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

# Lecture – 30 Incidence of Tax

Let us look at what you are talking about incidence of tax incidence of tax. What is incidence of tax is simply its economic jargon to say who pays the tax.

(Refer Slide Time: 00:19)

$\rightarrow ( \mathcal{B}^* \mathcal{L} \stackrel{p^*d}{\rightarrow} \uparrow \stackrel{p^{**}\mathcal{L}}{\rightarrow} )$	
Incidence of Tax (who pays the tax)	
CWho pays Th	
legal/ statutory	Economic/ Real
Stan Willing	¢ CV-
	76/100 -
	76

So, we can talk about it in two different sense one in legal sense or statutory sense and second we can talk about in economic or real sense. Incidence of tax is very simple when we are talking about the legal scenario the statutory scenario. What we say simply is the agent in our case buyer or seller legally responsible to pay the tax.

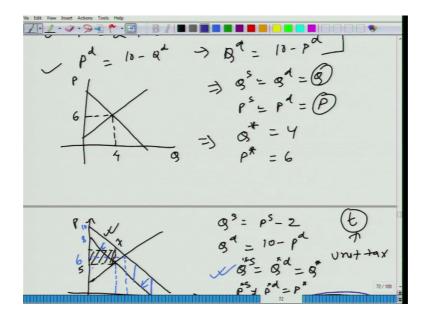
(Refer Slide Time: 01:12)

7-1-9-9-Incidence of Tax (Who pays the tax) Economic legal Statutory the rejent (bryer/seller) legally responsible to the bears a chul burden of the tax

Illegal sense he pays the tax it is very simple no definition he pays the tax. But what happens in the economics sense. The agent who bears the actual burden of the tax and these two are different.

Here just we saw in this particular case we are talking about whether it is imposed on buyer or on seller.

(Refer Slide Time: 20:01)



The tax would be shared by both of them let us look at it just for example. Earlier they were buying and selling 4 units at price of 6.

Student: 6.

6 unit per unit of good. Now, after the imposition of tax whether it was imposed on seller or on buyer that is immaterial what happen? Seller in the new scenario seller gets 5 unit while buyer gets.

Student: Buyer has to.

Buyer has to pay.

Student: 7 (Refer Time: 02:48).

7 unit.

Student: 7 unit.

So, who is paying the tax?

Student: Seller buyer, buyer.

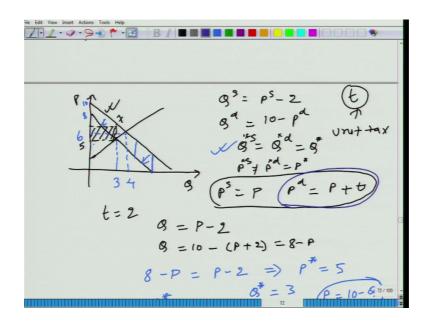
Buyer or seller or both.

Student: Both.

Both. See, now what is happening now 3 units are being bought and sold in the market, 3 units are being bought and sold in the market fine and Earlier sellers were getting 6 unit for one good one quantity of good. Now, how much seller is getting?

Student: 5.

(Refer Slide Time: 03:12)



5. So, there is decrease one unit per quantity seller is no longer getting 6 seller is getting 5 per unit. Earlier buyer was paying 6 per unit now buyer is paying seven per unit. So, buyer has to pay one unit more and seller receives one unit less and this, the difference of two unit that goes to the government. So, in this case I would say buyers and sellers they are equally sharing the tax. It does not always happen that they both equally share the tax, but in this case it is happening they both equally share the tax.

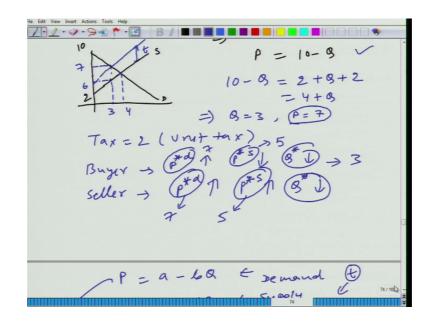
To answer your question that you say why we care that is if tax has to be imposed it should be imposed on the other party not on us if we consider ourself buyer we hope that tax is imposed on seller and if we are seller we hope that tax is imposed on buyer. Two reasons I would give you and both are partially true. The one reason is that inadequate economic knowledge. We think legal incidence of tax is same as the real incidence of tax that is one point of you know we do not understand that. We think if seller is paying then why should we care. And when similarly the second reason is the here we are dealing with a very special case we are talking about perfectly competitive equilibrium although I have not talked about this case in the detail, but what we assume that there are large number of buyers and large number of.

Student: Seller.

Seller.

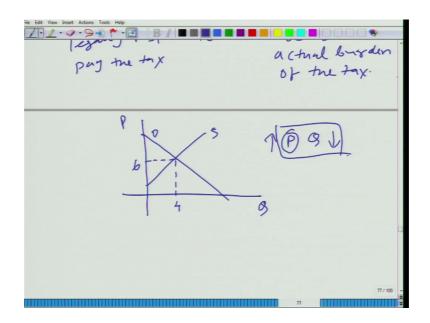
So, in this case whenever you have this particular scenario it does not matter whether tax is imposed on buyer or on seller it would be decided by who pays the tax would be decided by some other factor that we will look at, but if market is not perfectly competitive then it does matter who has to pay the taxes. So, that scenario we are not talking about. When we talk about a different kind of market there again we will give the example that what happens when tax is imposed in this particular kind of market fine. But now let us look at it this particular market.

(Refer Slide Time: 06:03)



See, one way to you can look at it just to explain, just to get the feel of this part.

# (Refer Slide Time: 06:07)



What is happening? This is the, these are two original curve supply and this is demand. Now, let us say seller is being asked to pay certain amount of tax per unit of gold sold in the market the tendency that seller earlier if we continue with the example here is 4 and here is.

# Student: 6.

6 what seller would realize seller would think tax has been imposed to us I am just talking colloquially the tax has been imposed on us. So, let us pass this tax to the buyer. What would be an ideal for us that to charge 6 plus two more unit that is the tax 8 unit 8 unit per quantity, but seller would also realize the demand is a downward sloping function. If price goes up a buyers have to pay higher price they would then they would buy less of.

# Student: Goods.

Less of the goods they would not buy the same amount they would buy less. So, what happens? If they pass the tax to consumer the quantity bought will go down considerably. So, what they realize that what if we they are not interested in how much they charge they are interested in maximizing their revenue, revenue is equal to P multiplied by Q this is P multiplied by Q. So, if P goes up Q comes down. So, they are not interested in individual P they are interested in on the whole thing.

So, they found the new equilibrium where these two are they get the list effect where they are able to maximize their revenue. So, they figure out that in certain scenario its good idea to share some of the tax burden so that consumer does not decrease consumers do not decrease their consumption considerably you understand that is why it is happening. When it is imposed on buyer what happens? The same if it is imposed on buyer sellers natural reaction would be why should we bother you know it is imposed on buyer, but immediately they realize or even before they think about it if they have they are in business for long time they realize this that if they have to pay higher amount per unit of the good they will buy less of the goods.

So, it is good idea to take away some of the burden from consumers so they consume more of goods and that is why they will end up sharing some of the tax burden, is it clear. That is why the tax incidence is different, the economic tax incidence is different from legal tax incidence. We are talking about realistic scenario.