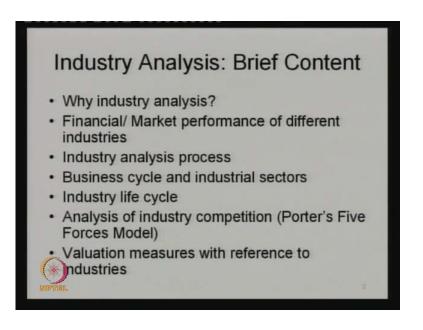
# Security Analysis and Portfolio Management Prof. C. S. Mishra Department of VGSOM Indian Institute of Technology, Kharagpur

## Module No. # 01 Lecture No. # 15 Industrial Analysis-1

Hello, in the last few sessions, we talked about industry economic and industry analysis as an EIC analysis known as which talks about economic, industry and company analysis which is part of fundamental analysis for a company stock. We first discussed about economic analysis, they are talked about different trends in economy in this session and the subsequent session, we are going to discuss about industry analysis, how industry performance is going to be observed and affecting the company's performance, where the company belongs to particular industry.

(Refer Slide Time: 00:52)



So, in this session we will have the as a part of Industry analysis, we are talking about why we should go for industry analysis and what will be the performance in of different industries in the particular economy; how do you do industry analysis for the process involved in that and what is the relationship between business cycle and industrial sectors, then we talk about industry life cycle, and then, we will talk about we discuss about industry computation with the help of Michel Porter's Five Force Model and subsequently last, we will talk about different values and measures with reference to industries in a particular country like India or elsewhere for that matter.

So, coming to the subsequent slide, we talk about why we have to do an industry analysis as such. This industry analysis is the second stage of EIC analysis, where EIC analysis is known as economy, industry and company analysis. So, having done the overall economy analysis, where the company belongs to, then we look at the sector where this company is going to belong to actually. And in fact, some of the analyst will be there; some of the investors may be there who are very specific about particular sector, like some of the investors or analyst may be interested only in IT sector or manufacturing sector in manufacturing and automobile or steel for that matter or may be some of the people may be interested in the investment banking sector for that matter.

So, in that way, before they go to analyze a particular company in that sector, they will like to look at what is the prospective that particular industry in the present scenario or what is the likely performance going to for the industry in the subsequent time period, then if that industry is particularly attractive for them, then they go for the particular company in that particular industry as such.

So, this could be the in fact, we will find that some of the people specialized in this particular sector like analyst people, if you talk to them, they will say we I am an oil sector specialist or a IT sector specialist. So, they will be in their career, they will be doing a thorough analysis of the particular sector and besides the economy as such, they will be looking at, they will be focusing on a particular sector as such and they will suggest the clients about the stock in that particular sector as such.

Then we move on to the next thing that why we go for this. All industries in the particular in economy may not be performing the same way as such some of the industries may be performing better than other industries. So, in that case, if all the industries are going to perform the same way as the economy is performing, then industry analysis has no relevance as such; you can choose any company across the sectors different sectors if the company is good to invest as such. So, you are you no need to have industry analysis for that matter.

**So,** then we have got something like what is the relationship between market and individual industry. If the industry return is commensurate or is something like similar like market (( )) observed norm or it is something different than the market trend.

If the industry returns, industry performance some way counter to the economic performance, overall growth may be there; but in that particular industries, the particulars may be a counter stock or counter industry where it will be a contrarian sector there. So, there will be just when the economy is actually going up, moving up that particular industry may be down as such. So, in even if that particular trend is observed, then also one can look at the particular sector, a particular point of time in the business cycle.

Then what are the different risk involved in alternative resource, one should look at what are the risk is in the different industries or the all the industries are same risk prone or they are different risk prone as such some of the industries may be very less risky, some of the industries may be very high risky.

So, high risk of course, will be the high risk there is the potential of higher return. So, a risk taker may go for a high risky and high risk industry in the very moderate industry as such. So, that is why one can analyze the industry in terms of risk also in the return and risk and finds out which particular industry may be suitable a particular investor as such.

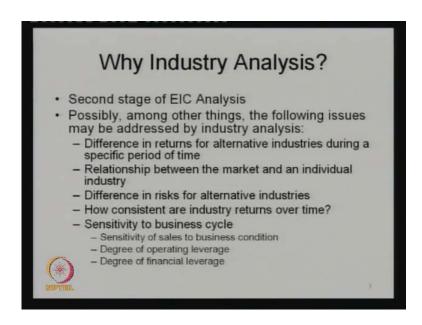
Then we will also look at how consistent that the industry returns over time, is this industry return that you are talking about is consistent, that means, whatever is happening, the trend happened that is going to happen if that is the case, then one can be certain about that or there is quite inconsistent whether a lot of variation is possible and accordingly the portfolio management can take place.

Then looking at the industry analysis, we would talk about one of the very fundamental thing that talked about is how a sensitive is this industry to business cycle change. So, business cycle change means business cycle may go up from recession to a peak and or boom for that matter, then again it may fall down, then the cycle may go for true and there it could be a recession or contraction in the sector as such.

So, how sensitive is the growth in this sales or revenue in this particular sector to change in the economy, is they economy is going up with this particular sector sales is also going up, that means, we can say they are exactly cyclic allocate there is exactly same as what the economy is happening.

So, if the economy is going to boom up in subsequent period as we expected, then it is like then one can go for this particular sector, because this sector is also going to go up in the subsequent period and the economy is going to go up. So, if you can find out one can find how sensitive is that, if there is a change in good change or whatever favorable or unfavorable change in the particular economy, how sensitive is this particular sector to that.

(Refer Slide Time: 06:36)



Besides that there are two things one can also discuss, one can link here that is what is the operating leverage or degree of operating leverage as well as what is the degree of financial leverage of a particular sector or on a particular for that matter.

