Security Analysis & Portfolio Management
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Lecture 05
Hybrid Instruuments

Welcome back. So, let us continue from where we left off in the last lecture. But before we do that, a quick recap of where we stand. We have discussed in detail the relationship between debt and equity of a company and we agreed that we need to have a debt-equity mix for optimality or for a minimization of the cost of capital of the company.

I would like to emphasise here that this viewpoint is somewhat in divergence with the viewpoint of Miller-Modigliani, who in their celebrated "Capital Structure Irrelevance Theorem" propounded that the value of a firm is independent of its capital structure. It is independent of its financing mix. However, this result was arrived at on several very restrictive assumptions and the operation of the financial markets as being perfectly efficient. These, incidentally, are not realistic in the practical world. Later on, of course, they relaxed some of the assumptions and acknowledged that the firm derived value from the interest tax shields that it enjoys. But again, certain assumptions therein were also restrictive.

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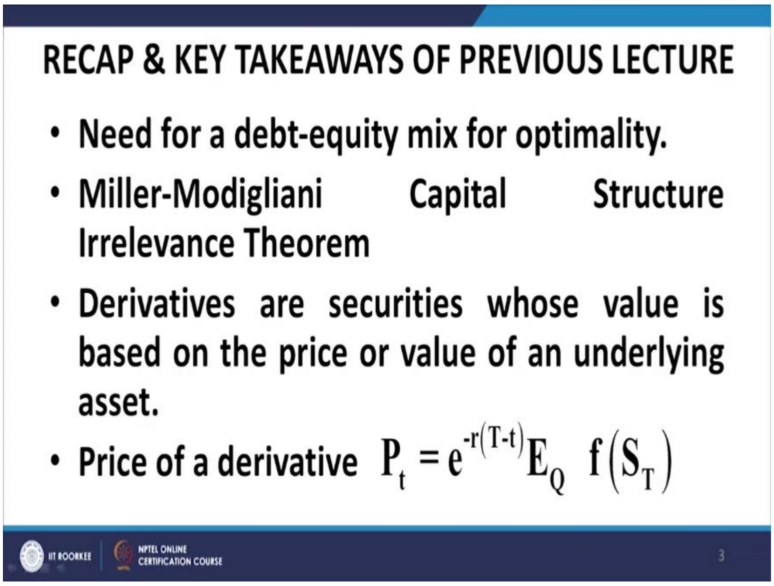

So, I leave it at this and I will put a note on this in the appendix to this PPT or in the supplementary notes. Then we moved over to derivatives and we defined derivatives as securities that derive their value from the price or the value of some underlying asset or some underlying financial structure. That underlying financial structure could be stocks, indices, interest rates, commodities, bonds, and even real estate.

I also brought to you the valuation formula for the derivatives as the discounted or the present value of expected future cash flows at maturity arising from the derivative, that expectation being calculated on the basis of risk neutral probabilities.

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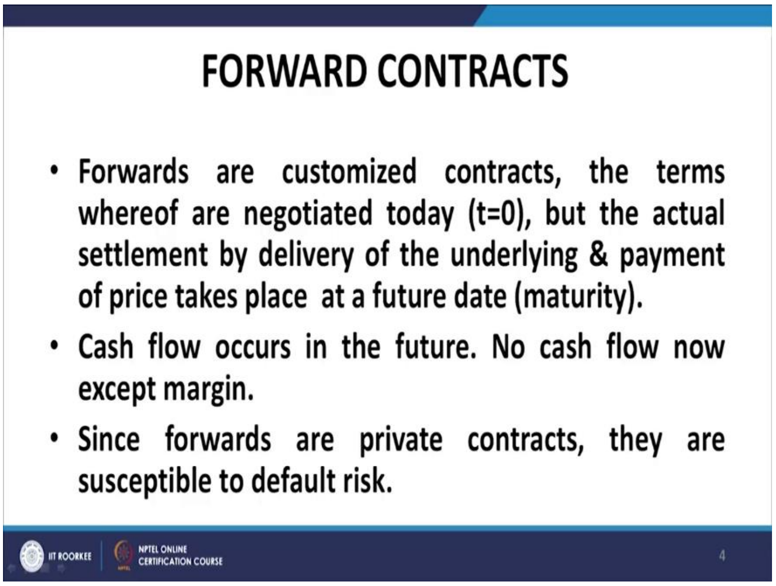

Then, we discussed the common types of derivatives viz. forward contracts, futures, contracts, options contracts and swaps. Forwards, as I mentioned, are customized contracts that entail two relevant dates viz. t=0, that is now, that is the point at which the forward is incepted/created. That is the date of negotiation of the contract, the date at which all the terms in relation to the price, delivery and the unambiguous settlement of the contract are agreed upon. The second relevany date is a future date t=T (that is also agreed at t=0) at which the contract is actually settled by the delivery of the underlying asset and payment of the price as per the conditions agreed upon at t=0. The important thing is that these are customised contracts and therefore the parties to the contract have adequate opportunity to assess the creditworthiness of the other party and take measures for their safeguard accordingly.

