

Managerial Economics
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Lecture - 52
Perfect Competition (Contd...)

So, now next we will move to the long run equilibrium and how the short run is different from long run. Because, long run is the situation where all the inputs are variable and the output can be increased by changing all the input, there is no fixed cost in the long run.

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Long Run Equilibrium

- In the long run perfect competitive firm only earn normal profit.
- This is due to unrestricted entry into and exit of firms from the industry in the long run.
- Two extreme possibilities:
 - Firm's earning supernormal profit
 - firm's incur losses in the short run

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So, in the long run the perfect competitive firm only earn the normal profit there is no case of loss, there is no case of supernormal profit. All the firms they earn normal profit in case of a perfect competitive firm, this is due to unrestricted entry into and exit of firms from the industry in the long run.

So, if you remember one of the characteristics, what we discussed in the case of characteristic of perfect competitive economy is the free entry and free exit. And this is the main source of source of this is the main point that why the perfect competitive firm earn the normal profit. Two extreme possibility generally it may happens we can discuss two extreme possibility and then from there we can lead to the fact that, why the firm only they earn the normal profit in the case of the long run.

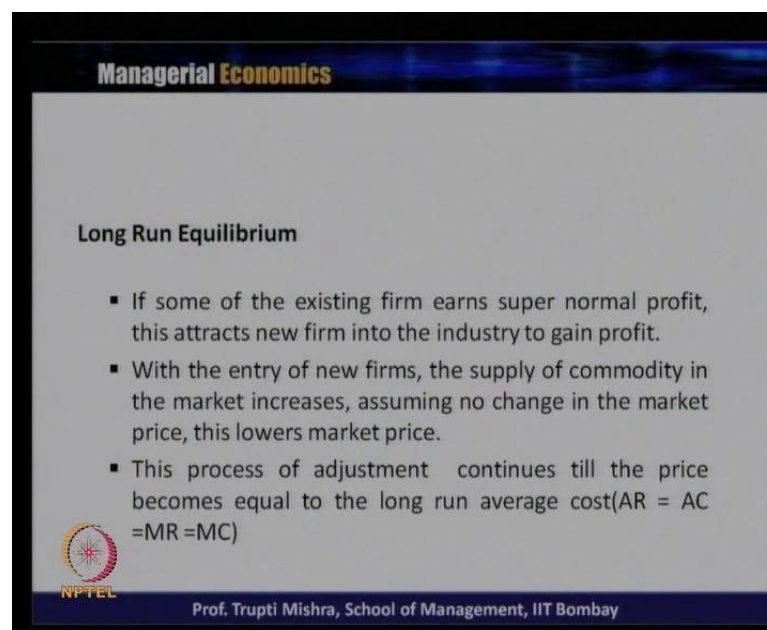
So, one firms earning supernormal profit and second firms incur losses in the short run, even the first case the firm is earning supernormal profit in the long run taking this as a situation

let us see how generally the firms handle a situation where where they just get the normal profit.

Assuming that if some of the firm they are just earning the supernormal profit in the short run. Now, what is the what will the outcome or what will be the consequence, supernormal profit some of the existing firms they are making profit in the supernormal profit in the market there is free entry. So, that will that will be the incentive for the few more firms to go and operate in the market, because it is profitable market and some of few of the firms they are getting profit over here.

New firm enter into the market there is no restriction and entry, supply increases, because they also go and produce the same product. Because, this is the market where the uniform product or the identity product gets produced, with the entry of new firm supply is of the market increases, we are assuming there is no change in the demand. Because, when the firms get profit that may not profitable for the buyers, so if buyers if it is not profitable may be they are not demanding more in the market.

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Long Run Equilibrium

- If some of the existing firm earns super normal profit, this attracts new firm into the industry to gain profit.
- With the entry of new firms, the supply of commodity in the market increases, assuming no change in the market price, this lowers market price.
- This process of adjustment continues till the price becomes equal to the long run average cost ($AR = AC = MR = MC$)

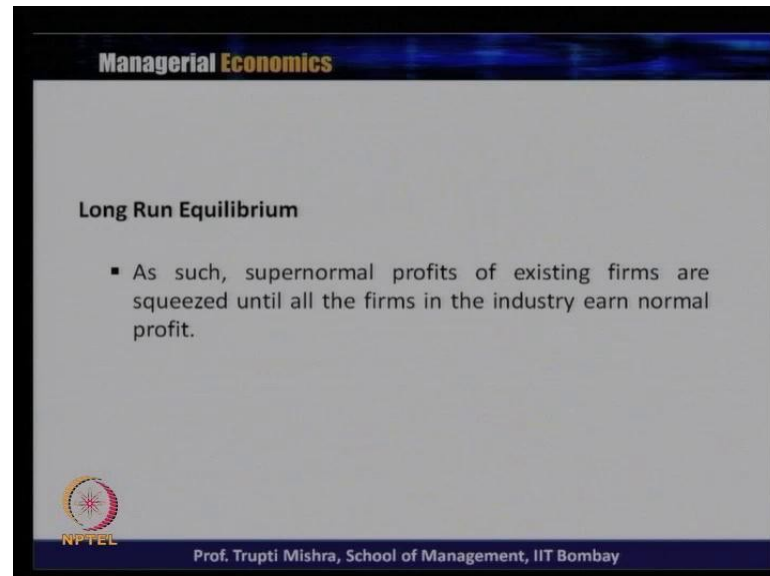
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Existing firm earn supernormal profit, which attracts the new firms to enter into the market, new firm enter into the market, no change in the demand supply increases, this lower the market prices. Because, supply is more and demand is less, the process of adjustment continue till the time price equal to the long run average cost, that is average revenue is equal to average cost which is again equal to the marginal revenue and marginal cost. So, in this

case it is the case of the normal profit where average revenue is equal to the average cost. So, the entry of the new firm will continue to come till the time at least all the firms they are not getting the normal profit in the market.


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Long Run Equilibrium

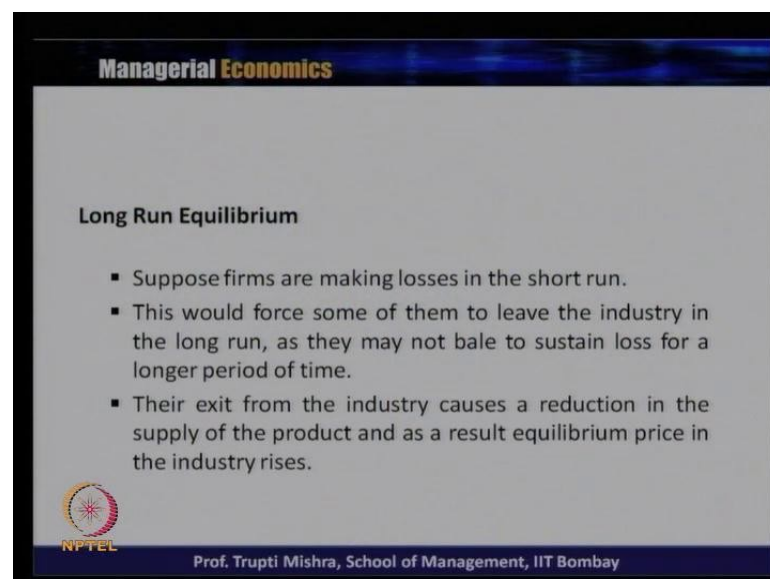
- As such, supernormal profits of existing firms are squeezed until all the firms in the industry earn normal profit.

