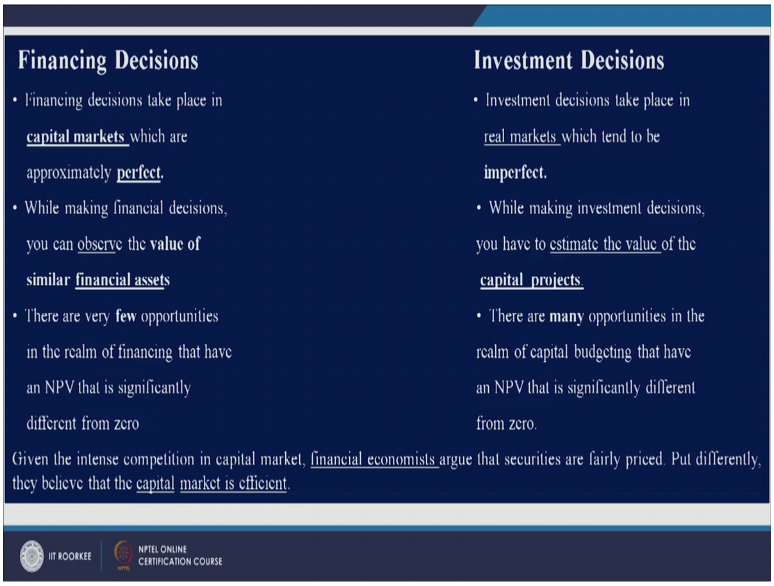

In case of financial decisions we generally observe the value of similar financial assets, while in case of investment decisions what we do we estimate the value of capital projects right. So, that is another difference between financial financing decisions and investment decisions and the another difference between these two is that financial decisions we think that there are very few you know there are very few opportunities to get NPV which is significantly different from zero, while in case you have got several opportunities right.

So, there are many opportunities in the area of capital budgeting that have an NPV significantly different from zero while there are very few in case of financing decisions right.

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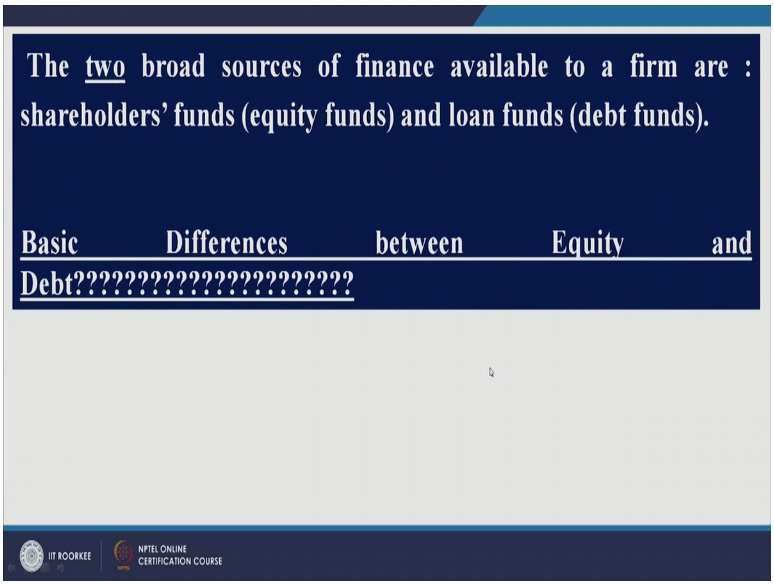

Now, you have got two types of sources as for as financing is concerned, you can broadly classify them as shareholders funds and loan funds are equity funds and debt funds right. So, can you tell me about what are the differences between these two? There are two sources of financing you have got equity funds and debt funds right let us look at couple of differences right. So, as for as the duration is concerned equity ordinary has indefinite life while the debt has fixed maturity.

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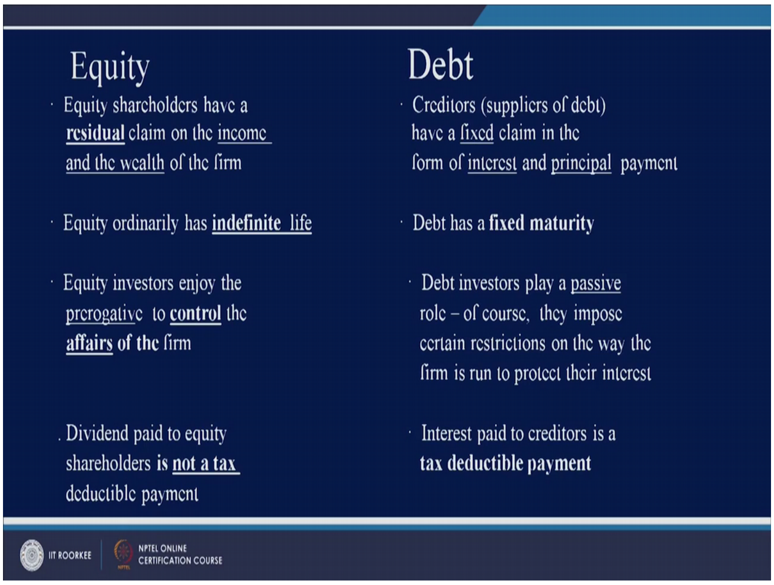

If you look at the first difference, the equity shareholder we will have residual claim our income of the firm, while the creditor who is supplying that have a fixed claim in the form of interest and principal. So, you need to pay only interest and principal to creditors while the equity share shareholder will have claim over income of the firm in the form of dividend right. So, equity shareholder or equity investor enjoys prerogative of control over the firm in terms of voting right, while creditors they have got very passive role they do not have voting rights, but in some situations they may have voting rights. Dividend paid to equity shareholder is not a tax deductible payment this is one of the most important differences between these two.

The dividend paid to equity shareholder is not a tax deductible payment while interest paid to creditors is a tax deductible payment. So, these are couple of differences. So, after finding or after knowing the differences between equity fund and debt fund let us look at how should we determine the combination of these two in particular project. So, should we use more data or should we use less data or more equity or less equity right.

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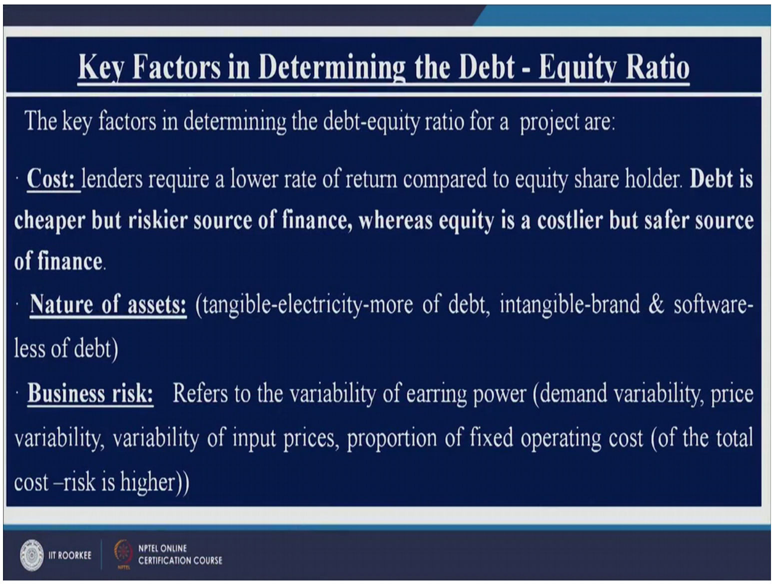

So, there are certain factors which would decide these two things right. So, first is cost; as for as cost is concerned debt is quieter cheaper source of fund, but it is quite a risky also on the other hand equity is less risky, but an expensive source right. So, this is so you need to have a balance between these two right one is one is cheaper, but risky right on the other the other one is less risky, but expensive right.