When you talk about degree of operating leverage, we talk about what is the presence of fixed cost in the total cost structure a particular company or in the overall industry as such. The fixed cost is very high relative to any other industry any other company for that matter and variable cost is low in overall cost structure in that case, we can say that particular company or industry has a high operating leverage.

So, in such case if there is going to be smaller change in the expected revenue, then in that case there will be major change in the expect a profit of the particular sector or particular industry or particular company for that matter. So, how what is the operating leverage particular company or particular industry in that particular situation? So, in that case similarly what is the degree of financial leverage? If financial leverage comes from the phenomena, the company has certain debt in the capital structure and the financing structure. So, since debt is there, there is going to be an interest payment. So, if the for any reason if this particular company or a is going to pay the interest as such.

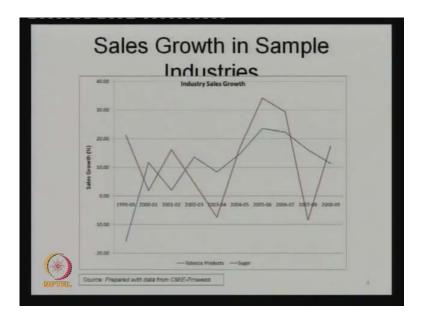
Similarly, the company is going to have or this particular sector is going to have a very huge growth in the revenue, the company is not going to pay more interest, because there is a going to be higher profit or higher revenue for that matter.

So, high degree of financial leverage or high degree of operating leverage will benefit a particular sector or particular company in a very good condition. Similarly, it can harm a lot if the particular condition is that bad or there is going to be if the degree operating leverage, let us say 1, then in that case we can say that if there is any change in the revenue to the extent one percent, then the profit is going to also change by operating profit is going to also change by one percent. But the degree operating leverage is two, if you can measure that is a two, then that case we can say that there is one percent increase is going to there in the revenue, there will be two percent increase in the profit or operating profit.

Similarly, degree of financial leverage also can be interpreted like that, if the DFL is going to be more than one in that case, **if** in a favorable condition this particular company or this particular sector is going to benefit **and**, but whereas, the condition is going to bad, the company is going to lose a lot for that matter.

So, one has to look at **how** what is the DOL or the DFL of a particular industry or particular company in that particular context. So, it may be advisable that one can aware high operating leverage or financial leverage companies during a particular period like a contraction recession or the down turn is going to happen in that particular sector. So, that is one thing one has to look at before while analyzing the industry for that matter.

### (Refer Slide Time: 09:29)

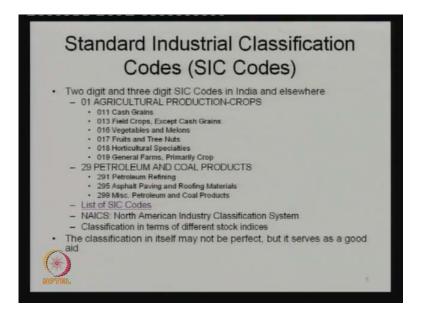


Then we move on to the next point. We can be see here in this graph, we have two sectors Growth in Sales one is a tobacco products; another is a sugar as such why we have plotted this graph is that, it is not necessary that all the industries will be performing in the same manner. This is an example that in a particular period of time let us say in the period like 1999-2000, there was a high growth in sugar, whereas there is a fall in the tobacco industry.

Similarly, you can see for a particular almost up to 2003-04, we can see here that these two particular sectors are moving in opposite direction, that means, there is a growth high growth; here there is a negative growth here in the tobacco product; whereas there is a growth high growth in tobacco products there is a lower growth in sugar as such. These are two sample example is need not be we cannot say say that this particular s n up's holds good for all the time taken; this example to show that different industries growth can be different in a particular period of time.

So, in that case it may be advisable for that investor to switch from one particular sector to another sector depending on the performance of different sectors, which we will discuss little more in subsequent slides.

#### (Refer Slide Time: 10:47)



Next we see here before we go to industry analysis as such, the industry or the entire economy is part of lot of certain production activity and service activities, then infrastructure sector could be there. So, many different sectors of production services are there. So, all this sectors have not classified in a particular manner there are certain code for standard industry classification code, which is almost same or almost common in different countries as such.

So, **if** we can look at, there are two digits here, 01 talks about agricultural production crops, **then** in that you have got different sectors like 011 talks about cash grains like, then we have got 013 which is field crops or except the cash grain, then 016 which talks about vegetables and melons, then we have fruits and tree nuts.

So, in a particular broad sector of agriculture, we have got subsequent classification in fact, in these three digits also you have got another digit, then that will be comes talking about some other sub classification in general forms like that. So, they will have last three digits as 019, then subsequently one more digit will be there.

Similarly, if you look at the petroleum products, there is an overall two digit code is 229, then petroleum refining has got 291. So, like that different industry codes are there, this is a classification done priory. So, that there is a comparison and one can find out that yes, this there is a proper analysis can be done and we can categorize the particular

company in a particular sector so that we can say for this particular company which particular sector has to be looked at.

(Refer Slide Time: 12:32)

And this particular code is also you have also some similar code like NAICS like North American Industry Classification System, this codes are almost same and one can have a look at the industry codes a sample of that, one can have here you can see that, there is a agriculture product, then second category comes agriculture production life stock, then we have got seven category agricultural services; the coal mining, oil and gas nonmetallic minerals all this these are two digit codes. Subsequently, we have three digit and in again in three digit, we may one may have on some other classification in that particular sector, like in this case your dimension stone part of this fourteen two digit fourteen nonmetallic minerals and diamond stone also may have multiple sub classification subsequently.