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So, if you look at the supernormal profit of the exiting firms are as squeezed until all the firms in the industry earn the normal profit. Then we will take the second situation where some of the firm or may be existing firms, some of the existing firms they are getting or they are incurring loss. Now, what would be the outcome, since this is long run and they are all they are already incurring loss from the short run onwards.


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Long Run Equilibrium

- Suppose firms are making losses in the short run.
- This would force some of them to leave the industry in the long run, as they may not be able to sustain loss for a longer period of time.
- Their exit from the industry causes a reduction in the supply of the product and as a result equilibrium price in the industry rises.

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This would force, few of the producer or few of the sellers to leave the industry in the longer run, because they are not they may not able to sustain loss for the long period of time. Their exit from the industry cause a reduction in the supply of the product and as a result equilibrium price in the industry increases. So, now there is a decrease in the supply demand remain constant the there is an increase in the equilibrium price of the industry.

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Long Run Equilibrium

- The process of adjustment continues to the point where the marginal firm no longer earn losses- till the price line is tangent to AC curve.
- Equilibrium occurs at a point where price is tangent to the long run average cost and all the firms make normal profit in the long run.
- Thus perfectly competitive firm only earn normal profit in the long run.

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The process of adjustment again continue to the point where the marginal firm no longer earn losses or we can say till the time price, line is tangent to the average cost. So, the process or adjustment continued to the point, where the managerial firm, where the marginal firm no longer earn losses. And till the price the till the time, till the price line tangent to the average cost and if the price line is it tangent to the average cost that is how we get the normal profit. Equilibrium occurs at a point where price is tangent to the long run average cost and all the firms make normal profit in the long run.

So, equilibrium occurs at a point where price is tangent to the long run average cost curve and all the firm they just earn the normal profit. So, whether you take the case of supper normal profit, whether you take the case of the supernormal loss, this is not going to continue in the long run at least in the prefect competitive market structure, which has a significant future as free entry and free exit.


And because of that at the end of the day if you will find all perfectly competitive firm they are just getting the normal profit even, if they are getting a supernormal profit or the incurring loss. Generally that in a in a time period, generally they again come back to a situation where all the firm they are just getting the normal profit.

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Long Run Equilibrium

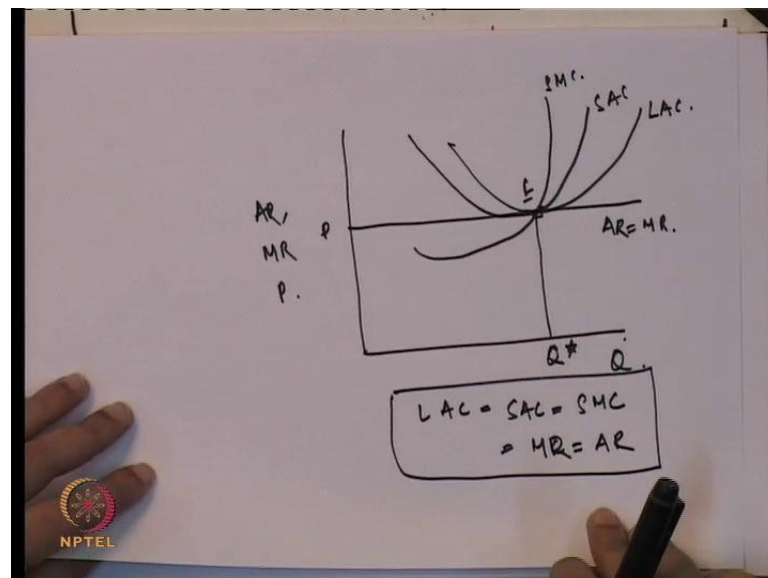
- The condition for profit maximizing behavior of firm in the long run is
- $P = MC = MR = LAC$

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So, the condition from the profit maximizing behavior of the firm in the long run immerse from here, $P = MC = MR = LAC = SAC = SMC$. So, we will just see the graphical representation that how graphically we can reach to a long run equilibrium.

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This is P which is also equal to average revenue and marginal revenue, here we take the quantity where we take the average revenue marginal revenue and price. And this is the long run average cost curve, this is the short run average cost curve this is the short run marginal cost curve and this is the equilibrium point and this is the equilibrium level of output.

So, what is the profit maximizing condition in case of long run, that is long run average cost curve is equal to the short run average cost curve equal to the short run marginal cost curve

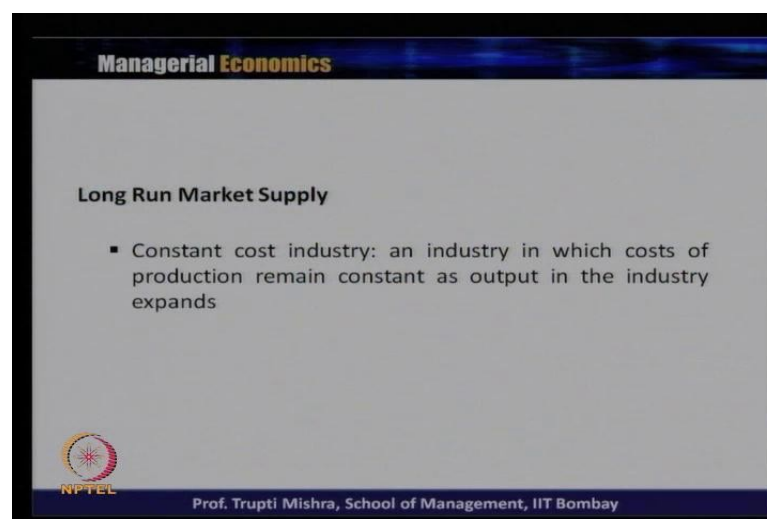
equal to the marginal equal to the marginal revenue and equal to the average revenue. So, the equality of long run average cost curve, short run average cost curve, short run marginal cost curve, marginal revenue and average revenue that leads to the long run equilibrium, long run profit maximization.

Then we will see the supply curve in case of the long run market supply and long run individual firm supply. In case of three different type of industry that is constant cost industry increasing cost industry and decreasing cost industry. So, if you remember the in case of short run the market supply is horizontal summation of the individual firm supply curve.

And how we get the individual firm supply curve individual firm supply curve which that segment of the marginal cost curve, which lies above the average variable cost, but that is that cannot be done in case of the long run. Because, in the long run at least we are not checking the shut down condition its actually exit from the market.