If you look at nature of assets, so nature of assets in the project would decide whether we should use more of data less of data right. So, it is said that if the project has got more of tangible or it is a tangible in nature, then you should go for more of debt if it is more of intangible then you should go for more of equity. So, intangible products can be or intangible things can be let say brand image of a firm or it is a software right. So, you should use more of equity in those cases. Business risk is also one of the criterion which would be considered to look into decisions of debt to equity ratio. So, if risk is more it is it is good to go for equity right otherwise go for debt right.

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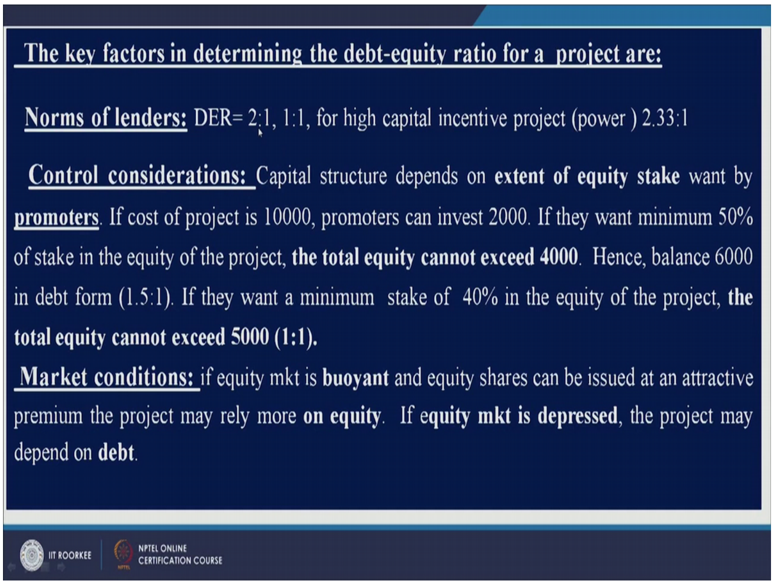

So, debt equity ratio can be 1 is to 1 can be can be 2 is to 1 for capital incentive projects like power project, sometimes it can be this also right and it can be even more than this. So, debt can be more then even this value. If you look at control consideration criterion to decide about debt to equity ratio then it depends on how much is the control of promoters and that would decide debt equity ratio. If you let say if there is a project cost of project is let say 10,000 and promoters can invest 2,000 right and the promoters have decided that they want minimum 50 percent stake in equity of the project right.

So, the total equity cannot exceed 4,000 hence balance is 6,000. So, debt equity ratio would be what next 1.5 to 1 right next 6000 and 4000. So, if they want a minimum stake of 40 percent then equity of the project, then this ratio would be 1 by 1 right and market conditions also play important role in deciding debt to equity ratio if marketing. If market conditions are let us say favorable then it is good to go for more of equity otherwise go for more of debt.

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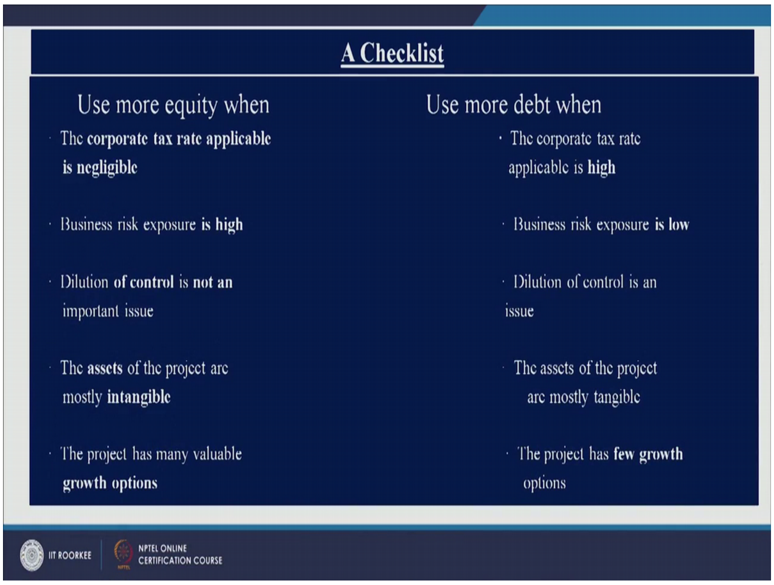

So, these are couple of key factors which you should use while deciding debt to equity ratio. So, this is checklist when you should go for more of equity you should go for more of equity when corporate tax rate applicable is negligible; otherwise if it is not negligible or if they are if corporate tax rate is very high go for debt right as I said business risk is high go for more of capital. If dilution of control is not an important issue then go for equity otherwise go for that the assets of the project if intangible go for equity otherwise go for debt, if the project has got very few growth options right.

So, this is a checklist of determining debt to equity ratio. Now there are several sources of finance. So, we can put them into two categories or two parts.

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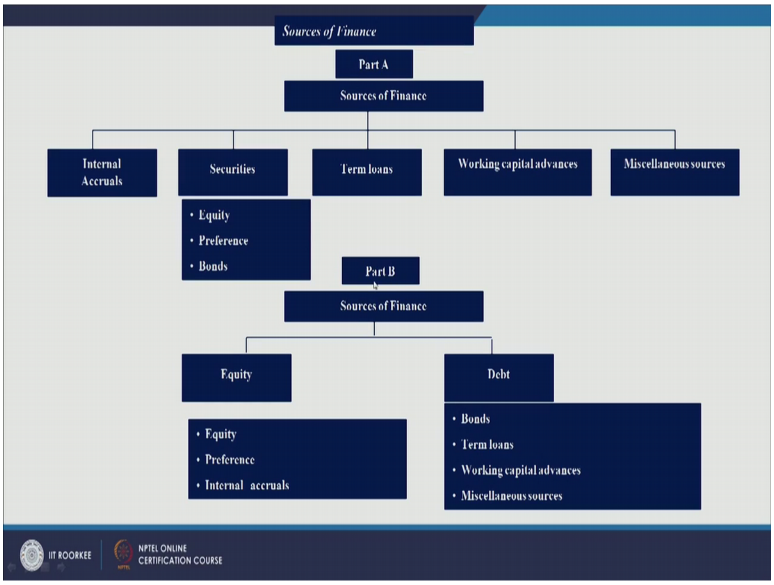

So, part A and part B right. So, first we will see part B. So, sources of finance you can have equity as I said equity and debt are two sources, in equity you can have different types of equity, you can have equity, you can have a preference you can have internal accruals we will see what these things are. In debts we have got bonds term loans working capital advances and miscellaneous sources and in part A you have got internal accruals, securities, term loans working capital advances and miscellaneous sources right.

