Mergers Acquisitions and Corporate Restructuring
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Lecture – 24
Alternative Exit and Restructuring Strategies - 2

Hello friends welcome to another session on Mergers Acquisitions and Corporate Restructuring. In the previous session that is lecture number 23 we started with valuation of startups and we want to discuss about certain special cases with startup valuation, because startup valuation is not same as an established company evaluation and also we discussed about the how startups and new ventures have gained prominence as far as targets concerned.

Different established companies are now targeting different startups which have new ideas new ventures which have gone to new areas of operation which the established company could not go on their own. So they are now looking at those as targets for growth in their company.

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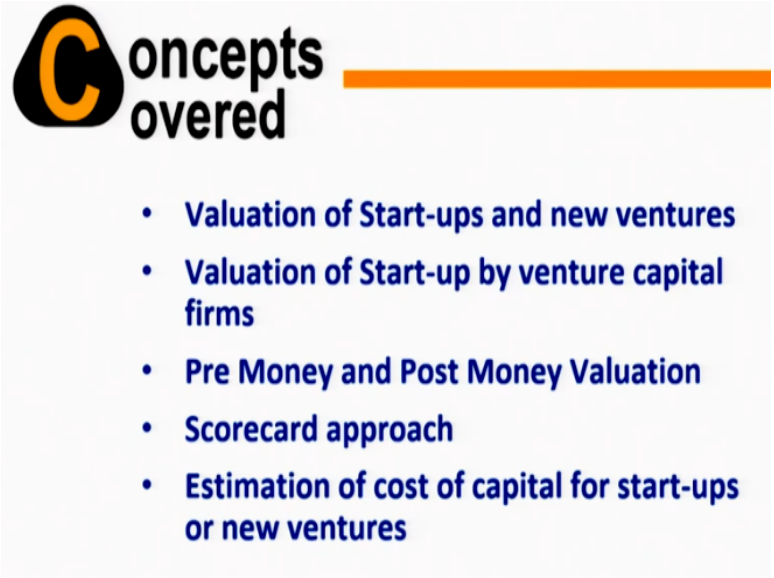

So this particular session we will talk about valuation of startups will continue with that or new ventures and we will talk about valuation startup by venture capital firms different approach. We will revisit the terms called pre money and post money valuation we will also discuss one of the method as far as score difference scorecard approaches concerned we will talk about one of the scorecard also here, and will also talk about the cost of capital estimation from a startup counter point of view and the cost of capital estimation for startup may not be same as the established company.

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So these are the keywords that we have in this particular session that we will cover.

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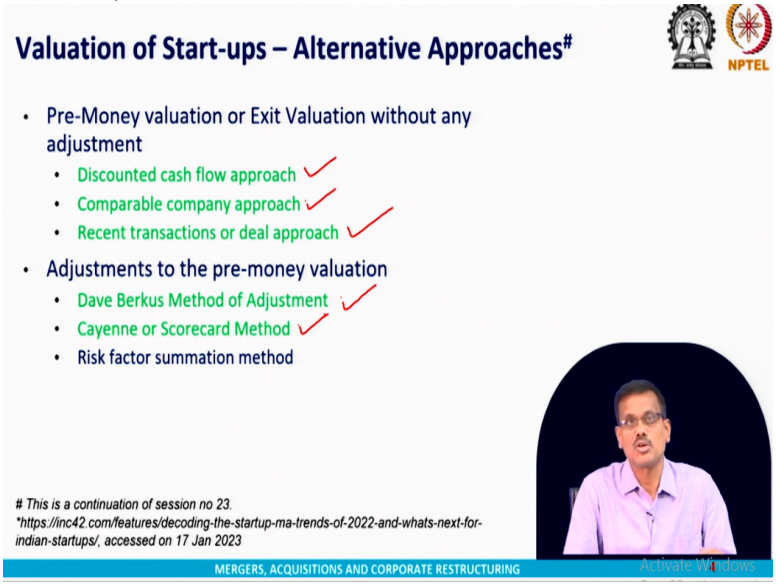

And the previous session we have talked about different methods valuation we talked about discounted cash flow, we talked about comparable company approach valuation we talked about recent transactions or deal approach. These are the nothing that the pre money or exit value so suppose a company like to exit today toward the valuation or what is the valuation before another industries approached and the industry is actually investing extra amount in this particular company that is called the pre money valuation.

And once you have the pre money valuation it is possible that we may need to do some adjustment depending on the type of startup, the stage of startup, the nature of business startup in that particular as a target. So we talked about in the previous session Dave Berkus method

adjustment to talk about Cayenne method or scorecard this class we will talk about risk factor summation method as an adjustments to pre money valuation.

