

**Markets in Action:
Government Participation**

Price Floors/Ceilings
Tariffs/Quotas
Sales Taxes

Government Intervention

- What we have looked at before were cases where the "invisible hand" and market mechanism worked without interference from outside sources.

- Lets look now at what happens when there is government intervention in the market

Government Intervention

- Cases where governments (Federal, State, Local) intervene:
 - Price Ceilings
 - Price Floors
 - Sales Taxes
 - Tariffs
 - Quotas

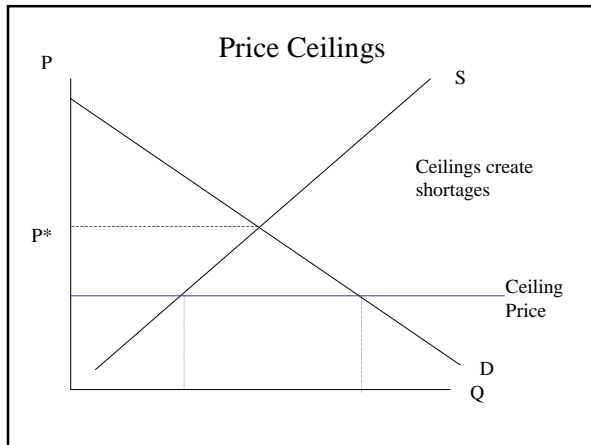
Price Ceilings

- **Price Ceiling:** A government regulation that limits how high a price can be charged for a good/service
- 2 possible situations :

1) ceiling set above the equilibrium price

2) ceiling set below the equilibrium price

Where do we see price ceilings in place?



Price Floors

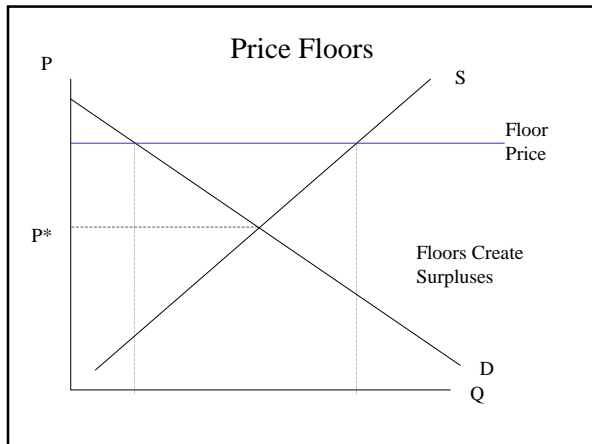
Price Floors: A government regulation that limits how low a price may be charged for a good/service

2 possible situations :

1) ceiling set above the equilibrium price

2) ceiling set below the equilibrium price

In what situations do we see price floors in place?



Quotas

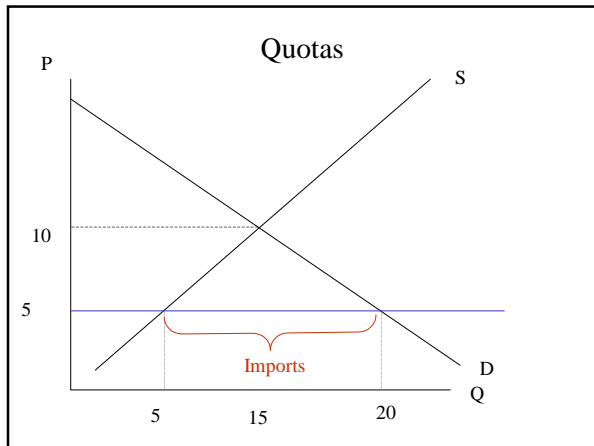
- Limit the quantity of imported goods that can enter a market

- 2 possible scenarios
 - 1) Binding quota (*)
 - 2) Non-binding quota

Why would the government ever use a quota rather than a tariff?