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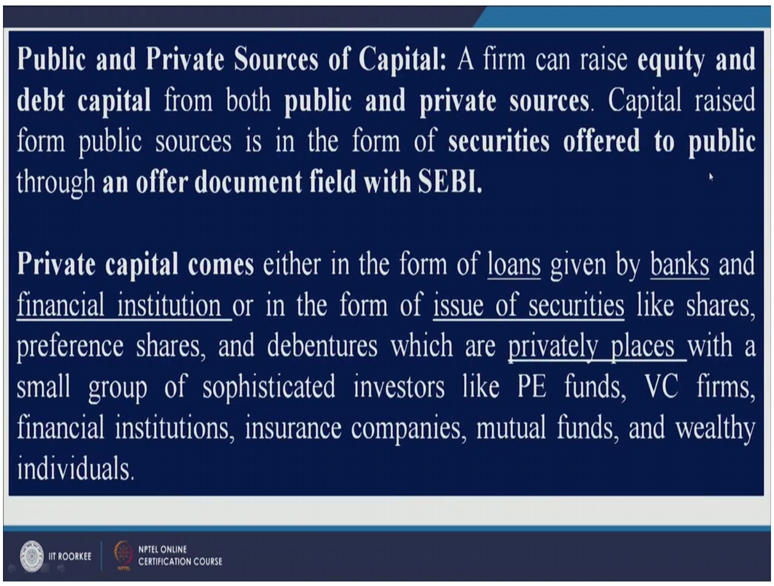

So, as I said you have got two sources equity and debt. So, from where you would be arranging these two funds? Either you can go for public source or you can go for private source right. So, when you go for capital raised if you are raising capital from public source is in the form of security offered to public through an offer document filed with SEBI right. If it is, if you are going for private capital and it may come from let say bank or insurance company or you can have let say venture capitalist is not it. So, there are several other options available when you are going for private capital source right.

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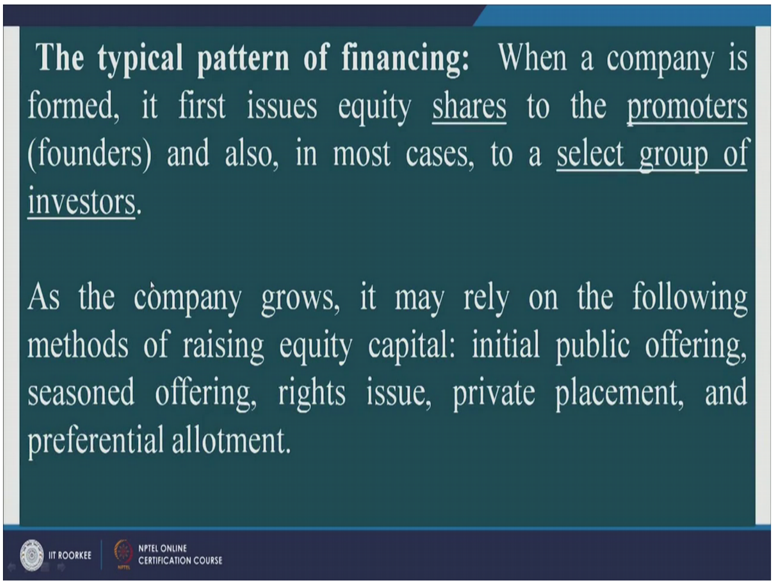

Let us look at a different pattern of financing. So, first of all what happens when you form a company first of all you would be no issuing equity shares to promoters right, and they are nothing, but they are founders, in most cases to a select group of investors right. So, you would be issuing equity shares when you need some more money you need to look for some other revenues of sources right. So, you can go for IPO right initial public offer or seasoned public seasoned offer right issues private placement and preferential allotment right.

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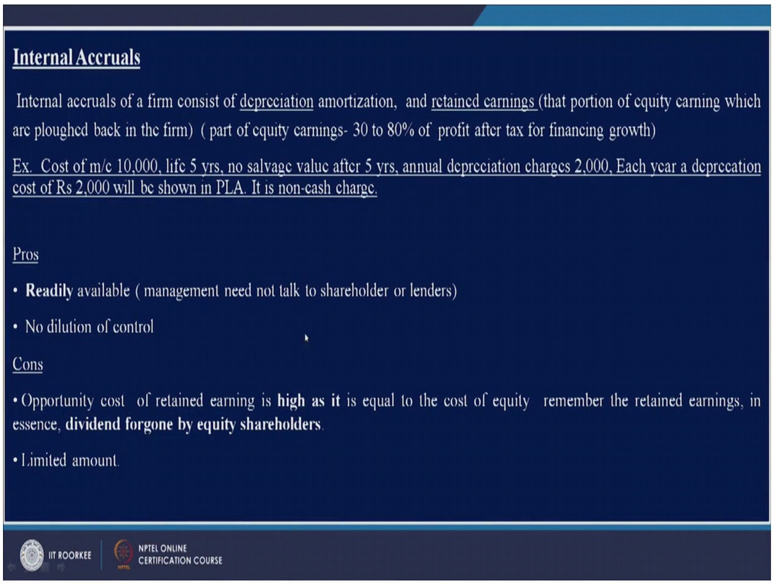

So, we will so for more funding you need to look at all these options right. So, let us look at what is internal accruals. So, internal accruals are of two types first is and depreciation amortization and the second one is retained earnings retained earnings are nothing, but the revenue, the revenue foregone by shareholders. It is it is basically the dividend part which share holders have for one right or they have returned with the company, and this retained earning can be 30 to 80 percent right.

So, let us take an example of a depreciation amortization. So, if there is a machine having cost of let say 10,000 and it is life is 5 years. So, it is depreciation by year is 2,000 right, but actually it is not, it is a non cash charge right. So, this also forms part of internal accruals right. So, there are some pros and cons of this particular source right internal accruals. So, the process it is readily available right in the management need not take talk to shareholders right and the one of the conscious upon it is limited amount right then the opportunity cost of retained earning is high, as it is equal to the cost of equity remember as I said the retained earning in a sense is dividend forgone by equity shareholders right. So, this is internal accruals.

