

Conservation Economics
Dr. Ankur Awadhiya, IFS
Indian Forest Service
Indian Institute of Technology, Kanpur

Module 10
Labour market economics and Conservation
Lecture 2
Earnings and discrimination

Namaste! We carry forward our discussion on Labour Market Economics and Conservation and in this lecture we will have a look at Earnings and Discrimination.

Before we begin let us recap what we had observed in the previous lecture. In the last lecture we had a look at the new classical theory of distribution and in that we saw these salient points, the amount paid to each factor of production is derived from the supply and demand for that factor.

Which means that, in the case of the labour market the demand for labour and the supply for labour will determine how many people get employed in the market and what is the rate at which they will be paid or the wage rate.

Second the demand for a factor depends on its marginal productivity which means that, if there is a person who is giving out a larger amount of output. So, his or her marginal productivity is higher and in that case the wages that will be offered will also be higher. Third, in equilibrium each factor of production earns the value of its marginal contribution to production which means that, if somebody is contributing greatly to the production of something that is valued high.

In that case the person will be earning more and a good example is people who work in making software that is valued highly and they are putting in the major share of making that software. So, in that case such people will be earning a lot more than those people who are working to make something that is not valued that high or those people who are working to make something that is valued highly, but are putting in a very small or a minuscule contribution to the actual making of that product.

A good example is a person who is working for the security of the premises where the software is being made. So, this person is not putting a very major share of contribution in the making of the software and in that case the wages that are offered to such a person will be much lesser than the wages that are offered to a software engineer who is actually making the software that is valued highly.

And it is currently said that if somebody is putting in a contribution to a production of something that has a lower value or when the contribution to the production is less, then in that case the person will be earning less which ultimately gives rise to poverty.

In the previous lecture we were analyzing what causes poverty because we have seen that poverty is intimately related to conservation. Now this is because if the society is poor then in a

number of cases we have observed that the population size will increase people will have less per capita resources which would mean that their marginal productivity will be less and to feed the large population or to get resources for the large population when the marginal productivity is less the only option would be to expand into the forest areas.

In that case the forest will be indiscriminately cut and converted into agricultural fields, but still because the forests are generally in those areas that do not have a very good fertility. So, the marginal productive productivity will still remain less, the people will still remain poor, but in this case the forest will also be gone which is why it is important to understand that, why poverty arises in the society.

But then apart from the neoclassical theory of distribution there are also a number of other factors that determine how much a person is paid. And in this lecture we will look at some of those factors.

What are the factors that modulate the predictions of neoclassical theory? Now one such modulating factor is the compensating differential. Compensating differential is defined as a difference in wages that arises to offset the non monetary characteristics of different jobs and good examples are night shifts or dangerous jobs.

What we are saying here is that several jobs have certain non monetary characteristics, which is a way of saying that there are certain jobs that do not have a very big difference in the amount of remuneration that they will provide, but they have certain characteristics that differentiate them against each other. So, a good example is a person who is working as a security guard.

Whether this person provides security in the day time or whether he provides the security in the night time the kind of service that he is providing is the same which is security. The amount of input that he would have to make in keeping himself attentive to the details is roughly the same. But still it is easier for people to work in the daytime than in the night time. So, this is a non monetary characteristic of this particular job, whether a person is going to work in the daytime or in the night time.

Now because working at night time is more difficult. So, people are paid more, now in this case they are being compensated for a difference in a non monetary characteristic.

So, the difference is whether they are working in the daytime or in the night time and this non monetary characteristic differential is getting compensated. So, this is a difference in wages that is arising to offset that is we are trying to nullify or we are trying to compensate for the non monetary characteristics of different jobs.

Examples are night shifts that pay more or dangerous jobs that pay more, for example coal mining. A person who is working in a sector to carry load from one place to another place that is a person is working as a porter will be earning less money if he is doing the work of a porter in a market or say in the railway station, but he will get much more amount on much more amount of compensation or wages if he is working say in a coal mine, why?

Because coal mines are generally dirty places to work, they are generally dangerous places to work because at any point of time an accident can happen with a greater probability, than an accident occurring say in a market area.

