Financial Institutions and Markets
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Lecture - 46
Stock Market – I

So after the discussion on the bond market are the one of the major markets which contribute a lot for the financial development process. Today we can start the discussion on the Stock Market which is a buzzword among everybody's mind or always will all everybody thinks about or discusses about this market which is called the stock market. And what exactly the stock market trees and what are those instruments which are available in the stock market and how the pricing or the valuation of this particular market is done and how the trading in this particular market takes place, what are those different types of market we have within this stock market.

So, those are the different issues, different things always comes to our mind. So, today we will be discussing certain issues related to the basic fundamentals of the stock market, then you can move on to pricing or the valuation and the market fundamentals with respect to the trading and settlement and other issues which are linked to the stock market.

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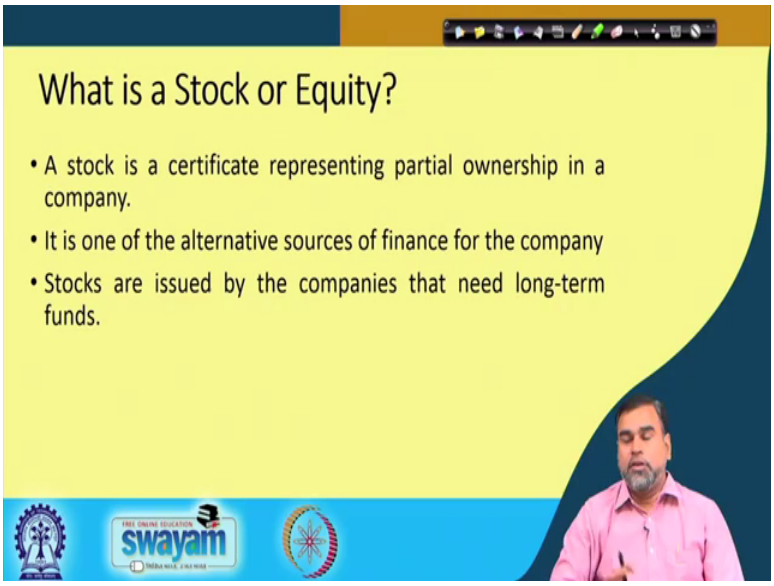

So, before that let us see that what exactly the stock is. Whenever you talk about the stock it is basically a certificate which represents the ownership of a particular company, partial ownership of a company, because the particular stock gives you certain ownership of the company for some certain decision making process.

So, stock is nothing but a ownership. And against that ownership the company raised some money from you and that money is utilized in the market and finally, some kind of return will be realized by the investor who has put the money in this particular stock. That is why it is basically a one of the alternative sources of finance for the company whenever company wanted to raise the money from the market or wants to raise the money from the different sources, one of the best sources says the raising the money in terms of equity. So, that is why we can consider this is a alternative sources of finance which is available to the system.

And it is also consider as a long-term financing instrument which has no typical maturity period the particular stock which was issued by the different entities, it has no specific maturity period. The stock can be hold for a reasonable period of time if anybody wants to maximize certain return out of this. So, the stock in general is always a long-term financing always in the financial system we consider. And already I told you this provides certain ownership of the company and it is one of the major sources of finance for the company. So, these are the way the stock can be defined.

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Why we need a stock market first of all? This is a debate that whether the stock market affects the economic growth or economic affects the stock market, there is a unidirectional causality or bidirectional causality there is a long lasting debate not only now, this debate is going on since 1990s. But in actual sense if you observe, but in a true sense really whenever we look at the stock market is always a leading indicator of the business cycle.

I hope you understood what do mean by this leading indicator. Already I think I have explained and in some of the sessions or in one of the sessions that we have three types of indicators; one is leading, lagging and coincidence. What when we call it a indicator is a leading indicator because our target is the GDP or the output. If you find that before the GDP reaches the peak reaches the highest level, if that particular indicator reaches the peak then we can say that this is a leading indicator. This first increases and that leads to the increase in the outcome variable that is the growth of the economy.

So, therefore, in this context, lagging indicator is first economy reaches the peak or the top whatever it may be; after that we can realize that other factors or other things are reaches the peak or the top. Coincident indicator means both are reaching in the same level at a same point of time these are called the coincident indicators.