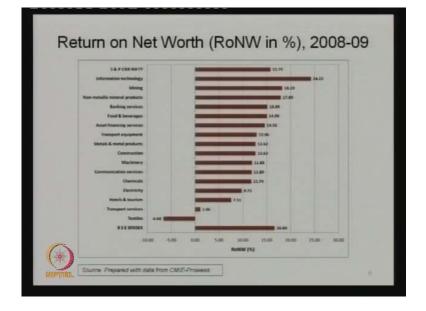
So, one can have a look at that and this is common as such and this helps in the export trade also and we have a two digit code, three digit code in that particular sector. So, we can have a comparison and also across the country in which what particular sector this particular company belongs to.

Then. So, having talked about different sectors, we have also another classification in terms of different stock indices, certain stock indices like Bombay stock exchange has its

got different indices like IT sector, pharmaceutical sector, reality sector, bank or financial services sector like that. And they also make a classification on different company, different indices and so that they can track the performance of particular indices and similarly, in national stock exchange, Indian context has also in different indices for different sectors. Besides the broad based index like nifty, similarly, broad based like senses besides that which is a very diversifies broad index they also have different sectors specific indices.

So, one can look at the performance of those indices as which will represent as a particular industry as such, then, but one note one can have here is that this particular analysis may not be very much perfect as such there may be some ambiguity, but it have solves as a good air for the analyst fundamental analysis; at least we have got a narrow down to a company is find (()) in a particular sector as such.

Another limitation could be that, it is not necessary that a 100 core turnover company particular sector is comparable with a 1000 core turnover company or an old company in a particular sector is compared with a new company. So, such limitations do exist for industry classification, but having said that, it does serve as a very good aid for a fundamental analysis.



(Refer Slide Time: 14:52)

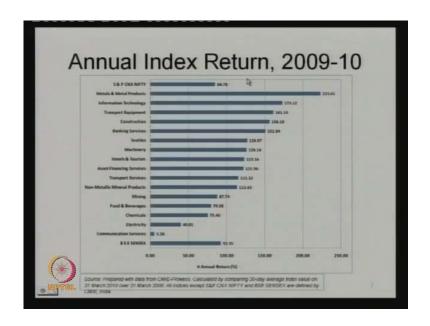
One can see an example, I talked about the different sectors may be performing in a different way, if you look at this particular slide, here we have got two broad based Index like SNP, CNX nifty or nifty popularly known as which comprises fifty stocks which has given 15.75 average return on net worth in that particular compared to all the 50 companies 15.57 percent return on net worth is there.

And similarly BSE senses has got around 16.60, so there are almost same returns they have afford the as a group, whereas in that if you look at the other indices, other group of industries like information technology has a highest. In those companies, in that particular sector on average has given some 24.2 percent return similarly, we have got 18.19 percent from mining, then 11.8 percent for machinery sector or machinery index, then we have 1.06 is very small return that has been given transport services and textile sector has giving something like a negative return in this particular time period.

So, this particular graph shows that the chart shows that yes, there are different industries which perform differently at a particular point of time; it is quite likely that whatever performance we are seeing in this particular graph, may be something different in subsequent time period.

So, it may happen so that the IT sector may give a later lesser return in subsequent period of time. So, this is time subject to a particular time period; it is need not be that is going to be consistent over a time period, but you see in the it is a that was shows that different industries give different returns for the investors in a particular point of time. So, that shows that industry analysis is important if they were giving all the industries were giving same percent of the return, then that case industry analysis was irrelevant for that.

### (Refer Slide Time: 16:43)



Another major that one can look at here is the annual index return for 2008-10. So, what you have done here in this case, we have taken the closing average closing value on 31 march 2009 for this different indices including the two broad based indices like senses and nifty.

And we have also taken the figure on 31 march 2010 that is a monthly 30 days average on that period of time and these two values have been compared and having compared one can see here there is a 84.78 percent as far as the nifty is concerned as 84.78 percent return has been there in one year.

Of course, this high return is possible, because in 2008-09, we had a downtown, the heavy fall in the market. So, because of the lower base 2008-09 itself, we have got a very high return in 2009-10 in one over a period of time.

But having said that we can see here this broad based indices like nifty has 84.78 percent and BSE senses has something like 92.35 percent, but if you have if you could compare if you let us say one takes this BSE senses or SNP nifty as a benchmark, we can see a certain sectors like metals and metal products or IT transport equipment, they have outperform from the broad based indices like anything, they have given more than double the return that the broad based indices have given. At the same time there are certain sectors like food and beverages, chemicals, electricity and communication services why are the overall return actually has been lower than the benchmark returns like see nifty or senses for that matter.

So, this shows that again another proves that different industries give different performance, different returns for different people at a particular point of time. So, all the industry does not perform in the same manner as the broad based or the broad economy is actually performing. So, this highlights the importance of going for an industry analysis as such.

Having done this, saying having said that yes, different sectors offered different returns, it is not necessary that in their particular sector like let us say for example, in this case there is a construction sector where couple of companies is a part of the construction sector indices here, which has given overall 156.19 percent, where is not necessary that all the company that is part of this construction in index will be giving same 156.19 percent return, all this companies may offer a different returns as per the companies are concerned.

So, in the industry itself also is not necessary that all the companies will be giving same return in the industry; one may again go for a company analysis to find out which particular company is going to be better company compared to other company in that particular sector. So, having done the economic analysis and industry analysis, it is also pertinent or important to go for this specific company analysis, then zero on a particular company or group of companies to be invested as a portfolio for that matter.