So, in the long run we will see that whenever there is a changes in the price, whenever there is a changes in the factor of production. It is not only due to change in the price also due to the change in the factor of production the increase or decrease in the prices of the factor, that also lead to the change in the supply. So, that we will analyze through the three different industry, that is constant cost industry, increasing cost industry and decreasing cost industry.

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Long Run Market Supply

- Constant cost industry: an industry in which costs of production remain constant as output in the industry expands

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To start with we will first analyze the constant cost industry, constant cost industry is an industry in which cost of production remain constant as output in the industry expand. Means the scale of output is increasing at the cost on cost of production, there is no increase cost of production.

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Long Run Market Supply

What will happen to the supply of the product as new firms enter the industry?
It will increase.
What happens to the price of the product?
It falls.
So the price goes back to where it was before the demand change, but there is more output being produced by more firms.

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Now, we know that whenever there is a supernormal profit, new firms enter into the market, what will happen to the supply of the product as new firms enter into the industry. Obviously, supply will increase, because new firm they have entered into the industry, what happen to the price of the product price is decreases, because given the demand then supply is more and demand is constant supply is increase. So, now supply is more than demand and that leads to decrease in the price.

So, price goes back to where it was before the demand change, but there is no more output being produced by more firm. So, if... So, the price goes back, where it was before the demand changes, but there is no more output is being produced by more firm. Because, they know that if they are increasing the supply that leads to decrease in the market price, then it is no more profitable for the existing firm at least.


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Long Run Market Supply

Note that if the price didn't drop enough, there would still be positive economic profits and firms would continue to enter the industry, supply would keep increasing, and the price would drop some more.

If the price dropped too much, it would not cover costs per unit, and there would be losses. Firms would leave the industry, supply would fall and the price would come back up to just covering costs per unit.

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Note that, if price did not drop enough there would be still the positive economic profit and firm would continue to enter the industry. So, if price is not decreasing significantly still there will be some amount of the economic profit and which will again act as a incentive for the firm to enter into the industry. The firms should continue to enter in the industry supply would keep increasing and the price would drop some more, because since there is a new firms still entering, still supply will increase and price will again decrease more.

The second one is if the price drop too much it would not cover cost per unit, there would be losses. So, at least they are not getting only the super normal profit also they are not getting the normal profit, rather they are incurring loss; firm would leave the industry supply would fall and the price would come back just covering the cost of price would come back of just covering cost per unit.

So, either if it is just dropping a bit again new firm will continue to come, because still there is some amount of profit. But if it is drops too much the existing firm they incur loss and when they are not covering of their cost per unit, they prefer to exit the market, which will reduce the supply and the price would come back of just covering the cost per unit.

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Long Run Market Supply

So what has happened as a result of the increase in demand in this constant cost industry?

We now have the same price we had before, but we now have more output because we have more firms in the industry.

So in a constant cost industry, firms will produce as much or as little as the economy demands at a price which is just enough to cover the cost per unit.

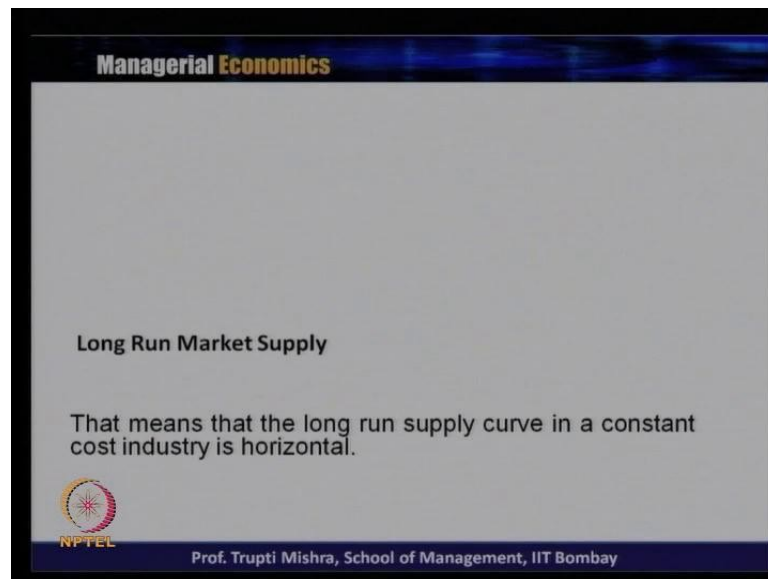
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So, what is happened as a result of increase in the demand in the constant cost industry we now at the same price we had before, but but we now have more output, because we have more firms in the industry. So, in a constant cost industry firm will produce as much or as little as the economic demands at a price it is just enough to cover the cost per unit, they will not produce more than that, because it is a constant cost industry. Firm will produce only

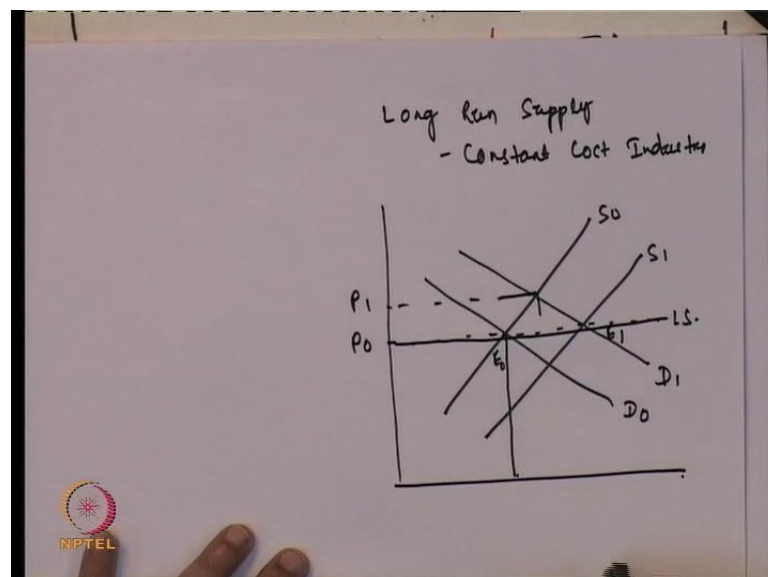
whatever is the requirement on the basis of the demand at a price, which is just enough to cover the cost per unit.

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It means the long run supply curve in a constant cost industry is horizontal, because price is fixed and the supply they increase on the basis of the demand, whenever there is a increase in the demand they just cover up that at the typical price. Now, we will see what is the how is the graphical representation of the long run supply curve in case of constant cost industry.

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So, this is our demand curve, this the demand curve this is S_1 , this is S_0 . So, this is a D_0 and this is S_0 , so this is our P_0 and at the same price we will continue to supply more. So, that is why this is our long run supply curve and this the this the price that is P_1 , this is one equilibrium point, this is another equilibrium point. So, the long run supply curve is constant,

because they are not producing more they are just increasing the supply just on the basis of the demand that is comes from the consumer.