Futures on the other hand, are contracts which are traded; which are similar to forwards but which are traded in organised exchanges.

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To facilitate the trading of futures uninhibitedly, two things are required which are duly incorporated in futures contracts. Firstly, the contracts are standardised and secondly, the risk component or the possibility of default of the counterparty is eliminated. This is done by introducing the clearing house of the exchange as an intermediary between the two legs of the contract. In other words, a single futures contract is split up into two contracts, one between the long party and the clearing house and the second between the short party and the clearing house. The clearing house guarantees the performance of both the legs of the contract. Now, because the clearing house guarantees the performance of both the legs of the contract, it becomes necessary for the clearing house to protect its own interests. It does so by introducing the scheme of margining and marking to market. We will again talk about all this at a later point in time.

Option contracts, on the other hand, are slightly different from futures and forwards in the sense that, one leg of the option contract has a right attached to it and the other leg of the option contract has an obligation attached to it. In other words, an option contract is a right whereby one party to the contract has the discretion to buy or sell an asset at a predetermined price at or before a predetermined date.

So, option differs from futures and forwards; in futures and forwards both the parties have obligations to honour their legs of the contract, whereas option contracts give one party a right and the other party has the obligation to perform the contract if the party that has the right decides to exercise the option So, that is a significant difference.

Of course, because one (long) party is at a superior pedestal (he is enjoying a right while the second party merely has the obligation), the long party or the party that has the right has to pay a certain upfront fee to the party that is short and that fee is called the option premium or the option price.

Swaps are exchanges of streams of cash flows, spread over multiple periods. In a sense, they are a sequence of forward contracts. We shall again talk about this at a later point in time. Let us know continue to hybrid instruments. Now, the prototype of a hybrid instrument is the concept of preference shares. So, what are preference shares?

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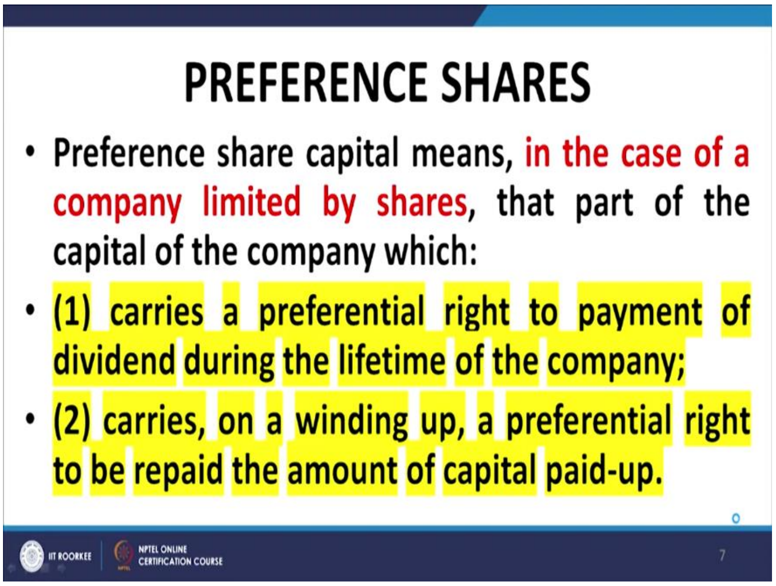

Let us read out the definition of preference share, “preference share capital means, in the case of company limited by shares, (I have already explained the concept of limited by shares, whereby the shareholders have limited obligations confined to the nominal amount of the shares that they have taken up) that part of the capital of the company which (i) carries a preferential right to payment of dividend during the lifetime of the company and (ii) carries, on the winding up of the company on the liquidation of the company, a preferential right to be repaid the amount of capital paid up. So, in other words, in terms of the return of capital and the payment of dividends, they are at a superior position compared to equity shareholders. They have a preferential right. In fact, that is why they are called preference shares.

Because they have a preferential right as to the payment of dividend, they must be paid dividend before the dividend to equity shareholders is paid. And in the event that the company is liquidated, the company is wound up then the on the disposal of the assets of the company the claims of the preference shareholders must be satisfied before the claims of the equity shareholders.

Now, why preference shares are hybrid instruments? Well, let us talk about this.

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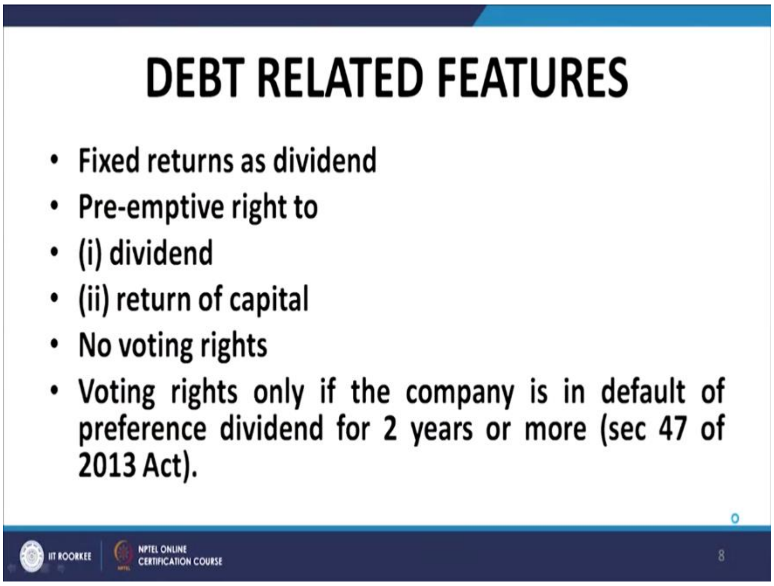