So, in that context, we call that or we can define that stock market is a leading indicator. Before economy reaches the peak or the top the stock market reaches the peak or the top that is why it is popularly always we consider this a leading indicator. This is a also reliable guide for the performance of the and financial position of the company.

If you look at how the stock of the companies performing, accordingly we can conclude that how particular how the company is going to perform. This is one of the we can say that guide or a kind of informative parameter to comment on or to say that whether the companies doing well or not that is another way of using the stock market.

And another thing a near continuous valuation of the companies because the market price means it is market is continuously evaluating countries. The particular company is continuously valuated by the market. Because of that it whatever prices we always look at or we always get it in the market for that particular company, this is basically we can say that all those fundamentals of the company is reflected to that particular prices. So, that is why that particular information can help to the different other activities like mergers, takeovers, all kinds of things if anything any at all we are think about any other peripheral activities which may happen to this specific companies.

And other argument is stock market also can create the liquidity, because this particular market has always worked with a technical really less infrastructure. And the people take the position without going to the market literally, they do the online trading and all these things. Then the participation in the market is relatively should be higher and as well as the money which is floated from the different other parts of other markets within the financial system that can easily floated in the stock market to maximize the return. So, the stock market creates the liquidity; the liquidity mostly is created by one of the reasons the stock market is quite important.

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And another thing if you see in today's context, one of the markets among all the market stock market is highly integrated with other markets. There is a financial integration that means, the Indian stock market is integrated or may be related with NASDAQ stock exchange or maybe Bombay Stock Exchange is related to the DJIA or maybe it can be related to any of Japanese stock exchanges or any other stock market which are existing across the globe.

So, because this allows one companies investor to participate in the other system, other stock exchanges or other markets, this helps in the diversification process. Already all of you might have the idea that the basic job of the investor to diversify the risk, the unsystematic risk. If the diversification is the principal through which the risk can be managed, then the stock market if anybody want to; anybody wants to invest in the stock market, then because the stock market is highly integrated in that particular process, it is also easy for the investor to diversify the risk or the risk can be diversified through the international integration, which generally happens to the stock market.

And in some cases, some of the investments are allowed in the financial sector. If you talk about India, the foreign institutional investor, FI investments are allowed in the financial sector. So, the stock market developments attract the foreign investments. And once the foreign investor comes to India, then the probability of getting the return from the market goes up which increases the savings of this particular investor within the system, then finally, those savings helps for the investment in the economy as a whole, and finally the growth of the economic and take place.

So, the one another input an stock market is this is the market which can attract the foreign investors largely if the market basically really does well. And there is no such kind of frauds malpractices and other things are happening in this market and market is relatively efficient in terms of information point of view. If those kind of conditions are there, then stock market can attract the more investors, foreign investors into the system.

Then another one is inflow of foreign equity through stock market helps to avoid the excess reliance on the debt and saves the firm from undue exposure to the debt-servicing burden. Because you see that whenever we talk about the stock market because the there is a diversification which works in this particular system and people are ready or easily can raise the equity capital from the market.

And because the high debt equity debt of the company the high debt of the company, the debt basically increases the risk higher the higher the debt higher the financial risk and that also reduces the flexibility of the manager to take any kind of strong or risky decision in the from the company prospective.

So, as the financial risk increases with the debt, then most of the cases what has been observed, the companies may be reluctant to raise more debt. But if they will they are reluctant to raise more debt, then how they can basically fulfill their investment objectives. So, in this process the investment objectives can be fulfilled by the equity financing.

And the equity financing if they will go about then from where the equity can be raised if the n of equity capital is not available in the domestic system, because the foreign institutional investors or foreign equity is coming to the stock market, then it is also one of the importance of the market which provides the capital for the companies and which reduces the debt servicing burden or declines this financial risk in them in the system. So, that is another advantage of the developed stock market of a particular country.

So, these are the major things what although stock market contributes in the different other ways also, but these are the major contributions or major or we can say that advantages of the having a stock market of a particular country.

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Then if you see in the true sense how the stock markets are classified. The stock markets are classified by two ways like every market we have two different market in sub in terms of stock market also. We have a primary market or the new issue market what we call it, some people call it, it is IPO market Initial Public Offerings market, then we have a secondary market.