So, this is the long run supply curve in case of constant cost industry, which is just a straight line and its parallel to the x axis. Then we will take this case in case of the increasing cost industry and decreasing cost industry.

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Long-Run Market Supply

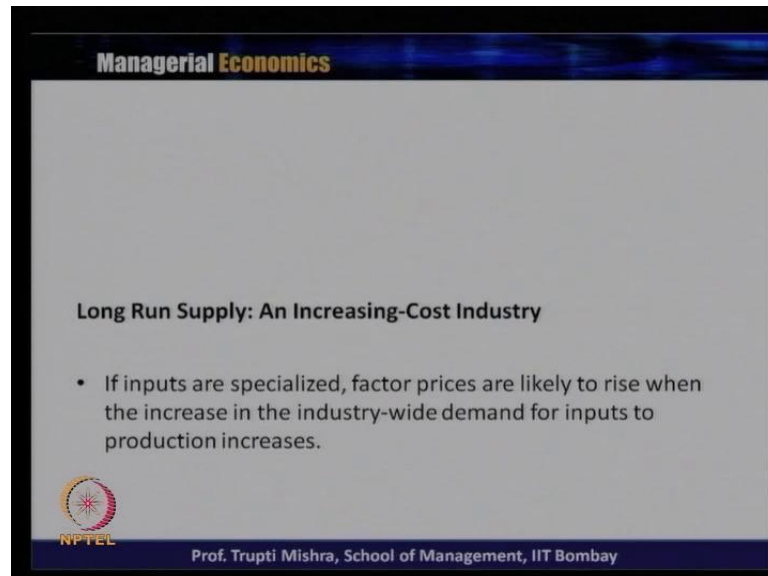
- *Increasing-cost industry* – factor prices rise as new firms enter the market and existing firms expand capacity.
- *Decreasing-cost industry* – factor prices fall as industry output expands.

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Now, what is a increasing cost industry increasing, cost industry is when they increase the scale of output the cost of production also increases. So, in case of in case of increasing cost industry factor prices raise as the new firms enter into the market and existing firm expand the capacity. Because, new firm enter into the market they require input they require factors and also the existing firm they enter they expand their capacity they also need the factor. And as usual the demand is increasing the factor price also increasing given the supplier that same level.


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Long Run Supply: An Increasing-Cost Industry

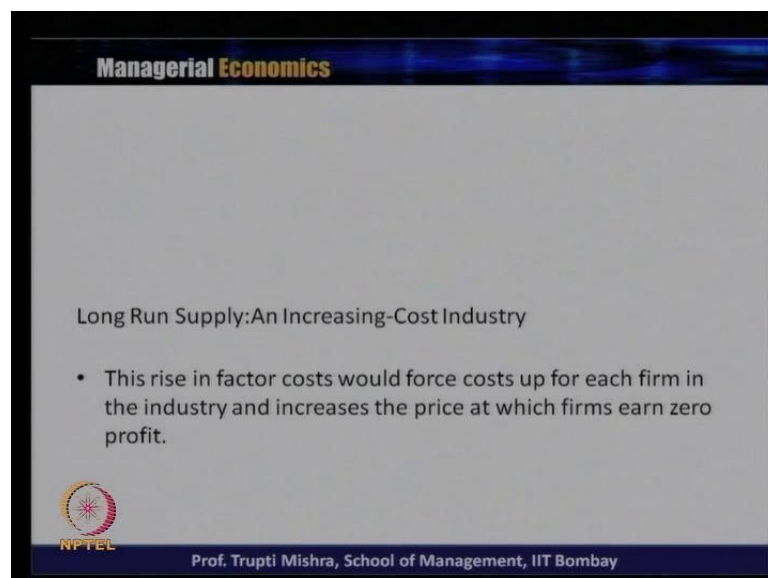
- If inputs are specialized, factor prices are likely to rise when the increase in the industry-wide demand for inputs to production increases.

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So, if the inputs are specialized factor prices are likely to raise when the increase in the industry wide demand for inputs to products increases. So, demand remain if you look at if demand is the new firms enter into the market, existing firm expand the expand the production capacity that leads to increase in the industry wide demand for inputs. And if the inputs are specialized again the factor prices are likely to increase.


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Long Run Supply: An Increasing-Cost Industry

- This rise in factor costs would force costs up for each firm in the industry and increases the price at which firms earn zero profit.

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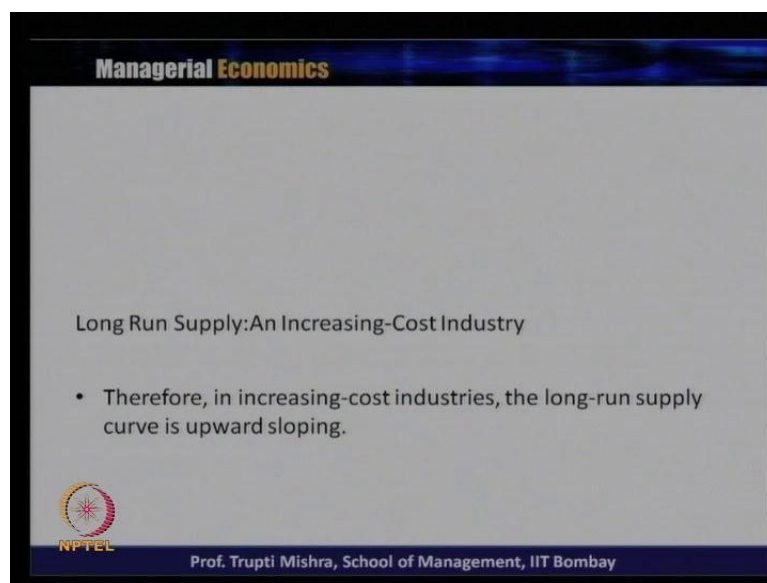
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The rise in the factor cost or the increase in the factor cost would force the cost for each firm in the industry and increase the price at which firms earn the zero profit. So, when there is a

increase in the factor cost that also lead to increase in the cost of the each firm, because now, they are spending more on the incurring the incurring the expense in the factors and the inputs.

And increase the price, because if input cost is more; obviously, the market price has to a more, because that is if the price is not covering the input cost, the firm will prefer to leave the market if they are not getting the profit. Since, it is a long run at least they should get the normal profit. So, increase in the factor price would force the cost of the firms to increasing and also the increase in the price, because at least they feel that the unit cost should at least earn, which the firms earn zero profit.