The debt related features of preference shares are:

(i) They normally carry fixed returns. Although it is not mandatory, but usually preference shares carry a fixed rate of dividend, maybe 10 percent, maybe more, maybe less, but the rate is fixed. It is computed, of course, on the basis of face value. They have a pre-emptive right just like lenders who would normally have a fixed rate of interest accruing to them.

(ii) The preference shareholders also have a pre-emptive right to the payment of their dividend and the repayment of the capital that they have paid on the preference shares in the event of liquidation of the company.

(iii) These preferential rights are with respect to the equity shareholders.

(iv) There is another point. Just like the lenders do not have any voting rights in respect of the general resolutions of the company (Of course, they do have voting rights in the context of resolutions that directly affect their interests), preferred shareholders do not have, in general, voting rights to vote on the resolutions that are of general nature relating to the affairs of the company. However, of course, they have voting rights in respect of class meetings where their interests are directly involved.

Nevertheless, there is a catch to this, that is provided by section 47 of the Companies Act 2013 and that says that in the event that the dividend on preference shareholders is in default for 2 years or more, then the preference shares will also have a voting right on the general resolutions of the company. But in normal situations, the preference shareholders have no voting rights, just like the lenders of the company.

Well, equity right related features now. This is very important, what is the relationship between equity and preference shares? Well, the most important part is that dividends on both equity & preference shareholders is discretionary.

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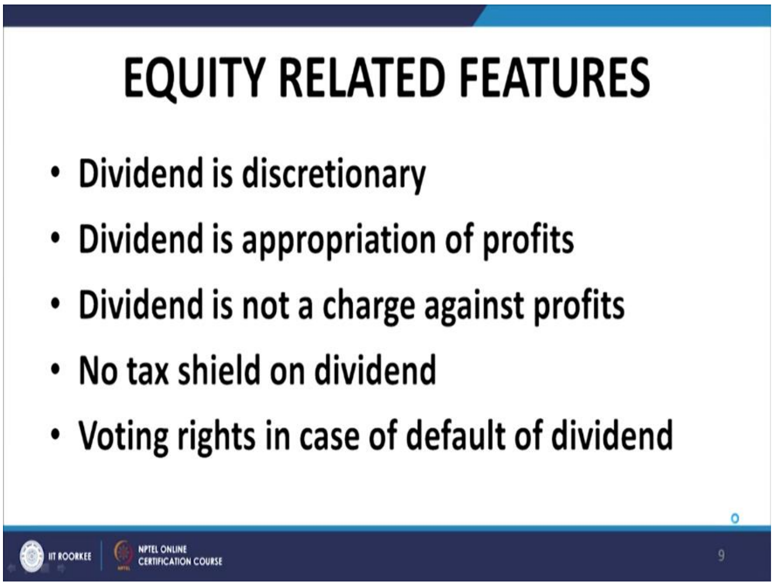

It is not a mandatory payment. It is not a charge against the profits like interest. Interest is a charge against the profit. It must be debited to the profit and loss account irrespective of whether the company earns a profit or not. However, dividend on preference shares are discretionary like equity dividends. The company has discretion to declare and pay dividends on the preference shareholders.

So, prefence dividend is not a charge against the profits. It is an appropriation of profits like equity dividend and therefore, it does not enjoy an interest tax shield. You do not get a tax shield on the preference dividend payments just like the equity dividend. So, this is a very important relationship between preference and equity dividend. They are on similar pedestals, both equity dividends and preference dividends are distribution of profits or appropriations of profits, they will not be debited to the profit and loss account. But they will be treated as a distribution of profits and are taken directly to the statement of changes in equity. The preference dividend does not enjoy a tax shield like equity dividend. Therefore, taking cognizance of all the features that I have elucidated so far, we can have the following situations.

