Taxation by another name

7-4 Price Control

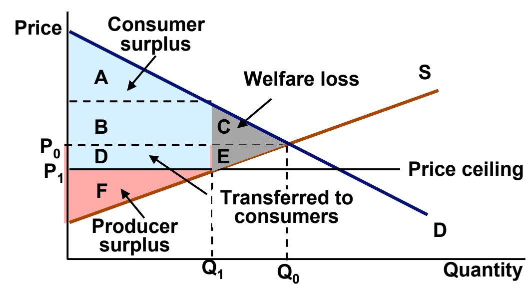
Government Intervention as Implicit Taxation

- Government intervention in the form of price controls can be viewed as a combination tax and subsidy.
- A price ceiling is an implicit tax on producers and an implicit subsidy to producers that causes a welfare loss identical to the loss from taxation.
- A price floor is a tax on consumers and a subsidy for producers that transfers consumer surplus to producers.

Price Ceilings

- A ***price ceiling*** is a government-set price below market equilibrium price.
- It is an implicit tax on producers and an implicit subsidy to consumers.

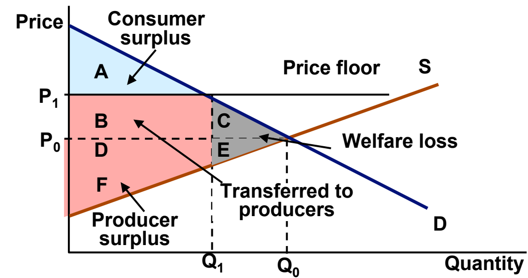
Effect of a Price Ceiling



Price Floors

- A ***price floor*** is a government-set price above equilibrium price.
- It is a tax on consumers and a subsidy to producers.
- Price floors transfer consumer surplus to producers.

Effect of a Price Floor



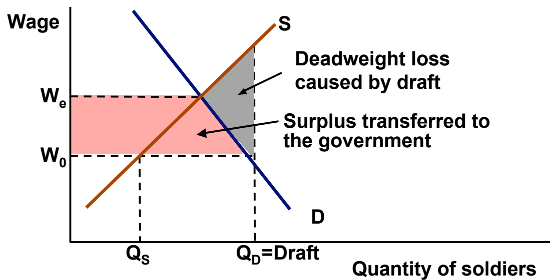
The Difference Between Taxes and Price Controls

- Price ceilings create shortages and taxes do not unless people try to evade them.
- Taxes leave people free to choose how much to supply and consume as long as they pay the tax.
- Shortages also create black markets.

A Price Ceiling with Forced Supply

- The draft is an example of a price ceiling with forced supply.
- A draft must be imposed when the wage offered by the army is below equilibrium and the quantity of soldiers supplied is below the quantity demanded.
- The surplus is transferred from the ones drafted to the government.

Effect of a Draft on Surplus



Rent Seeking, Politics, and Elasticities

- Price controls reduce total producer and consumer surpluses.
- Governments institute them because people care more about their own surplus than about total surplus.
- Individuals spend money to lobby governments to institute policies that increase their own surplus.

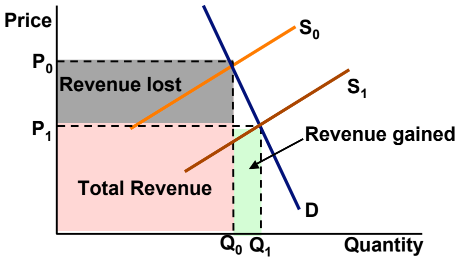
Rent Seeking, Politics, and Elasticities

- Rent seeking – activities designed to transfer surplus from one group to another.
- Public choice economists integrate economic analysis of politics with their analysis of the economy.
- They argue that when all rent seeking and tax consequences are netted out, there is often not a net gain to the public.

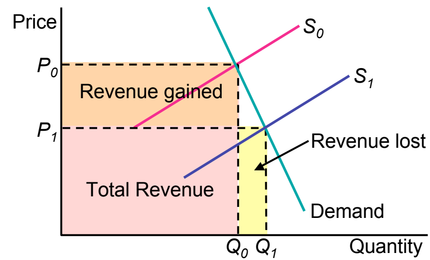
Inelastic Demand and Incentives to Restrict Supply

- When demand is inelastic, such as the demand for food, producers have incentives to restrict supply.
- Advances in farming productivity increase supply, but decrease price.
- Since demand is inelastic, lower prices decrease total revenue.
- Farmers have an incentive to restrict supply in order to raise price and increase total revenue.

