Security Analysis and Portfolio Management

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Module No. # 01
Lecture No. # 16
Industry Analysis – II

Hello. This particular session is a part of economic industry and company analysis. It is known as EIC analysis in a security analysis context. We have discussed earlier about economic analysis. We started the industry analysis in the previous session. Let us recapitulate what we have discussed in the previous session. We talked about why one should one go for industry analysis, what is the importance of that, what is the advantage of going for industry analysis. We also talked about different market or financial performance like different industries give different returns in the market, and they have got different accounting rate of return also, in a particular period of time, and we talked about the basic steps involve industry analysis. Subsequently we talked about the concept of business cycle and industrial sectors.

We saw that in different cycle, different part of business cycle like recessionary period or a booming period, we see that different industries perform different way. So, then analyst has a challenge to find out which particular industry is likely to do better in the subsequent phase of business cycle. Accordingly, the analyst can switch from one industry to another industry or suggest the investor to switch from one industry to another industry as such. So, there is a possibility of industry rotation looking at the business cycle as a concept, and if one can figure out the trend in that, nothing like it in can analysis frame work.

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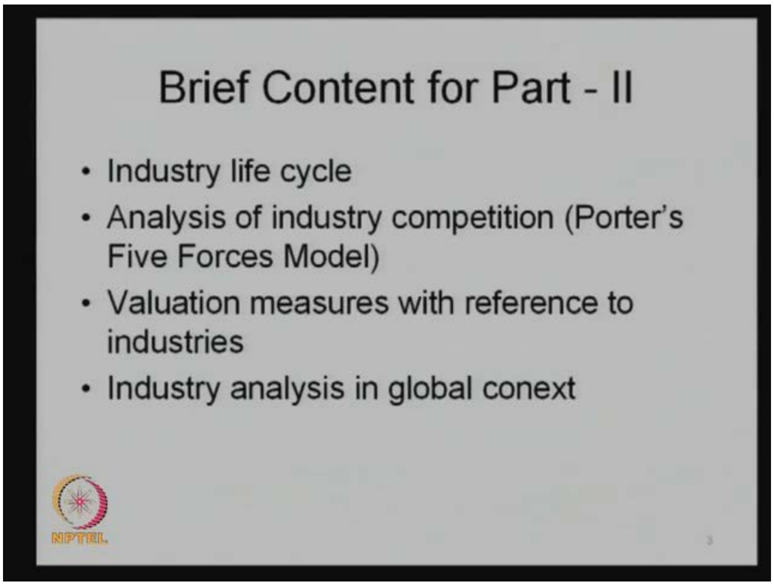

And in this session, we are going to discuss about the industry life cycle, where you talk about how (()) products go through different phase of risk life cycle. It gets introduced and then grows, then it decline at the subsequent time. No company can produce certain goods and can produce as such, but can market the goods or products for that matter for all the time to come, products get introduced and they again come to a decline stage. So, no product is going to be there for all the times to come as such.

So, companies have the challenge to switch from one product to another product depending on the type of products they have the portfolio. And next, we talk about in this session is Michel Porter's five forces model is a very famous framework to analyze the particular industry. Then, we talk about the different valuation measures with reference to industry as such. We talked about company valuation and look at the industry valuation from there also you can go to company valuation for that matter.

Then, we will also talk about the global industry analysis context, what are the thing that special things to one has to take care as far as a global context is concerned because industry these days is not specific to a particular country, rather it is affected by different things across the world, different companies source, different materials from different countries for that matter. They have got different customers across the world as such. In that case, industry analysis has to also look at the global context.

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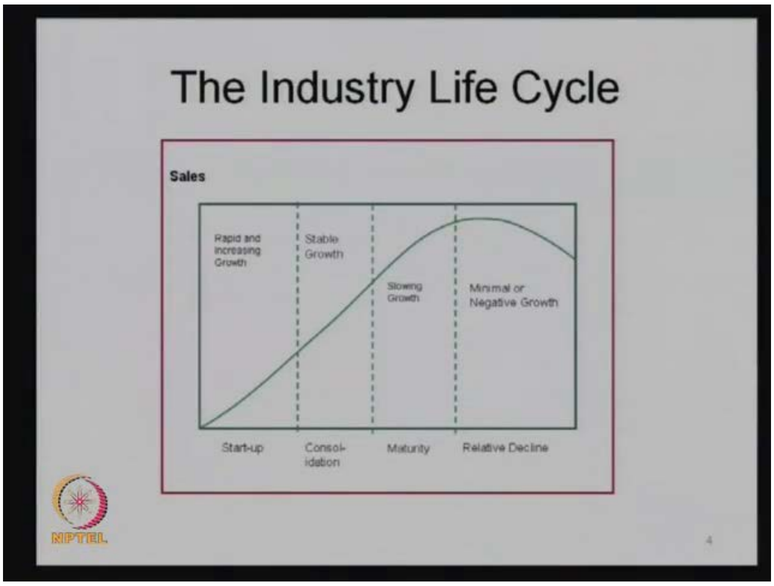

And coming to the one of the tools in industry analysis, we use something called industry life cycle, and in industry life cycle we say the company of the particular product gets introduced, and that is our start up phase; it is a four phase, one of the four phases industry life cycle as such here. Then we have got introduction stage; a start up phase where you see that rapid an increasing growth. Then we have what is growth stability is there, then the growth slows down, and there is an accelerator growth here, then the growth minimum growth or lesser growth or it has a negative growth decline that happens.

Any product in a particular context will always go through such phases, and product gets products get introduced, products also grow in terms of sales, and then subsequently products have got to decline as no particular product is going to be there for all the time to come accepted by the consumers at large.

Now moving to the different stages here, we see here in start up phase, we will see that there is a very rapid and very high increase in the growth in the revenue and possibly we will have few number of players also in that.

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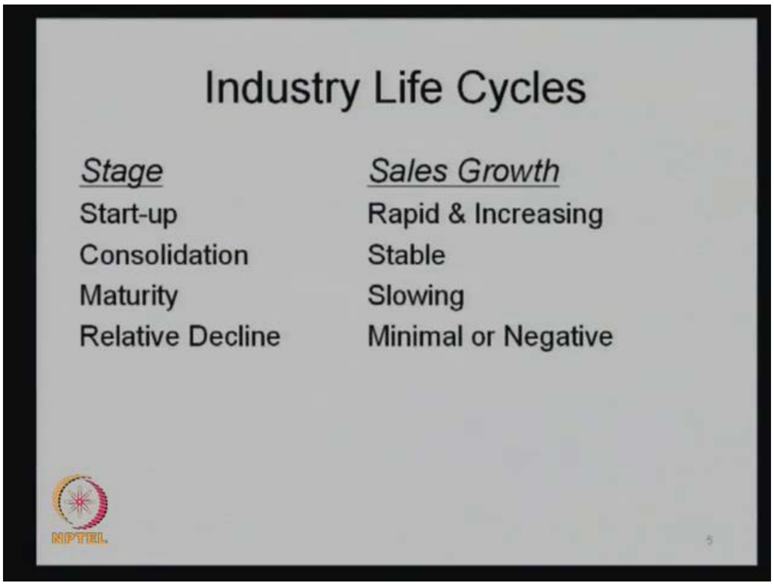

Then we have got consolidation phase, then we have growth stabilizes, then we have maturity where the growth actually slows down; though the growth is there but the rate of growth is much lower than the previous phase, then we have the declining phase a relative declining phase where you say the list amount of growths are there. In fact, that could be a negative growth in the product sold by a particular industry together or even for the particular company for that matter.

So, this becomes high time where one has to switch to another product, before that it is in the new product should have been introduced by the company or by the industry in the market as such.