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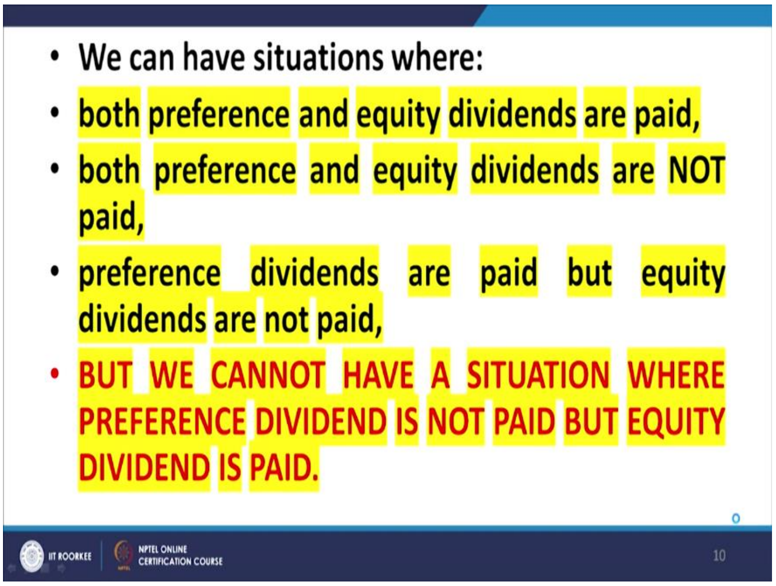

And we cannot have a certain situation.

We can obviously have a scenario where both preference and equity dividends are paid. We can very much have this situation. In fact, this is the ideal situation where the company is in profits and the company pays of the preference dividend and then on the basis of whatever remaining profits are there, the equity shareholders in general meeting decide to pay equity dividend as well.

We can also have a situation where the company has losses and therefore, the company is not paying the preference dividends as well as the equity dividends. In other words, dividends to both preference shareholders and equity shareholder are not paid. We can also have the situation that if the company is in loss or even if the company is in profits and the shareholders decide not to pay both equity & preference dividend to retain profits for future use in the company for reinvestment. Then they can take the decision not to pay both the preference dividend and the equity dividend.

We can also have a situation where the preference dividend is paid, the dividend to preference shareholders is paid, but the equity dividend is not paid if the company in general meeting decides to do so.

But we cannot have a situation where the preference dividend is not paid, but the equity dividend is paid. This situation is not tenable under the law, under the definition of preference shares. Dividend on equity shares can only be paid if the dividend on preference shares is already paid at a fixed rate envisaged in the contract of issue.

Now, why preference shares are not popular?

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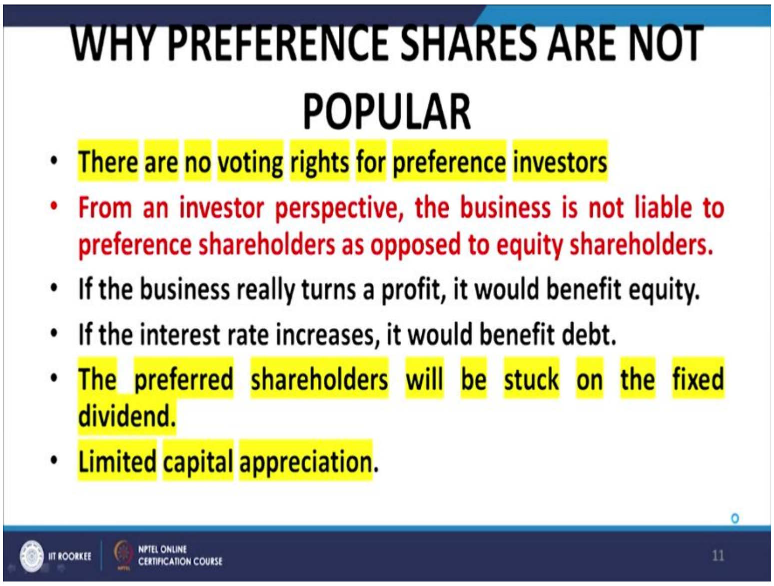

Well, there are certain reasons for this. The first thing is that the preference shares do not carry any voting rights in normal circumstances. Hence, the company as a whole does not seem to be answerable to the preference shareholders, the policies and the strategies of business to be initiated and maintained by the company are decided by the company in their general meetings of equity shareholders, not by preference shareholders. Also in that sense, the preference shareholders do not have a say in the affairs of the company, in running the company.

Then the second thing is that if the company happens to do well, if it earns profits, then naturally the profits or the benefits of those profits will accrue to the equity shareholders. It may result in capital appreciation or it may result in a high rate of equity dividend, but the preference shareholders get only their restricted fixed rate of dividend.

And if the interest rates increase, the lenders tend to gain and again the preference shareholders are left out of the gains arising out of increased interest rates. So, in some sense preference shareholders lose out on both counts and therefore, the capital appreciation in the context of preference shares is very limited. Thus, the benefits from holding preference shares are very limited.

So, this is the perspective of the investor. From the perspective of the issuer company, again preference shareholders are not the very best option in the sense that if the company raises debt, then it could well get debt at a relatively cheaper rate compared to preference capital because the level of risk attached to debt is less from the perspective of the investor since debt enjoys a pre-emptive right over preferred shareholders as well.

The lenders enjoy a pre-emptive right over preference shareholders who enjoy a pre-emptive right over equity shareholders. So, lenders find themselves in the least risky position and therefore, they would be willing to lend money at a relatively lower rate. Not only that, we have the benefit of the tax shield operating in favour of lenders and therefore, the cost of lending could well under normal circumstances be relatively lower than the cost of preference share capital.