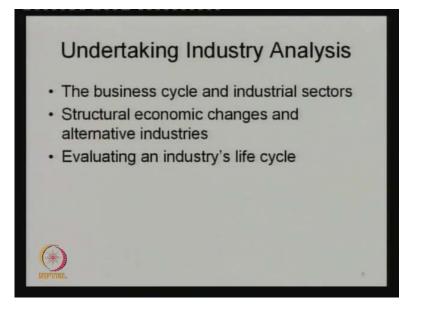
Then we talk about what are the different steps, what are the different processes is involved in when you one will look at industry analysis. One is that you can look at is the relationship between the business cycle and industrial sectors. For that the industrial sector, particular industrial particular sector is moving and tandem with the overall economy overall business cycle or it is just counter or its contrary on to the particular sector or they are just may they may be leading ahead of the overall economy or they may be lagging behind the economy. So, if the economy is going grown next year, possibly this particular industry sector may grow subsequently or as a reaction to that. So, like that one has to look at what is the relation between the business cycle and industrial sectors, then one has to look at is there any structural economic change that is happened. Already industries have taken place new technologist have compared the in a particular sector in a particular industry, this particular change might have taken place.

There may be certain products which may become very much obsolete because of the technology that has taken place, there may be new products, there may be new technology or may be new service; it have come up because of different changes in the lifestyle possibly or the technology for that matter.

So, those also have to be looked at because we may find a particular industry be attractive now, but it may happen so that after 2 or 3 or a 5 year. So, that matter, this particular the product sold by this particular industry may become redundant as such.

So, those industries may not be good value proposition to invest as such. So, those things also have to be looked at beside the responsiveness of the industry in a particularly in the business cycle or look at how this particular industry is going to be very much competitive or there is lot of people who are involved there or the products that has been sold are going to be just, it is going to resist to exist or they may not be just acceptable for the or like by the customers, the customers simply may go for a substitute for that matter.

(Refer Slide Time: 21:39)



Then we look at we looking at the industries life cycle, there are different stages of life cycle with the particular product is introduced; now it may go for a initially lower growth, then it go to very high growth stage, then the growth may stabilize after some point of time, then it may go for a decline as such.

So, how (()) in this particular, if I am looking at an industry in what stage is this particular particular industry is there or the products of this particular industry is there that also has to looked as if it is in growth phase. Obviously, it is in attractive profession, if this particular industry in decline face, there is an indication, that is, we have already invested a particular stock in that particular sector which exit from that unless there is a growth possibility one should not stay invest in this particular stock.

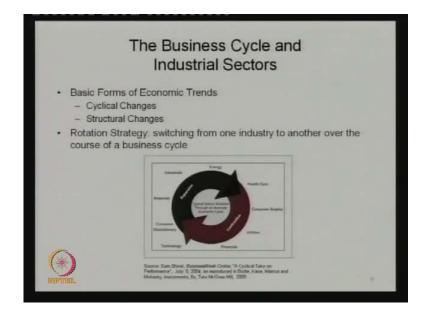
So, this lifecycle also going to help us at what stage we should invest and at what stage we are going exit particular industry, which particular sector we are going to choose in subsequent time period also.

Then one we will look at that the competitive environment in an industry we will use, we will talk about the Michel Porters Five Forces Model, which talk about different factors that affect the industry competition rivalry for that matter in a particular country or in the industry for that matter, then coming to first phase of industrial Industry analysis, we talk about the business cycle and the different sectors for that matter.

So, in a business cycle context, before we talk about that we have got two fundamental forms of economic trends as we discussed one is there is a cyclical changes in commensurate or like the business cycle that is happening, another is that in the structural that the particular industry the structure may happen because of technology or demography the structure of the industry may go for a change as such. So, there are two trends which can happen.

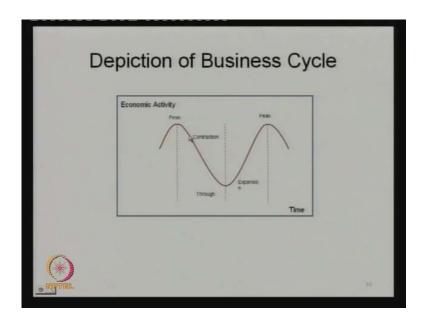
First we talk about the cyclical changes and how different industries move in tandem or opposite or whatever how we are going to go for different industry in for this business cycle changes are taking place.

(Refer Slide Time: 23:40)



Then And because if you go for a cyclical changes, you can know that what is happening, then one can go for a something like a Rotation strategy, where one can switch from one particular sector to another particular sector as if their particular sector is not going to be attractive.

(Refer Slide Time: 24:00)



Then we can see here, before you go to this particular graph, we can see this a business cycle here in this case, we have got something like a peak, then you have got a contraction happening, then you have got the through here, then you have got expansion and subsequently we have got a peak again.

So, then this is the time period and this is the economy activated that is happening now. If you look at this particular peak time period, there may be certain sectors which may be actually very much attractive, there may be some other sector which may be attractive in contraction phase, there may be some other sector which is happening the through or some of the some of the sectors which may be attractive in expansion phase similarly like peak phase is happing.

For instance, if the company is there is a recession is going to happen is likely to happen in that case, the financial services sector they may have a better opportunity as such. Because if the recession has already come to a lowest phase as such, that means, there is going to be likely have some other activity, where you will have more contraction is with more expansion is going to likely happen recovery is going to takes place.

Then what will happen in that case? The companies going to invest in different projects capital goods sector is going to be looking up and because a capital goods sector will have more funds as such, the banking sector may go for loans to be given to different clients. So, this particular sector is going to go up.

Similarly, if there a recovery is going to happen, then lot of merges acquisition can also take place and the lot of merges acquisition take place means the financial service industry investment banking say industry is going to be beneficial.