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Long Run Supply: An Increasing-Cost Industry

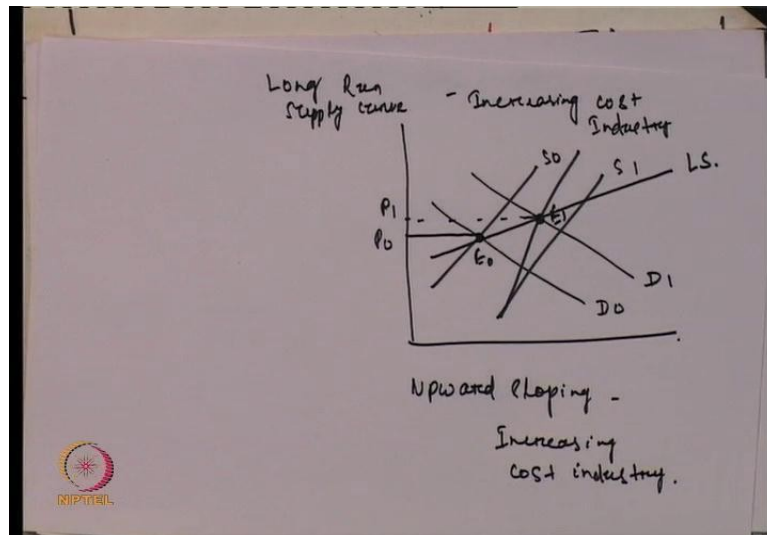
- Therefore, in increasing-cost industries, the long-run supply curve is upward sloping.

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Therefore, in case of increasing cost industry the long run supply curve is upward slopping, because increase in the new firms enter into the market existing firm expand the size. Demand for input increases and sometimes there is also special demand for specialized input that leads to increase in the cost of production for the firms, that leads to increase in the market price. And that is the reason in case of in case of increasing cost industry we get a upward slopping supply curve, and that we will check graphically that how we get a upward slopping curve in case of increasing cost industry.

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So, this is increasing cost industry, we are finding out the long run supply curve. So, we have D_0 , we have D_1 then we have S_0 and then we have S_1 . So, this is E_0 this is E_1 and corresponding to this we have P_0 we have P_1 and if you join this 2 point E_0 to E_1 we get a long run supply curve. So, it is upward sloping, sloping in case of increasing cost industry.

And why it is upward sloping, because the factor price increases which leads to the increase in the, which leads to the increase in the cost of production for the firm. And also which leads to the increase in the market price market price and that force the, in fact, that force the firms to charge a higher price. Because, they have to at least cover up the unit cost what they are incurring to produce the product.

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Long Run Supply: A Decreasing-Cost Industry

- If input prices decline when industry output expands, individual firms' marginal cost curves shift down and the long-run supply curve is downward sloping.

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Now, we will check the decreasing cost industry. So, in case of decreasing cost industry if input price declines, when the industry output expand, individual firms marginal cost curve shift down and the long run supply curve is down ward slopping. So, since in case of decreasing cost industry, when the scale of operation increases it increases with a decreasing cost of production. So, that has to give an reason that if, because of the decrease in the input price.

So, if input price declines, when the industry output expand individual firms marginal cost curve shift down, because the per unit cost decreases and the long run supply curve is downward slopping. So, it is a case of decreasing cost industry where the scale of operation increases cost of production decreases, because of less in put price, which leads to decrease in the marginal cost marginal cost shift down. And that lead to decrease in the long run supply curve, in case of a perfective competitive market structure typically in case of decreasing cost industry.

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Long Run Supply :A Decreasing-Cost Industry

- Input prices may decline to the zero-profit condition when output rises and when new entrants make it more cost-effective for other firms to provide services to all firms in the market.

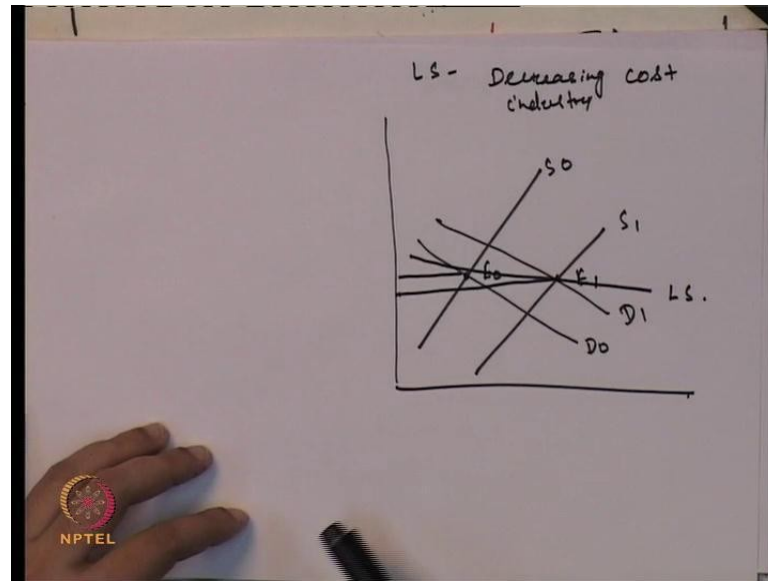
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So, input price may decline to the zero profit condition, when output increases and when new entrants make it more cost effective of for other firms to provide services to all firms in the market. So, input price may decline to the zero profit condition, when output increases and

when new entrants make it more cost effective for the other firm services for the all firms in the market.

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So, we will see the graphical representation of the decreasing cost industry. So, this is long run supply, in case of decreasing cost industry D_0 , then we have then we have D_1 , So we have S_1 . So, we have E_0 , we have E_1 , so this is the first equilibrium, this is the second equilibrium and if you do this then this is our long run supply curve. Because, this is decreasing cost industry expansion is at a decreasing cost per unit and that is the reason we get a downward sloping long run supply curve in case of the decreasing cost industry.

So, in case of constant cost industry, the long run supply curve is a straight line, horizontal. In case of increasing cost industry, the long run supply curve is upward sloping because of cost of production increases, when in when the scale of operations expand or when new firms enter into the market. And in case of decreasing cost industry the long run supply curve is downward sloping, because the cost of production decreases, when the firm or may be the scale of operation increases at a decreasing cost per unit of production.


Then we will see that what is the effect of tax or how how the consumer, how the buyers and sellers, they borne the tax imposition of the tax or they borne the burden of the tax in case of a perfect competitive market structure.

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Effect of Taxation

- Imposition of a lump sum tax
- Imposition of profit tax
- Imposition of specific sales tax

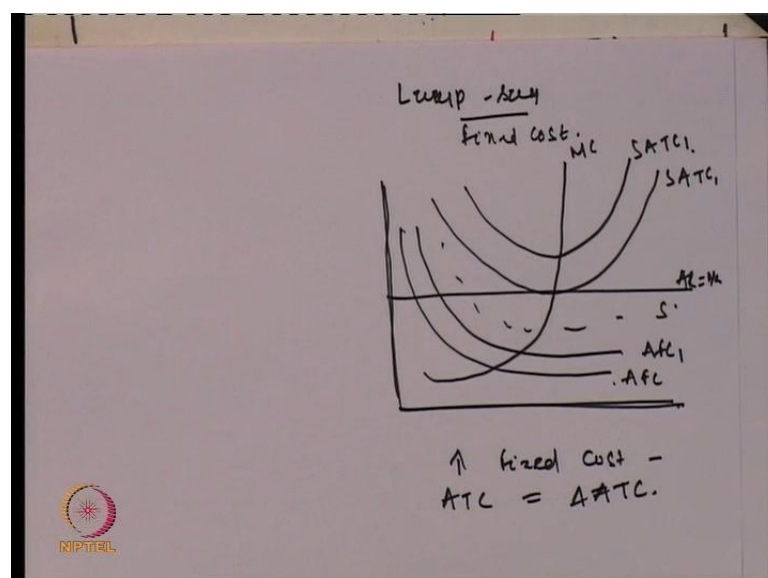
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So, we will talk about typically three type of tax, one imposition of a lump sum tax, second imposition of a profit tax and finally, the imposition of a specific sales tax. So, if you look at the lump sum tax, it is a the effect of lump sum tax is like a effect of the fixed cost. Because, it is on it is the effect is on the fixed cost and if you look at the in the short run, if there is a change in the fixed cost it is not going to change the it is not going to change the equilibrium position.

