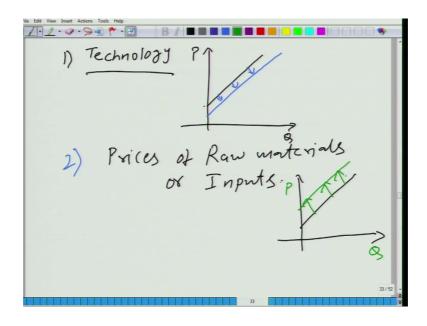
An Introduction to Microeconomics Prof. Vimal Kumar Department of Economic Sciences Indian Institute of Technology, Kanpur

Lecture – 14 Factors Effecting Supply

Let us look at the factors affecting the supply curve.

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We have learned what do we mean by supply curve supply curve, just to remind you that supply curve is a curve that gives the combination of market price and at that price sellers willingness to supply certain quantity of good.

So, now let us look at the factors affecting the supply curve and the first is technology. So, here we have again I remind you again and again, then whenever in economics whenever we are drawing the graph, quantity is always on x axis and price on y axis ok. Even though quantity is dependent variable and price is independent variable and roughly this is the supply curve. It need not be a straight line it can be any upward sloping curve, but just for illustration I am drawing this straight line.

So, now let us see what happens if there is an improvement in the technology, what can you get, what does it mean if there is an improvement in that technology. It means it can mean two things either you need less amount of input to produce.

Student: (Refer Time: 01:39).

The same amount of output that can be one meaning or it can be that the new there is

absolutely new technology, that produces the same output more efficiently, but it does

not mean what you take the meaning of technology. It if there is an improvement in

technology it means the marginal cost to produce one more unit is little less and let me

remind you what is marginal cost? Marginal cost at any particular level is the cost to

produce one more unit ok.

So, if seller is producing that unit, he needs to recover at least that much of amount from

the market. If his marginal cost is 5 rupees and the market price is 4 rupees he should not

produce this particular unit. Because by producing it he would incur five rupees of a cost

and he will get only 4 rupees. So, he will make a loss that is why he would not produce.

So, technology leads to reduction in cost ok. So, what does it mean in terms of supply

curve?

Student: (Refer Time: 02:52).

At the same price the producer will be willing to produce more. So, we will have a shift

in the supply curve, it will shift outward ok.

So, let me draw it here this is the shift. So, technology an improvement in technology

means, an increase in supply. The second factor is the prices of prices of raw material or

more broadly speaking prices of inputs ok. So, take example of one input which is not

raw material labor you need human resources to produce something.

Now, let us say wage goes up wage that you need to pay to a worker goes up, what will

be its impact on the supply curve? Let me again draw the basic supply curve what will

happen.

Student: (Refer Time: 04:13) inward shift why.

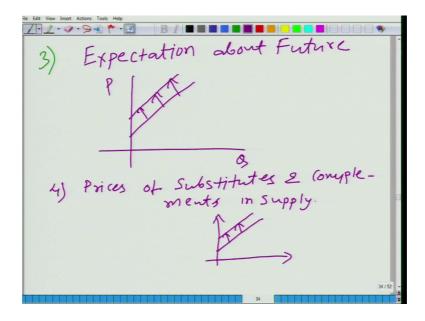
Student: (Refer Time: 04:14) because.

Wage has increased it means to produce one more unit, you need to pay a little bit more

to the worker. So, marginal cost has increased it means the supply curve would shift

inward; it means supplier is willing to supply less amount of good at the same price this will be the movement.

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Now, let us look at the third factor; third factor is expectation about future. Let us take an example from petrol industry. When a petrol pump owner although he is not producing, but he is supplying the petrol, later on you will see that in economics we sometime we use goods and services interchangeably; he is basically not producing a good, but he is producing some sort of service. So, if he expects that the price of petrol it will be the input price for him in a way, that it goo it is going to go up in the near future let us say in 2-3 days what would he do?

Student: (Refer Time: 05:42).

His willingness to supply petrol today will decrease he would supply less why? Because he thinks that in the future he will be able to sell his petrol at higher price. So, what will be the shift in the supply curve?

Student: Inward.

Inward it will be inward shift.

Now, fourth is it clear? Similarly I am just talk I gave you only one example from future, you will have to analyze depending on the scenario. If you feel that tomorrow onwards

no one is going to buy petrol because of some reason probably you will be willing to sell

at less lower price. So, your supply would increase fine .

Now, let us look at the fourth factor, that is the prices of substitutes and complements in

supply not in consumption in supply. So, I gave you an example or from airplane

industry Boeing, and I discussed that civilian aircraft and military aircraft they are

substitutes in production. So, its let us say because of some reason the price of military

aircraft goes up, what will happen to the supply of civilian aircraft by this Boeing

company.

Student: It will decrease.

It will decrease; why because Boeing will devote its resources to produce.

Student: more.

More military aircraft and because they are substitute the military and civilian aircrafts

are substitutes in production, it means Boeing is using the same sort of a same kind of

vastly same facility for to produce either military aircraft or civilian aircraft. It means the

willingness to supply civilian aircraft goes down if price of military aircraft goes up. So,

supply of civilian aircraft will decrease.

And similarly let us say I gave you another example complements in supply milk and

cow dung, if price of cow dung goes up.

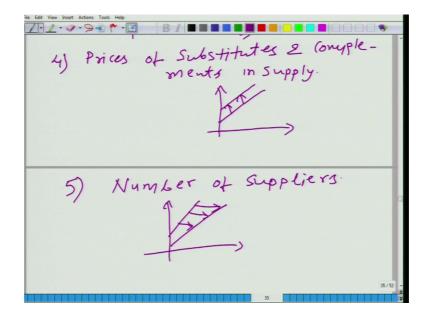
Student: Supply of milk.

Supply of milk will?

Student: Increase.

Increase fine.

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So, let us move to the last factor at least in my list you can of course, think of more factors by the way all these factors that we have discussed; they affect not only the market supplies, but also individual supply. Now I am going to talk about a factor that affects only market supply not the individual supply and that is number of suppliers. If number goes up what will happen to the market supply?

Student: Goes up.

Market supply will go up is it clear.