Because people have to be lured to work even in these difficult surroundings or in these dirty

surroundings. So, they will have to be paid more and this is known as the compensating differential, this is a compensation for the differential characteristics of certain jobs.

Especially, depending on whether they are more difficult or whether they involve working in a dangerous situation or in dirty situations. So, this is known as a compensating differential and this modulates the predictions of the neoclassical theory.

Another difference that modulates is the human capital. Now human capital is the accumulation of investment in people such as education and on the job training it is an accumulation of investment in people that is how much amount of investment has been accumulated in a person by means of things such as education or on-the-job training and a good example is that income increases with education and income increases with training and experience.

What we are observing here is that if we talk about people having the same experience, but different education levels doing the same job. Now if you remember when we were talking about the neoclassical theory of distribution we were saying that the amount paid that at equilibrium each factor of production earns the value of its marginal contribution to the production process. Now in this case what we are observing is that people are doing the same job. So, the neoclassical theory of distribution would say that these people should be paid the same amount.

In actuality what we are observing is that people have paid different amounts. So, a person who is a graduate of the high school is paid less, a person with a certificate or diploma is paid more than the high school graduate, a person with a bachelor's degree is paid even more, a person with a masters degree is paid even more and a person with a PhD is paid even more. Now even though these people are doing the same job and they have the same experience. The only difference is the difference in the education levels.

In this case what we are observing is that we are paying these people more on account of the accumulation of investment in the people by means of education or training. So, this is a modulating factor. Because of this factor the neoclassical theory of distribution does not exactly apply. So, this modulates the results of the neoclassical theory to some extent.

Here again a person who is working in a sector that is making things that are valued very high in the market and is putting in a major contribution will be earning more than a person who is putting in a smaller contribution or a person who is working in a sector whose output is not valued that high.

The neoclassical theory still remains. If we talk about two people who say our software engineers. They will still be paid more than say two people who are working as security guards, but among these two software engineers the one who has got more education will be paid more.

This is a payment that is being made on account of the greater education that this person has. This is a payment on account of the human capital that has been accumulated in this person by means of higher education. So, this is human capital that modulates the results of neoclassical theory.

The question is why should somebody do that? Why should a firm pay more to a person who has a higher amount of human capital accumulated in that person. And there are several reasons, one education and training increase the marginal products of labour and this is true to quite an extent, education and training increase the marginal products of labour.

What we are saying is that if there are two people who are say working as software engineers and one person is just a novice he has just come out of a college. And there is another person who has accumulated a lot of training by working in some other company or he has acquired education by working in an academic institution. So, he has gained a masters degree or a PhD degree.

What happens is that when the person has been working in a particular sector or has gained a higher education in that particular sector, then they are exposed to a lot more challenges, a lot many problems than a person who is a novice who may not have been exposed to those challenges. Now because of these exposures and because of having an ability to solve the problems in those situations in a number of cases people learn how to tackle certain situations.

For instance if there are two software engineers and there is a particular bug that has come up or corrupt into the software then a person who is more experienced either by account of a higher training or by account of say a higher education he will be in a much better position to find out where the bug lies because in his lifetime he has experienced several setbacks in several sorts of course.

Whereas, a novice may not have been exposed to so many problems and so he will have to start from the scratch. So, in this case the marginal productivity of the person with higher education or with higher training will generally be higher. This is the first reason that education and training increase the marginal products of the neighbor and. So, the human capital leads to a higher payment as in the case of the neoclassical theory of distribution.

Another reason is that higher education is the compensating difference for the cost of education both in terms of opportunity cost and time involved. What we are saying here is that the higher income of the people who are educated more is the society's way of compensating them for the troubles that they have taken, troubles in terms of the opportunity cost.

That is if the person with the higher degree had not gone for higher education he or she would have been working somewhere and by working somewhere they would have been earning some amount of compensation, some amount of payment.

To get the higher education they had to forgo this payment. There is an opportunity cost that is involved. A person who is going for a higher degree is not going for the work in the labour market and the society needs to compensate that person for the loss of that opportunity.