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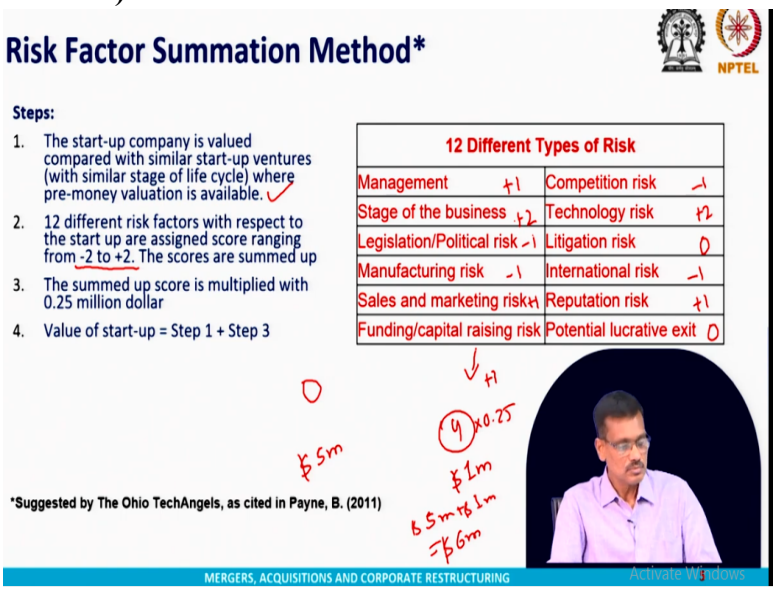

So what is this particular method is suggested that startup company is valued comparing similar startup, similar ventures at similar stages of life cycle, because a life cycle a particular company may be difference. Some company might have gone to a commercial stage of product some company might be just trying with experiment new ideas and somebody some company also might have launched the product and started getting customers.

So there 2 different cycles are there so we have to look at the company other companies other deals in the same sector, but at similar life cycle stage as the target that you are looking at as a startup target valuation. Then the author suggests that there are 12 risk factors which could be there in a particular new venture. So the 12 different risks are like management risk the type of management may be different in the target compared to the year book that we looked at this stage of business could be different.

Then legislation political risk can be there, the manufacturers risk can be different, sales and market is could be different then other risk like funding and capitalizing risk, competition risk, technology risk, litigation risk, international risk, reputation risk and potential lucrative exit as a risk. So these are the risk in the spectrum and depending on how the startup stands with respect the risk compared to the other comparable companies that we got in the first days.

So we will now add or minus or adjust the valuation upward or downward by adjust putting a particular score for this and the score as the author suggests can range from -2 to +2. If this, startup that you are looking at and the comparable company is same with respect particular risk. Then we remain neutral in that case we can assign a score of only 0 that means that is no difference between the startup that we are looking at the target and the comparable companies.

But if you feel the risk is higher in our startup compared to the existing company then one can give a negative weight and if the risk is lesser with respect to the target with respect to the comparable company then we can give a positive weight for that. So in that case valuation could be more valuation could be less and in that so ranging from -2 to +2 we have a total score for example suppose for management we look that the score is given as let us say +1.

Stage of business let say +2 maybe the company is in a different little advanced stage of operation compare the pure group. Political risk could be little higher maybe in that because geography so maybe it gets -1 manufacturers could be let say higher. So in that case some -1 sales and marketing because maybe this company has good marketing team. So maybe we can assign a score of let say +1. Funding and capitalizing risk the company is facing difficulty or not the difficulty let say is less difficulty so we say +1.

Competition can be there may be new players coming in the same segment so maybe it is little risky. So let us say we will do -1 these were talking about they are all subjective we are just taking in this hypothesis hypothetical case. This company into may be into technology which is much robust much better certified by some people to be that less technology is good compared to the peer group so let us say they get +2 in that case.

Litigation risk may not be there in this company let us say this company has no problem with any legal cases pending or something like that so let say there is a neutral 0. International risk might be there so, let say -1 this company may be is funded by or may be established by a people with lot of reputation. So they have they can command higher valuation so reputation risk actually will give add plus point there let us say +1 and lucrative exit risk may not be there let say so it is let us see your neutral.

See that is what happens we have got 1 + 2 3 3 - 1 2 – 1 1 + 1 2 + 1 3 -1 again 2 + 2 4 0 - 1 + 1 so 4 is the total risk summation of total risk. So the author suggests that for every one unit of

risk we can sum up and we can add 0.25 million dollars. So that means suppose the startup was valued compare you as a pre money valuation that done as per a particular method was let say 5 million dollar. So this 4 into 0.25 that gives us 1 million so this company can evaluate 5 million + 1 million so this can be come to 6 million.

So 1 must question here this 0.25 is a factor such to be author and then we have valuation already there it is a dollar term so in that this is applicable a particular economy particular specific country. So that is a limitation, this particular approach but if you look at the framework assets finding out 12 different risk and depending on the risks spectrum we make the upward adjustment valuation or downward adjustment valuation that framework is very relevant.

So that has to be kept in mind whether you will multiply 0.25 or something else that can be subjective otherwise the framework is a very good framework when you are comparing in target with similar companies. But exactly will not get a clone like our target so that target may be in these 12 different aspects accordingly we can have upward or downward valuation compared to what we have got as the initial method of valuation.