And what is the basic difference between these two the primary market basically supply is the fresh or additional capital to the companies. New capitals are generated through the IPO market, but once the money basically has been floated by the company; company has a issued that particular IPOs and raised the money from the public. Then once this is issues are or the particular stocks are listed in the stock exchange, they become the property of the secondary market.

So, the securities which are already issued or floated in the new issue market or the primary market are traded in the secondary market and some people argues some people always says that the this secondary market does not play in a direct role in making funds available to the corporates. Because the pricing of that particular security only depends upon or only varies due to the demand and supply of that particular stock and it goes from one hand to another hand depending upon the supply and the availability of the demand within that system that only changes the price level.

But this is not a new addition to the system itself, as it is not a new addition to the system that is why some researchers always feel that the it does not play in a direct role and making funds available to the corporates, but still this secondary market helpful for enhancing the capital, but that capital maybe there is a zero sum kind of gain kind of thing that may be lost for another company and gain for this company.

It helps to encourage the investors to invest in the industrial securities by making them liquid that means which provide these facilities for continuous regular and ready buying and selling of those securities in the system. That is nowadays we have the online systems or exchange traded system through which the tradings and everything takes place in the online system. And because of that it basically helps us to increase the efficiency and terms of the timing and also transparency.

So, secondary market if you see that is nothing but the whatever shares or whatever equities are floated in the market for the first time through the new issue market, those particular securities are indexed in the stock exchange and those things are invested through the stock exchange in the secondary market. And finally, the price of that particular security depends upon the demand and supply forces of the different investor who wants that particular security for that investment. So, that is the basic difference between primary market and the secondary market.

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Then we have if you see the instruments which are available in the stock market, we have two different instruments broadly, one is your ordinary shares or the common shares what we call it, then we have the preference shares. And all of you know what do you mean, were the ordinary share, the ordinary share means the common shares, the common shares basically gives the shareholder, these shareholder voting rights.

If anybody is holding the share of a particular company, they have the rights to vote for any kind of decisions within the company whether it is decisions related to mergers or acquisitions or related to any other bigger decisions if the company wanted to take, then the voting rights always the shareholder has.

And another thing is if anybody is holding the common shares of a particular company, it is not mandatory for the company to pay the dividend. So, dividend is not guaranteed; not guaranteed in the sense whether the company want to give the dividend or not that depends upon this particular company. Some companies pay dividends some companies do not pay dividend. So, if somebody is holding the common shares, it is not mandatory that the company will pay them the dividend.

Then we will have the preference shares; preference shares always there is a fixed payment of the dividends always the company gets. Generally there is no voting rights of the preference shareholders, but they have the priority after the bond holder, the payment will be made to the preference shareholders if they any time the company becomes insolvent. And there are many types of preference shares always we observe in the market.

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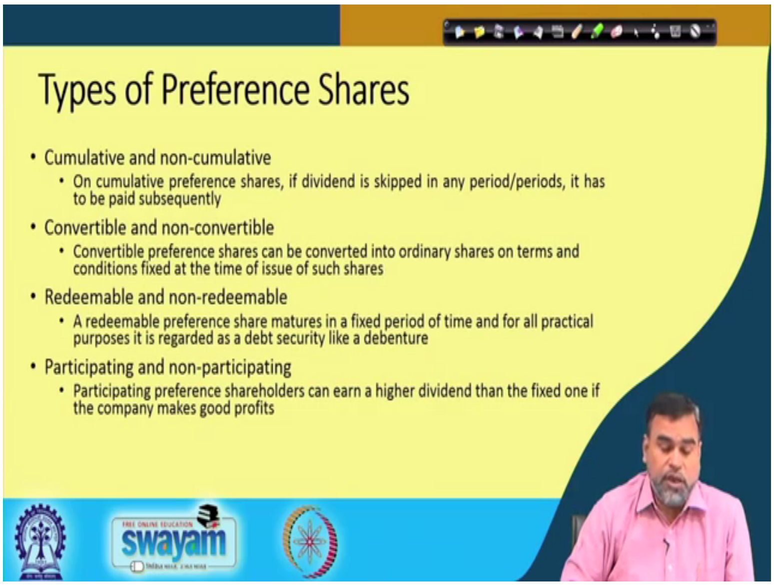

Then what are those many types of the preference shares always we look at or we see in the market. One is cumulative and non-cumulative what is the basic difference between cumulative. And non-cumulative on cumulative preference shares if dividend is skipped at any point or any period or periods it has to be paid subsequently.