The society compensates for the opportunity cost and the society also compensates for the time that is involved because a person who goes for a higher education for a higher degree has to spend a lot of years in an educational institution working on say very theoretical subjects.

This person, by working on these theoretical subjects, will also gain an insight into problem solving. That will increase the marginal productivity later on, but currently when the person is there in an educational institution he or she might feel that there is a huge amount of and there is so much of the time that needs to be invested into higher education.

All this needs to be compensated by society. Later on when the person joins the job market and the higher income to people with higher education is the way of society compensating for this loss of opportunity and putting in so much time which is the cost of education. In this case what we are saying is that because education is difficult. So, society needs to compensate for this

difference.

That is similar to the case of a person who was working a night shift or who was working in a dangerous profession. They need to be paid more because there is a level of difficulty involved there is a level of danger involved.

Similarly a person who has put up so much of the cost into education in terms of opportunity cost and time will also have to be compensated for because higher education typically is difficult and the third reason is that education and training are signals for higher ability.

What is a signal? Signaling is defined as an action taken by an informed party to reveal private information to an uninformed partner signaling is an action taken by an informed party, which means that when we talk about a person who was getting into an employer relationship with an employee.

Suppose I am the owner of a firm and I need to check who is the best person for the job. Now I do not know how good person A is or how good person B is. Now they are having this private information that probably person A knows that he is an extremely lazy person, but in the interview person A will not tell me that sir I am a lazy person. Probably person two is completely disregarding of punctuality. So, it is possible that person when I hire him then probably person two will never come to the office on time because he is completely non punctual.

But then person two will not come to the interview and say that I am a person who pays no punctuality. Both these people when they come for the interview to get the job they will be projecting themselves as the best person for the job. So, both of them would say sir I am a very hardworking person and I am a very punctual person. Now the employer when he needs to know which person to hire, how is he to extract this private information?

Because nobody is going to tell the employer that these are my limitations, we have a situation where there are certain people who have this private information about their abilities and about their disabilities and there is another person who is the employer, who needs to extract this private information out of these people.

Herein comes signaling. It is an action taken by an informed party to reveal the private information to an uninformed party. So, what will both of these people do? These people suppose person two says that sir I am having a so and so degree from a second set institution then this is a signal that person two is providing.

In that case the employer finds it much easier to judge whether he should hire person one or person two because the employer would think that ok I have these two people and both of them are saying that they are the best person for the job, but then the first person does not have a higher degree the second person has a higher degree from a very prestigious institution.

It means that person two was able to secure an admission to that prestigious institution and at the same time person two was able to pass with flying colors. I can see his grade sheet. So, I can see if this person is able to put up hard work or not. So, this is a signal now it is very similar to, say, a peacock when it dances. When a peacock dances it splits its feathers for the peahen to see if this peacock is fine or not.

When peacock and peahen are mating in the mating season the peacocks will show off their wings and, if there is a peacock which, say, is a diseased peacock, in that case the disease will

show itself in the wing patterns, because a peacock that is a diseased peacock that is not getting enough resources then in that case probably the feathers will not shine that much. Probably it will have fewer feathers than a peacock that is in the prime of itself.

By showing themselves law the peacocks are giving a signal to the peak end that this is my ability this is my level of health status and similarly in the case of education people can use their education as a signal to tell the prospective employer that these are my abilities.

If I have a degree from such and such institution it means that I am able to put up hard work. It means that I am a punctual person. So, whatever the other person says that is immaterial you can just have a look at my grade sheet and you can make your own choice, so that is signaling. So, education has a very important role in signaling.

Similarly, training because if a person has been hired by say a very prestigious firm before. Then the employer will get this idea that if this person could work in this firm then probably this person is a good person. He will be an asset to our organization as well because he has already worked in such a prestigious position.

So this again is a signal. Signaling is an action that is taken by an informed party to reveal private information to an uninformed company. Now there are certain characteristics of good signals; these signals must be costly so that everyone does not get to use them, which means that if you use a signal suppose there are two candidates who have come for a job interview and the first candidate says that sir I am very fond of Jagjit Singh songs, the second candidate says sir I am very much fond of Kishore Kumar songs.