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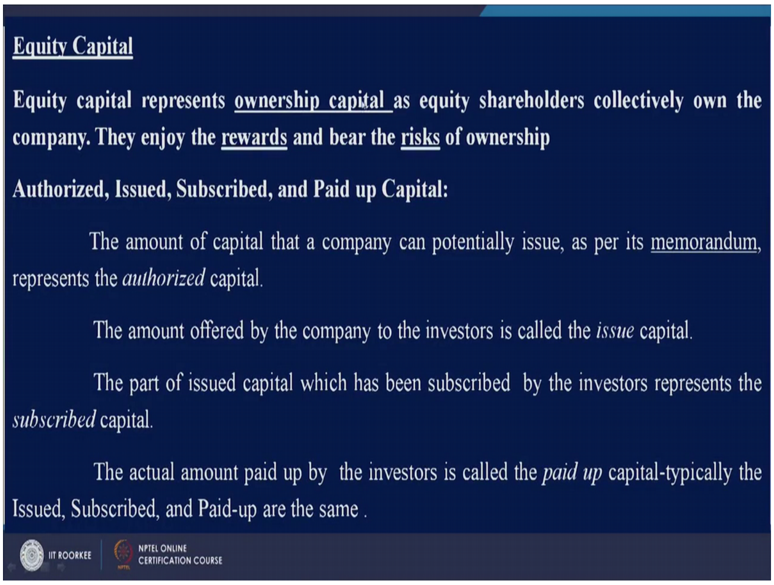

Now, what is equity capital? Equity capital represents honor ship capital as equity shareholders collectively on the company. So, all those equity shareholders they are nothing, but owners of the company right and that ownership is up to what up to what level? Up to the, did the level of that particular value of the share right. So, they enjoy reward if more is the if the profit is more they will get more dividend right and of course, they will have to be a risk also right. So, equity capital can have different forms, the first is authorized capital; the company when the company the amount of capital a company can potentially issue as per memorandum is called authorized capital right, and the company the amount offered by the company to investors is called issue capital right. So, authorized capital to memorandum whatever the company is issuing is called issue capital right and the amount subscribed by shareholders is called subscribed capital and the actual amount paid up by the investors is called paid up capital right.

So, equity capital can be classified as authorized, issued, subscribed and paid up capital.

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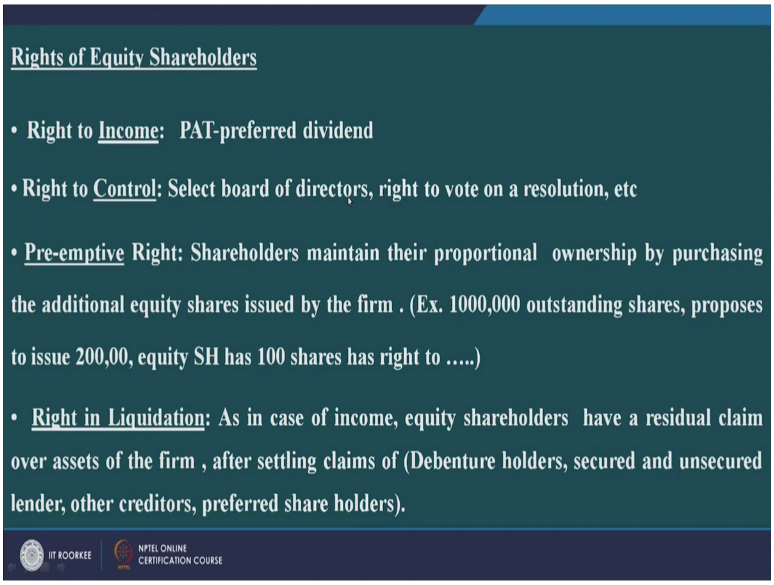

Now let us look what are the rights of equity shareholders they have got lots of rights they have got right over income right to control right by the way of voting right. So, they would be selecting board of directors through voting right preemptive right rights means preemptive rights are those rights in which they would be getting whenever company issues some more shares they would be getting some shares. So, they would be getting some preferences.

So, let us look at this example let say a 100 let say 1000, 1000 outstanding share right. So, company is going to let us say these many shares are on offer right. So, proposes to 200 two this 200 let it be like this it is 20,000 equity share equity share holders right and share holder has got 100 shares. So, he will have right hour how many shares you would be having a right to 20 shares right because he is he is already having 100 shares right to share. So, share hold.

So, what is primitive right share holders maintain their proportional ownership by purchasing the additional equity share issued by the firm. So, these are outstanding shares, out of our these many outstanding shares the company proposes to issue 20,000 shares and if I am already having 100 shares, I would have right to have how many more 20 right. In liquidation of course, as in case of income equity shareholders have a residual claim over assets of the firm, but after settling claims of debenture holders secured and unsecured lenders other creditors and preference preferred shareholders rights.

So, once you make payments to all these 4 then whatever is remaining on that remaining portion share holders will have their rights right.

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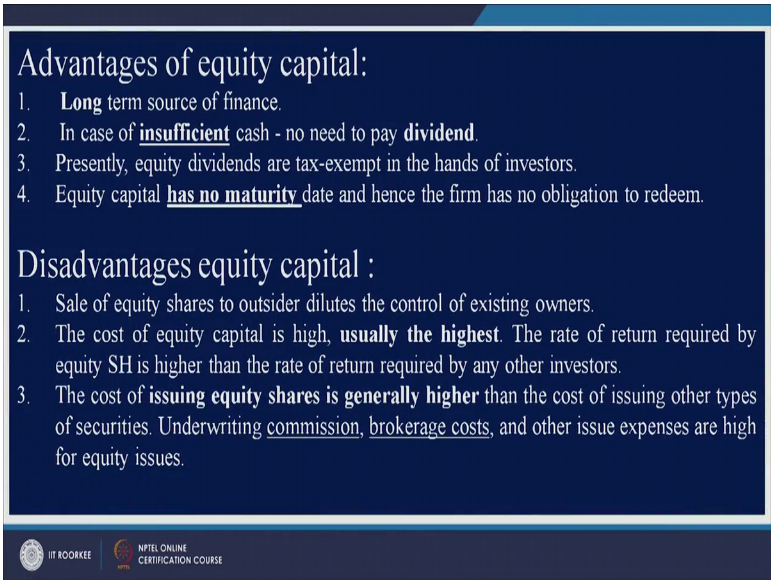

So, that is writing in case of liquidation of the firm, there are certain advantages of equity capital it is a long term source in case of insufficient cash no need to pay dividend to shareholders this is a very very very very very you know not plus point right. Equity capital has no maturity date and hence the firm has no obligation to reading right and there are some disadvantages also you can see this one the cost of equity capital is high.

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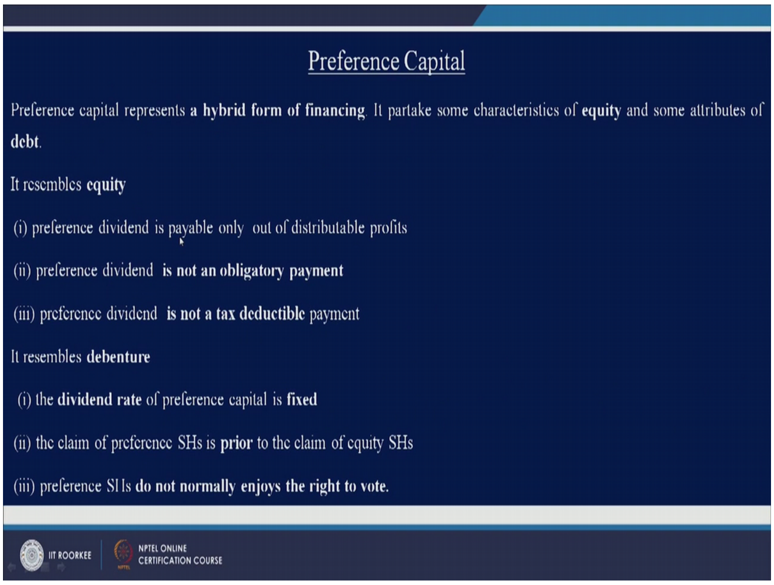

Usually the highest and compared to other sources right the cost of issuing kept the cost of issuing equity share is generally higher than the cost of issuing other types of securities right. So, these are couple of advantages and disadvantages of equity capital; now you have got preference capital you know capital takes the benefit of equity capital as well as debt right. So, it is a hybrid form of financing. So, it is similar to equity because preference dividend is not an obligatory payment, it is similar to equity because preference dividend is not a tax deductible payment it resembles debenture as I said it is hybrid form. So, it resembles debenture in these ways right.