The dividend is mandatory or for some reason if the company could not pay the dividend in some particular year or some particular period. If it is a non-cumulative dividend again the company will not pay that dividend. What if it is a cumulative preference share, then this particular money will be cumulated and when the company will generate the profit the particular cumulative cumulatively the particular dividend has to be paid to the preference shareholder.

Then you have convertible and non-convertible all of you might have known this. Convertible preference shareholders can be converted into ordinary shareholders on terms and conditions, fixed at the time of issue of such shares. At what point of time or on what basis this particular preference shares will be converted into equity or the common shares that basically will be always mentioned in the beginning of these ones of the shares. So, the, but some of the preference shares can be converted and some of the preference shares cannot be converted. By if it can be converted we call it convertible; if it cannot be converted we call them the nonconvertible.

Then we have redeemable and non-redeemable preference shareholders. A redeemable preference basically matures after a fixed period of time and but if it is a non-redeemable preference share then it will not be redeemed with a fixed period of time this goes on unless this investor one should redeem it. So, the redeemable preference share basically also has the characteristics of the debenture; that means, the corporate bond so that is why we call them the preference share is a mixture of it is a hybrid instrument it is a mixture of debt and equity.

Then we have the participating and non-participating preference shares. The participating preference shareholders can always get a higher dividend than the fixed one if the company makes good profit. If there is a possibility of increasing profit of the company, if some of the shares are some of the preference shares basically called as the participating preference shares, because they participate in this particular investment process, there is a possibility they can get more dividend than the non-participating preference shares. So, these are the different type of preference shares which are available in the system always we look at or always we find whenever you define the preference shares in the economy.

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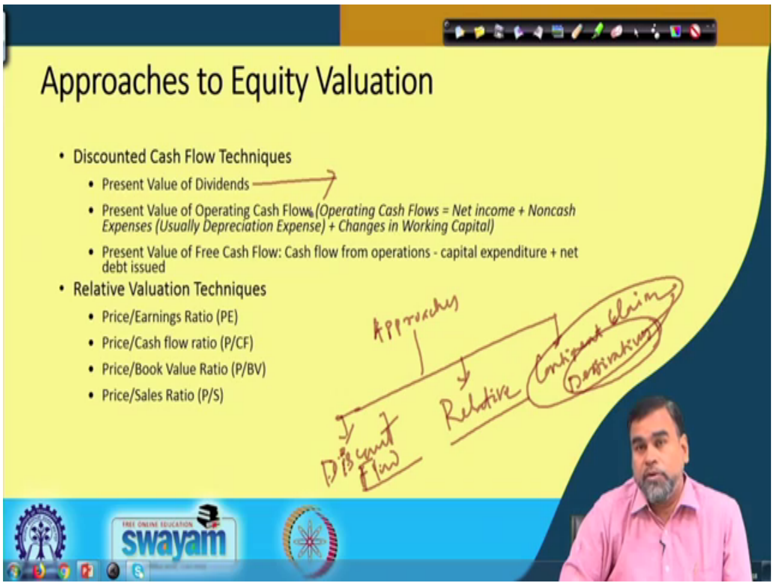

Then we can look at that how the valuation of the particular company is done or how the pricing of the equity is done. Whenever you talk about the pricing, if you see in general sense; in general sense basically this the approaches of the valuation if you see there are three approaches. One is discount flow approach, another one is relative valuation approach and another one is discount flow approach, relative valuation approach, another one is contingent claim approach. But why we are not talking about the contingent claim approach here because that is related to the derivative instrument.

The valuation of derivatives whenever we use the formula or a different methods that is basically we can define broadly a contingent claim valuation approach. But whenever we talk about the valuation of equity, we have two approaches discount flow approach and the relative valuation approach. And one by one we will discuss all these that what do you mean by this different approaches.

And whenever we go for the discount flow approach or different discount flow techniques, we have three types of cash flow always we observe on that basis we try to find out the present value of those cash flows to find out the price of that particular equity. And whatever price we calculate through that is called the what we call it that is called the intrinsic value of that particular equity.