Now in this case whether a person listens to Jagjit Singh or whether he listens to Kishore Kumar that has got little to do with the kind of one that is involved in the firm. And at the same time it is very easy to get Jagjit Singh songs or Kishore Kumar's songs because these days everything is available on the internet and people can listen to these songs or watch these songs on radio or television. So, people have easy access to these whereas, for a signal to work properly it should not be. In this case the song that a person hears will not play the role of a signal because the employer would say that how does it matter because to get this signal to listen to say Kishore Kumar songs or Jagjit Singh songs you do not have to enter a very huge amount of cost.

There is no great cost involved. Whereas, in the case of education it is extremely costly both in terms of money for fees, both in terms of opportunity cost that somebody has to give up and also in terms of the time that one has to put in.

So signaling will only work when it is costly so that everyone does not get to use them and education is costly. Secondly, signaling will only work when it is something that should be more costly for the lesser quality product than for the higher quality product which means that if there are two people one listens to Jagjit Singh the other listens to Kishore Kumar then there is no difference between these two people in terms of their abilities.

Whereas, in the case of education if somebody says that I was able to secure this grade at this institution, in that case a person can very easily make out that doing this thing was difficult for a person with lesser ability, but doing this is easier for a person with higher ability. So, passing is easier for a person who is hardworking or who is intelligent or who is diligent, but passing is more difficult for a person who is lazy or unintelligent.

So in this case there is a differential costing involved which means that signaling is cheaper for a person with a higher quality or with a higher ability, but signaling is costlier for somebody with a lesser ability.

So, education becomes a very good signal because it is easy for somebody who is having the desired qualities, but it is costly or even costlier for a person with lesser abilities. A person who is having a lesser ability in terms of say doing problem solving or in terms of putting up punctuality or working hard.

Now this person will find it extremely difficult to pass a course whereas, a person who is hard working will easily pass the course. In this case there is a difference that exists between a person with a higher quality or ability and a person with a lower quality or ability; this is another characteristic of a good signal. It should be more costly for a less quality person or product than for a higher quality product or person.

Whereas, if you wanted to use listening to a song by Kishore Kumar or Jagjit Singh as a single, then there is no difference between the cost for a higher quality product or a lower quality product or person.

So a person with a higher ability will also find listening to these songs equally easy or difficult than a person with a lower quality. So, it does not work as a signaling. Signaling should be something that is costly and this cost should be different for people with different abilities and because education is both costly and it has a differential costing for people with higher and lower abilities. So, it acts as a very good signal.

Now if a person has a higher degree from a more prestigious institution then it acts as a very good signal and the employer will make this decision that yes this person is intelligent and this person is hard working and this person is punctual and you can add a number of other differences here. So, signaling modulates the results of the neoclassical theory.

Another thing that modulates the results is the ability, effort, chance and appearance ability. So, higher ability people get higher wages and this ability may be a result of hereditary upbringing, exposure and so on.

What we are saying here, is that suppose you have two people who are working in a job say they are working as porters. Now a working person has a higher ability which means that he can work for longer hours and he can pick up heavier weights. Now this person with the higher ability will at the end of the day earn more than a person with a lower ability. Now this is because the person with the higher ability is able to put up a greater marginal product.

In this case what we are saying is that people with higher ability get higher wages. It is not necessary that this ability stems just from the person, but it may be a result of heredity, upbringing, exposure and so on.

A person who is born to intelligent parents may be intelligent because he got intelligence in heredity. So, even though this person is not putting up that much of an effort, still this person is able to pass easily.

In that case he will be able to get an education with lower effort, but then once he gets this education it will act as a signal in the market or this difference in ability may be because of a difference in upbringing. There could be a case in which the parents have inculcated the

tendency in their children to work very hard. In the other case you can have parents who have not inculcated this ability.

In this case the upbringing would lead to a difference in the ability because at the end of the day the child one when he grows up he will be working very hard as compared to child two because it is there in his upbringing.

From early childhood on he knows that he needs to work hard and. It is now a part of his character, it is a part of his nature. Upbringing can also make things exposure can bring changes in ability. A person who has worked in different sectors or a person who has worked in different countries and is exposed to different sorts of problems will have a higher ability for problem solving than a person who is not exposed to these things.