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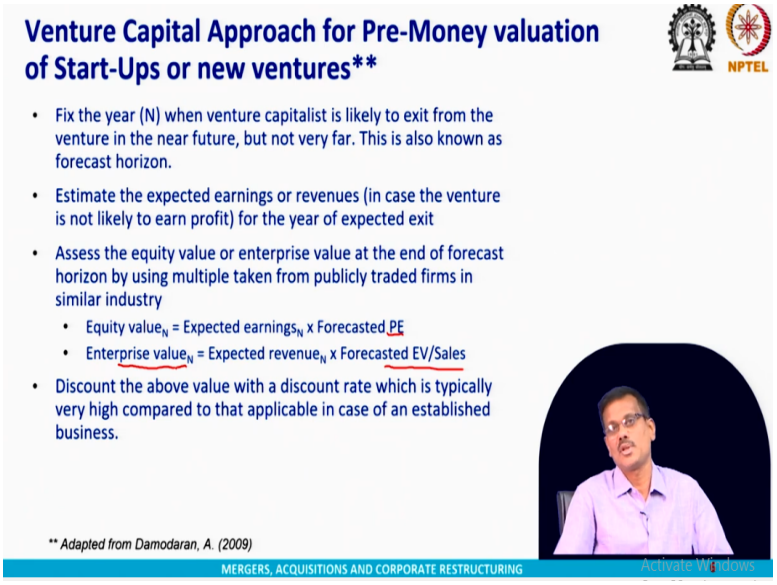

So having said that we have got other methods evaluation called venture capital approach venture capitalist what happens venture capitalist goes for the firms, where it is not may be not a very commercially successful product, they have got but they have got a lot of potential lot of opportunities. So, they may be approached or they may look for targets where funding is

required, but normal funding like banks and other investors are not willing to play and also very much likely.

These companies are not making any profit there might be making losses in certain companies the company might never started revenue also how do you do that as what to do and risk is very high. So what happens in this case one of the approach is that the venture capitalist form can look at the exit there going to invest today let say 2023 and they may exit 2026 so they look at 2026 as an exit time. So they will estimate the earnings or revenue or whatever parameter for that matter for 2026.

Then also they will go to multiple values and multiples so relative valuation will be used here so get a multiple looking at the comparable peer groups in the same sector and that multiple is multiplied with that particular metric parameter like it can may earnings or revenue it is possible company may not be having profit at the end of in the 2026 or company may have very small profit for that matter so in that case it will not be appropriated so they may company may the venture capitalist may say that.

We will rather look the values with respect to revenue or the sales for that matter so accordingly if his earnings is ok you look earnings into forecasted price earning multiple p multiple is price earning multiple. Otherwise if his revenue is ok then we multiply the forecasted enterprise value sales multiple and find out enterprise value here not equity value and whatever value who get that is after 3 or 4 year whatever period by 2026. Then we discount it at a discount rate which is typically high because the risk is very high so that is why the discount and we find the pre money valuation today.

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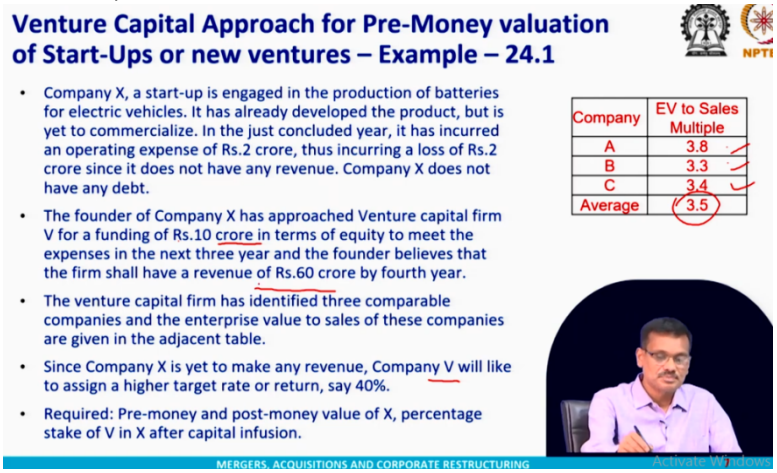

So let us say look at an, example here we have a let us say startup company X which is in production of batteries for supply to the electric vehicles and the companies started and the company has made an recently operating expense of 2 crore, but there is no revenue. So effectively there is operating loss of 2 crore and the company does not have any debt and the company is now approaching a venture capital for a funding of rupees 10 crore.

In terms of equity to meet the future expenses related to growth related to technology related to setting a facility or may marketing or advertisement all those things it is looking for that expense for the funding and it is expected that after 3 year period the company is going to have 60 crore of up to by fourth year the company is going to have 60 crore revenue so 3 year investment that leads to revenue of 60 crore.