Because, till the time it is not effecting the marginal cost it is not going to change the equilibrium position. And in case of similarly in case of profit tax again it is a the effect is like a fixed cost, but in the long run the possibility is that that supply will shift, but in case of specific sale tax the imposition of tax is dealt through the elasticity of supply. And that talks about that how much is the sensitivity of the supplier with respect to change in the price. So, we will start our start our explanation for the imposition of the tax from the lump sum tax.

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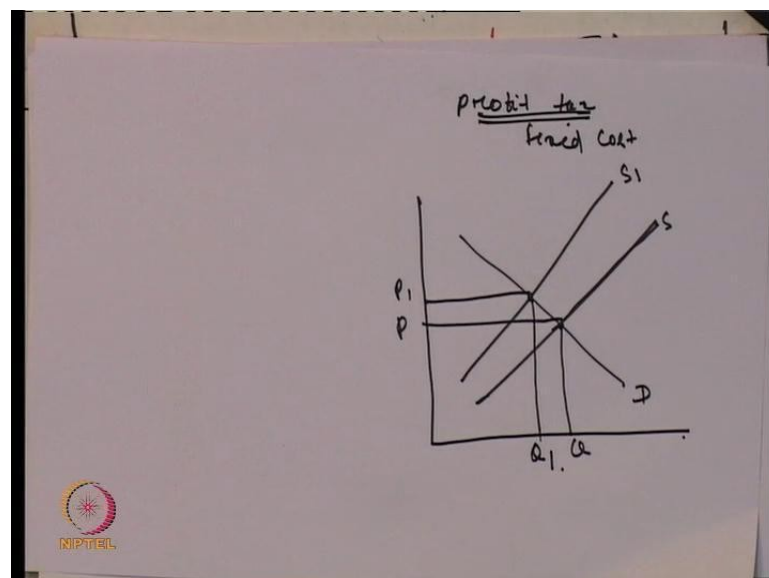
And lump sum tax is like it is one time lump sum. So, its effect is like fixed cost at least in the short run there is no effect, but when it comes to long run may be there is some effect because there may be a decrease in the output. So, this the average revenue, that is marginal revenue here we get the short run total cost curve and this the average fixed cost. Then there is an increase in the average fixed cost after the imposition of the tax, that is why this is average fixed cost change in that average fixed cost.

And with the change in the average fixed cost, the short run average cost curve is increasing that is $SATC_1$ and marginal cost generally intersect the average variable cost and average cost at its minimum. So, if you look at in case of lump sum tax only there is an increase in the fixed cost and that shifts the average total cost curve, there is a change in the average total cost curve.

Otherwise there is no much effect at least in the short run, but in the long run at least to some level of output, it is going to influence. But if you look at if it is short run someone is just earning the normal profit, then in the long run he has to incur loss because of the lump sum tax. But in the short run if someone is getting super normal profit at least after imposition of tax, he will get only the normal profit or there is some reduction in the amount of profit, but at least he is not incurring loss.

So, in this situation at least they are getting affected through the lump sum tax, because they are moving from one possibility to another possibility, that is either from super normal profit to normal profit or from normal profit to loss. Then we will take the effect of the profit tax.

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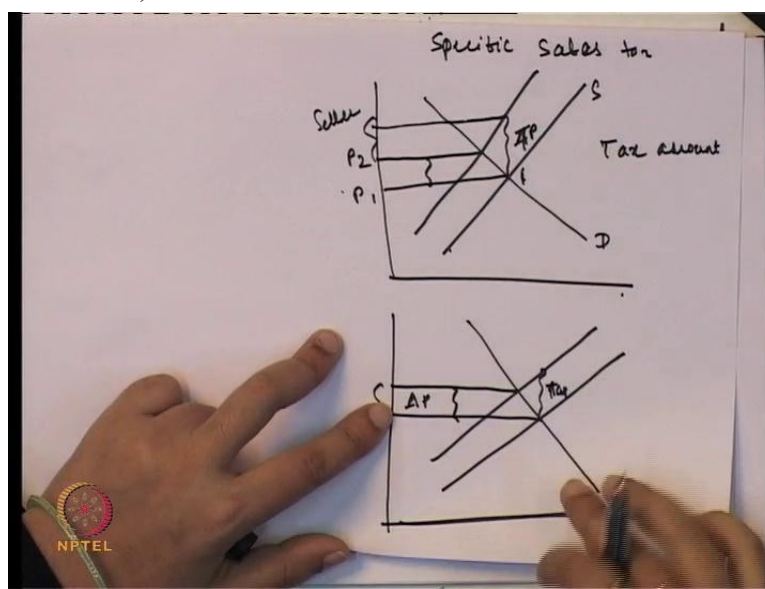
So, profit tax is also somehow in the same category that this is the the effect of like change in the fixed cost, but sometimes due to this the supply changes at least in the long run and it has it leads to increase in the price. So, this is the demand curve, this is the supply curve, this is the equilibrium quantity this the equilibrium price.

So, at least in the short run it is not much of change, but it when it takes to the long run it is generally shift the supply to the up and that leads to increase in the price and decrease in the quantity demanded. So, the effect of the profit tax if you will see if it is much felt in the long run rather than the short run, because short run it has nothing more to do or the effect is not much.

But, in case of long run that leads to decrease in the supply, because there is a imposition profit tax that leads to decrease in that leads to increase in the supply, which leads to increase in the price and decrease in the quantity demanded. And what is the specific effect of on firm, because of this profit tax again the same explanation if they are earning supernormal profit in the short run at least it is not much because they will just there will be some reduction in the profit. But if there is a just getting the normal profit the possibility that they may land into incurring loss at least in the long run with the imposition of the profit tax.

Now, we will analyze the case of specific sales tax and this effect of this specific sale tax is more on, what is the elasticity of supply. If the elasticity of supply is more generally the firms pay less for the tax and if it is less, then the firm has to pay more for the tax. So, it is all about the elasticity of supply curve that decides that what is the effect of specific sales tax on buyers and what is the effect of specific sales tax on the seller.