Inelastic Demand & Producing more



Inelastic Demand and Incentives to Restrict Supply

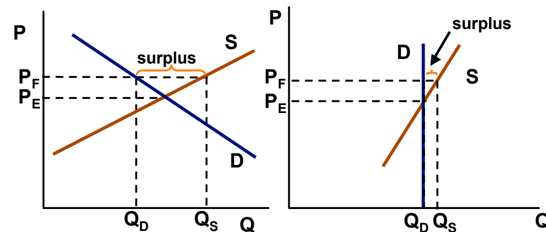


Inelastic Supplies and Incentives to Restrict Prices

- When supply is inelastic, consumers have incentives to restrict prices.
- When supply is inelastic and demand increases, prices increase causing consumers to lobby for price controls.
- Rent control in New York City is an example.

Price Floors and Elasticity of Demand and Supply

- The surplus created by a price floor is larger if demand and supply are elastic.



The Long-Run/Short-Run Problem of Price Controls

- The problem of price controls worsen from the short run to the long run.
- In the long run, supply and demand tend to be much more elastic than in the short run.

The Long-Run/Short-Run Problem of Price Controls

- In the short run there will be small effects from the price controls.
- There will be huge effects in the long run.

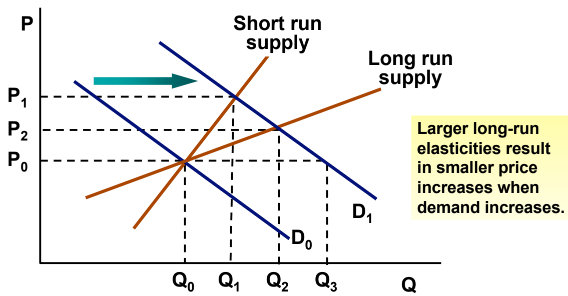
The Long-Run/Short-Run Problem of Price Controls

- In the face of price controls, potential new competitors hate to enter the market thereby strangling supply.
- Vacancy rates drop as potential new renters scramble to find shrinking affordable housing.

The Long-Run/Short-Run Problems of Price Controls

- In the long-run, supply and demand tend to be much more elastic than in the short run.
- In the short run, when demand and supply are more inelastic, the effects of price controls are small.
- In the long run, with more elastic demand and supply, the shortages or surpluses are larger.

Long-Run and Short-Run Elasticities



Larger long-run elasticities result in smaller price increases when demand increases.

Summary

- Consumer surplus is the net benefit a consumer gets from purchasing a good.
- Producer surplus is the net benefit a producer gets from selling a good.
- Equilibrium maximizes the combination of consumer and producer surplus.
- Taxes create a loss of consumer and producer surplus known as deadweight loss, which is graphically represented by the welfare loss triangle.

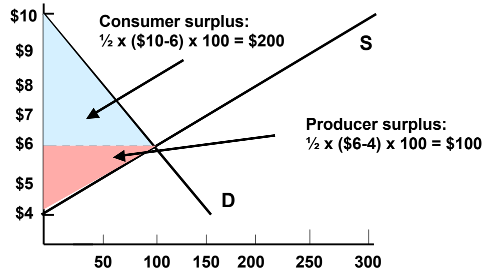
Summary

- The cost of taxation to consumers and producers includes the actual tax paid, the deadweight loss, and the costs of administering the tax.
- Government follows both the benefit principle and the ability-to-pay principle when deciding on whom to levy taxes.
- Relative elasticities determine who bears the burden of the tax. The more inelastic one's demand or supply, the larger the burden of the tax.

Summary

- Price ceilings and floors, like taxes, result in loss of consumer and producer surplus.
- Price ceilings transfer producer surplus to consumers; they are a tax on producers and a subsidy to consumers.
- Price floors transfer consumer surplus to producers; they are a tax on consumers and a subsidy to producers.
- The more elastic supply and/or demand is, the greater the surplus with an effective price floor and the greater the shortage is with an effective price ceiling.

Review Question 7-1 **Given the following demand and supply of pizza, find consumer and producer surplus.**



Review Question 7-2 **Given the following demand and supply of pizza, show the effects of a price floor at $8.**