To the fourth year and they have found 3 comparable companies which are also producing batteries for E-vehicles and so that comes to that there EV to sales multiple are given here and the average comes to 3.5 and since this is a very risky venture may not be successful all those things the company venture capital V is look going to is expecting return of 40 percent very high rate or return 40 percent and with this input let us find the value of the pre money value of this particular company also will find out how much percentage stake that company V is going to get by putting this 10 crore funding.

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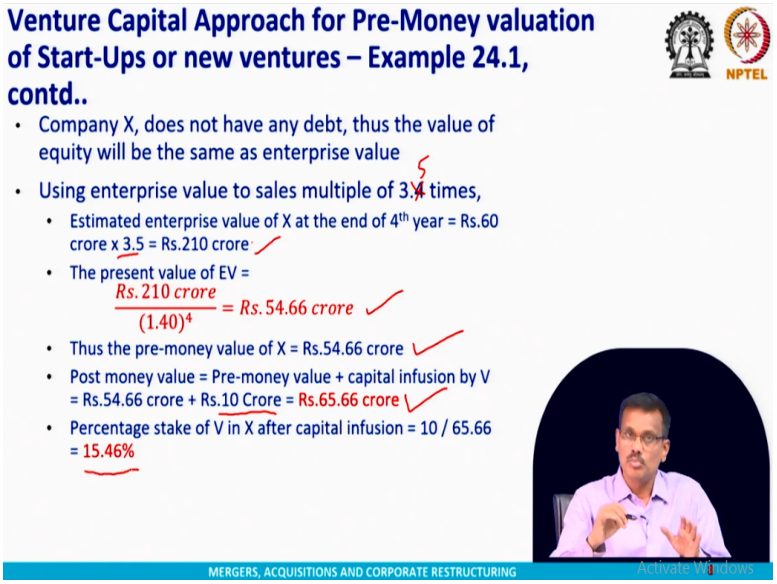

So company X has no debt so we can say the value of the equity will be same as the value of the enterprise and enterprise value is nothing but we got already 3.5 times is our enterprise sales multiple. So 3.5 into 60 gives 210 crore and this 210 crore is going to be at the end of

fourth year. So discount at 40 percent for 4 times then we get 54.66 crore so the pre money valuation comes to 54.66 crore and this company is going to infuse the venture capital is going to infuse 10 crore.

So the valuation post money, is going to be 65.66 crore and this since they are putting 10 crore and violation is 65.66. So they are going to have a stake of 15.46 percent in the startup and 100 – 15.46 percent that is around 84 percent 84.56 percent is going to be the share in capital of the existing investor. So this is the way one can approach valuation of startup or new venture from venture capital point of view the important part is the venture capitalist use a very high discounting rate because the risk is very high and risk and discounting rate are positively related.

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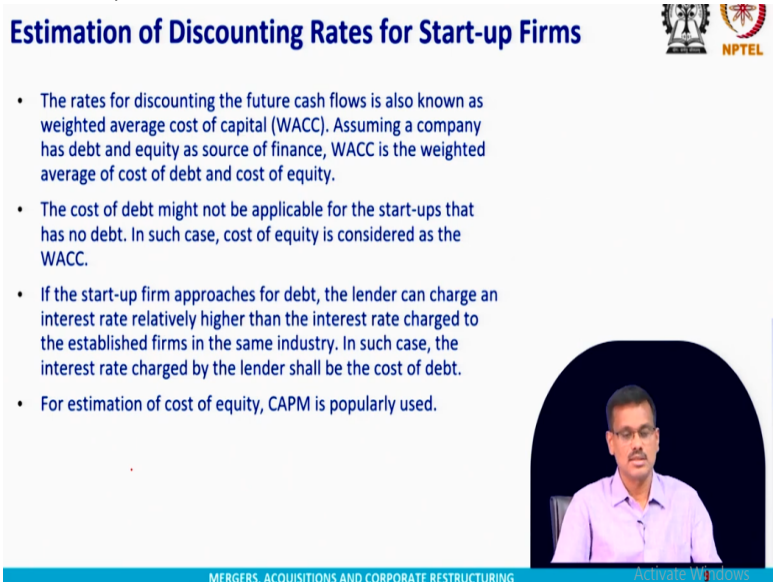

Then another approach is another problem that companies face is that what could the discounting rates for startup firms because startup firms is not listed. We do not have suppose we are going to the cost of equity you do not have the suppose you are going to cost of equity and you have capital asset pricing only the popular method we do not have the beta also and they may not have published files statements market does not know them prominently.

So we do not have this problem as such so what you go this that is way you have to go up a little subjective approach for that although there is a limitation subject we approach one, model one has to do that, because discounting factor is one of the important ingredient in the valuation of a company. So let us look at that so rate of discounting factor nothing but the

weighted average cost of capital. If the company has a debt and equity so we have cost of debt we have cost of equity.