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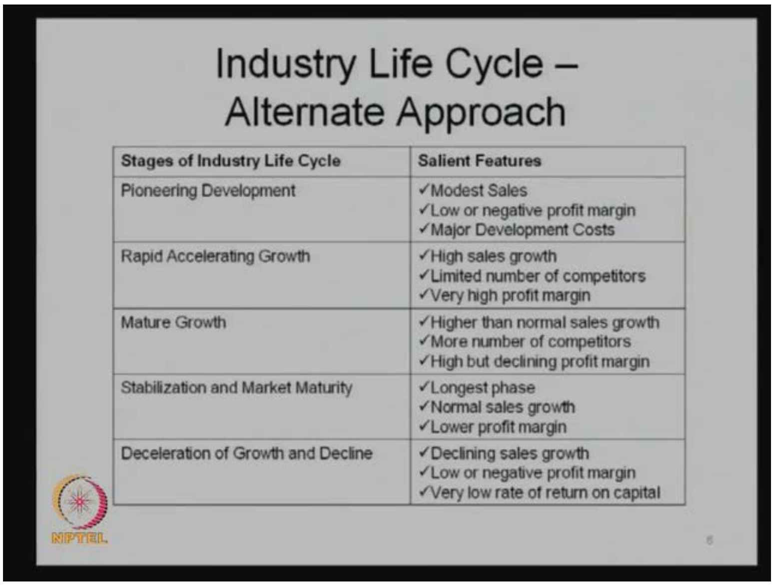

Stages of Industry Life Cycle	Salient Features
Pioneering Development	✓Modest Sales ✓Low or negative profit margin ✓Major Development Costs
Rapid Accelerating Growth	✓High sales growth ✓Limited number of competitors ✓Very high profit margin
Mature Growth	✓Higher than normal sales growth ✓More number of competitors ✓High but declining profit margin
Stabilization and Market Maturity	✓Longest phase ✓Normal sales growth ✓Lower profit margin
Deceleration of Growth and Decline	✓Declining sales growth ✓Low or negative profit margin ✓Very low rate of return on capital

Now, coming to another alternate that we have in industry life cycle, instead of the four stages that we talked about in the previous section, here you talk about the five different stages of industry life cycle. The first one is called the pioneering development where you have got the limited amount of sales, but and at the same time you have got low profit margin or low profit margin because at this particular point of time there is huge cost involved, huge capital expenditures are involved, big amount depression will be there.

So, there may not be as much revenue to take care of the cost. It is quite likely that there will be a lesser amount of profit margin or may be a negative profit also is quite possible in the initial phase as such. And we will see that very few number of players are there in the particular stage, but subsequently what happens, when the market knows about these and the product, and similarly when the companies achieve the economies of scale or economies of scope for that matter, so, they have got a high revenue and they also have got recovery of cost. It will refund larger production base and the cost par and also decline some profit margin because of very very high during the this particular stage.

So, that is called the rapid accelerating growth, and they have got very high sales growth, will have very limited number of competitors, and at this point term also very high profit margin because the sales is very high and the cost value could be much lower compare to the previous cycle phase, and in this we will have high and we will also have limited number of competitors there, but looking at this particular attractiveness or particular industry in that particular stage, new number of players going to be attracted to this particular sector at this point of time.

So, what will happen in that case, once more number of players come into the market, there will be a lot of competition they base the price also. The price competition takes place. So, in that case what will happen the profit margin is going to be lower because the price itself is going to be controlled and there are several players where the lot of competition comes to the phase in the next phase called the mature growth.

So, there will be high profit margin could be there, but the profit margin is going to decline over a period of time as such. So, because a number of players are more and price competition base in the price is very high at this particular phase, and then what in this stage also we have this normal sales growth higher than the normal sales growth.

When you say normal sales growth, we talk about that the overall economic growth whatever is there and higher than normal means the particular industry is growing at a higher rate than the economy. The economy is going to let us growing at 8 to 9 percent during particular period. At that point of time, this particular industry may be growing at some 10, 12, 15 percent as such.

So, there is a lot of growth opportunity still there and it is increasing growth is more than the economy growth as such. Then after the mature growth, we have got the stage called stabilization and market maturity. At this point of time, the as many competitors have come into the market, and this particular phase is suppose to be a very longest phase in the industry for that matter.

And we will have a normal sales growth here which is almost same as the overall economic growth as such, and since as many number of players are there, the best possible price is there available the customer; that means, least possible price afford by a particular competitors to stay in the market. Then in that case, we also have the lowest profit margin there is a profit margin definitely there, but there is lower than the previous periods. So, at this point of time, this particular industry, particular product or industry loses its attractiveness and possibly new new things might have come in the overall market where the product sold by the industry in that particular time period may not be that much appealing or catering the customer requirement. Customers might have shifted some other products and that be more attractive.

So, that point of time what happens next; as next stage is the deceleration to growth or decline in the sales growth. That is the last phase where the decline takes place. There will be a very low profit margin during this particular phase, and there is a that could also possible there is a negative profit margin. The companies making may be making losses on that particular product in that particular industry.

And; obviously, this is going to very very low return on the capital invested so; obviously, there is no point in investing in a particular company which has got the products in the declining phase. For that matter at the time of stabilization phase also there is no point are introducing there.

The looking at the utility of this particular analysis is that the analyst should look at those industries where the lots of growth opportunities are there. Particularly, during your mature growth may be not mature growth, but before the actually there is rapid accelerating growth. This is the time where the analyst should enter in that particular sector and invest so that they have the best possible growth.

They are best possible profit margin and you should one should repine the benefits of introducing there. And once the particular company a particular industry comes to a stabilization phase or maturity stage, it is time that one should look at existing for that particular industry as such. So, this is the one of the utility of industry analysis. It is a very beautiful tool as per the industry life cycle is concerned.

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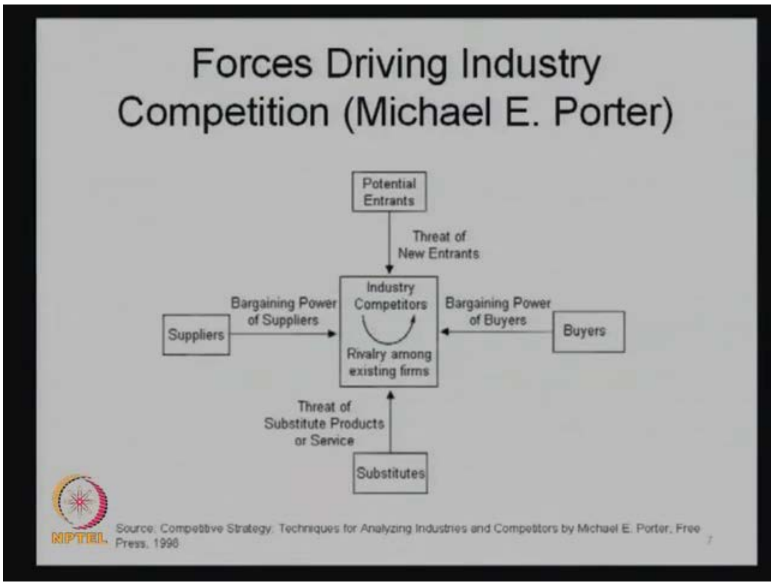

Now, we move on to the next method of Industry analysis where you talk about the Michel Porter's five forces model popularly known as a Michel Porter's five forces model. If you look at this model, which says that what are the different forces that drive the industry in any industry for that matter.

There are different industry thing that they have that affect the performance of industry as such, like one of the potential entrants that there they are going to affect the industry here what is competition, and industry itself there may be lot of rivalry among the existing forms, and they may be affected by the potential threat from the new entrants. There could be also pressure from the buyers. There could also be pressure from the suppliers. The suppliers may have a very high bargaining power. Then this particular industry loses its competitiveness possibly.

Or the buyers may have the higher bargaining power. That could be also difficult proposition for the industry. And there could be threat of the substitute products or services whatever products are being sold by this particular sectors industry, the products may be available in some other sector, some other substitutes could be available.

So, then this particular industry may not be that much attractive. So, all those factor that you would discuss here as Michel Porter has suggested, there are several things which are part of this like bargaining power of buyers or threat of new entrants or the rivalry among the existing forms in the particular industry for that matter or suppliers or different threat from different substitute products.

The multiple things that affect as a set in a one of this five things that we have in Michel Porter's five forces model. So, you are going to discuss one by one, what are different things that are there as far as different forces are concerned in industry analysis.