Similarly, when you talk about the recession has taken place, the contraction has taken place in that case, we will find that consumer durables goods or capital goods all the sector are not going to better good, because there is not going to demand, because the disposable income itself the investors is very low. So, they like to go for basic necessity like food and basic food sector or basic pharmaceutical or health sector for that matter to some extent.

So, they are going to be the better sectors compared to others; it is not that this sectors are going to do exceedingly well, but they are going to be better compared to other sectors as such. Similarly, when the economy is going to look up there is or the economy as has got expansion phase, it is likely that the inflation is going to be there in such per type of sector. The basic metal sector or basic industry sector which is produced, which is supplying the raw materials to the different productive the sectors as such ,they are

going to benefit, because they can possibly get a higher price for the raw material that they are having as such.

So, they this particular sector is going to be better as such, because they can pass on their price higher cost, they can face a higher price because of the inflation that has taken place at the same time if there is a higher already inflation is taking place and there are industries like banking sector they are going to suffer as such.

So, like that looking at the different season, different cycle one can go for that and to after that one can go for rotation sector and you can make a summary of sector rotation here in that. If there is a peaks season, then we can go for something like a natural resource extraction firms, because they can have a better price for their products or they they have got the raw material for that matter and they can pass into the supplier for that assuming that they can pass on this particular cost of the supplier and they will have a higher phase higher phasing higher price for their metal supplied.

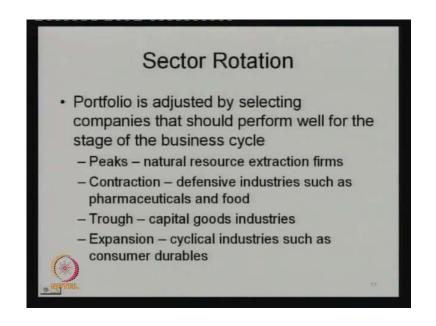
Similarly, in contraction phase, a defensive industry like pharmaceutical pharmaceuticals or food basic essential sector are going to be better, because people will consume this things and so this sector is going to be relatively better than other sectors. As we discussed earlier, it is not that they are going to be much offering very high return for that matter, but their return is going to be likely to be higher than any other sector in that particular period of time.

When there is a true phase as such, they need that case because that is already the contraction has taken place. If you look at the graph here the through has happened here, so there is already a contraction that has taken, ultimate fall has taken place. Now, there is going to be an expansion, because there is an expansion happening going to happen, then obviously, we will go for those expansions require certain fixed assets investment certain capital expenditure. So, the capital goods sector will look up, because there is expansion is going to happen elsewhere. So, they will have an expansion now as such.

So, this particular sector may be attractive when the expansion is likely to happen other sectors as such and when the expansion are actually takes place, then the cyclic industry like consumer durables, because in the expansion phase, the investors disposable income is higher they can spend more now. So, they can go for now like consumer durables like

TV, refrigerators electronic products, because they can they have more savings in their hand because the disposable income is more.

(Refer Slide Time: 29:13)



So, they can go for that and in that case and the cyclical industry is going to be benefiting for a particular sector. So, once you have this particular stages of business cycle, it is not that during a particular peak we should go for that, if the beauty of this particular industry analysis is that or the intelligence of the analyst is to be proved. When when you can see that the peak is going to happen, then just before that particular and the peak during peak season that if I am talking about natural resource extraction firms are going to do better.

So, before just the **peak** season peak takes place, then one should go for investing this natural resource extraction firm not necessarily that when actually the peak takes place. So, one should be intelligent enough to find out what is the likely industrial growth or a likely business cyclic change in subsequent period of time, then now we choose for that. Because in that case, they are going to do better in subsequent year as such it not necessary; it is not may not be worthwhile to go for investment actually when the trend has taken place, we should preempt that what is going to happen in subsequent time period then go for investment.

Similarly, if you can preempt that, there is going to be decline and this decline in the business cycle is going to happen and the because of decline business cycle, this particular sector and particular sector is going to also decline. In that case, it is advisable that before the decline trend comes may be during just decline starts takes place or when the industry has already gone to peak, the cycle is already in a peak condition; it is better that one should exit from particular sector as such, because they are going to be same like the what is business cycle. The business cycle is going to fall, this particular sectors in revenue is also going to fall, this is better that one exit.

So, one has to preempt this particular moment in this sector than just saying that yes this particular sector is going up or coming down. So, one should see how it is going to happen in future and accordingly the exit or entry options can be taken care by the investor for that matter.

Then we have got different other variables that is which will affect the industrial sector as such, like we have got something different economic variable that affect the different industries, that is, we have got inflation; we have got interest rates; we have got international economics condition; we also have got certain like something like an consumer sentiment.

Coming to the inflation, inflation as such has got a negative effect on the industrial sector as such there is a stock return for that matter, but there may be a certain places, where inflation may be beneficial as such for a particular sector as we discussed like basic industries basic metal industry for that matter basic in food industry for that matter.

So, during inflation, they can face higher price for their particular products produced or supplied to their clients or for the accounts for that matter. So, those particular industries are going to do a good thing in during and the inflation is actually there.

But inflation is also going to affect negatively several sectors because of inflation what will happen, like let us say banking and financial services sector here is inflation is going to be there and then the interest rate is going to be higher as the interest rate is going to be higher, there may be very less demand for the loans for the bank as such. So, in such case the banking and financial interest will not be attractive when the inflation is very high.

Similarly, the inflation reduces what will happen in that case, inflation is low for that matter. So, the interest rate is going to be lower; the interest rate is going to be lower then what will happen? There will be a good demand for the products, there may be like a housing sector, there will be good demand for the houses; construction can takes place, because when the interest rate is lower, there may be more affordable for the investors have the equal for that matter. So, they can go for a house at a for a with a loan, with a very less low interest rate as such.

