Econ 51
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Quiz 6: Solution

Aggregate Demand is given by D(p) =1/p and Aggregate Supply is given by S(p)=p.

(a) To find the equilibrium price and quantity, we need to fine the price p, that equates aggegrate demand and supply. Setting :

$$\frac{1}{p} = p$$
$$p = 1 \Rightarrow q = 1$$

(b) Demand Shifters:

We are looking for anything that can change the quantity of a good demanded, exluding changes in the price of the good itself (this would cause a movement along the demand curve) For example:

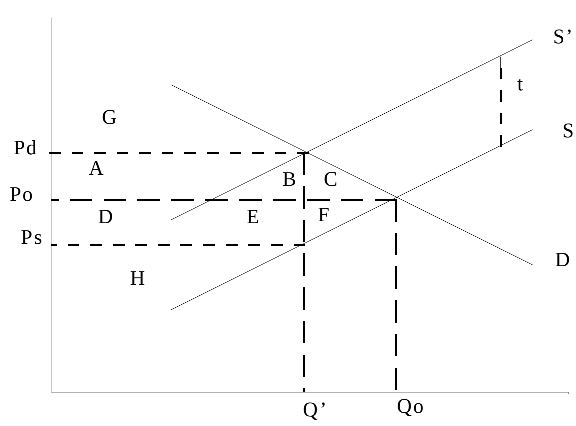
- Changes in the underlying taste for the good
- Changes in the price of a substitute or complement of the good
- Increases or decreases in personal income
- Exogenous increases in the population

Supply Shifters:

We are looking for anything than can change the Marginal Cost of producing the good:

- Advances in the production technology
- Changes in the price of inputs. Remember, a movement along the supply curve is caused by changes in the price of the output.
- The advent of industry economies or diseconomies of scale

(c) The government introduces a sales tax. This drives a wedge between the price paid by consumers (Pd) and the price received by producers (Ps). The price paid by consumers rises, the price received by producers falls and the quantity consumed also falls. The diagram below illustrates the effect of a lump sum tax.



	Old	New	Change
Consumer Surplus	g a b c	g	-a -b -c
Producer Surplus	d e f h	h	-d -e -f
Government Revenue		a b d e	+a +b +d +e
Dead Weight Loss			-c -f

There is a net transfer of both consumer and producer surplus to the government. In addition there is a net loss of welfare none as the Dead Weight Loss.