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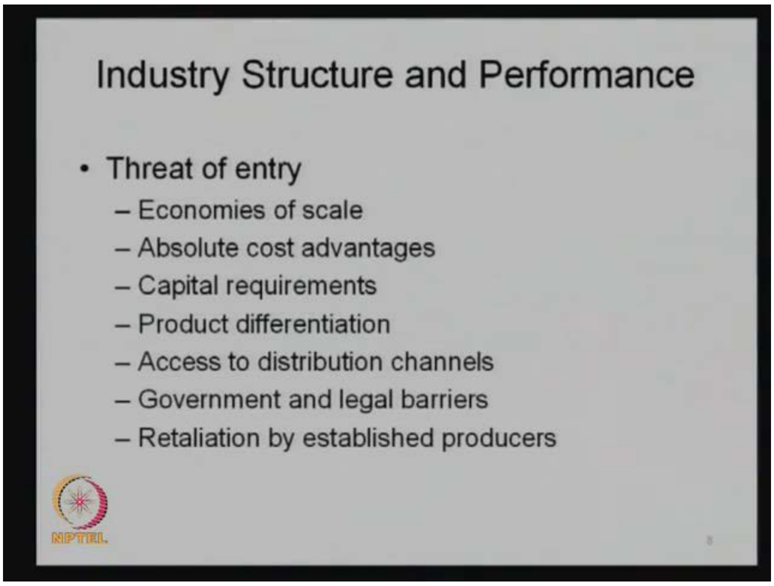

First we move on to the threat of entry. Now; obviously, this is very simple concept that as long as the return on investment is more than the cost of capital in any sector, we talks about return on investment return here, and here you talk about the cost of capital, what we you mean to say that if there is a particular company which is earning a return on the investment, and whatever the borrowing rate is there or the overall cost of capital is there, which are overall cost capital depends up on the equity as well as the date or other source of finance, as long as this r is more than cost of capital, and; that means, the industry is an attractive proposition for that matter.

So, every time, an investor looks for that opportunity whereas, return is earn more than what are the expected by the investors as such. So, that is an attractor proposition. So, as long as that particular phenomenon is there, that is that particular industry is going to attract lot of players in the market as such.

The moment lot of players comes to the particular industry, then the competitiveness of the particular products may still be there, but since numbers of players are very high, good number of players is there. So, the lot of competition going to happen and in that case what will happen, the price whatever the if the company is able to charge a particular high very high price at the particular point of time, since more number of players are there. The price is going to be charge now is much lower as such.

Now, one has to see that what is the threat that the in this particular industry face, the players in this particular industry face from the other outside agents, outside players who will like to enter this particular market. And the threat may be very high if the threat may be low for that matter depending on different things like this.

So, first let we talk about in threat of entry, how bigger is threat is that wherever something called economies of scale. If already the particular companies in the particular sector has spread across and lot of activity has to happen so that you got the least cost production as such, then for another company to come and establish a particular in unit in that sector and having a bigger operation is going to much difficult as such.

So, if that is the cases the higher economies of scale has to achieve, then in that case for the new enter this becomes a very bigger threat as such because already established players are there who have got large scale of operation. Now, one has to come to that particular level of higher scale of activity as such. Look at telecom sector when I have got the companies have got pan India license as such. now everybody has all most all big players have got the pan India license.

Now, one new player also has to get a pan India license and spread across the country. Then only the particular new players the different service can be little more competitive or at least can through a competition in the market as such. That is one.

Then second that we have in case of threat of entry is something called absolute cost advantages. When you say absolute cost advantage, the existing income and player in that particular industry has got certain advantage over the cost for that matter. For instance, when the oil fields are action or the exploration takes place, whether you can one can go for different river basin or the sea for that matter off shore for that matter, so what happens, the company is goes for the booking of this oil potential oil for that matter, if they achieve that particular oil, there they strike that oil is there or let us say the mining company, they go for having lot of mines in their hand.

So, what happens? These particular companies have got a very huge raw material advantage in terms of cost also. They already exist there. They are already got the license to explore. They already got the license to get the mines there. So, they have got themselves sell very lot of cost advantage.

Now, any new entrant coming to this particular industry will have to depend up on the existing players. We will have to supply the raw material for them as such. It may be possible to access those raw materials as such.

So, the existing players have got lot of absolute cost advantage. They had the list procure their procurement cost of the raw material is going to much lower than what the new players are going to come and procure the raw material, but possibly they have to procure the raw material from the existing industrial, existing players in industry itself.

So, if that is the case, then it becomes a major threat for the new entrants. If this is not the case, if the company did not have those advantages, then becomes a lesser. So, it will be easy for new entrants to come into this particular market and force a competition or throw a completion in that particular sector for different companies already operating.

Then there may be certain industry which has that in the Industry of which where we have got lot of capital, may be lot of huge investment has to take place like may be the company to enter in this particular sector has to pay of huge license fee like a telecom sector or he has to go for a huge R and D development like a for a pharmaceutical sector or one has to go for very good knowledge pool like you go one has to go lot of patents and copyrights. Trademarks for to operation like a knowledge based industry and or if it is banking industry then you have to have large amount of large number of network and in that case, you have got large number of large number of capital to be infused for that matter.

If that is the case, large amount of capital as required for a setting a new in it in this particular time in a particular industry, then that becomes or as one of the threat for the new entrants and the existing players are going to get a advantage over the potential new entrants, and as long as the threat is less, threat is not there for new entrants, then this industry can have a better one bit price in terms from the companies point of view, they can charge a higher price because they are few players available in this particular sector at that point of time.

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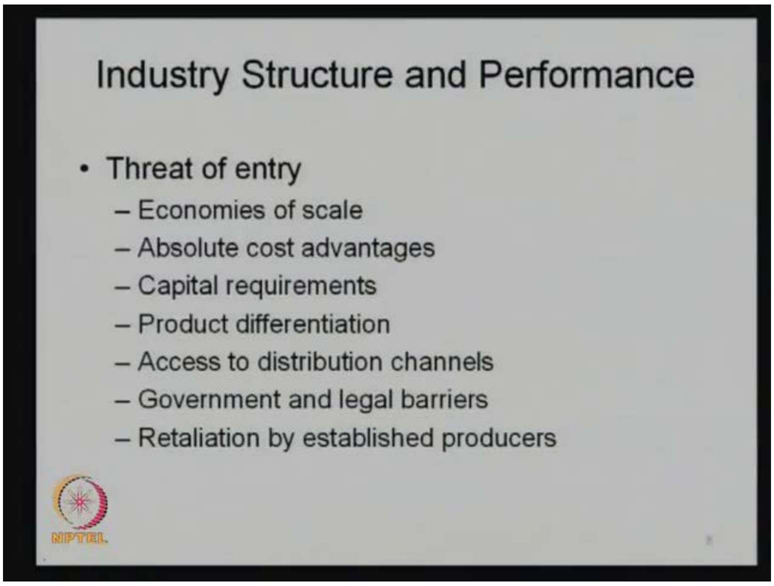

Next we have got something like a product differentiation. A product differentiation means the as long as the product sold by in a particular industry in the particular point of time are different from one to other, then it is better because product differentiation comes because of lot of R and D input, lot of advertizing input; one can look at a software sorry soft drinks company, it has got a simply something which has to drink one has to drink for that matter and consume, but the company has got multiple soft drink products as such.

And each particular product has got different cliental base, different target types of customer, and each particular software drink we have in soft drink for that matter has got lot of branding happening there, we have different brand ambassadors for different soft drinks for that matter.

So, as long as the products are differentiated, different products are there, then for another new entrant to come and play in this particular market is going to be difficult.

The new player has to put lot of money in branding and having new new things to compete in the market as such.

If the products are not differentiated, they become something like a commodity, and which can be produced and sold by anyone. So, if the product difference is very high in a particular industry, then threat from the other competitors is very going to be low. I mean there is a chance other players can come; there is a entry barrier from this particular industry as such.

Then we have got next is the access to distribution channels. Sometimes what happens, a particular producer may have access to different lot of retail outlets, retailers in the country as such.

Now, having they have already got the access. any new competitor if is going to produce and sale, and also like to have multiple access points, and number of access points is very wide spread geographical spread has to be there, they have some may have to look depend on the existing retailers as such. Let us looks like let us say the shopping malls like big bazaars, shoppers stop and they have something like that or the malls for that matter.

So, now the existing malls may not like to have another product of the same category unless they have got certain advantage from the new player to be offered as such. So, this seems the particular new old player has already accessed the geography or access the space so it may be difficult for the other companies the new players in that particular sector to enter and come through a competition against the existing players.

So, if the access distribution is very high, it is better. Then in this we have another point called government and legal barriers. There may be for some reason could be one extreme that the particular government in that particular industry is favoring to a particular group of companies or for whatever reason the government itself has got some barriers like interest of FDR restriction or a licensing for that matter, for instance the banking industry is concerned, it is not that any time anyone can set up a bank or have a new bank in this country for that matter in the book.