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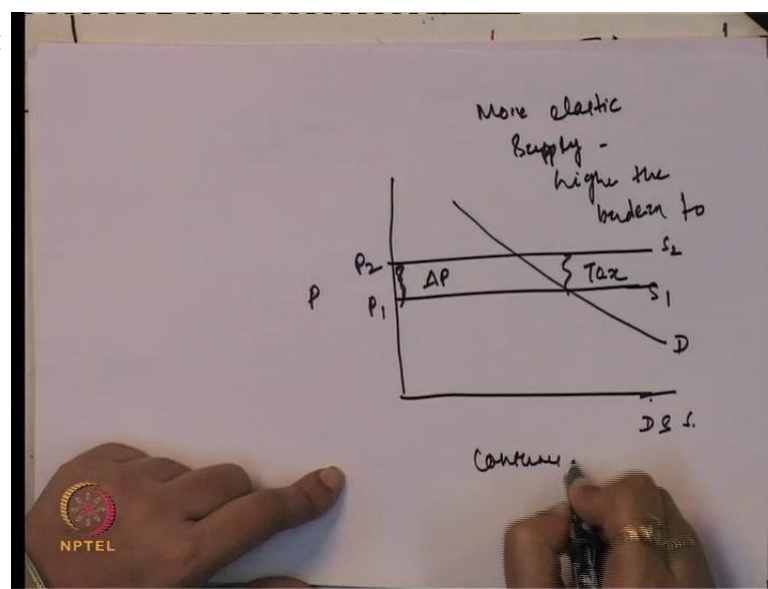
So, if you will take different scenario, and we will see how the imposition of specific sale tax effecting the buyers and seller. So, if you take a regular demand curve and the supply curve, then this is the demand curve this is the supply curve and when there is aim position of tax that is shown through the change in the supply. In this case, this is the tax and this the change in the price after imposition of tax.

So, if you look at here the entire tax amount is not passed to the consumer entire tax amount is not passed to the consumer in the form of increasing price still this much amount is paid by the seller. So, if you look at here the imposition of the specific sale tax is equally on both the side buyers and seller if it is a case of the regular demand and supply curve.

Now, suppose we will take another example, where the supply curve is elastic than the previous case and here, if you look at this is the amount of the tax and this is the change in the price. So, in this case in the, if you make it a comparison between the first case and the second case if the, since the supply curve is more elastic the major part of the burden of the tax is passed to the consumer in the form of increase in the price.

But, in case of the first case if you look at equally both the seller and buyer they were paying the tax amount, but here the supply curve is elastic. So, there is some leverage in the seller side to pass the burden of tax to the consumer in term of increase in the price and that is why here it is more as compared to this, because the change in the price is more in case of the second case and by through change in the price. Generally, the tax is passed to the consumer or may be majority portion of the tax is passed to the consumer.

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Then we will take a case where the supply curve is perfectly elastic and this is the demand curve, here we can take the may be demand and supply and here the price. So, in this case if you look at this is the tax amount and the entire tax is passed to the consumer in the form of increase in the price. Because, here is the supply curve is perfectly elastic any small change in the price will lead to greater change in the supply. And that is the reason if you look at the entire is entire supply entire tax entire tax burden is passed to the consumer.

So, more elastic is the market supply, higher is the proportion of the specific tax that can be passed to the consumer. So, more elastic is the supply, higher the burden to the consumer. So, in case of lump sum tax and fixed tax, in case of lump sum tax and profit tax the effect is like a fixed cost of production and if you look at it is not getting it is not getting much of effect in case of short short run. But in case of longer run the possibility is that they may incur loss if they are just getting the normal profit.


And in case of specific sales tax, it is always the elasticity of supply that decides that how what is the effect of what is the effect of this imposition of tax on the sellers, if supply is more elastic burden is less if supply is less elastic the burden is more, then we will look at sum of this efficiency criterion and perfectly competitive market. So, if you remember in the initial class we talked about the allocative efficiency and productive efficiency.

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Managerial Economics

Efficiency Criterion & Perfectly Competitive Markets

- (1) Resource Allocative Efficiency Explained
 - Any firm produces at $MR = MC$
 - Since $MR = P$ for competitive firm, then $P = MC$
 - Meaning: Marginal Benefit (demanders) = Marginal Cost (suppliers of using society's resources)
 - Society's marginal value of resources = its opportunity costs of using resources
 - Allocative Efficiency satisfied

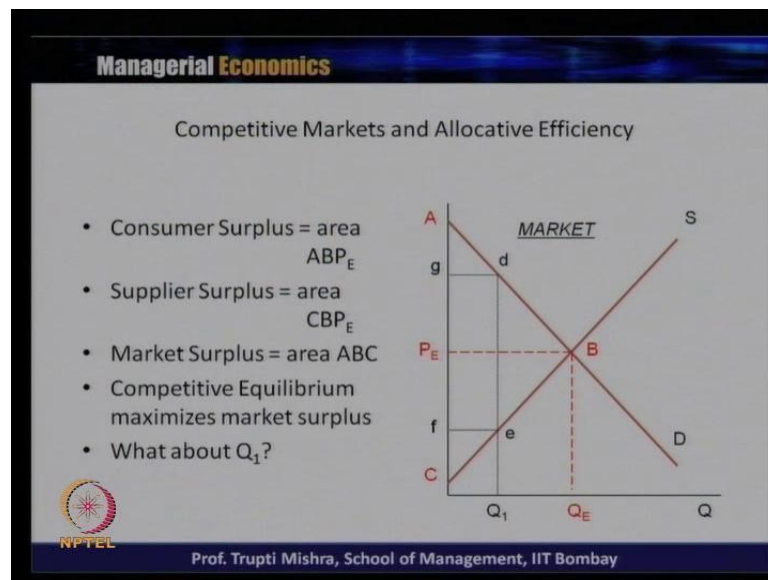
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So, we will check in the first case what is the resource allocative efficiency in case of a perfectly competitive market. Any firm they produces the produce at the marginal revenue, which is equal to the marginal cost and since marginal revenue is equal to P for competitive firm then P is also equal to marginal cost.