So, here if you see we have a present value of dividend can be used as a cash flow. Most of the cases we use the dividend because dividend is easily measurable, easily quantifiable. But the another problem here is whether the reality dividend why you sometimes what is the limitation of the dividend, because the dividend may not be paid by all the companies. If the dividends are not paid by the all companies, then how the dividend can be discounted to get the present value of the cash flows of the dividend to determine the price. But still because it is easily measurable and it is easily quantifiable in that sense and the dividend discount models are quite popular.

And another one is the present value of the cash operating cash flow. And here you remember the operating cash flows are not measured in terms of equity valuations, they are mostly always used for the company valuation. It is operating cash flow to the company. So, what is the operating cash flow? The operating cash flow basically what we have we can calculate an operating cash flow in this way. It is the net income plus the noncash expenses basically noncash expenses means we are referring to the depreciation and all plus the change in working capital. This is basically we call it the operating cash flow.

Then we have free cash flow. The free cash flow how we measure it is basically cash flow from the operations what we got minus the capital expenditure if any company has met lost the net debt issued, how much debt already repaid, how much extra debt the company has issued that is basically we call it the free cash flow. So, we have three types of cash flow always we observe in terms of the company one is dividend, second one is your operating cash flow and the third one is the free cash flow. These are the three types of cash flow always we look at. Then we have to discount with respect to a discount rate to find out the value of that particular equity.

Then whenever you talk about the relative valuation; relative valuation we have many ratios the popular as price earnings ratio, we have price to cash flow ratio, we have price to book ratio, price to sales ratio, but the basic job of the relative valuation is nothing to find out the intrinsic value of the company. The basic job of the relative valuation is to compare with another company within the industry whether the company is good for investment or not or we can also have a link between the discount flow valuation technique with price other kind of relative valuation ratios.

But these ratios are mostly used for comparative religions not for the absolute religions to find out the intrinsic value of that particular equity. So, these are the approaches to equity valuation.

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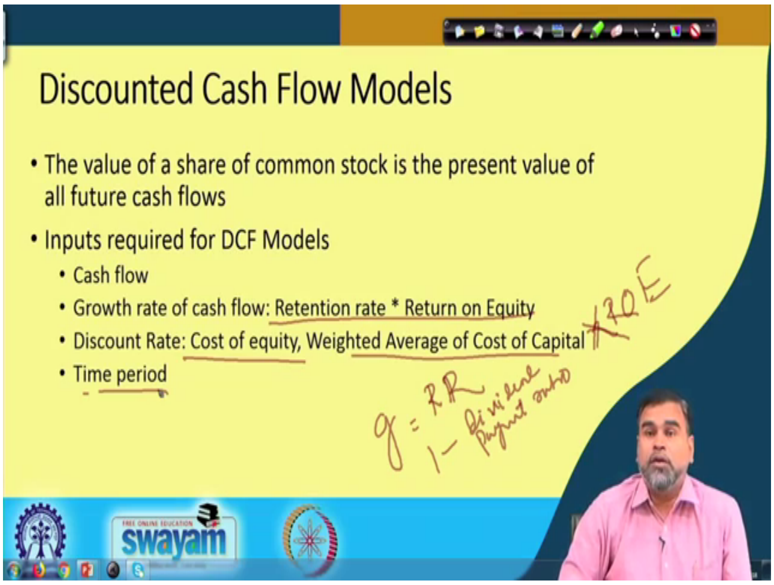

So, in the discount flow or cash flow model if you see it is nothing, but they value of a share is the present value of the future cash flows. And whenever you talk about the future cash flows what are the inputs we required, you required a cash flow, we required the growth rate we required the discount rate, we required the time period these are the four inputs always we required. You see that how basically the expected cash flow of a company can be calculated for that we need the growth rate.

So, in general how the growth rate is calculated for any kind of cash flow the g is equal to your Retention Ratio R R. Retention ratio means your 1 minus the dividend payout ratio, 1 minus the dividend payout ratio multiplied by the return on equity that is the way basically the growth rate of the particular cash flow can be calculated. And discount rate if it is a cost of we are going to valuate the equity, we used discount rate is the cost of equity.

If you are going to valuate the company, we are going to basically use the weighted average of the cost of capital that means, we consider both the cost of equity and as well as the cost of debt. Then finally, the time period we have to know to find out the value of that particular stock or the intrinsic value of the particular stock.