The particular new entrant has to go for a license from the reserve bank of India and different other formalities also have to be taken care. Unlike setting of some other industry like cement industry or steel industry for that matter, there the government restrictions are much lower as long as setting of a new entry is concern. See the government restrictions are very high, and for and setting a new unity particular industry, in that case, the existing players are going to have advantage over the potential entrants. Means potential entrants could have a barrier.

Another factor could be that the government itself could be favoring a particular group of industry at that point of time which may not be desirable thing, but it could be actually possible, and once that happens, then for the new entrants may be actually difficult and new entrants has to make a may be indoor in to government system so that those there potential units are actually approved to be set up in that particular sector.

Then having heard this points that different threats of entry could be there, there could be another threat of entry that there the existing players can converse to get there. They can collide with each other and can also through a competition in the different form by possibly reducing the price they offer for the product they are selling as such.

So, in this case what will happen, the new players may go for a step back because they may not be expecting that suddenly these existing players will reduce the price, maybe by thirty percent to forty percent for that matter.

So, the customers may not shift from the existing players to new players as such because new players may not be able to charge a very low price as the existing players have now charged.

So, one can see here there could be lot of particular link of telecom sector; one sees here the moment the new players come they themselves charge very low price, like then what happens, other competitors also offer some such price. We used to have very high call rates, now we see call per second and those things have come up and you see typically, very truly that the call rates have gone down substantially and so, both the new as well as existing players are resorting to a very cheaper call rate.

But this is one where all the players are doing, but there may be some other sector where looking at the potential new players, the group of industries, they join together and so, that they can have a threat towards the new players or the potential competitor who are going to set up new unit for that matter by reducing their price. So, this is retaliation strategy by the established players.

Next we have the next category; how much is the rivalry among the competitors in a particular sector that is at present there. So, sometimes rivalry could be intensive then it has got different things to talk about; the rivalry is not there, something else is going to happen.

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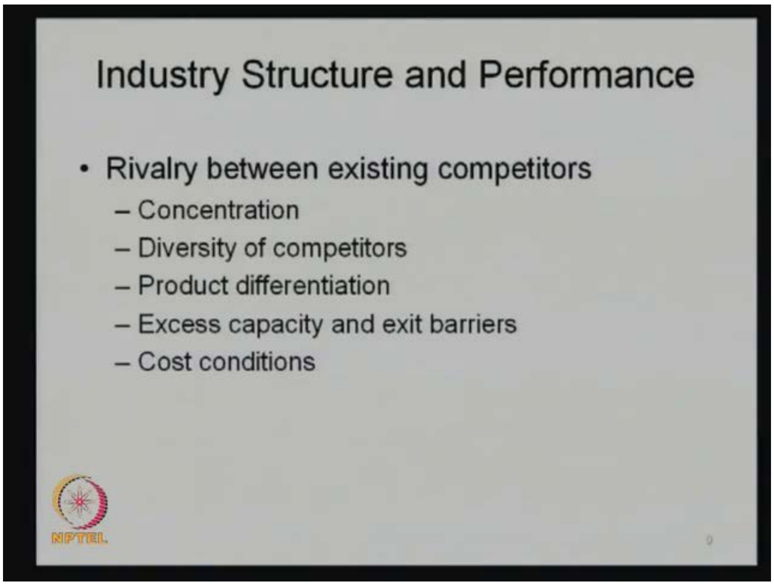

So, what happens in this case we talk about is the concentration. What is the concentration that is there in a particular sector, when we say concentration, the concentration is very high when you say that; that means there are very limited numbers of players in this particular market.

So, there is a lot of there is limited number of players are in the market then what happens, all the companies can join together and possibly rule the market as such and they can have a particular price which will be defined by the group.

If the concentration is very low; that means, lot of players are there in this particular product, in the particular product space or the industry then it will be difficult for them to come together and set the price for the market.

So, in that case if the concentration is very high; that means, limited number of players is there, the companies can collude with each other in that particular industry and set the price for the market and they can continue to have the advantage over the other player's potential players for that matter.

So that concentration which is high, it may be beneficial for it; may not be beneficial for the individual for the products, but is beneficial for the producers as such. So, a lower concentration means the industry may not be that attractive for that matter.

Similarly, we have got the diversity of competitors not that the companies are there, small number of players or good number of players are there, but how diverse are they or are they selling the same one single product or are they selling different products in that particular sector, single product may not be achieved because new new products can come up. So, if this diversification is high then it is also going to beneficial for the particular sector as such.

So, it should not be that when single product is poled in the particular sector and diversity of products will be sold by different players in the particular sector and extension of this diversity according to competitors is that the product differentiation as you discussed earlier, also the product differentiation has to exist there still different products to be sold. Let us look at the mobile handset for that matter.

It is not that there will be one type of handset available, there are different products, different handsets are available in one single company there may be limited number of players producing and supplying them, but at the same got different products if these mobile companies producers if they produce only single or may one or two handsets for that matter it be very easy for new players to come and produce the same thing as the moment they have got multiple products, as such they are diversified things, they have which caters to needs of different consumer segments that is going to be beneficial for the industry as such they existing players.

So, the product differentiation has to be there, one product has to be different than the others in something.

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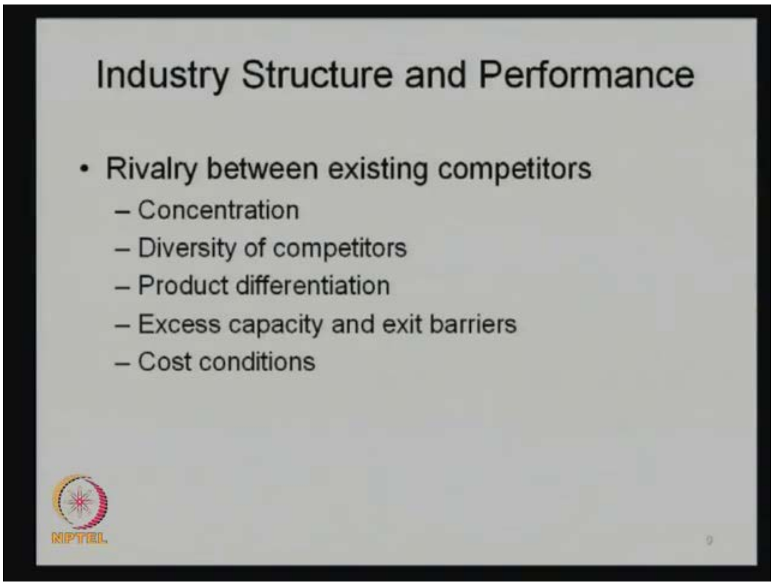

So, next we have got the condition on excess capacity and the exit barriers. When we say excess capacity the excess capacity is that particularly we feel at the time of recession as such.

Now, there could be a problem and there is a lot of excess capacity during recession. The recessionary period is going to be very I mean longer duration a company is with having excess capacity are going to have a huge losses because they have to have certain fixed cost to maintain the higher capacity level and it may not be possible for the companies to exit from this excess capacity and there is no exit barrier for that matter.

Because for instance if the company has got lot of work force and then there is a recessionary phase and the work force is there, will retrenched or they removed may be lot employ liability could be there. So, exit barrier in that case is going to be very high as such the company may not be able to exit as such, if this is the case then this particular industry is not an attractive proposition as such.

So, it should be possible that during this particular phase, where you have got excess capacity, one should get it of the capacity, how quickly under the exit barrier also has to be very less to exit from that.

Then we have another factor in this rivalry between existing players; we have got certain companies which may have fixed cost high or variable cost high, there may be some players who have got very huge fixed cost in proportion to total cost, there may be some players who have got lesser number of fixed cost.

Actually the presence of fixed cost that we discussed in some of the earlier sessions of this course, and the presence of fixed cost list, a concept called leverage presence of fixed cost and the operating cost is known as the presence of operating leverage.

So, high fixed cost is good and high fixed cost maybe good in the case when you have got large number of invest to be produced as such then you can recover that and for unit cost is going to be lower and the variable cost is likely to be lower in that case.

So, in that case what will happen, every unit sold after breakeven point is going to give a huge contribution, a very high profiteer contribution margin for that matter.

So, high fix cost is good as long as demand for the particular products is good and one can achieve a lot of economies of scale and produce the things at a cheaper price cheaper cost. So, that is going to beneficial, but if the condition of the industry becomes bad then company with high fixed cost is going to suffer like anything, that is one thing also one has to look at how much is the operate leverage operating use the particular company or the industry for that matter.