We have respective weight of debt and weight of equity; are you discussed in the cost of capitalization. We can find the multiply the weight of debt with the cost of debt and are also multiply weight of equity in cost of equity and find our weighted average cost of capital and if the cost of debt not applicable, because a startup company may not have any debt like in the our previous case our startup company did not have any debt in that case cost of debt is 0 there is not applicable in fact.

So cost of equity is nothing but the weighted average cost of capital, if the company has a cost of debt because the company might have approached a funding agency which is willing to give a loan. Then the interest rate can be taken as cost of debt and most likely in these cases the lending rate is also going to relatively higher compared to the prevailing rates for established companies, there is no doubt because the startup company has more risk.

So lender will likely to charge a higher rate of interest for a startup company, if they are going to lean and for cost of equity calculation we go for capital asset pricing model is a very popular method used as.

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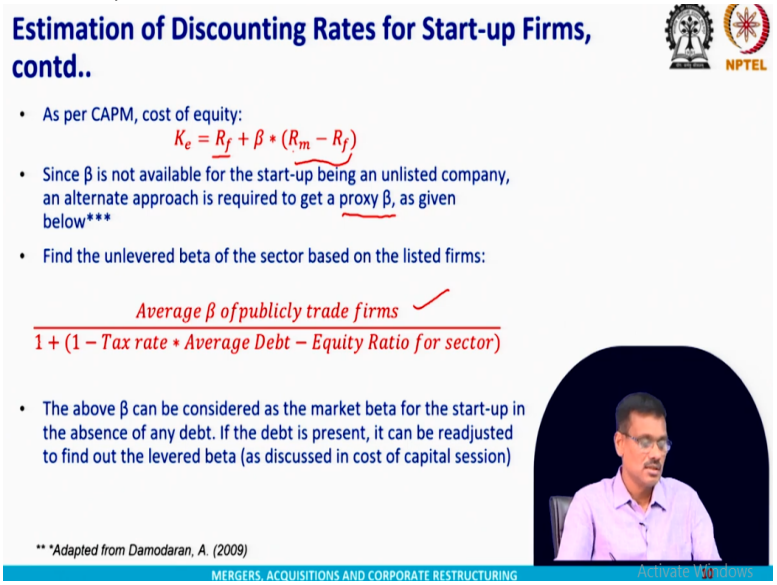

So as per CAPM revisiting that the cost of equity is nothing but risk period of return + beta into risk premium which, is nothing but difference between market return and risk period return. Now what happens since beta is not available for the startup company which is an

unlisted company for that matter, we have to look for alternative approach to get a proxy beta as given below here. Now this is taken from author (())(18:07) from by also Damodaran which is very famous author in the valuation companies.

We have adapted from the author's work so what we do there as we discussed in our levered beta only levered beta a calculation we have to look at find out the average beta. The market beta of the publicly traded companies in the similar sector so that is the start way. Then we convert that in unlevered beta by applying this particular formula and this is a levered beta this is unlevered beta and this beta can be considered as the market beta for the startup.

If there is no debt this is the beta for the startup itself if there is a beta dead then you have to do some adjustment and that will do as per that will be as a levered beta unlevered beta that we did in cost of capital session assets.

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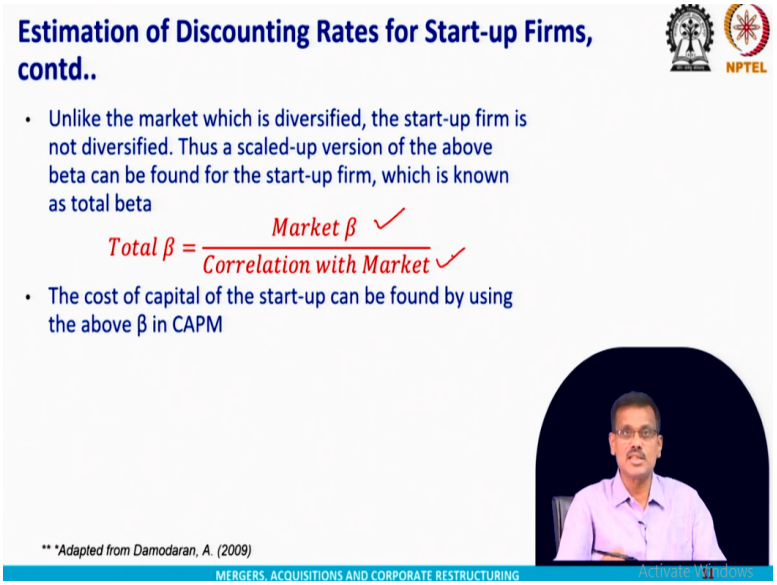

Then once you have the total beta on market beta see a startup company is very focused they are not diversified, but we got the beta from the public related companies which are relatively diversified and diversification lead to lower risk in that case startup company is going to have higher risk compared to the publicly traded companies. So we have to now adjust the beta upward by dividing the market beta that we calculate the previous step.

Dividing it with correlation the market and that with total so total beta is likely to be higher. The total beta is the beta for the startup company in the absence of any debt and once you have the total beta calculated then this beta can be taken as a proxy for in CAPM and then you

can find out the cost of equity and that will become cost of capital for the company if there is no debt.