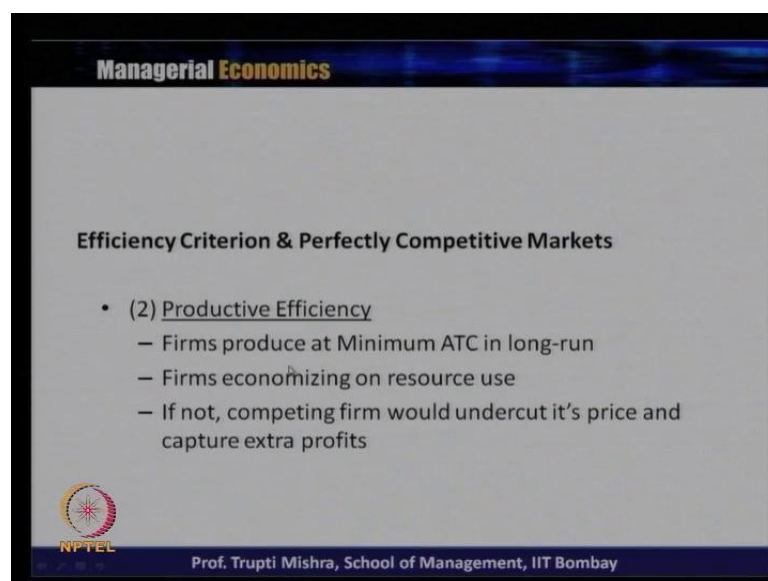
Now, what is the meaning, meaning here is the marginal when if it that is through demand and marginal cost that is supplier using the society resources. So, society marginal value of resources is equal to the opportunity cost of using resources and that is how we use the allocative efficiency or that is how the allocative efficiency get satisfied in case of a perfectly competitive market.

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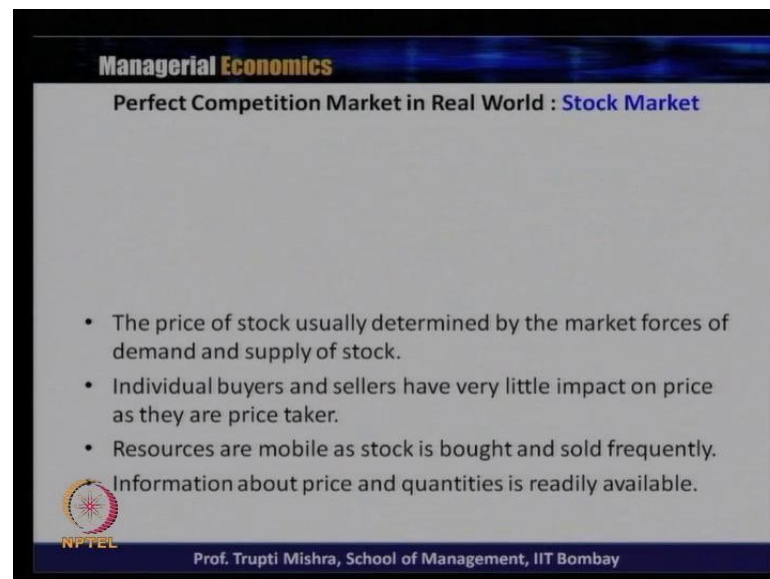
And when we again explain this through the consumer surplus and producer surplus if you look at the graph over here the consumer surplus is if you remember the at least the definition the consumer surplus is one. Where any price above the market price if the consumer is ready to pay more and if they are paying less generally they get some amount of the consumer surplus. So, consumer surplus area in specific graph if we look at ABP_E is the consumer surplus area, because that is the above the market price and supplier surplus is that is CBP_E . So, that is again C P and B and competitive equilibrium maximize the market surplus.

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Now, the question is what about Q1 what is what about the level of output. So, the second case is productive efficiency here the firm produces at the minimum of average total cost in the long run. And firm economizing on resource use and if not competing firm would undercut it is price and capture the extra profit. So, since their economy is on the economizing on the resource use, that is again satisfy the productive efficiency.

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The slide is titled "Managerial Economics" and "Perfect Competition Market in Real World : Stock Market". It lists three bullet points: "The price of stock usually determined by the market forces of demand and supply of stock.", "Individual buyers and sellers have very little impact on price as they are price taker.", and "Resources are mobile as stock is bought and sold frequently. Information about price and quantities is readily available." The slide also features the NPTEL logo and the name "Prof. Trupti Mishra, School of Management, IIT Bombay" at the bottom.

Then we will see what is the application of perfect competitive market in the real world and we will take the typical example of stock market. As I said the stock market share market somehow share at least some of the feature of the perfect competitive market. So, if you are taking the example of stock market, whether this a perfect competitive market in the real world let us analyze what are the similarity and what are the dissimilarity.

The price of stock usually determined by the market force of demand, and supply of stock, which goes with the perfect competitive market structure. Individual buyers and sellers have very little impact on price as they are the price taker again the same situation what we generally face in case of a perfect competitive market structure. Perfect mobility of resources and here also the resources are mobile as stock is bought and sold frequently and information about the price and quantity are readily available.

So, there is full information and perfect information to all the people those who are in the stock market buyers and seller. So, price decided by the market demand and market supply first feature, individual buyer seller has less impact, second feature perfect mobility of the

resources, third feature. And full information about the product price fourth feature; all this four features get match or it is comes from the characteristic of a perfect competitive market structure.

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Managerial Economics

Perfect Competition Market in Real World : Stock Market

- Funds flows in to stocks and resources flow in to uses in which the rate of return. Thus stock prices provide the signal for efficient allocation of investment in the economy.
- Imperfection occurs here also though stock market is very close to a perfect competition. For example, sale of huge amount of stocks by a large corporation will affect the price of stock.

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Now, we need to see that whether there is imperfection, but before that we see that whether like in before couple of minutes we were talking about the efficiency of the or whether the productive efficiency and allocative efficiency gets satisfied in the perfect competitive market structure or not. So, to take that as a q and same thing happens in case of stock market that fund flows into the stock and resources flow into the use and in which the rate of return. So, stock price provide a signal, signal for the efficient allocation of investment in the economy.

So, till the time all this features are matching with the perfect competitive market structure, but still there are some imperfection. And that is why we cannot say that there in a rigid form there are the perfect competitive market structure, but somehow there is a close resemblance of this type of market structure with the perfect competitive market structure.

Now, what are the what is the imperfection over here, imperfection occurs here also those stock market is very close to perfect competition. For example, sale of huge amount of stock by a large corporation will affect the price of stock, which goes against the characteristic of perfect competitive market structure, that one seller or one buyer cannot influence the price of the product.

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Managerial Economics

Perfect Competition Market in Real World : Credit Cards

- Credit card industry seem to be a concentrated industry. Visa, Master card and American express are the most familiar names and over 60% of all charges are made using one of these three cards.
- **Number and size distribution of buyers and sellers:** All though these cards are the choice of majority of consumers, these card do not originate from same firm.

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So, to summarize we can say that perfect competitive market stock market closely come to the perfect competitive market, but still it is there are some imperfection occurs. So, in the next class again we will take one more example like whether credit card industry comes in the category of perfect competitive market structure or not. And then we will start our discussion on the monopoly.

So, to summarize whatever we discussed today is we talked about the market supply in the short run, which is the segment segment of MC which lies above the average variable cost. We talk about the long run equilibrium, we discussed about the long run supply curve in case of increasing cost industry, constant cost industry, decreasing cost industry. And we talked about the imposition of tax and we talked about the allocative efficiency and productive efficiency, whether that is getting satisfied in case of a perfect competitive market structure or not. So, we will carry forward our discussion of perfect competitive market structure application to real word and monopoly in the next session.