Exposure may change ability and in the case of ability a person with higher ability will typically get a higher wage even though both of these people are working in the same sector. Effort, a person who is putting up more effort is paid more than a person who is not putting up enough effort.

Basically if there are two candidates both have equal abilities, both have equal education, but what happens is that person one works for 12 hours in a day, but person two works for only 2 hours a day the rest of the time it does not work.

In that case because person one is putting up more effort. In that case he will typically earn much more in the market. He will be getting a higher wage than person two. So, the result of the neoclassical theory of distribution is modulated by the effort a person puts in higher effort means more wages. Chance, now this is a very important factor students who are graduating during a recession time will get paid less.

Now, these students may be having the same ability, they may be putting up the same amount of effort than their previous generation of students, that is their seniors, but just because the market is in a recession period.

In that case it may be more difficult to get a job or it is also possible that the job that these people get will be paying them less. Now this is not because of any difference between the students of this class and the students from the previous class.

It is just a luck factor, just a chance factor. People who graduate during times when there is a recession typically get lower wages. A chance factor is also involved, appearance is also involved because good looks may be needed for certain jobs with public exposure.

If you talk about a job such as that of a news anchor. A person who looks better, who has a better appearance may be paid more actors. Now in the case of actors, if they look beautiful, if they look smart they might need a higher payment.

Appearance may play a role especially in those jobs that involve public appearances say in the case of TV or cinema good looks are also a signal of upbringing and an availability. So, they might be needed or they might act as a signal.

Now it is a signal of upbringing and ability. For example, does a person know how to tie a tie or not? In this case it is acting as a signal because if a person knows how to wear a tie properly, if a person knows how to wear a suit properly then probably they have been brought up in an environment where these things were already taught to them.

With these, people can read out certain deductions about the qualities that people might have not because you have an indication of the kind of upbringing this person has been through. So, good looks might also be a signal. And in certain cases the beauty premium may be just a form of discrimination. So, ability, effort, chance and appearance regulate the wages.

Then we have the superstar phenomenon that regulates wages. People like Lata Mangeshkar or Sachin Tendulkar or Amitabh Bachchan earned way above their colleagues. They are the superstars of society. Lata Mangeshkar earned much more than other singers of the same time who were probably putting up the same amount of effort, but those singers were getting paid less, but Lata Mangeshkar was getting paid more. Sachin Tendulkar got much more income from playing cricket than another person who was probably putting up the same amount of effort. Now, why do we have these people who get way above the average wage rate that is prevailing in the society?

Not all the singers get paid equal to that of Lata Mangeshkar, not all cricketers get paid equal to that of Sachin Tendulkar, not all actors get paid equal to that of Amithab Bachchan. Now, this is the superstar phenomenon and it happens when every customer in the market wants the goods supplied by the best producer.

So basically, if you have a chance to watch a movie by Amitabh Bachan or by or watch a movie by an actor who is completely unknown. So, people would generally think that because Amitabh Bachchan is so good at acting. So, let us watch that film. So, people want to have the product of the best producer of that particular good. Lata Mangeshkar is probably the best singer. So, she is the best producer of songs, especially Hindi songs.

Sachin Tendulkar is the best producer of the entertainment or the thrill that you get by watching cricket and most of the people want to have the best and the good that is produced is. If it is possible to provide it to every customer at a low cost it is possible to provide it to every customer at a low cost - so what we are saying here is that suppose the good is something like the work of a doctor. Now in this case a doctor when he is treating one patient will not be treating another patient at the same time and. Depending on the demand and supply in the market the amount that the doctor will charge to the patients will change. If there are very less number of doctors and there is a very great amount of demand then probably the doctor will start charging more.

So, there will be a natural equilibrium in the market and you cannot provide the services of a doctor to everybody at a very low cost, but what happens in the case of professions such as cricket or profession such as acting. Once a movie has been made it can be shown to n number of people for a very low cost.

These days when we watch a movie on a streaming medium it hardly costs anything to watch the movie. So, everybody can now afford to have the services of the person who is the best producer of the good in the base of a doctor not everybody gets a chance to afford the services of the best doctor.