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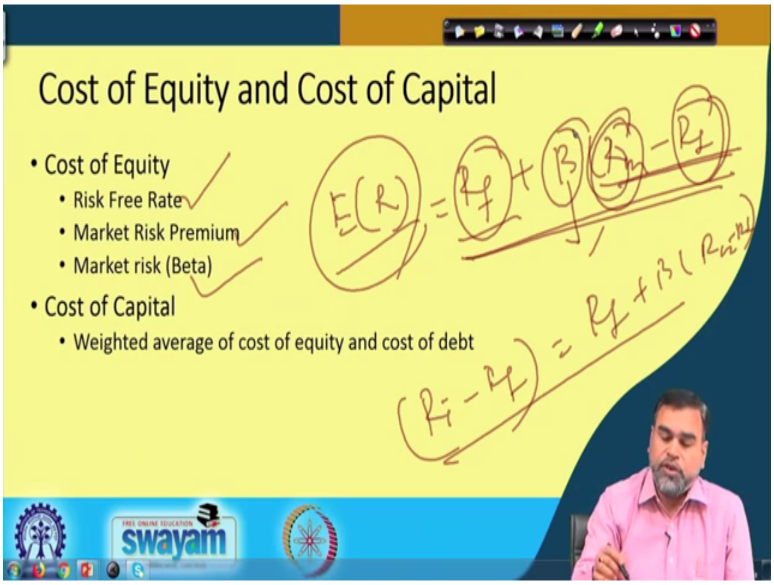

Then how the cost of equity is calculated? Cost of equity you can use the CAPM model already we have discussed about that. The CAPM model is basically what your expected return which is the cost of equity is nothing but your R f plus beta into R m minus R f. So, this is what so we have we know the R f, we know beta, beta is the market risk this is R m minus R f is equal to the market risk premium and this is your R f.

So, here basically it is not it is R i minus R f is equal to R f plus beta into R m minus R f, so that part already we discussed in the beginning of the classes. But mostly we want to calculate the expected return. And this is the formula the R f plus beta into R m minus R f if you if you know the R m, if you know R f risk free rate of return you know beta and all this thing then you can calculate the risk free the cost of equity. And that can be used at a discount factor one over you are going for a valuation of the equity.

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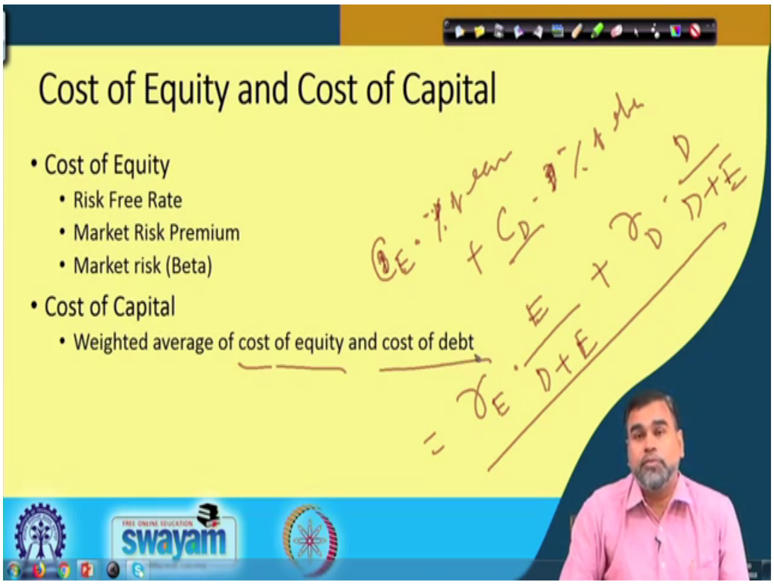

And the cost of capital; that means, it is the cost of equity; cost of equity let into the what is the percentage of the equity plus the cost of debt into the percentage; the percentage of debt; that means, if it is notation wise if you write let R is equal to the cost of equity r E into you have total equity upon the debt loss equity plus your let cost of debt is r D into D by D plus E. So, this is the way basically the weighted average of the cost of capital can be calculated which is nothing but the cost of equity and the cost of debt. So, then we can find out the discount rate for this and finally, this can be used for the valuation of the equity.

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So, this is the reference you have to go through to know about the details the thing what we have discussed in this particular session.

Thank you.