So, inflation being low can be beneficial for banking and financial service sector; inflation being high can be detrimental to banking and financial service sector. Similarly, several other sectors, if some country, some of the one of the sector or a particular company is there which is not able to pass on the higher input cost because of inflation to the particular to the clients their clients or their customers for that matter, then the inflations can be detrimental for that.

But as long as the increase in the cost because of inflation can be passed on to the customers in that case, inflation is not going to be detrimental; if this inflation cannot be increased in price, because the inflation cannot be passed on to the customers, then there is going to problem for those sectors which is affected by the input price rise, inflation in that particular input price for that matter.

Then we have got certain things like interest rates in the overall economy; interest rates can be a function of different things in the country, but at the same time the interest rate let it be affected by different factors, but interest rates then itself can be more or can be less because of certain factors as such. So, as as we talked about in case of inflation is interest is going to be affected banking financial sector is going to be affected for that matter.

But at the same time, the interest rates decline, there is going to be lot of demand for different things which requires loan finance as such. So, a capital goods sector can benefit because of deduction in the interest rate, because they can go for capital goods, because they need lot of money for producing them, they need a lot of amount loan as such the loans is available cheaper. So, the capital goods sector is going to benefit out of that.

Similarly, the interest rate is lower banking and finance sector is going to benefit; if the interest rate is going to be higher, it is going to be detrimental for the banking and finance sector as such.

And if interest rate is going to be lower, housing industry, construction industry as going to benefit out of that we have seen just in India, we have seen last one or two years, we have seen that because of the higher interest rates, we have seen that the demand for the houses demand for besides the change in the disposable income interests are also have played a negative role in case of that.

So, what has happened, the government has gone for a policy intervene, where they have got often the interest rate, they have the banks have come with certain lower interest rate particular period of time. So, that there is a demand for the particular sector, where the banks have given this favorable interest rates for housing loans as such so that the demand for housing loan and subsequently demand for the housing sector, housing construction sector also taken care because of that. So, the government also can come for some policy intervention, if certain advertence is happening in these particular macroeconomic factors for that matter.

(Refer Slide Time: 36:22)



Then we have certain other factors like international economics as such of course, international economics changes can have a very broad effect on different companies

specific things factors as such we have seen in the last few days or last few months something happening European country like Greece going to almost bankruptcy.

So, overall condition in that particular country or particular Europe for that matter has affected the performance of the different countries sector or different countries economy for that matter, but that is one general condition which can be a detrimental or which can be favorable for overall international sector or for different countries can benefit out of that particular favorable or favorable change or may suffer because of unfavorable changes there.

But at the same time if a particular industry is dependent upon, let us say more of imports, if there is this particular currency of that particular countries, where the company exist an industry exists is now going for a devaluation or the currency rate is actually the foreign currency rate is higher now in that case, this company which depending on lot of imports is going to suffer.

So, a favorable currency is going to affect favorable currency means let us say rupee appreciates and that is going to be detrimental for import based industries, because their import cost is going to be higher as such and they have to pay more foreign in terms of foreign currency similarly, if the for any reason the export currency is being now strengthening or currency has weaken then also the export sector also can be affected.

So, if one is company is based on the exports as such in that case what will happen if the currency condition is currency is not strengthened as such, that means, we are going to pay more in rupee for one dollar for that matter. So, those exports who are going to undertakings are going to benefit out of that.

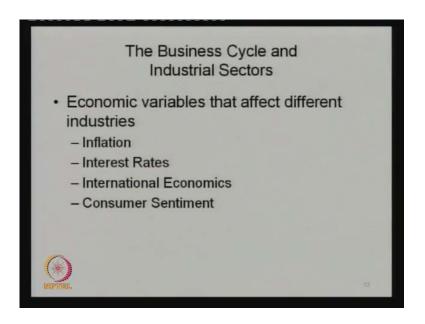
So, unfavorable currency when we say the domestic currency is undervalued not valid properly or we are going to pay more foreign more domestic currency for one single unit of foreign currency in that case, the export industries going to benefit, whereas import based industries are going to suffer because of that.

So, it all depends upon whereas the customers in particular industry as such. So, look at Indian IT industry, majority of the percentage of revenue comes from the export as such services export or software exports. A very may be ten to twenty percent of the total of the total revenue of particular well established IT companies comes from the domestic sales as such in that case, if the currency rate is going up, that means, you are going to pay more rupee for a dollar; that means, you obviously, you are going to realize more rupee for one dollar for that matter.

So, if you used have forty or let us say one million dollar of revenue which is going to be same as in the subsequent year and the dollar rate moves from forty rupees per dollar to let us say forty two. So, we are going to have point two million dollar million rupee or whatever in extra because of the change in the foreign currency is not because that the company did some good marketing or good products have been sold just, because the currency rate has changed that is why the company has benefited.

Similarly, there is going to be rupees going to strengthen, where you have to going to pay lesser rupee for one unit of foreign currency, this same exported units are going to suffer in that context.

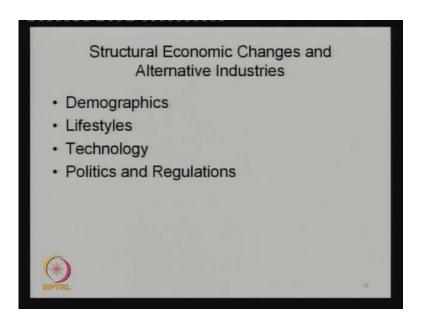
(Refer Slide Time: 39:22)



Then we have talked about the international economy, then one more thing that you talk about in this, is the consumer sentiment. If for any reason the consumers are not happy consumers, do not have good disposable income, the sentiment is down; then irrespective anything that is happening this this sector is going to be declining as such. So, if there is an overall recession is happening or interest rate decreasing and increasing or whatever reason for that matter, the consumers are not willing to buy more. So, obviously, the first thing that is going to affect, whereas in the consumer durable goods as such and the consumer durable goods are affected likely be affected, then obviously, the capital goods which is helping the consumer goods in producing the consumer goods as such they are going to be affected as such.