Whereas in this case the good is being produced and distributed in such a manner that everybody can afford to have the good of the best producer.

So everybody can watch Sachin Tendulkar play on the TV screen, everybody can listen to Lata Mangeshkar songs at a very low cost, everybody can watch Amitabh Bachchan act in a movie at

a very low cost. And it is only in these professions that we start to observe the superstar phenomenon. So, in the case of the superstar phenomenon you have certain superstars who get paid way above their colleagues.

Because there are two things: one they are the best producer of the goods that they are producing, and every customer in the market wants to have the goods supplied by the best producer.

And second, the goods are being produced in such a manner and distributed in such a manner that it is possible to provide it to every customer at a low cost. In that case everybody will just flock to the best producers of the good and. The best producers will be earning way above the second best which is not the case say in the case of doctors. The best doctor may not be earning way above the second best or the third best.

But in the cases of superstar phenomenon the people who are the best they earn way above the second best or the third base. That is the superstar phenomenon and this is something that is not explained by the neoclassical theory of distribution.

This is another factor that modulates the wages that people get in the market, if they are working in a sector that permits them to provide the goods at very low cost and when they are the best in the field and they are working in a in a sector where everybody wants to have the goods or services by the best in that case they might be earning way above the crowd that is the superstar phenomenon.

Another modulating factor is the case of above equilibrium wages because of the minimum wage laws. So in this case the government is influencing the wages that people will be getting. The neoclassical theory was saying that people are getting wages that are equal to the value of their marginal product of labour, but the government may tinker with it and the government may say that no this is the minimum that you will have to pay these people.

We have observed that in the case of a non binding price floor. Suppose the government has put up this price floor that this is the minimum wage. In this case the law department is saying that this is the minimum wage that you need to pay. And suppose the market is paying above this minimum wage. So, this is the natural equilibrium in the market then we do not have an impact of the non binding price floor.

But in case the minimum wage which is shown by this red line is more than the natural market equilibrium that is shown by this point. In that case there will be a difference between the quantity that is demanded at this price. Quantity demanded is given by this point where the demand curve is intersecting with the price curve or the price floor curve.

The quantity that is supplied is given by this point where the supply curve is intersecting with the price curve. In that case we will have a quantity demanded that is less and a quantity supplied that is more and we will start to observe a surplus in the market. So, the actions of the government may tinker or modulate the results of the neoclassical theory of distribution.

In these cases we can have a surplus, a situation in which the quantity supplied is greater than the quantity demanded impacts selling is possible only for a few sellers. In this case workers who can appeal to racial familial or other ties what we are saying here is that in the case of minimum wages because there is less demand there is a huge amount of supply.

Not everybody gets paid, not everybody gets work and those people who can appeal to say

familial ties or their cultural ties or their linguistic ties they might get employment and other people will not get employment.

Now the neoclassical theory of distribution was saying that every person is getting paid according to the value of their marginal product of labour, but in the case of such government interventions, it is possible that two people who can put up the same value of marginal product of labour one of them gets employed the other one just does not get employed. So, this is a modulation: it may result in losses to sellers due to unsold inventory. In this case the sellers are the workers because they are selling their labour.

So there will be losses: there will be losses for the workers because of their unsold inventory in terms of unemployment. The workers in this case have labour to offer to the market for a price, but because the price has been increased to a level above the market equilibrium.

So, nobody is hiring them. This is a loss to the workers and this may also have a long term impact in terms of closing of industry or job losses because the price is a bit too high for people to pay. So, in that case it will be difficult for people to run their industries or it may be difficult for at least some people in their industries.

And because of that they might close the industries which will create even greater unemployment. So, this is another modulating factor to the neoclassical theory of distribution.

Another example of or another case of above equilibrium wage is union. Unions can do collective bargaining and use strikes to demand above equilibrium wage. In this case the workers will not get paid according to the value of their marginal product of labour, but the neoclassical theory of distribution was same, but in this case what the unions do is that they go for a collective bargaining and they say that if you do not pay as this much amount they will strike.