Preference shares, because their riskiness is higher than that of the lenders would require a higher fixed return on their investments. And again, the issue of tax shield does not operate to mitigate or to reduce the cost of preference share capital and therefore, preference share capital does not find favour also with the issuing company.

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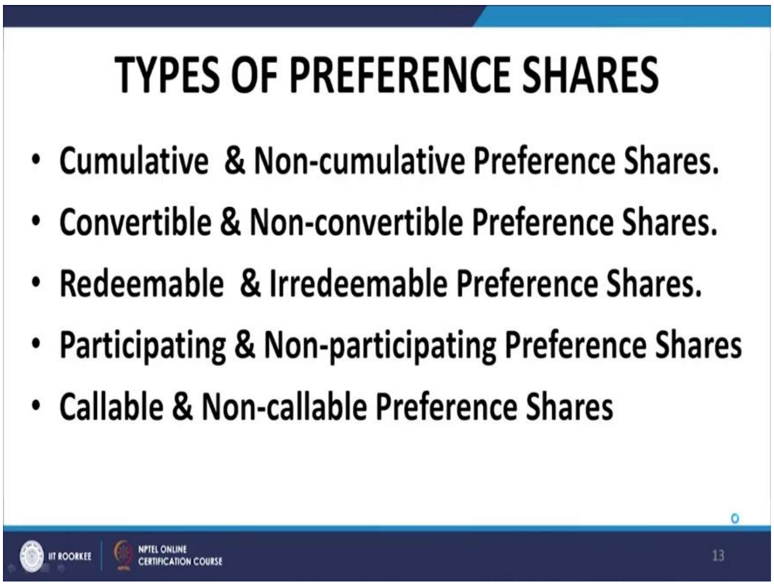

There are different types of preference share, different varieties of preference shares. We have cumulative and non-cumulative preference shares, convertible and non-convertible preference shares, redeemable and irredeemable preference shares, participating and non-participating preference shares, callable and non-callable preference shares. I will quickly run through the features of each of them.

In the case of cumulative preference shares, if the dividend on such shares for a particular year remains unpaid i.e. the company decides not to pay dividend on the preference shares, either because it has inadequate profits or because it would like to retain the profits inside the company for reinvestment and maintenance of the assets of the company or upgradation thereof, then, that dividend which is in default would be carried forward to the following year. That is the meaning of cumulative preference shares. The default dividend of a particular year is carried forward to the next year and it would be paid and it should be paid next year if the company decides to pay dividend. In the case of non-cumulative preference share, it is the other way round. If the dividend of a particular year is not paid, then the shareholders lose the right to the unpaid preference dividend in the next following year. In other words, the arrears of dividend are not carried forward.

Preference shares may be convertible into equity shares. This is a feature which is normally introduced to enhance the marketability of the preference shares, whereby preference shareholders are also given a right to convert their shareholding into equity shareholding at a future date and at a price which is either agreed upon upfront (It is given in the prospectus of the issue) or the formula for the computation of the price at conversion is so given. The price or the methodology for the computation of the price at conversion is specified in the contract of issue of the preference shares. These are called convertible preference shares. These are convertible into equity shareholders at a future date and on terms which are contained in the issue document of the preference shares. Then, non-convertible preference shares are the standard type of preference shares where they have no conversion rights to equity under any circumstances. So, these are non-convertible preference shares.

Then we have redeemable and irredeemable preference shares. In the case of redeemable preference shares, the preference shares are issued for a fixed period. Unlike equity shares which are by nature, irredeemable (You cannot redeem equity shares, except in the event of winding up of the company. Of course, you can buy back equity shares under certain circumstances, but you cannot redeem equity shares as such.) preference shares can be issued with redeemable rights. In other words, the company would be mandated to redeem these shares at the end of a certain period as per the terms mentioned in the issue document. We also can have irredeemable preference shares. I will come back to the issue of irredeemable preference shares in a minute because they are prohibited for issue in India. Why it is so? We will come back to it.

Then we have participating and non-participating preference shares. Participating preference shares are those shares which carry a right to participate in the profits of the company and on the surplus assets on the winding up of the company after the rights of the preference shares at a fixed rate of dividend etc or the repayment of capital, as the case may be, are extinguished. In other words, in the profits that remain after the payment of preference dividends, the preference shareholders can again participate. In those profits which are left over after the extinguishing of the primary claims of the preference shareholders to preference dividends at a fixed rate, the preference shareholders can again participate. Thus the profits that remain after payment of preference dividend at a fixed rate will need to be distributed between equity shareholders and preference shareholders (once again). So, that is why they are called participating preference shares. Because they participate in the distribution of profits that remain after the payment of dividends to preference shareholders at a fixed rate. And in non-participating shares, this is not the case.

Callable preference shares are those preference shares, which the company can call back. Call means right to buy. So, the issuer company has the right to buy back the callable preference shares at an agreed price and agreed terms as specified in the issue document. Callable means the issuer of the security has the right to buy back the shares from the investors, from the holders of the preference shares at times and on terms that are specified in the document of issue of the shares.