That is one thing the cost conditions could be favorable depending on the condition in the economy and condition economy is bad then high variable cost is going to be actually beneficial because once high variable cost is there the company can stop producing and save cost. If the high fixed cost is there, even the company produce stops producing the particular goods it has to go for paying the for the fixed cost as such.

Then we go to the next category of industry analysis, that is we talk about the pressure from the substitute products. So, what happens there may be one particular product which could have other substitutes to take care of that?

So, in that case what is the propensity of the buyer to substitute, can there be something, let us say our industry is produce a certain things and which can be substituted by some other new products going to come in some other sector for that matter, in that case if the high substitute is going to be there, then it is going to be difficult proposition particularly in case of chemical industry we may find there will be a alternate chemicals, may serve the same purpose. So, if for some reason a particular chemical is more costlier for the buyer to buy they may go for a substitute chemical available elsewhere in some other industry for that matter.

So, similarly there could be other substitutes where the price of the substitute is going to much lower and not only that the substitutes available, the price also should be competitive, it should not be that because it is available one can switch to another substitute, the price has to be little competitive as well as the substitute should also perform the same way as our particular products, taking care for the our customers for that matter.

So, in that case if that is not the case the substitutes are not going to perform well as far as our products are concerned, compared to our products then the substitute has no advantage as such, but the industry has to look at the substitutes available or not, and the moment the substitutes becomes available the industry has got challenge to make their product more cost competitive, means producing at lesser cost and produce supplying toward the lesser price to the customers, otherwise they are going to they will be seems to exist in the market because substitutes are going to replace this things as such.

Then we have got another force type of force that is called the bargaining power of buyers. When you say bargaining of power of buyers we say that the buyers as a whole have got lot of bargaining power. It is some way if the supplier or the producer of the goods depends more on the buyer and for some reason it is not able to, you know, price a particular product as for the suppliers we said rather the buyers this is taken care more than that then the buyer has got lot of power and there is a threat for the existing industry as such.

So, when you say bargaining power of buyers we talk about different things. The first thing I have to talk about the size and the concentration of buyers relative with the particular producers as such, if the number of buyers of the products sold by a group of companies and Industry is very limited; that means, no other buyer is going to be there. Then what happens, this particular supplier depend up on only that particular buyer then; that means, the buyer has the advantage than the supplier as such. So, if that the case it is going to be difficult, if the number of buyers are going to diverse more number of players are going to be there.

So, it is may not be possible for one single buyer to rule the market or the dictate the terms and condition for the suppliers. So, that is one thing one has to look at if for some reason only few players are allowed to operate in the particular sector and what about they are going to demand, that is going to be taken care, then it is going to be disadvantage condition for this suppliers as such.

So, then we have got another thing that is called undifferentiated products. That means, the moment we say undifferentiated products, it may be very easy for the buyer of the particular product to go from one company to another company and because the products hold by different companies are not different; they are actually same.

The moment the products are actually different that one is sourcing means switching from one product to another product may be actually difficult or may be there may be some of the cost also could be involved for the buyer as such.

So, as long as the concentration, as long as the products sold by the competitors are differentiated, then the bargaining power has going to buyer is going to be lower. If they are going to sell the same thing, as you discuss the undifferentiated products means is a commodity being sold and commodity is being sold mean anybody can produce and anybody can also source by anywhere as such. In that case, the buyers may not have any problem from switching from one thing to another as such.

Similarly, the buyers may have certain switching cost. for instance, if the buyer is using this particular material; could be a chemical, could be particular metal that is giving, a particular Industry, particular another supplier and as far as that is concerned, a particular type of machine, particular type of a factor set up is there.

Now, switching from this particular one product to another product and one supplier another supplier may be difficult for the buyer because the buyer just to stop sourcing particular product and go for another product as a raw material or as an input has to also change the entire set over the facility.

So, in that case, switching cost for the buyer is going to very high. And similarly, there could be also penalty clauses that you one has an agreement with the buyer and the seller and a seller may have expect and assure demand for the buyer, and the buyer who the moment switches from the one particular producer to another particular producer, in that case, there may be you have to pay penalty as for the buyer is concerned.

The switching cost in that case is also going to be high for the buyers. The switching cost is going to be there high for the buyer. it is actually beneficial for the Industry that you are talking about. So, that is one thing.

Then sometimes what happens the buyers have got may have lot of information; that means, actually if you look at the information theory or information asymmetry symmetry, any player in the market benefit out of information asymmetry, information asymmetry may not be healthy, may not be good for that matter, but that do exist in the market and people do take the advantage the information asymmetry; that means, what one person has another person does not have, take the advantage of that and possibly you go for a gain in the market for that matter.

Now, it is quite essential from the sellers' point of view that buyers do not know the cost structure of the particular product that is being procured by them from particular company. Buyer should not be knowing that there are number of who are the actual players involved. All those things buyer should not know. Then it becomes advantages for the supplier as far as that is concerned.

The moment the buyers come to know about different the cost structure, they come to know about different players that is there in the market as such, then they will have lot of bargaining power, and they can go for a lower price because they know; there are other players who are involved in this they also know the cost structure. So, they can accordingly plan as such. So, if there is an information available more if the buyer, then it is a disadvantage for the industry from where the buyers are actually sourcing their input that matter.

Then the next thing that you have is the buyers' ability to backward integrate. That is going to be the ultimate thing in a as a threat from the buyers. If the moment the buyer themselves are going to integrate their value chain backward; that means, they are going to procure on their own, they are going to have this input on their own, then it becomes a difficult propagation for the seller because the buyer themselves have got the source.

For instance, if there is a steel company, a steel company may be sourcing the iron ore from a particular mining company and it could be possible that the steel company has now bid for a mining iron ore mines and got the bid in their favor. What will happen they will obviously, stop procuring for the iron ore from the existing suppliers. They will have their own as such.

So, anything that happens like that where the buyer themselves are able to enter the input industry, then it becomes a bigger threat for the suppliers as such. So, that is something which supplier cannot do anything about, rather in that case the suppliers has to for alternate buyers for the particular products. So, that is something called the backward integration of the buyers facility as such.

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They good backward means they go for raw material, they source raw material on their own, they produce them for that matter and they no more depend up on the outside suppliers. That is another problem which can happen in case of bargaining power buyers and bargaining power buyer is going to be high in that case.

Next category of thing that we have is the bargaining power of the suppliers. Now, like in fact, in corollary to the earlier discussion that we had called bargaining power of suppliers, sorry bargaining power of buyers is; now this bargaining suppliers is exactly opposite here.

Now, the industries and company in a particular industry cannot be self sufficient from all the aspects are concerned. There could be different inputs that the supplier the companies may be requiring from different suppliers. So, it may be possible that there may be large number of suppliers for the input that the companies require or there may be very few number of suppliers for the input that the company is require.

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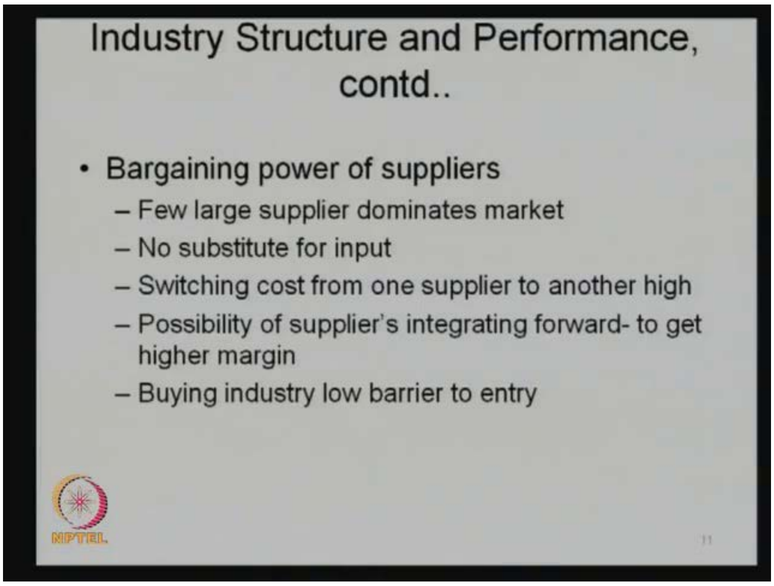

In that case what will happen? If there are few large suppliers or though they dominate the market then; obviously, it is going to be bigger problem for the companies. So, the moment we have got few number of suppliers, then what will happen; their input cost is going to be driven by the supplier than by the market by the producers for that matter. There may be specific chemical, there may be specific mines for that matter which may be only produced and sold by a particular group of entry.