A union is a worker association that bargains with the employers over wages and working conditions and strikes are the organized withdrawal of labour from the firm by a union.

In this case the union says that if the firm does not pay us or pay the workers at this rate, we will not permit anybody to work. Now this is very similar to the case of the minimum wages that are put in place by the government.

Even in this case the wages that are demanded are above the natural equilibrium of the market and we might also observe that in a number of cases because of these strikes or because of the inability of the firm owners to pay this high a wage they may just close the industry. So, there will be a huge amount of unemployment, but this is also another case that is modulating the results of neoclassical theory.

And third is the use of efficiency wages by firms to raise productivity, retain good workers, reduce turnover or reduce expenses of hiring and training. And in this case the efficiency wage is described as the above equilibrium wages paid by firms to increase the worker productivity.

In this case there is no role of government. The government is not saying that the firm should pay above the market rate, the workers themselves are not saying that the firm should pay us above the market rate, but the firm in its own best interest pays the workers above the market rate.

Now why should firms do that then this is because even when one person is fired and another one is hired, we can achieve the same quality at the same rate, but the process of firing and hiring

them are also expensive processes because the firm will have to put up an interview.

It will have to call for applications, it will have to search all these applications, it will have to interview, there will be a decision making that will have to be made and all of these require costs. So, the company might say that ok the people who are working for us and we know that they are working well let us pay them a bonus so that they do not also have an incentive to go to another company. So, they will not leave us and the amount that we would have had to spend to organize an interview, we will pay that amount to these people. So, our headache of hiring a new person is reduced and these people will go on working for us and we know that these are the good people. So, we want them to work for us.

So, the company might pay people or pay its workers above the market equilibrium in the aim to increase the efficiency of people or to retain the employees or to compensate for the alternative which would be to hire another set of workers.

So these are known as efficiency wages above equilibrium wages that are paid by firms to increase worker productivity or to retain good workers to lose turnover or to save the expenses of hiring and training. Now in this case because the firms are taking this decision out of their own free will there will hardly be negative consequences.

We also saw that another way in which the results of the neoclassical theory get modulated is discrimination. Now, discrimination is defined as the offering of different opportunities to similar individuals who differ only by a race ethnic group sex age or other personal characteristics.

When we talk about discrimination we are saying that there are two workers who are practically the same they have the same education they have the same ability, they will put up the same effort, but still we employ one and we do not employ other.

Because the one that we are hiring probably speaks the same tongue or belongs to the same community or the same religion. In this case we will say that we are discriminating one against the other.

It is the offering of different opportunities to similar individuals who differ only by race, ethnic group, sex, age or other personal characteristics. A good example is the gender pay gap, the average difference between the remuneration for men and women who are working.

Even though men and women might be having the same qualifications and the same education they might be putting up the same amount of effort, but in certain societies by tradition the women get paid less. This is the gender pay gap.

In our country the gender pay gap in the year 2007 was 44.8 percent and for the year 2013 was 24.81 percent. So, we are observing that as our society is modernizing the gender pay gap is reducing, but we still have a long way to go. So, this is an example of discrimination.

The market, in certain cases is able to solve the problem of discrimination by itself. Now, how is a free market able to solve this problem? In a competitive market a firm that cares only about profits will make products at a lower cost than firms that do discrimination because the firms that are doing discrimination might at times be hiring workers with lesser abilities or who are putting up lesser effort because they have this criterion of the person belonging to the same community as one of the criteria of hiring the people.

Whereas, another firm who is not discriminating and is looking only for profits this firm will be hiring the best workers. And in that case the firm that is not doing the discrimination end up producing the goods at a lower cost. Which could mean that, in in the medium or the long term this firm that is not doing discrimination that will gain a larger share in the market because they are producing the goods at the lower at the least cost at the lowest cost.

And we have seen before that in the case of a competitive market the firms that produce good quality products at the lowest possible price are the firms that get the orders.

So over time the firms that care only about profits will out complete the firms that practice discrimination and thus a competitive market with free entry and exit can automatically remedy the employee discrimination. Which tells us that the free market has a free entry and a free exit, which means that any firm that is able to produce goods at a cheaper price and at a better quality is able to enter into the market. In that case the firms that are not doing any discrimination, because they are having the best workers they will make cheaper products with good quality, they will out compete those that are making discrimination and in a short while we will see that the market is only occupied by those firms that are not doing any discrimination.