So, there will be a cascading effect, because there is a lower ability of the consumers to purchase certain things as such. Obviously, irrespective of the bad consumers sentiment, good consumer sentiment the basic necessity goods like grocery items, food basic foods as such basic minimum beverages, then pharmaceutical sector, they are going to have a moderate performance compared to other sectors; they may not be very high return as such, but they are going to have at least a minimum return or minimum growth is going to be there in that sector, but in any case consumer sentiment has got a lot of things to be affecting the industrial sector for that matter.

(Refer Slide Time: 41:47)



Then we move on to another way important aspect of industry analysis that is your structural economic changes and alternative industries. So, what is when you talk about structural economic changes, we say that the particular industry may itself go for overhauling.

So, you may find that particular industry has no relevance or no place in this particular present market takes, for example, the landline telephone service in this country at this moment. So, for whatever reason may be because of which the more affordability or easy accessibility easy affordable to the mobile. So, we can see that the landline have very less relevance. So, we can there is a consistent decline in the number of telephone numbers and number of accounts for that matter for the basic telephone service or landline services as there.

So, we can see the lot of withdrawal of the land line is taking place as far as BSNL, which is the leading player in this particular sector is all there, but there is a subsequently we have got lot of growth in mobile phone as such. So, coming to the demo like that.

So, because of this particular thing, you can see that the landline sector has no relevance. We talk little more about that subsequently the first thing that we talk about which can affect the existence particular industry is something like demography. When you say is a demography, you talk about different things like the age profile; if if you look at the Indian context now, we find that lot of people have we have got lot of people in the age bracket or may be thirty to fifty or something like that or or 25 to 50. So, this is a 25 to 40 years age as such.

So, this particular age group is obviously having got a very high spending habit. So, we will find such people going for more for departmental stores, more for shopping malls. So, retail sector is going to benefit because of the age profile.

Let say that this particular in you have one country, where we have got more people in the age group of let say fifty plus years; obviously, we will not expect those industry which require lot of food for like retail industry for that matter to have better food fall if the age profile is like that, but those companies like wherever whichever product, which is useful for old days people as such. So, such sectors are going to be having good thing because this age profile is something like that.

So, we can see that if you look at the age profile in Indian or emerging economics like India, china also, we have got lot of people in the younger generation. So, the product that is acceptable to the younger generation will have more relevance and the age profile changes from the young generation to let us see more in the old sector. So, products which are acceptable for younger generation will have very less or maybe they become simply redundant as such.

So, this one is age profile and that that we can talk about the we can see that divide in urban and rural as such, we find more and more people migrating for rural areas to urban areas.

So, obviously, the demand for the urban sector products which is there like basic facilities in urban city for that matter, you have got marble sector, you have got let say entertainment industry is more viva and then rural sector.

So, if the people migrate from rural areas to urban area, there will be demand for such products which is specific to urban sector as such. So, because of that one can see that there is a lot of demand for the particular products as such. So, entertainment industry may benefit because of that.

Then we see the cultural which is ethnic changes also happening. So, we say change in the culture of the (()) we have change in culture because of affected, that is, affected by the migration of different other countries people to your country.

So, because of this all these things, this is changing in demographic, then you have got geographical phenomenon like urban rural divide urban rural composition. So, this changes can affect different industry in different may be favorably may be unfavorably.

Then we go to the next factor that is the lifestyle of the people that is changing or not; if the lifestyle if you look at again in the Indian context or emerging economy context, we are now going for more towards from joint family to a nuclear family set up and we are also going to moving from a single source of income like instead of that you have got both this spouses working and so they have got lot of income as such.

So, what will happen, there are different things one can look at here, the both the spouses work obviously, there will be some there has to be something which you take care of the family security at a particular point of time, the children have to be taken care as such. So, if you see that the particular, you have certain growth in that sector, where you have the baby sitting for that matter; if you look at there in that case, you will find several

agency that have come up which takes care of that, because <u>the</u> when both these spouses working we have that.

Similarly, the housing security sector also has been taking going up, because of the because nobody is there in the house at a particular point of time for that matter besides that, since the both this spouses are working, you have they have got good amount of disposable income. So, they have got a higher ability to spend.

So, you will find that the consumer durable products like a TV; you move from the earlier, we used to have flat TV and ordinary TV to now a LCD TV for that matter. Now, you go for different refrigerators, which have got lot of technological advances as such, because you have more amounts to spend you can go for that. So, all these sectors everything is going to be better.

Then you have the proportionate to spend and we go for like restaurant, hotel sector; we go for tourism; we go for leisure sector all those sectors are going to be beneficial, because there is a high disposable income and the small family now easy to for them to move as such there is joint family, lot of members are there is not possible to move all together.

So, now the small family they can go for that. So, the leisure sector, the hospitality sector for that matter is going to have a lot of benefit, because this particular change in the life style.

Then because of the change in life style, we have the automobile sector, the people have the desire to own a car, whether there is a necessity or not basic necessity or not, but desire to own a car. So, this is going to increase the demand for the cars or automobile sector for that automobile sector as well as automobile ensiles, automobile parts all these things are going to be affected by like a chain reaction, because there is a change in lifestyle and the lifestyle change is that the all the families will like to own a car be a small or be a big car for that matter.