So, the in the dividend rate of preference capital is fixed, the claim of preference shareholders is prior to the claim of equity share holders right this is this is what we have seen in case of debenture right and preferences prefer preference shareholders do not normally enjoy the right to vote right. So, that is why this is combination of these two right. So, there are certain pros and cons.

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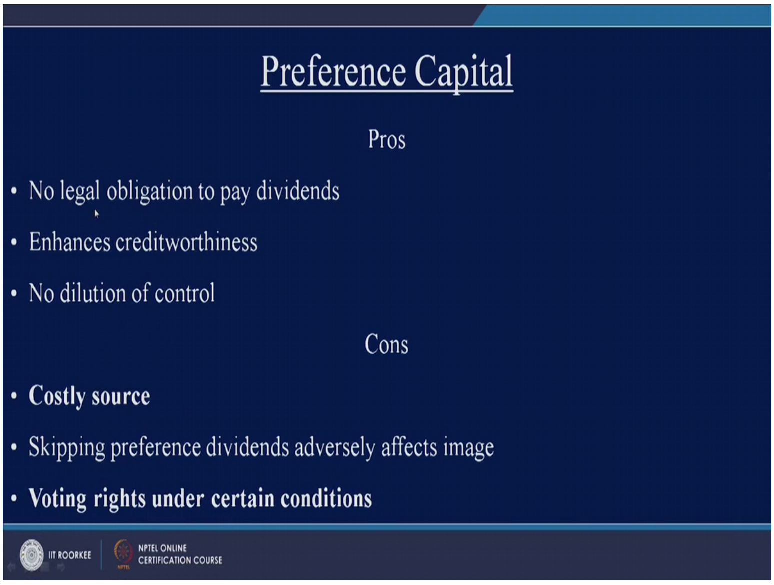

The pros are no legal obligation to pay dividends enhances credit worthiness no dilution of control, but again the problem is it is very costly source right. Let us look at debenture debentures. So, do you know what is debenture yeah debenture actually is sucking to promissory notes and debentures are instruments for raising date finance right that is why they are called debentures.

Debenture holders are actually creditors, creditors of the company and the obligation of the company towards them is that similar to other borrowers. So, you need to pay them interest.

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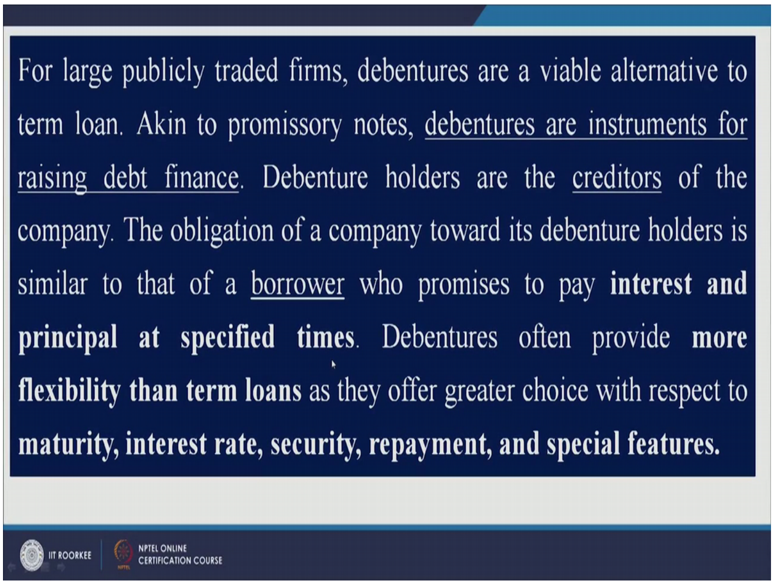

And principal at specified times; however, debentures provide more flexibility in terms of let us say interest rate in terms of let say a security or repayment compared to other sources right. So, this is debenture there are couple of things you should keep in mind related to debenture.

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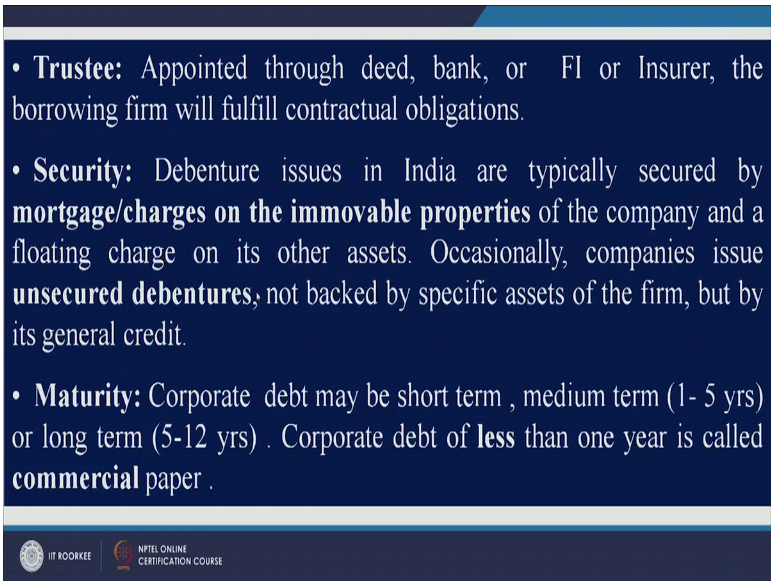

So, you there is a trustee which is appointed through deed either bank or financial institution or insurer.

So, the borrowing form will fulfill contractual obligations right. As for as security is concerned their a company can mortgage it is asset as a security right and maturity period is concerned then you can have a no long term, medium term and short term depending upon these many number of years right. So, if it is less than one year then they are called commercial papers right. So, these are the things you should keep in mind while studying debentures right redemption right. So, debentures are typically redeemable in nature right. So, redemption is possible.