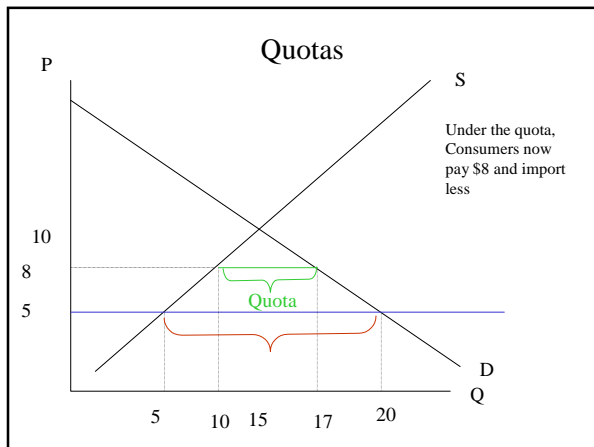
Quotas

- Suppose the US autarky (no trade) price is \$10.00. Suppose also that the price that the rest of the world pays is \$5.00.
- If the US begins to trade, its own firms will supply 5 units at \$5.00, while demanding 20 units
- This means the US must import 15 units



Quota

- Suppose a quota is put in place that limits imports to 7 units. What will happen to:
 - 1) US production
 - 2) US consumption
 - 3) Price US consumers pay



Sales Taxes

While there are many different types of sales taxes, we will focus on a specific tax.

A **specific tax** is a tax where for each unit of a good sold, a certain amount of money is paid to the government.

One type of this tax is called an EXCISE TAX.

Taxes

- NOTE:
- Sellers (Producers) only receive the price that excludes the tax.
- Buyers are faced with the price that includes the tax.
- Taxes have thus driven a wedge between the prices.

TAX INCIDENCE

- This is the idea concerning "who bears the burden of the tax." Is it always the consumer who pays the full price of the tax??

Scenarios:

- 1) Perfectly inelastic demand
- 2) Perfectly elastic demand
- 3) Perfectly elastic supply

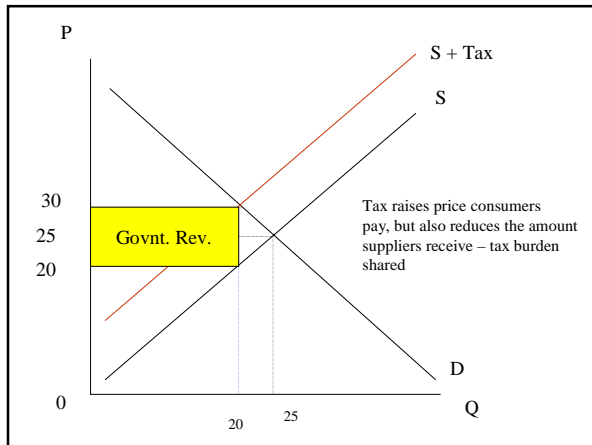
Modeling Taxes

- Suppose that a \$10 per unit tax is placed on a good. The pre-tax price of the good is \$25.

Firms make supply decisions based on the price that they receive, not the price that we pay.

Depending upon demand elasticity, consumers react by reducing the amount consumed.

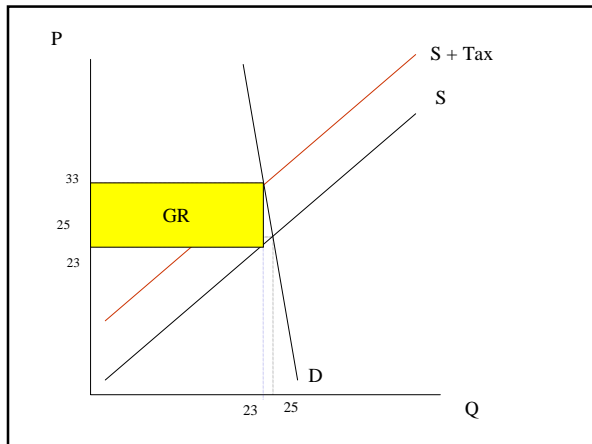
Depending upon supply elasticity, suppliers react by reducing the amount produced.



Taxes

- In this case, the burden is shared.

What happens to the burden of the tax if demand and supply elasticities are different?



Taxes

- What can we conclude from this???

- 1) The more inelastic the demand and supply of a commodity, the smaller the decline in output from a given tax.
- 2) Relative burden of taxation among buyers and sellers follows the "path of least resistance" (i.e. tax is shifted in proportion to where inelasticity is greatest)
- 3) Where is government revenue the highest? To which goods does this relate?

Subsidies

- **Subsidies:** a per unit payment on the purchase or sale of a commodity. Often called a "negative tax."

Purchase =====> consumption subsidy
 Sale =====> production subsidy

How would we draw these?