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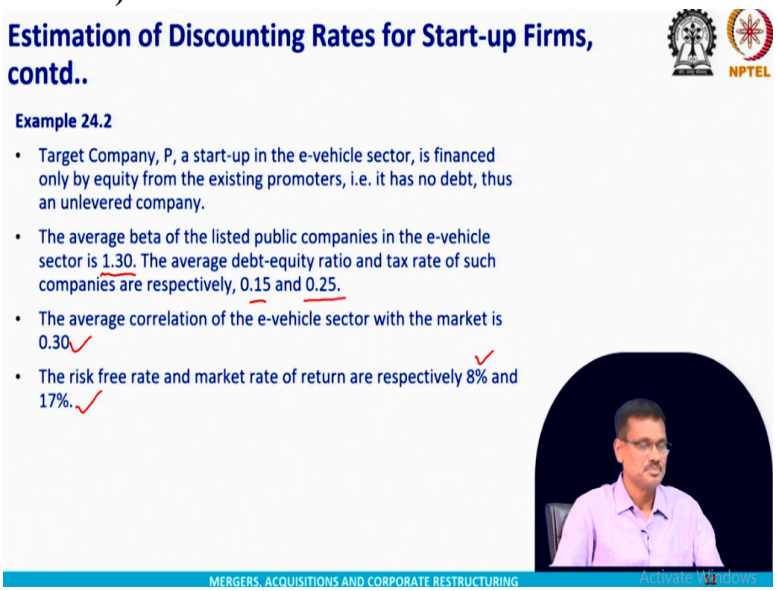

So let us look at an example here there is a, company P startup in the E-vehicle sector which is financed only by equity from the existing promoters and it has that means it has no debt, thus an unlevered company. And the average beta of the listed companies is in E-vehicle is 1.30 and it average debt equity ratio of those comparable companies in the listed public company in that sector 0.15 and 0.25 and tax rate 0.25 respectively.

And the correlation between E-vehicle sector companies and the market is 0.30 and the risk rate of return on market return are 8 percent and 17percent respectively. So these are the inputs given now we have to find out the cost of capital for this startup form called P.

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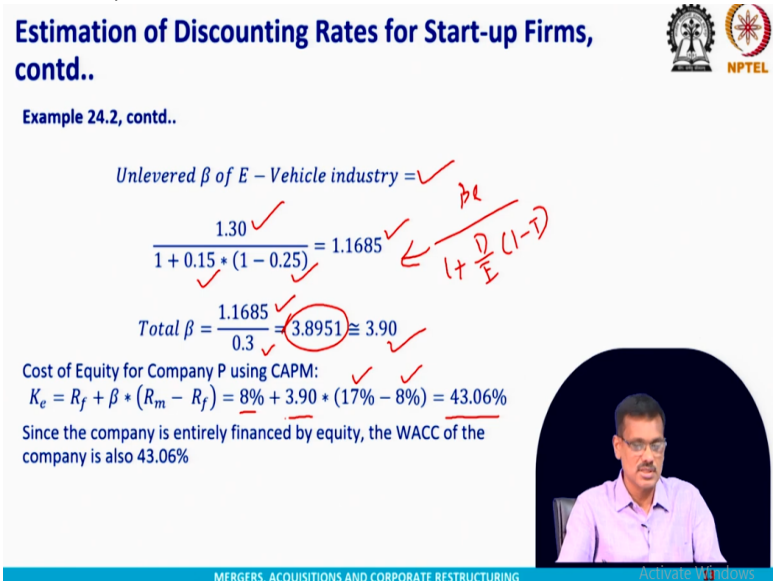

So first what you do we find out the unlevered beta with respect to E-vehicle industry we already have 1.30 as the average market beta of only levered of the E-vehicle industry and by applying this particular formula which is nothing but beta levered divided by 1 + D by E into 1 - T this is the formula by used in this particular approach. So tax that is 25 percent and debt if it is 0.15 so total bit it is 1.1685 is the unlevered beta.

And since there is no leverage in this company so total beta is can be taken from there itself and do not to do any adjustment for leverage and total beta which adjusted for because this company with the correlation that you adjust as you discussed previously. So 1.1685 by 0.3 so 3.8951 or 3.90 is total beta of this target company P. Now using this 3.90 as that target companies total beta we have risk free 8 percent 3.90 beta 17 percent risk market return 8 percent risk premium so that gives 43.06 percent is the cost of equity of the company.

Since this company has no debt that we discussed here it has no debt so the cost of equity can be taken as the whatever is cost of capital of the company for 43.06 percent and this can be used as discounting factor for discounting the future cash flow of this particular startup. Then suppose it is possible that the target has debt then how do we go about it? So we will do some adjustment like levered beta unlevered beta and then good for this setup process.