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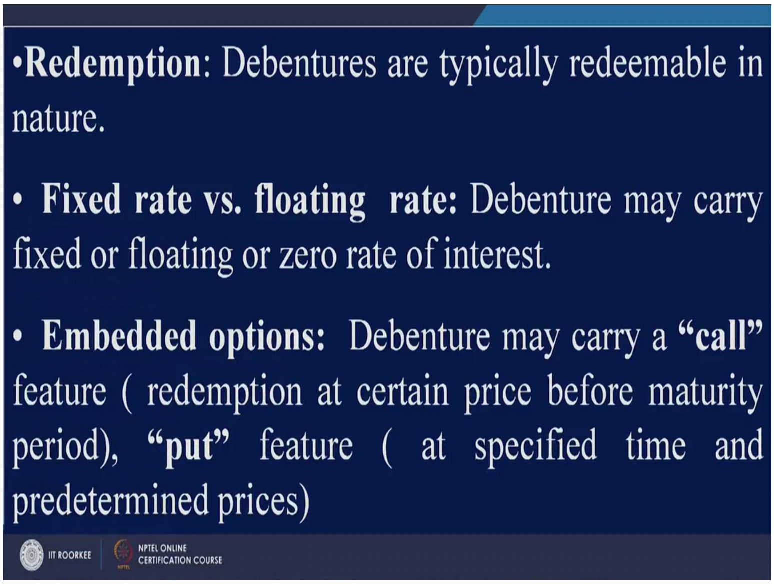

So, you can have fixed and floating rate for debentures and you can have a different options also. So, there and the options are embedded. So, you can have let say a call option right and you can have put option right. So, when you say call option it means redemption at certain price before maturity period right. So, you can redeem debenture right advantages and disadvantages of debt financing.

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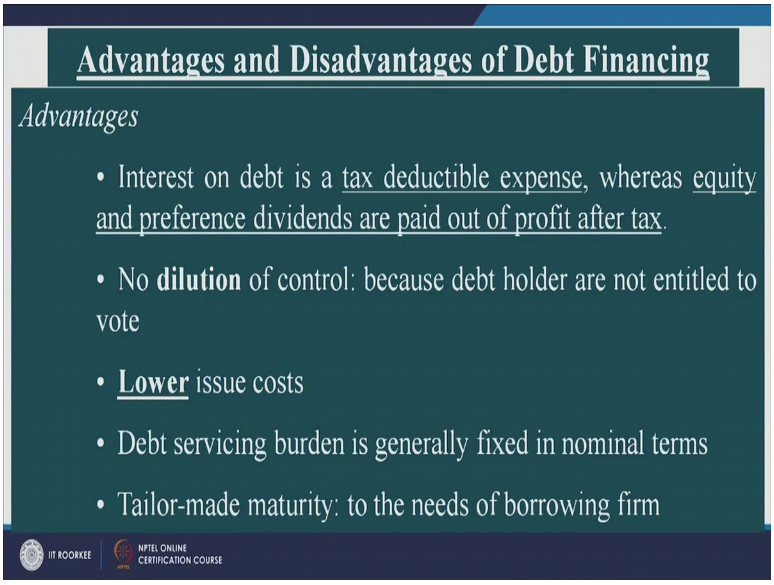

If you look at advantages the most important advantage is interest on debt is tax deductible expenses, where as equity and preference dividends are paid out of profit after tax right.

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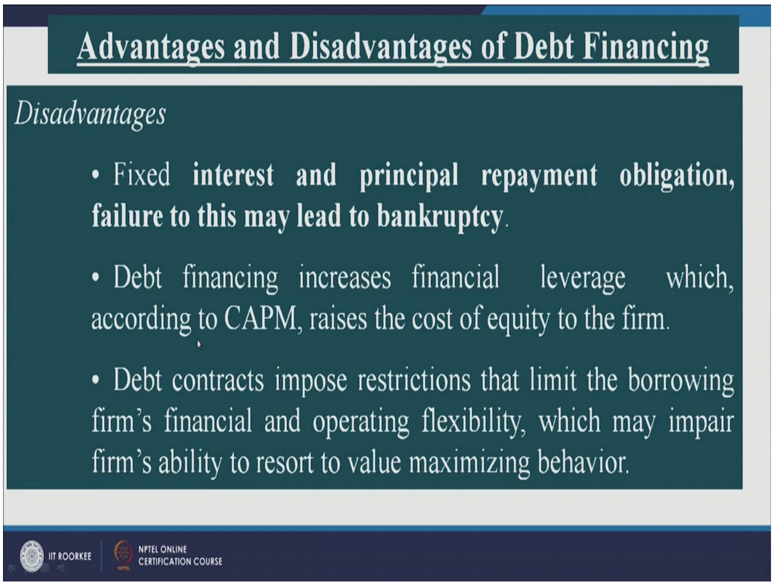

No dilution of control because of no voting power right. Lower cost of issue these are couple of advantages if you look at disadvantages then you have got fixed interest and principal repayment obligation, failure to do this may lead to bankruptcy right. So, you need to pay them interest and principal otherwise there would be problems right. So, this is the important disadvantage right and there are other disadvantages also right. So, there are couple of differences between debentures and shares. Shares cannot be converted into debentures while debentures can be converted into shares right.

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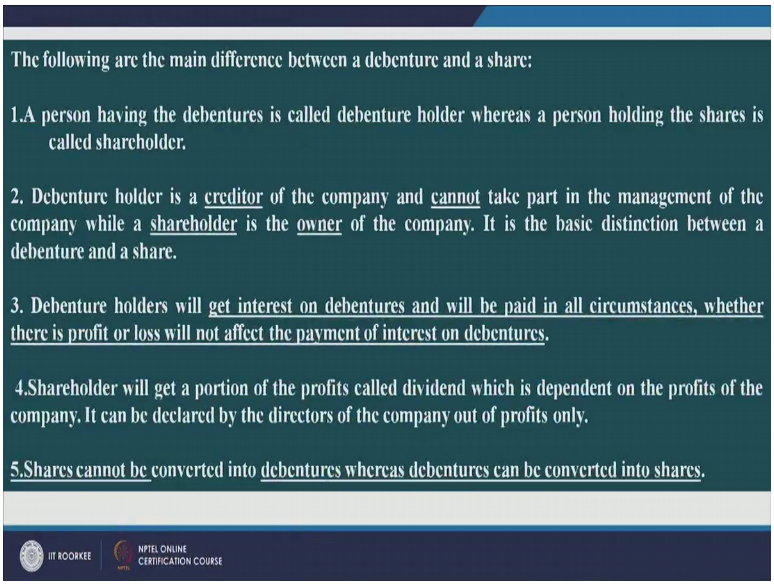

So, this is the important difference and a person having debenture would be called debenture holder otherwise if he has got shares you would be called shareholder right and debenture holder is a creditor of the company and cannot take part in management.

While share holder is owner right and he has got voting rights and he may he may actively participate in affairs of the firm right. Debenture holders will get interest on debentures and will you paid in all circumstances before shareholders as we have seen in previous slide as well right, whether there is profit or loss will not affect the payment of payment of interest on debenture. So, you will have to pay to debenture holder right. Shareholders will get a portion of the profit called dividend which is dependent on the profit of the company, it can be declared by the directors of the company out of profit and finally, which we have seen already shares cannot be converted into debentures where as debentures in be converted into right.