There may be specific technology which is available only few players. In that case, if that is the dependent system, dependence is there as far as the producers has concern, then it will becomes a bigger threat for the exits industry. So, if the supplier numbers are very high; that means, what will happen; at least there will be good quality of products because there will be demand will be there for that particular supplier which are producers and sales the best quality product. At the same time, they will also go for these… buyers will go for those suppliers who is supplying at a cheaper price.

The moment more number of players are there, the moment very less concentration is there in the supplier group; obviously, the price is going to be least for the inputs procured by the particular Industry as such.

That is one of the desirable for an industry, but it might be there it may not be there as such. Then if for whatever reason, there is no substitute for the input. For instance, steel industry cannot depend anything on anything else other than the iron ore as such. There is no substitute involved, but let us look at the furniture industry, but now if you look at furniture industry, now we should has to have wooden furniture, now have got the plywood based furniture, you have got fiber or plastic based furniture, you have steel based furniture.

So, it is quite possible for a particular thing one can migrate from one input to another input because the other substitutes are available in that particular sector. In a food industry also there will be lot of substitutes could also be available.

So, in that case switching from one input another input could be easier, but if there is something where one cannot, but use only particular input given a particular supplier, then it becomes a very difficult proposition for the existing industry. So, if there is no substitute for the input, then it is more like supplier dependency as far as the buyer or depend on the particular Industry is concerned.

But if there is lot of substitutes are there for the inputs that the company is using for producing things, then it is a variable situation because given a chance depending on the circumstances, one can switch from input to another input, but there is also one more thing one has to look at that the switching cost should not be very high. Otherwise it will be there may be lot of substitutes available for producing the same thing, but the switching cost in terms of changing the facility, the set up may be very high so that though the number of different things are available in the market, the still the companies cannot go for switching from the input as such.

Now, that is what we talked about; the switching cost from one supplier to another supplier is very high, it becomes difficult for the buyer to switch from one another one input to another input or one supplier to another supplier.

Then, there could be a possibility that the suppliers themselves integrate forward to get the higher margin. Suppliers when they integrate forward means; now instead of supplying to the present customers, they themselves produce start producing with their input as such. Looking at the earlier case we talked about where the buyers go for backward integration, where as the suppliers now go for forward integration.

Another example that you talked about in case of buyers going for a going backward for backward integration is that if you look at the shopping malls, if you look at the food bazaar, you look at the big bazaar, you look the shoppers stop; we find there are lot of products sold by sold with multinational labels, establish players products are sold, at the same time we find there are lot of private level items.

So, what happens actually, this particular shopping mall, for instance the big bazaar may be one of the examples; where they source actually on their own and they have their own suppliers, they have their own set set up. Instead of depending up on others, they have their own sale manufacturing company and where they produce and they only do that. They do not depend up on the outsiders. In fact, they could rather slowly move towards...

Suppose certain products which are not the differentiated, people do not go for that particular product because there certain unique features are there because these particular products producers of particular MNC or very branded entity; rather it can be produce by anyone and in one can go for a switching from one to another supplier.

Then what happens, the private level products are going to be… they are from the as far as the retail outlets are concerned. So, that is another example where these retail outlets have gone for a backward integration. So, that instead of depending up on the suppliers, they have their own supplies in house as such.

Similarly, suppliers themselves go for forward integration. Instead of selling through the retail outlets, the suppliers themselves establish their retail network. So, instead of depending up on the retail outlets of other entries or may be big bazaars may be shopping malls for that matter, they have their own retail network.

And in that case, there let us like a forward integration as such. Similarly, instead of supplying raw material to other players, they actually use their raw material and produce this things that the other their sellers of their raw materials actually producing, instead of they supplying to them, they are now produce same thing what they are their customers is to produce. If that is the chance, they are the suppliers are concerned then as an industry what I am producing and selling; it may be difficult for you to sell tomorrow because is a number of buyers are going to be restricted, the buyers themselves are having their own things as such.

Then buying industry could have low barrier to entry. So, if the buying industry is having low barrier to enter the market, then is also going to be a disadvantage condition for the suppliers as for the exits industry is concerned. The moment they have a low barrier; obviously, they will enter the market and force very high competition use competition a market as such.

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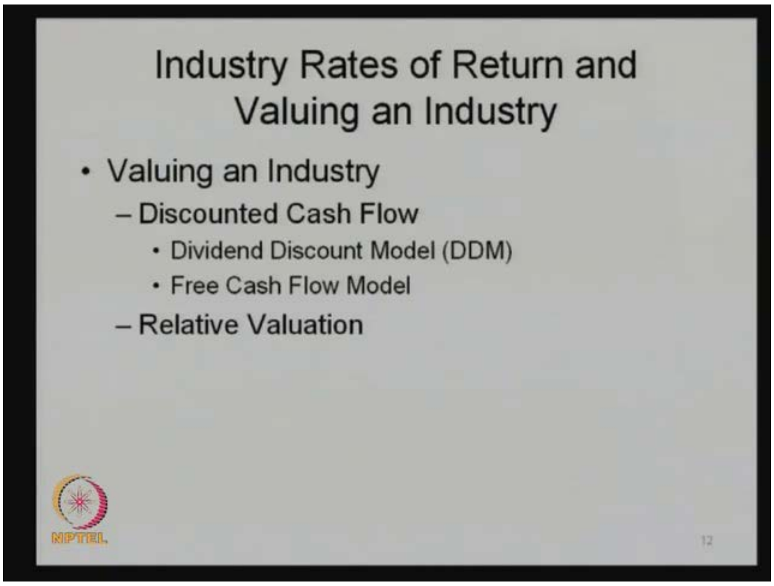

Next, having discussed different factors, different industry forces- five forces model like say substitutes buyers, pressure from buyer, pressure from the supplier, then the rivalry among the competitors now, we discuss to the different financial that we have in case of a particular industry is concerned. Looking at what we talk about here is a valuing an industry. Industry valuation is something like an from there, one can possibly go towards the company valuation. In industry valuation, we will now talk about something like dividend discount model as a part of discounted cash flow, then you have got something relative valuation approach, a dividend discount model, then we have got another model in this valuation is free cash flow approach, and in the dividend discount model we have here the ultimate form, the constant growth form of dividend discount model where you talk about the price which is nothing but a expect dividend divide by cost of capital minus the growth as such.

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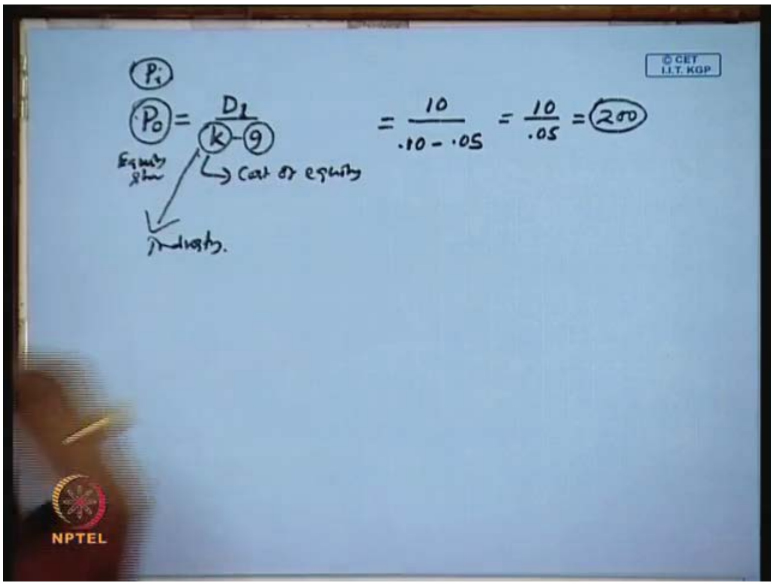

So, as far as you have discussed earlier in the valuation classes, we have talked about this as a valuation of company if the… this you are talking about price at a particular point of let us say 0, here we in this particular side we have to talk about the I; is a Industry access value, then P 0 in a generic model we had, this D 1 divide by K minus g.