The market is a way of tackling discrimination by the employees which is also why we say that markets are usually a good way to organize economic activity, but the sad part is that this may not always happen because in certain cases we observed discrimination by customers or discrimination by the government. Now if this is the situation then the market will not be able to solve this problem by itself. If customers are willing to pay to maintain the discrimination then free market will not by itself remedy discrimination.

By this what we are saying is that if customers say that we do not care about the quality we do not care about the price we only care about whether this product was made using workers of our own community. So, even though we get products at a higher price with a lower quality, that is ok with us as long as people from our community are getting jobs. Now in such a scenario the free market will not be able to solve the discrimination because people are paying for the discrimination.

In the theoretical context we had said that people are rational decision makers. So, everybody is trying to enhance their welfare by getting the the best quality material at the cheapest cost, but if people do not do this in this this relational decision making in that case the free market will not be able to solve the problem of discrimination.

In certain other cases the discrimination can also be government mandated example apartheid in South Africa. So, in certain cases the government may itself say that only people belonging to such and such communities are going to get employed. Now when discrimination is government mandated, then again the free market will not be able to solve the problem and in such cases legal remedies may be needed to counter such discrimination.

In our country we have a number of such legal provisions especially in our constitution. So article fourteen in our constitution says that the state shall not deny to any person equality before the law or the equal protection of laws within the territory of India. So, our constitution is saying that the every person is equal in the eyes of the law and will get an equal protection of laws article 15 says, the state will not discriminate the state shall not discriminate against citizen on

grounds only of religion, race, caste, sex, place of birth or any of them.

The constitution says that nothing in this article shall prevent the state from making any special provision for women and children or for the advancement of any socially and educationally backward classes of citizens or for the scheduled castes or the scheduled tribes.

The constitution is also saying that there shall be an equality of opportunity for all the citizens in matters related to employment or appointment to any office. The constitution is also saying that no citizen shall get discriminated against because of these factors.

We have the constitution saying provision of reservation then we have options like untouchability being abolished we have things like equal pay for equal work for both men and women.

What we are observing here is that in our country legally because of the constitution we have had several provisions that are aiming to remove or reduce discrimination.

Discrimination by the state is completely removed and in certain cases the societies that were discriminated against historically they have been provided a larger opportunity by means of reservations. And because of these provisions we also had a number of laws that were made: the equal remuneration act, the maternity benefit act, the factories act and we also have affirmative action in the form of reservation, special education and awareness opportunities. So, what the government is doing by all this is that in our country we are trying to remove discrimination

We can also touch upon the principle of economics that governments can sometimes improve the market outcomes because we saw that if the society is doing the discrimination and is paying for the discrimination then the free market will not be able to remove discrimination.

In this case the government can act. The government can say that you cannot discriminate and also the people that you have discriminated against we are going to provide them with greater opportunities. So, that they get a level playing field from background and. So, the government can sometimes improve the market outcomes.

And so to sum up, when we talk about wage determination the neoclassical theory of distribution says that the amount paid to each factor of production is derived from the demand and supply for that factor.

The demand for a factor depends on its marginal productivity and in equilibrium each factor of production earns the value of its marginal contribution to production. This is what the neoclassical theory of distribution says.

But we have observed in this lecture that the results of the neoclassical theory can get modulated by the compensating differential say in terms of more wages for difficult jobs or it can get modulated by the quantum of human capital how much is the amount of education and the training with the person it get modulated by the ability of person whether hereditary or otherwise by the effort a person puts in the chance factors whether the market is booming or in recession.

The appearance of the person can be modulated by the superstar phenomenon in those sectors where everybody wants the best product and these products can be made available cheaply to everybody.

They can get modulated by the minimum wage laws by the unions by the use of efficiency wages by firms or because of discrimination. So, there are a number of factors that can modulate the

results of the neoclassical theory of distribution.
That is all for today. Thank you for your attention. Jai Hind!