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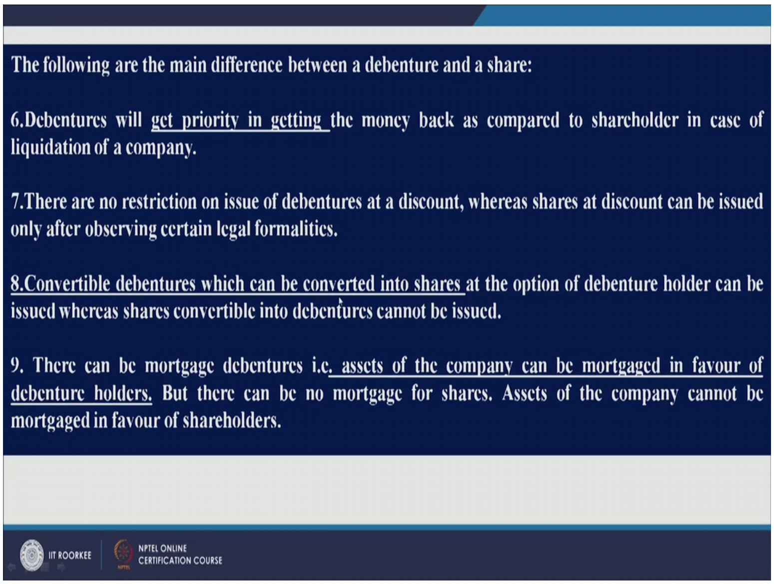

Debentures will get priority in getting money back compare to share holder right. Convertible debentures which can be converted into shares at the option of debenture holder can be issued where as shares convertible into debentures cannot be issued.

Of course share cannot be converted into debenture right and we have already seen that there can a company can mortgage it is assets against debentures right.

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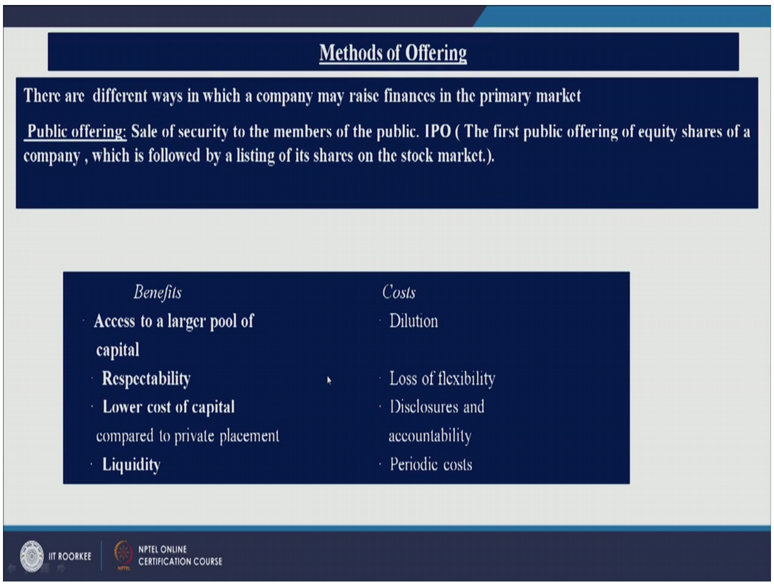

Now let us look at couple of methods of offering of these shares right. So, you first one is initial public offering are so, they are also called IPO. When you go for IPO you will you will have certain benefits and you will have certain costs. So, the benefit is that you are you have access to large full of capital and it means if you are going for an IPO it means you are quite a respectable company right and the lower cost of capital in this case and there are certain costs involved in this method of offering right. So, this is nothing ip is nothing, but the sale of security to members of the public right.

So, when we when the company generates a money from public for the first time it is called IPO right. Once you go for IPO when you need some more money then you need to again visit to market right. So, that is called seasonal equity offering right.

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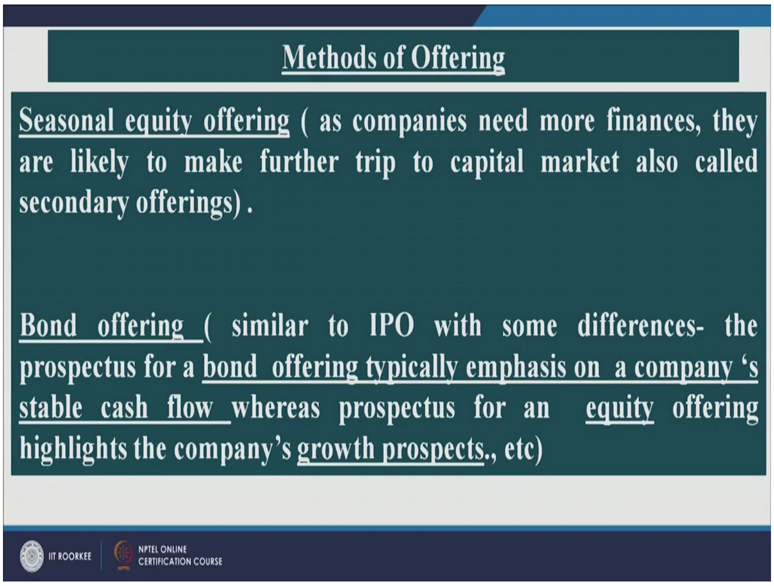

So, you need to revisit to capital market now there is something called bound offering now the purpose of the bond offering is to have stable cash flow right while the purpose of equity offering is to have growth prospects in mind right. So, there are different ways in which a company may raise finances in primary market. So, either through right issue and there are several others.

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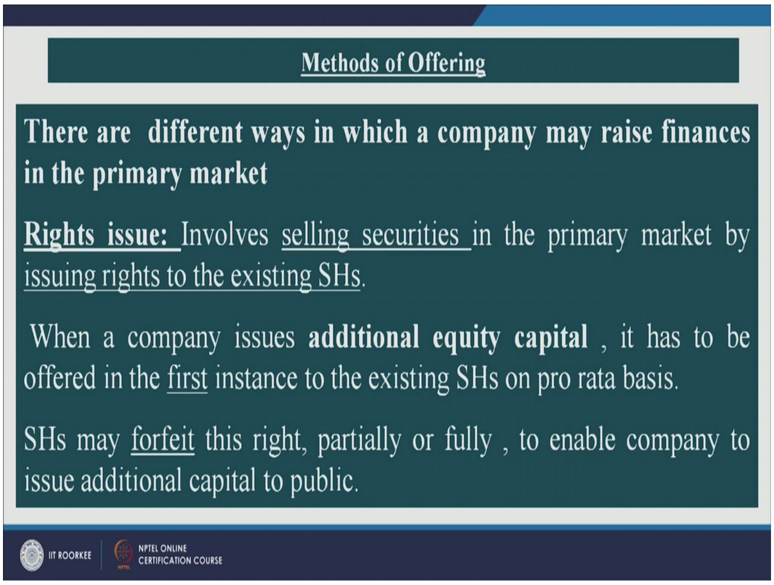

So, right issue selling securities in primary market by issuing rights to existing shareholders right.