The k is the return or the cost of equity because the price is related to share equity share. So, that is why it is this is called cost of equity, and this D 1 is expecting during the next year. So, for example, if the company is expect to declare a dividend of let us say 10 rupees in the next year, and the cost of capital is let us say 10 percent, and then we have got 0.05 is the growth, and then the value of the particular share becomes 10 divide by 0.10 minus 0.5 So, this becomes now 200.

So, 200 rupees is the price of the share. Now in industry analysis context, we are talking about the overall dividend to be declared and paid in the particular year in the coming year by the all the companies concerned in that particular sector. So, one has to look at how do they expect dividend to be declared by the company, and then subsequent industry together, and then what you look at the cost of capital in that case, we will talk about the cost of capital; this cost of capital from the industry's point of view, overall industry point of view and let us keep in mind this cost of capital is going to different from one company to another company in this particular sector industry.

Similarly, the growth is nothing but the growth in the long term growth in the dividend that is going to happen in this feature period to come, and this growth is talking about in industry, and this growth can be different from one company to another company.

So, that is one thing one has to look at, looking at the past performance of the different companies in this particular sector, then from there one can look at the past performance then the expectation and the same model that we talk about for company valuation like for the cost of capital for the companies point of view, same thing can also be done for the industries point of view.

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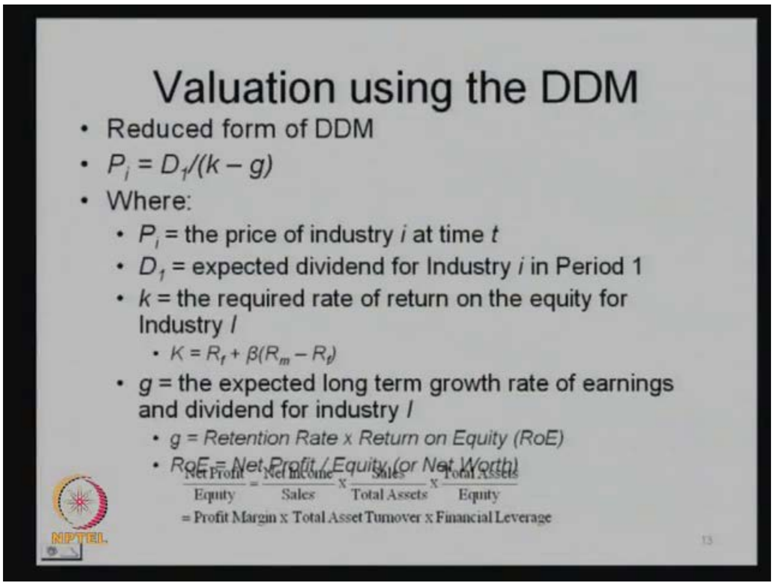

For instance, then as for the cost of capital is concerned, one has to look at this famous capital asset pricing model can be applied; CAPN where you talk about the risk of rate of return, then beta and R m minus R f. R m is the rate of return from the market index and Rf is the risk rate of the like garment security yield or (( )) security yield or may be treasure build yield; depending on the time period is concerned. So, and beta we can we use to have beta as far the company is concerned.

Now, one can also have the beta as per the industry is concerned. So, one can have an indies, particular indices for a particular industry and can regress with return on this in particular sector index on the return of the broad indies like sensex or nifty and find out the beta for the particular sector as such.

And there we can have cost of capital, and subsequently then we need g. g is the growth rate growth rate function of the retention rate. Retention rate means how much profit is retained by the business after declaring dividend, and then multiplied return on equity gives the growth as such. So, retention rate into return on equity. Now returns on equity which is nothing but the net profit by equity.

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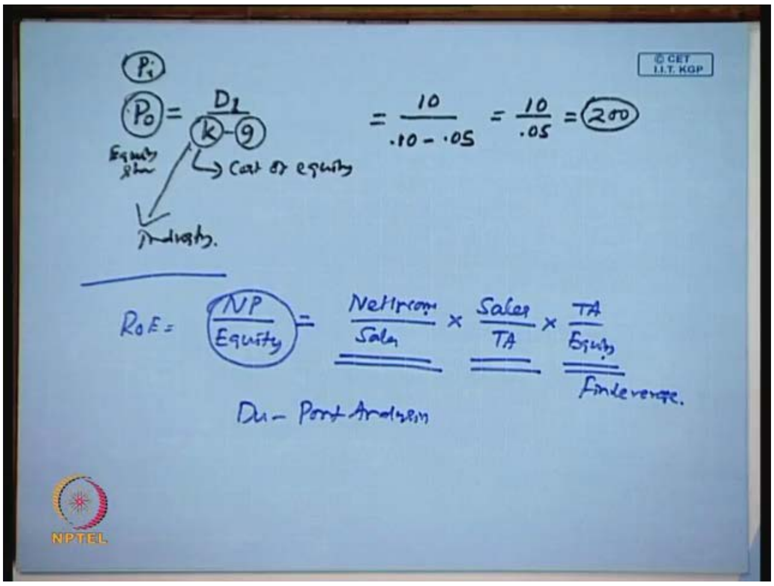

When you talk about that, so, return on equity we talk about is a net profit, profit of rate divide by the equity which is nothing but the net worth and in fact, we have discussed earlier this net profit of equity is a function of different things like we have net income or net profit to sales, then we have multiple sales by total assets, then we have total assets by equity. So, if you look at, the sales sales get canceled, total asset also get cancelled.

What remains is net profit on net equity divide by equity; that means, return on equity is a function of net profit, the profit margin.

The asset will (( )) called turnover ratio and the total asset by total equity is nothing but the is known as financial leverage. So, these three things as a together which is part of something called is called Du-point analysis and these three things together are going to affect the return on equity.

So, one has to look at how these three different things are there as far the industry is concerned, then one can forecast return on equity for the Industry has a whole.

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Financials of Select Industries

Year	Asset Turnover			Net profit Margin (%)			Return on Assets (%)			Total Assets / Equity			RoE or RoNW (%)		
	Cap. Goods	FMCG	IT	Cap. Goods	FMCG	IT	Cap. Goods	FMCG	IT	Cap. Goods	FMCG	IT	Cap. Goods	FMCG	IT
1999-00	0.93	1.57	1.04	6.84	10.98	22.40	6.33	17.19	23.33	2.97	2.14	1.83	14.88	27.85	28.65
2000-01	0.94	1.43	1.00	7.43	8.97	27.87	6.97	12.83	27.77	2.88	1.96	1.63	16.75	23.25	27.58
2001-02	0.90	1.50	1.03	5.90	9.51	27.39	5.34	14.22	28.26	3.21	2.03	1.94	12.77	29.57	24.50
2002-03	0.91	1.47	1.17	5.98	8.39	43.31	5.43	12.37	50.83	3.15	2.02	2.04	11.84	26.49	19.55
2003-04	0.98	1.57	1.32	9.05	9.71	57.61	8.87	15.27	76.10	3.23	2.20	2.41	18.57	35.80	43.13
2004-05	1.12	1.54	0.97	8.55	10.67	18.14	9.54	16.41	17.63	3.02	2.31	1.62	21.17	39.22	22.95
2005-06	1.08	1.45	0.91	9.75	11.16	18.06	10.53	16.17	16.38	2.75	2.18	1.65	23.42	37.17	22.47
2006-07	1.10	1.47	0.88	10.40	12.85	20.12	11.49	18.94	17.67	2.76	2.28	1.79	25.88	41.56	21.56
2007-08	1.05	1.39	0.91	11.35	12.95	52.43	11.96	17.96	47.56	2.53	2.45	2.02	24.78	46.84	25.98
2008-09	0.93	1.36	0.86	9.97	10.95	21.71	9.28	14.86	18.70	2.71	2.21	2.01	21.09	36.46	23.31
Average	0.99	1.48	1.01	8.52	10.61	30.90	8.57	15.62	32.42	2.92	2.18	1.89	19.12	34.42	25.97

Source: Prepared with data from CMIE-Prowess

Then if you look at in this slide, we have different figures. we have taken three different indices like capital goods, FMCG and IT, we find different ranges of asset turnover is average is 0.99 1.48 over period time. These particular figure is average of different companies that particular sector in that particular sector, the ratio has been taken and then the grand average has an found on different time period is concerned.

Now, like that, it is has been done we can see here return on equity for the capital goods is 19.12 which is 32.42 FMCG sector and 25.97 is for the IT sector. This data actually relate to certain number of small group number of companies, number of companies change the figures may change, but these are show that the different industries give different performance as such.