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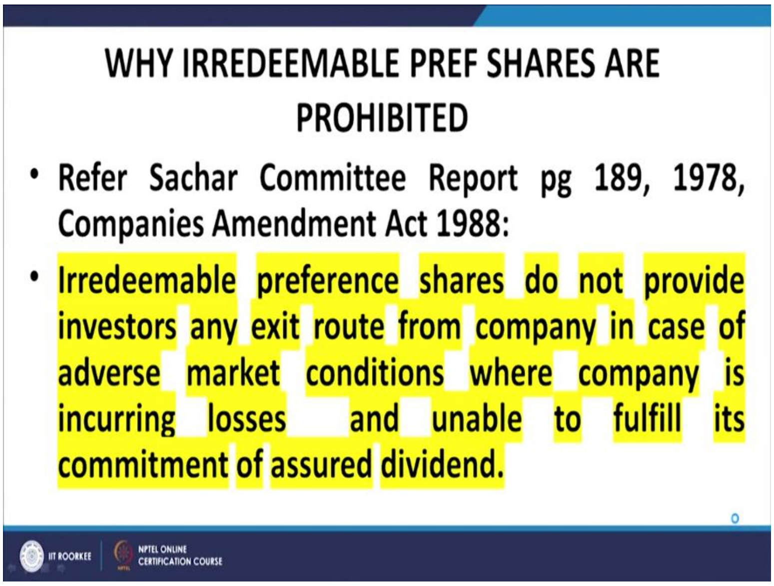

Now, I come back to the point, why irredeemable preference shares are prohibited in India? Well, to understand the reason therefor, we need to go back to the recommendations of the

Sachar Committee, which was a high-powered committee set up by the government to examine the upgradation of the Companies Act 1956. The recommendations of the committee took the form of legislation in 1988 as the Companies (Amendment) Act 1988.

Now, this 1988 Amendment Act introduced a prohibition against the issue of irredeemable preference shares in India. The reason therefor was that the irredeemable preference shares do not provide the investors with an exit route from their investment. In the case of adverse market conditions you cannot sell these preference shares in the market as they do not have a liquid market for the disposal of those shares. And if the company is in an adverse situation, it has accumulated losses or whatever and the preference dividend is not being paid, the shareholders have no opportunity, no means of exiting from this worthless investment. So, keeping in view the level of literacy of investors in our country at that point in time, it was decided that the issue of irredeemable preference shares should be done away with in our country. Because people would initially be investing in these shares in the anticipation of getting an assured stream of dividends and when the company starts accumulating losses, the benefits of assured dividends do not materialise and the shareholders also do not have an opportunity to exit from this investment. And the second thing is, while they do not have any means of exiting from this investment if the company is in adverse times, they also do not have any right to participate in the voting rights of the company.

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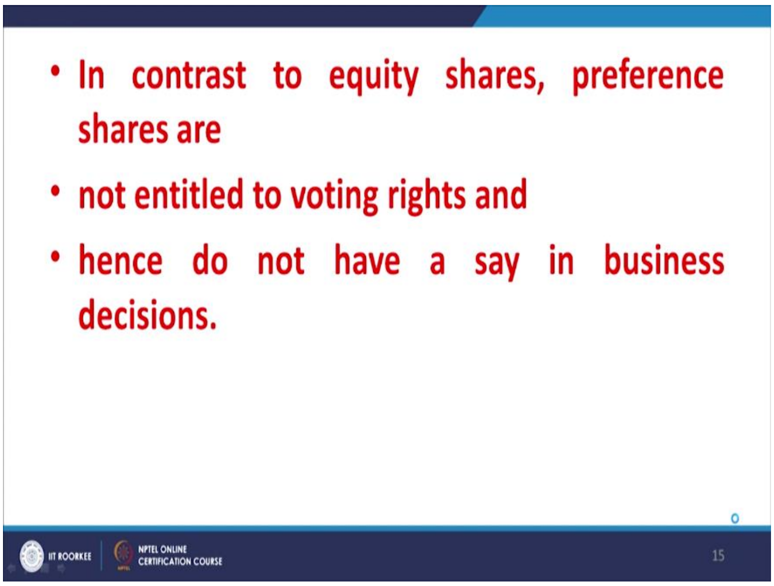

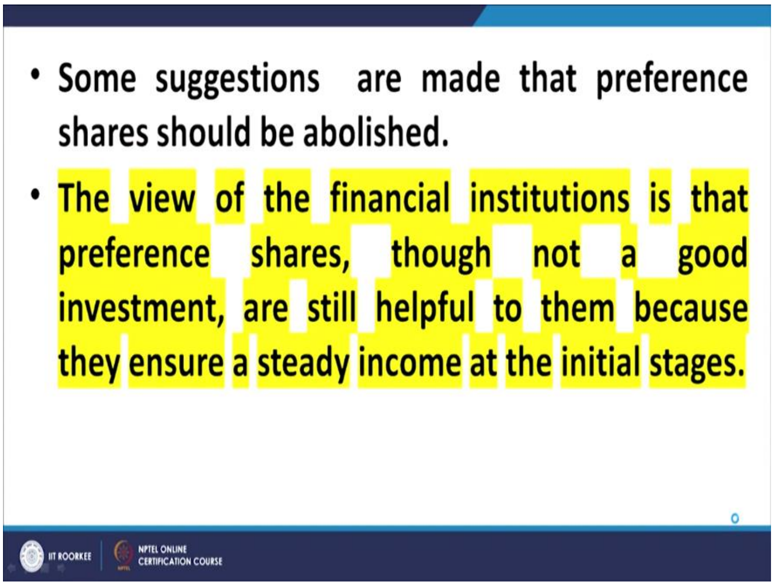

It was therefore decided to do away with the issue of irredeemable preference shares.