This is what we have seen as in an earlier slide as preemptive rights right. So, when a company issues additional equity capital it has to be offered in the first instance to the existing shareholders on pro rata basis right. So, what we already seen, shareholders may forfeit this right partially or fully to enable company to issue additional capital to public right. So, the other methods of offering are private placement, private placement can be in the form of.

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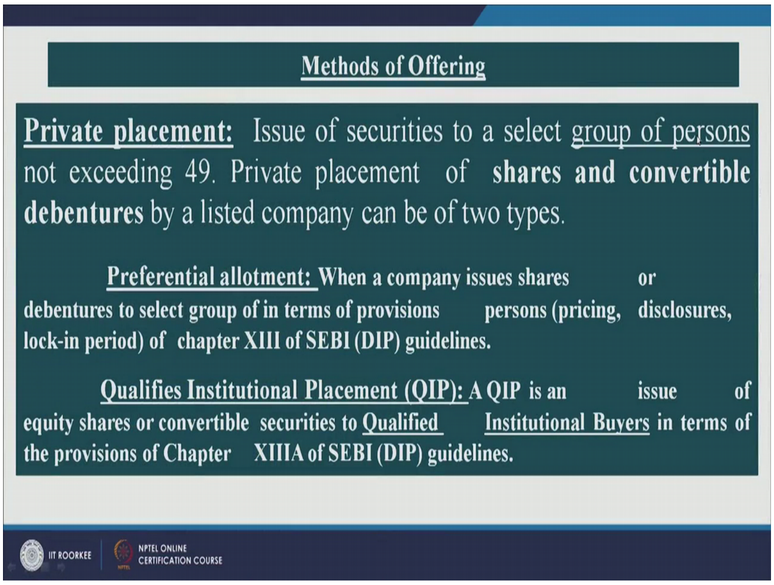

So, it can be to select group of persons right it can be preferential allotment or qualified institutional placement right. When you compare these methods you can have this particular table.

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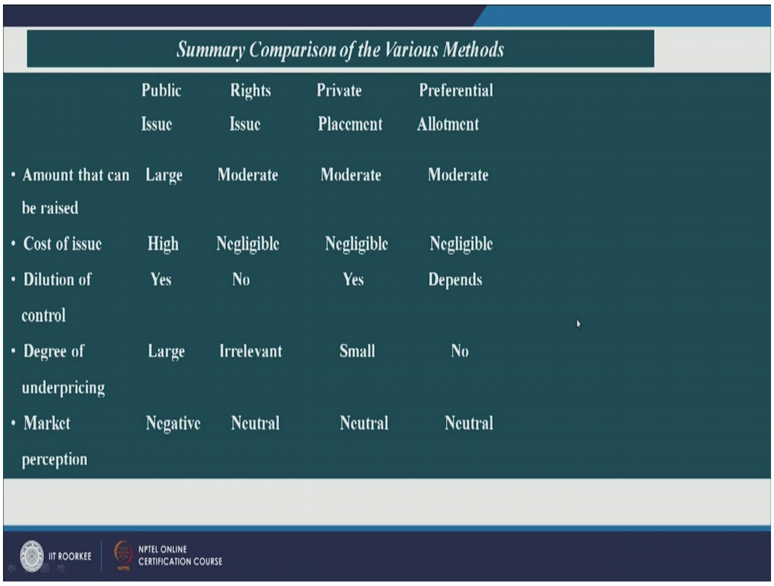
Summary Comparison of the Various Methods

	Public Issue	Rights Issue	Private Placement	Preferential Allotment
Amount that can be raised	Large	Moderate	Moderate	Moderate
Cost of issue	High	Negligible	Negligible	Negligible
Dilution of control	Yes	No	Yes	Depends
Degree of underpricing	Large	Irrelevant	Small	No
Market perception	Negative	Neutral	Neutral	Neutral

You just look at this particular table carefully and then select which is the best right and there are other sources like term loans.

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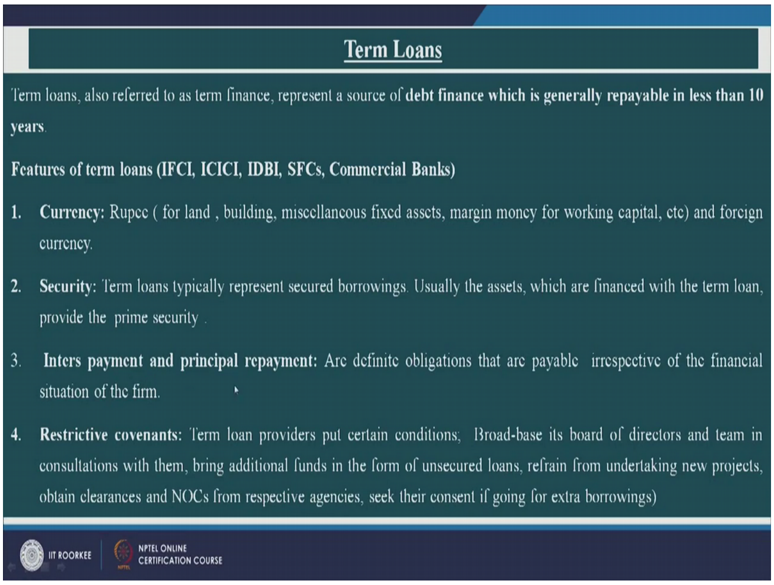

So, and the currency, security, interest payment, and principal payment restrictive covenants.

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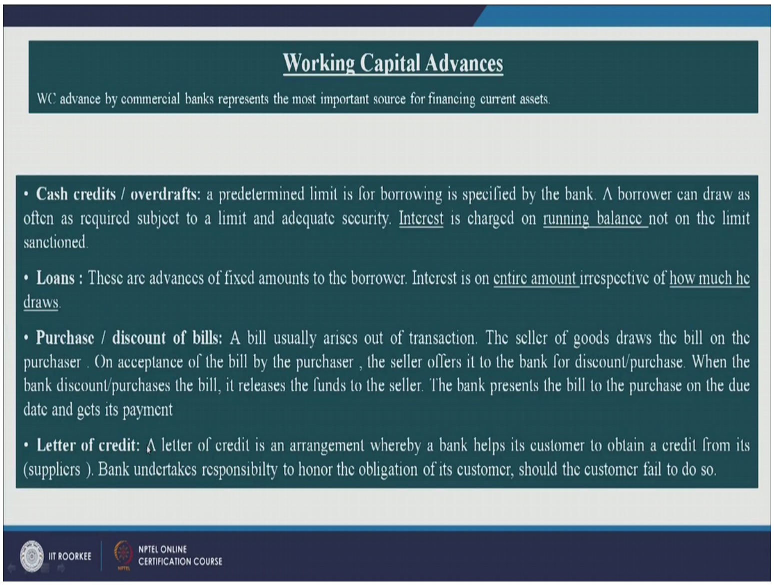

And as for as working capital advances are concerned you can have a different types of you know sources to arrange working capitals right and there are some miscellaneous sources also. So, with this we end this particular session, in next session we will start with risk project risk management.

Thank you very much.