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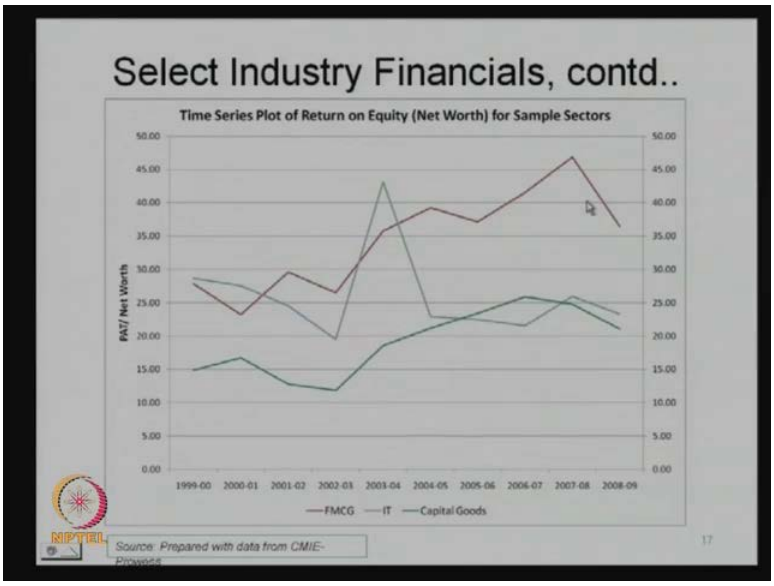

Then if you can look at we have plotted that we can see here sales to total assets. We can see there is a more of stable, they have got almost stable thing as far different industry is concerned like this FMCG, this is capital goods, and this is IT looking at… The next parameter that we have, we have got the capital IT Industry, if you look at the profit margins quite volatile over a period of time whereas, for the capital goods and the FMCG is more stable across the time period.

Next we have is the return on network where we see return on network has changed over period of time is increasing whereas, for the IT it is lot of a peak wise; there will big high rate of return of equity was there in the 2003-04 which has now substantially come down whereas, in FMCG it is higher. This may be little average on that FMCG is giving high rate of return compared to IT. May be is because a particular sample that we have considered in this particular study as graph as such.

Then we have the financial leverage. As usual you can see capital goods have got high final leverage, IT sector has suppose to known as low financial leverage, and the FMCG is input in capital goods and this one. So, is on the IT. So, this is has to say that the different industries have got different financial ratios also.

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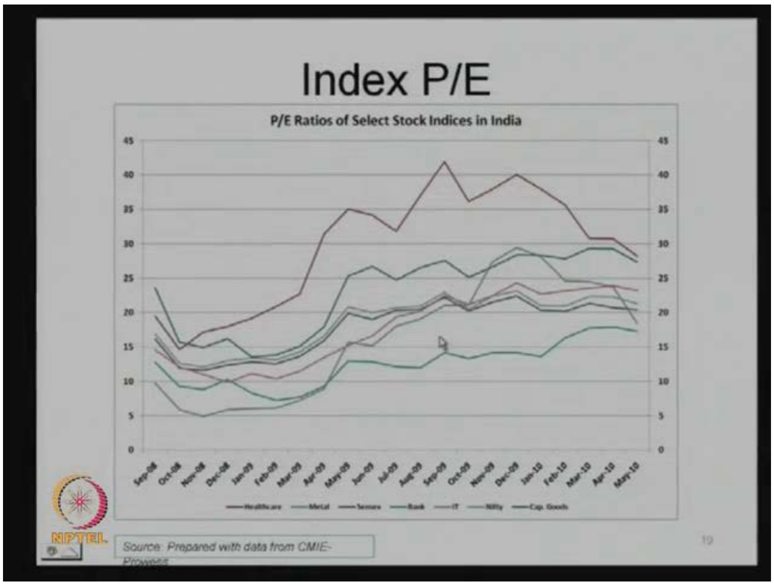

Now, the next thing that we have got is the relative valuation measure index. In that case, we saw plotted the price earnings ratio of a different sectors, and you can see that the here this is another is called health care, this is say IT sector here, then we have plotted some here like this the sensex and nifty; the price earnings almost parallel also they are moving up they are lower up steamer is in go peak to September 2009 and may 2000 is stabilize as some 20 something between 15 and 30. This is the price earnings ratio of different industry indices.

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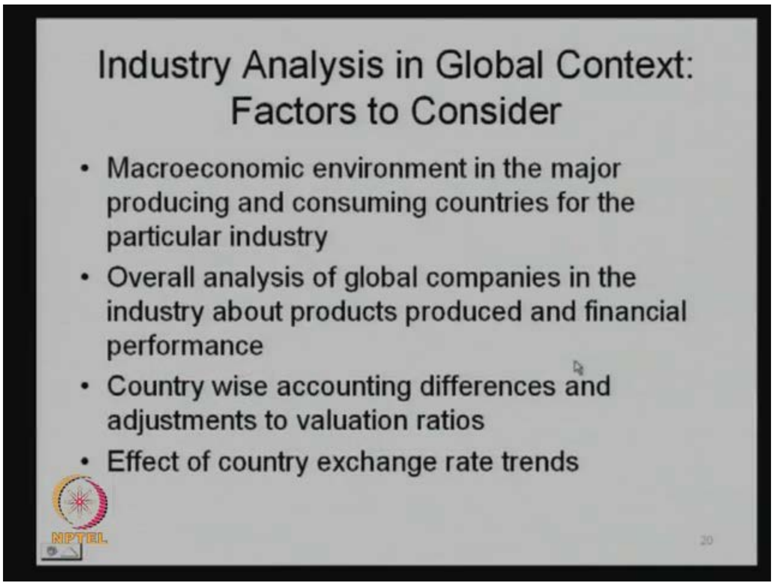

So, this is another thing, and as far as the Global Context is concerned, see the there are different industry which have got different inputs supplier across the world. So, for as far as industry analysis global context is concerned, one has to look at the major producing and consuming countries for the particular industry, and they are how they are economic environment, what are the different players in this global companies, and what are their financial performance, what are they are what are the different products were produce.

And different accounting differences may be there in different countries one has to do the adjustments to go for a valuation ratio for industry. It cannot be comparable from one country to another country, one has to do the accounting adjustments, and also one has to look at the exchange rate effect as far as the particular Industry in particular country is concerned.

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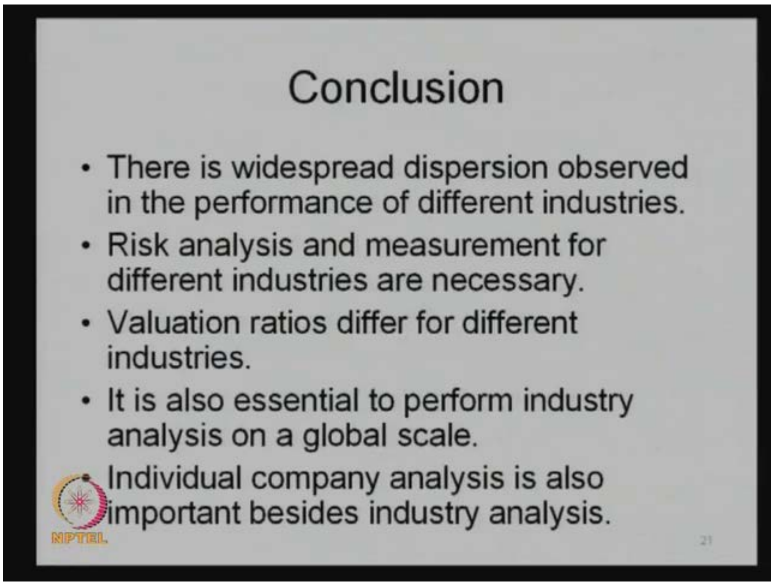

Now, concluding our session we talked about in the last two session industry analysis, we found that there is lot of widespread dispersion the in the performance different sector. We also saw that the different industry have different risk phenomena, different risk is more or less depending on different industry.

We also saw that the valuation ratio is different from one sector to another sector, and also saw that essential to perform the industry analysis global scale. They do have certain new things to observe in that or techniques to follow, and at this same time, having done the industry analysis also necessary that individual company analysis also has to be done beside the industry analysis which we are going discuss in this subsequent session as a part of company analysis. Thank you.