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

Lecture – 117
Two Interpretation of Supply Function

So, let us understand supply function from a slightly different angle. So, we are going to talk about supply function and inverse supply function.

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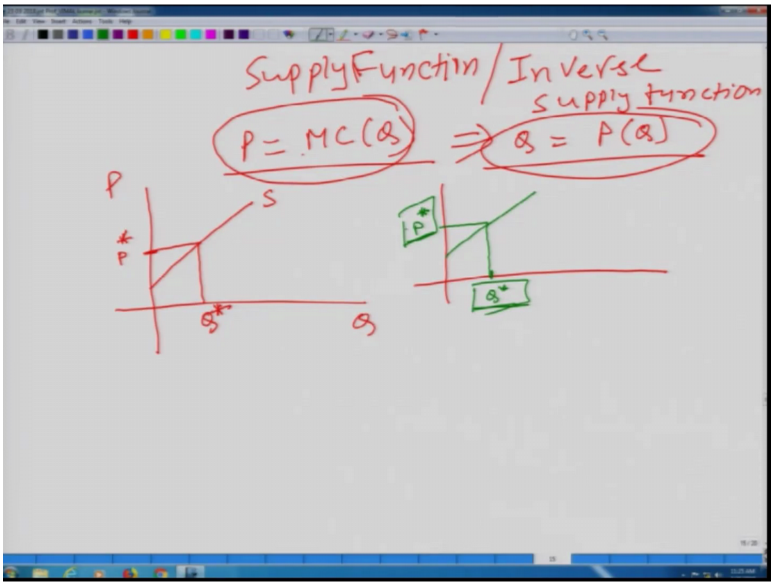

Again, let us get back to the equation that we used to obtain the supply function. So, this is what we had used P is equal to marginal cost. To obtain the supply function, how did we do it? Again, I am repeating it by writing this equation as Q as a function of P we got the supply function.

So, very clearly when we draw one of the quirkiness that we have in economics when we draw this particular equation we should have Q on the x axis and P on y axis which is always the case and when we draw this supply function we should have Q on y axis and P on x axis that we never do. In economics we always keep P on the y axis and Q on the x axis. So, when we draw even though this is the inverse of the supply function and this is the supply function when we draw we get exactly the same equation.

So, let us say this is what we obtain, this is the supply function as well as the inverse supply function. Now we can have we can read this graph in 2 different ways, one way to look at it is that if P let us say P is P star, then we can draw a horizontal line and then from here a vertical line from this graph we can read that market price is P star then this form would supply Q star amount of output in the market. The second interpretation is that instead of starting on a value on y axis, we can start from a value on x axis ok.

So, let us say roughly the same graph and we start from here that; Q star then this is what we get, what does it indicate? Of course, by looking at it we reach to the same point, but what interpret the here we can have slightly different interpretation that if a form is supplying Q star amount of output in the market it simply means that to produce last unit the firm has spent P star amount extra. So, the marginal cost at the level of production for a firm operating in the perfectly competitive environment has to be equal to P star. So, these are 2 different interpretation.

Thank you.