Then similarly, if you another lifestyle change is that because of this higher disposal income, people have demand for the housing loans, because they will like go for a new

house. So, the housing construction sector is going to be affected positively by such changes in the lifestyle.

So, these are the certain things which are going to affect different sectors possibly favorable or possible unfavorable. So, the as we discussed earlier, the beauty lies where we can see what is the going to change happening in subsequently. So, that you can take a position of buy or sale or exit at an entry strategy or prior to the change that is going to happen.

Then we go to the next factor that is going to affect, there is something like technology as we discussed earlier; we have got a mobile phone, mobile phone is almost going to outplace the basic electronic services like landline as such. So, landline has almost is going to seize to exist. So, that is what is happened, the companies have the which have a landline, they have looked at alternative revenue generation from that.

So, the same landline companies, they have now used there is something like broad band which can be used with the landline as such. So, a landline is this helping not for the telephone as a made some conversation, but landline is helps the company, because they have already have a very good network like fiber optic network for that matter and so that particular network is now being used for providing broad band technology as such.

So, this is the thing the electrical in changes. So, you can see that the technology is going to outsmart people and the different industries may suffer because of different is going to be there one can see that; another thing which is the internet has a technology that has come up that has affected several industry in different way look at the payment mechanism as such.

So, now people have no desire to go for a physical payment in terms of cash as such, they can they they no need to also use a coequal for that matter, they can simply go for an internet banking account and the internet banking account with the help of that, you can transfer the money to your another account for another client for that matter.

So, it has got lot of effect in different sectors like since we are going to internet financial transaction the security has to also be there. So, the companies in IT sector or security sector which are going to give the security for that matter, they are going to be benefited,

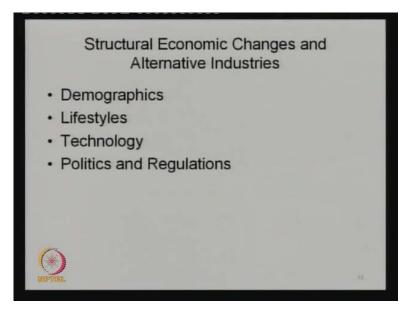
because this financial service sector needs this particular security to be there. So, that there is an assurance for the account holders, that there is nothing going to be the money is not going to be anywhere it is going to the right place as such.

Similarly, we have got technology like that we have got bar coding that is happening if you we visit retail outlet retail store they do not type it they just have a bar code and there is a uses machine and find out that which particular stock is out.

So, this particular thing is going to have a lot of implication for this software sector which is supplying this particular technique as such; there is lot of demand there is convenience because of that, because the inventory management is much better with the help of bar codes or RFIDI for that matter. So, if the any industry which is investing in this bar code or RFIDI or this or the enabling technology, they are going to benefit because the technological changes.

Similarly, we have got now the core banking solution. So, where you there is no branch banking now; we you go to you have an account is in the particular bank, you can go to any branch and have the same transaction like any other branch for that matter.

So, there is no difference between the branches, another branch; you are not a customer of a branch now; you are now a customer of particular bank as such. So, because of that convenience, people go for core banking. A bank has to invest in core banking and see the banks have to invest in core banking, the technology also has to be there; the software has to be there. So, they have to come now. So, new new things have come up in technology and software sector. (Refer Slide Time: 52:25)



Then we have got another thing that is the politics and Regulations which is going to affect the things there; the Regulation like the let us say foreign force Regulation for that matter. The FDA Regulation favorable, FDA Regulation unfavorable, so this is a favorable, then there can be a lot of investment from different parties, different investors across the country as such.

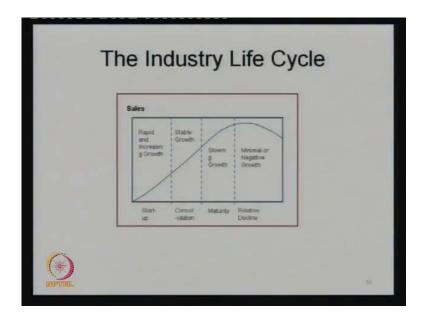
So, when there is a lot of demand for capital and the domestic capital market is not able to cut of the requirement of the need for the capital that is required by different companies in the sector in a particular country, then if the FDI norms are relaxed we will have other investors from across the country to come and invest in that as such.

So, favorable relaxes in that is going to affect different industry like particular which has more of technology oriented, where you need technology support and you also need a lot of financial back up as such like we have a favorable and FDI policies for insurance is going to happen when you have already favorable FDI policy in communication telephone communication sector for that matter.

Similarly, there is a change in the import tariff or there is a certain export levis or export duties are in there and there is going to be there, then there is going to be affected unfavorable to the export oriented inverse; the import tariff is going to relax any industry which is depending on the imports of capital goods or for the raw materials for that matter, they are going to benefit out of that because the import tariffs have been relaxed for that matter. Similarly, certain particular political establishment may be favorable a particular sector. So, those sectors may be benefiting out of the change in the government for that matter we have seen.

So, in this last discussion, we saw how our industry analysis going to be different; the industry itself is going to be changed. We have already seen that India being a country, which will depend even more of on agricultural, it has then moved to the manufacturing sector dependence. Now, we see lot of revenue lot of growth is happening in services sector. So, industries themselves may be there, but the growth in the industry may come down, may decline some other new industries, may come up and those industries may become attractive, some industries may see to exist because of technological changes.





So, this is the thing that we discussed and the subsequent session, you are going to talk about industry life cycle which is like this and we will have more discussion on that; we will also going to have the discussion about Michel Porters Five Forces Model which talks about the industry competitiveness revelry and such and also we are going to discuss about the industry financial evaluation or financial benchmarks or performance, which is like different valuation resources for that matter.

Thank you.