Microeconomics, Module 1: “Supply, Demand, and Equilibrium”

Overview and Concepts

(The attached PDF file has better formatting.)

Law of Demand: When the price of a good rises, people buy less of it. Demand means the demand curve, or the relation between price and the quantity demanded.

- Quantity demanded (not demand) is the amount consumed at a given price.
- A change in anything *other than price* changes demand (not quantity demanded)

A *sales tax* is paid to the government by consumers. By *price*, we mean the pre-tax price paid to the suppliers, not the after-tax price paid to both the suppliers and the government.

With a sales tax, the demand curve moves *down* by the amount of the tax.

Question: The seller remits the sales tax to the government; what does Landsburg mean that the buyer pays the sales tax to the government?

Answer: The seller is the agent of the buyer, giving the tax to the government. Suppose a shirt costs $30 plus a 5% sales tax. The price on the receipt is $30, not $31.50. The $1.50 of sales tax is separate from the price of the shirt. The buyer gives the sales tax to the seller as the agent for giving the sales tax to the government.

Law of Supply: When the price of a good rises, the quantity supplied rises. The term *supply* means the supply curve, not the quantity supplied.

- Quantity supplied (not supply) is the amount sold at a given price.
- A change in anything *other than price* changes supply (not quantity supplied)

The law of supply is less inviolable than the law of demand. In particular, the supply of labor may drop with wages. Barro discusses this in detail, referring to a wealth effect (what Landsburg calls an income effect) and a substitution effect.

An excise tax is paid to the government by suppliers. The supply curve shifts *up* by the amount of the tax.

Question: Why does the demand curve shift *down* and the supply curve shift *up* from taxes?

Answer: Both curves shift left, since the tax means that less is demanded or supplied for a given pre-tax price. The demand curve is downward sloping, so a leftward shift is a downward shift. The supply curve is upward sloping, so a leftward shift is an upward shift.

Question: Why don’t we say leftward shift instead of upward or downward shift?

Answer: The upward or downward shift is the amount of the tax. The leftward shift is the amount of the tax divided by the slope. The upward and downward shifts are easier to relate to the size of the tax.

- A sales tax reduces equilibrium Q and P; P decreases by *less* than amount of the tax.
- An excise tax causes a lower Q and a higher P; P increases by *less* than the amount of the tax.

The after-tax price is the same with an excise tax or a sales tax. Landsburg expresses this as *the economic incidence of the tax is independent of the legal incidence*.