As to the complete abolition of preference shares, this matter was also taken up by the committee, the Sachar Committee, and it was decided at the behest of financial institutions that redeemable preference shares should continue to be a part of the spectrum of financial products eligible for issue by the companies on the basis that financial institutions could be the major subscribers to these kinds of instruments and the financial institutions have the benefit of getting fixed rate dividends during the initial stages of the company without imposing the burden of interest thereon. So, at the behest of financial institutions, the redeemable preference shares are continued as part of the permissible spectrum of securities. However, irredeemable preference shares were disbanded.

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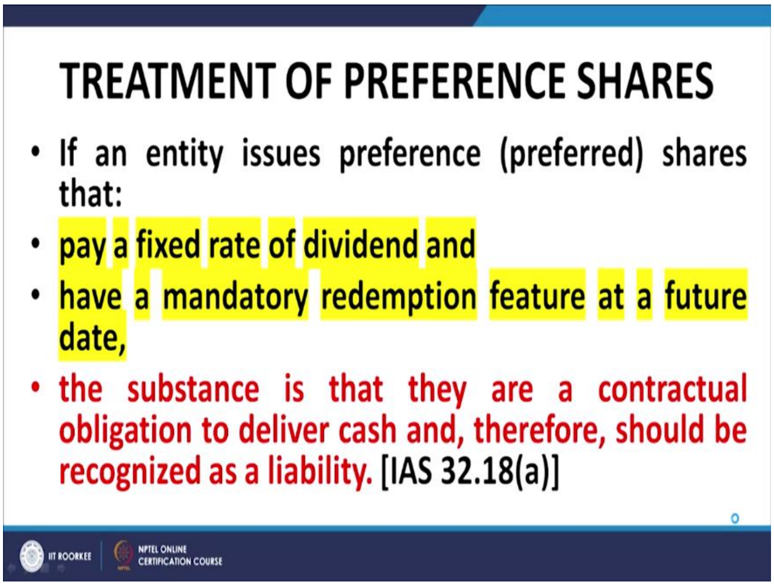

Now, the treatment of preference shares in accounts. Well, if the preference shares have a fixed rate of dividend attached to them, (which is normally the case but not always) and there is a mandatory redemption feature, that is, they are redeemable preference shares and need to be redeemed at a future date, then it is stipulated by the IFRS (the International Financial Reporting Standards) that such preference shares (which carry the fixed rate of dividend and carry a specified redeemable date) would be treated at per with the liabilities of the company, they would partake the character of liabilities of the company. If these features are not present in those shares, then they would partake the character of equity of the company.

So, preference shares that have a fixed rate of dividend and that involve a mandatory redemption feature at a future date will be recorded and accounted for as part of liabilities of the company whereas preference shares which do not have these features would be treated as part of equity of the company.

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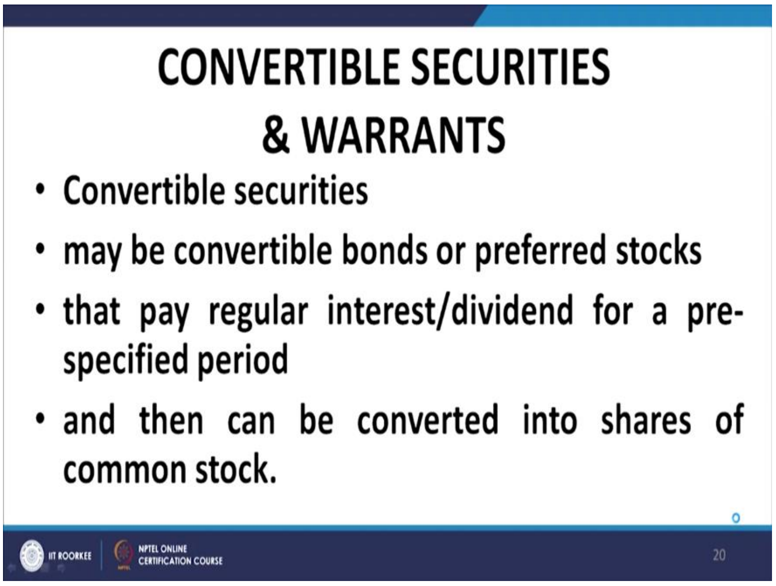

I have talked about convertible preference shares viz. preference shares which are issued by a company and carry a right of conversion into equity share at the end of a specified period and on terms which are agreed upon upfront in the issue document of the securities. Either the price at conversion or the manner of computation of the price on the date of conversion is mentioned.