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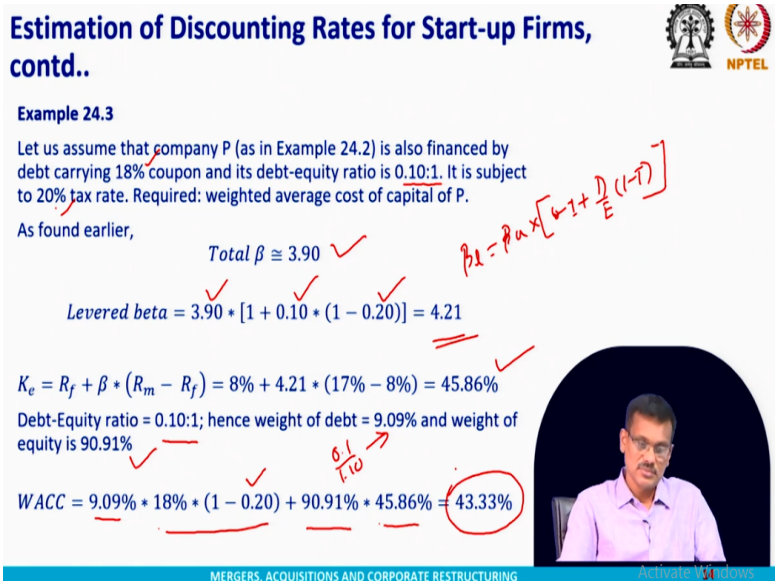

Some of the same company let us say we have already calculated 3.90 and the same company let us say it has got a debt equity debt with a rate to get ratio for every one rupee equity has got 10 percent debt. So 0.10:1 is the debt equity ratio and the debt carries 18 percent interest

and the company subject to 20 percent tax rate so you have to find out weighted average cost recover this particular P. So total beta that we calculated here is 3.90 so 3.90 is taken.

Now the 3.90 is unlevered beta because earlier you assume the company has no debt, now we are assuming company has debt so what you do you have to now adjust the unlevered beta to find out levered beta so unlevered and levered for the formula in beta levered is nothing but beta unlevered into 1 + debt equity ratio, multiplied 1 – T. So that gives us this formula 3.90 this is 1 this is .1 the debt equity ratio 20% the tax rate and we get 4.21

So now because the company is exposed to financial risk called finance levered is that is why the beta is higher now come to 3.9 has become 4.21. Applying this 4.21 we got a new cost of capital the cost of equity that is called 45.86 percent and this company has 0.10 is to 1 debt equity ratio that means total capital is 1.10 in that 0.10 is debt and 1 is equity. So 0.10 by 1.10 gives weight of debt 9.09 percent and balance is 90.91 percent the is the weight of equity.

Now multiplying 9.09 percent into cost of debt and adjust for the tax because the company's subject to 20 percent tax rate so and 90.91 percent into 45.86 cost of equity so that gives us 43.33 percent the cost of capital for this start up firm which can be used to estimate the cash flow to discount the cash flow of the company.

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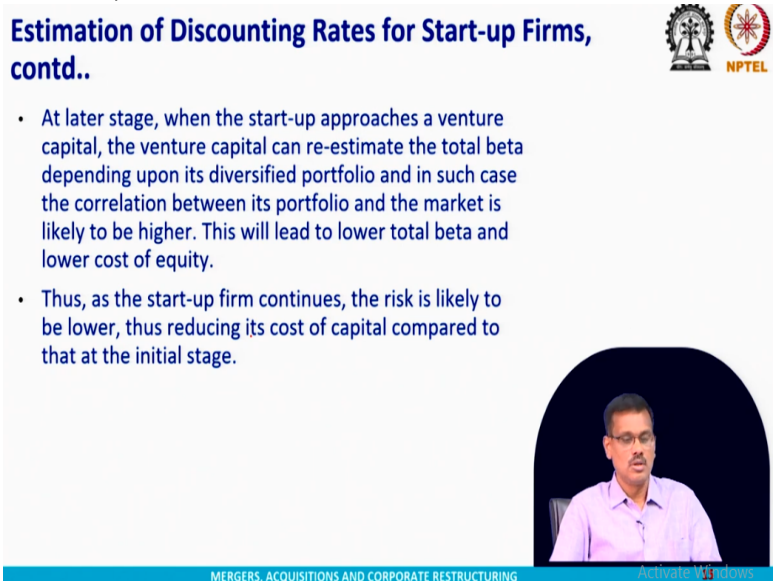

So like that what happens when the company moves in the life cycle the risk is going to be reduced. So possibly this what we talked about 43.33 percent or whatever rate 45.86 percent is likely to be lower assets, and so as the startup firm continues risk is going to be lower in this

what will happen the cost of capital is going to be lower also. Similarly, when the suppose the company is approached by venture capital firm. The venture capital firm is more diversified.