We can also have convertible bonds, convertible debentures, which have similar features of conversion into equity shares, at predetermined prices or prices computed in a manner which is pre-determined. We can also have warrants. Sometimes, in order to enhance the marketability of an issue of bonds or preference shares, warrants are attached to those preference shares or bonds as the case may be. So, these warrants act as sweeteners. These warrant acts as marketing gimmicks which provide further liquidity, further possibility of the investor buying these instruments in the primary market or the secondary market as the case may be. The warrants have this personalised feature that they can be traded on their own. If they are listed on the exchange for trading they can be traded on their own in the first instance. Further, an investor who is holding a warrant can get equity shares in the company to which this warrant relates at a price and at a date or before a date, which is specified in the issue document. In other words a warrant is simply a tradable instrument (or a tradable part of the primary security which may be a debenture or a preference share) which entitles the holder to buy equity shares in the issuer company at a price and on or before a particular date, as may be specified in the document of issue of the warrants.

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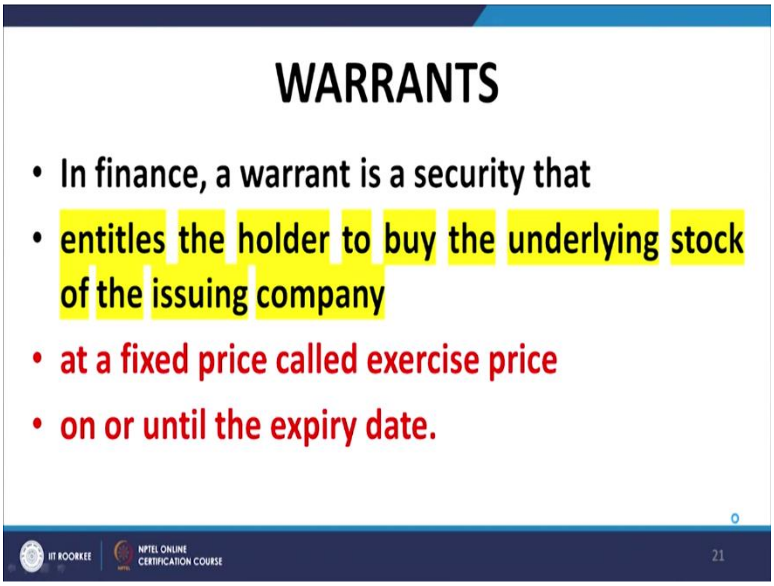

So, warrants have that special feature of enabling the holder to buy an equity share in the company at a particular point in time or before a particular point in time at a price which is either mentioned explicitly or the manner of computation thereof is mentioned in the issue document. The fixed price or the price at which the warrant may be exercised is called the exercise price and date up to which the warrant can be exercised is called the maturity date.

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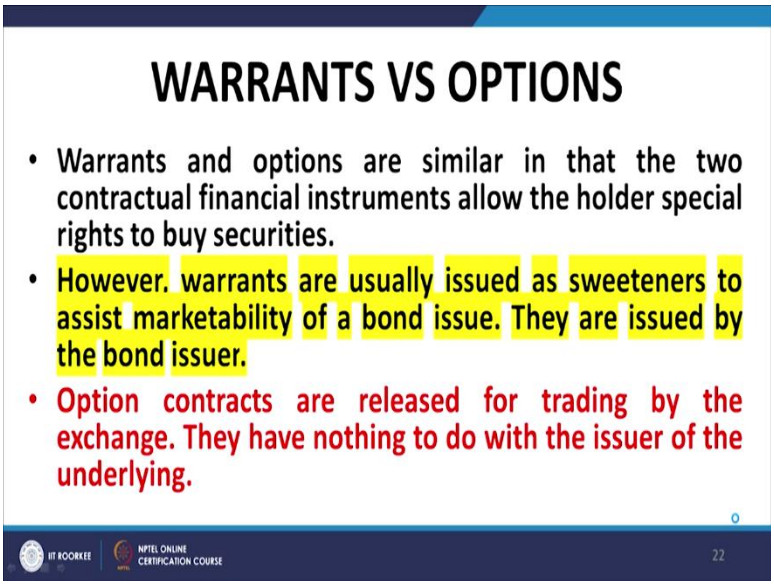

Now, there is a subtle difference between warrants and options. As I mentioned, warrant is the right to buy equity shares in the company at the exercise price on or before the maturity date. Options are similar contracts, but the important difference between these two is that while warrants are issued directly by the company in which shares can be taken up by exercise of the warrant, option contracts are released for trading by the exchanges at which they are traded. And they have nothing to do really with the issuer company or the issuer of the underlying stock. So, this is the fundamental difference between warrant and option. Warrants are issued by the company to which they relate. Options are issued by the exchanges in which they are traded and they do not relate to the underlying and the issuer of the underlying. Underlying is the asset which can be taken up by the exercise of the option. So, we take a break now, and after the break we will take up a very interesting and important concept, that of risk in financial terms and the related concept of arbitrage. Continue after the break. Thank you.