In that case the correlation between venture capital firm and the market as a diversified portfolio is going to be higher. In this case in that case what happens when you are doing this total beta calculation when you are going to adjust to find it adjust this unlevered beta to find out the total beta if this risk is going to be other the diverse this relation is going to be higher than 0.3 can be upward move to upward in that case total beta is going to be lower.

So that is possible as the company moves in its life cycle risk will be going to lower, they become more close related to the market in that case they are not standard company they are not unique company the unique is gone. So risk is also possibly lower and the cost of capital actually can come down. So that way the startup firm continuous risk is going to be lower and the cost capital is going to be lower as it moves upward in the life asset.

Then one of the another thing that we do in case of startup valuation is that one unique thing is that in startup companies the owners are actually the operating managers and since they are is their own company they may not be adding any salaries and expense they might be drawing from the account because they are saying they are doing it they are putting it up as their own effort. So the company may not be charging any salary to the owners who are actually managed in the company.

So there some adjustments have to be there similarly some expenses they may look at normal expenses, but they are actually going to capital expenses. So there may be some misclassification of capital expense, revenue expense so that has to be readjusted to find out the profit cash flow etcetera going back to that is the company's income statement does not capture the salaries that is supposed to be pay to the startup owners if they have employees the company in that case.

Suppose the company has shown a profit before tax or even loss for that before tax itself of x rupees it is going to be further lower profit or further more loss, because you are going to impute the salary of the managers because the company has to manage and that is how the salary has to be paid. So that way some readjustments are required to the income statement to

the cash flow because this incomes to preparation that has been done in different manner but then we are acquiring the company.

We have to look at the normal, financial statement approach and readjustments can be so readjustment can lead to either lowering a profit or higher made increasing profit or any other way either expenses can go up or expenses can come down and accordingly cash flow can be different than what the startup company has actually projected on its own.

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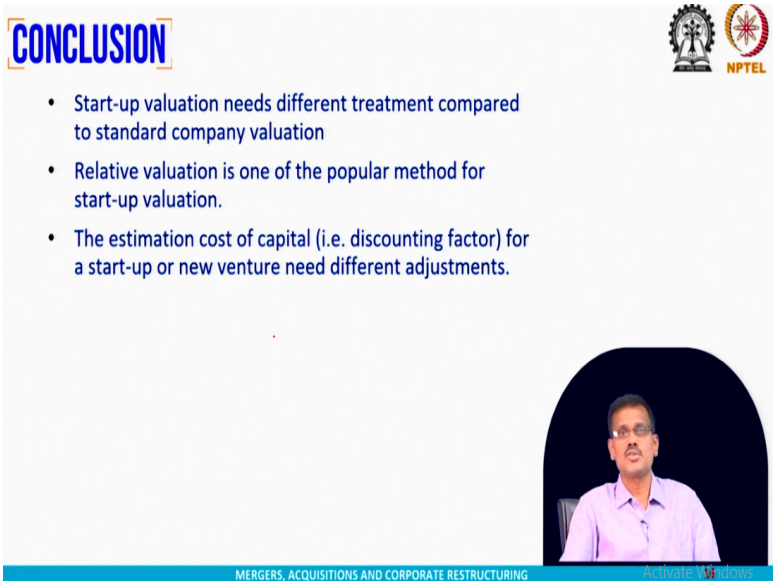

So the startup method in the conclusion startup valuation needs different treatment compared to standard company valuation method. Relative valuation is one of the popular method startup valuations and estimation of cost of capital has to be adjusted compared to that we do in case a normal cost of capital calculation. We will continue with other special cases valuation in a session number 25.

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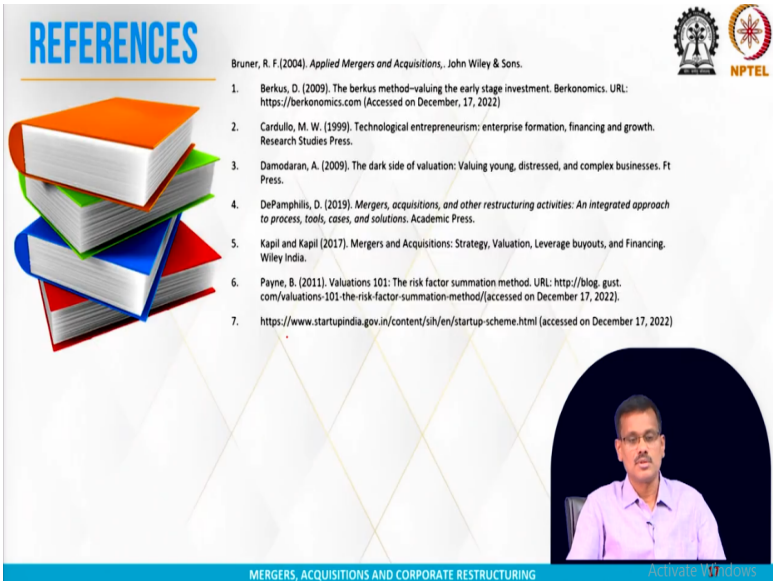

Thank you and happy learning.