

EE211

PRINCIPLES OF MICROECONOMICS

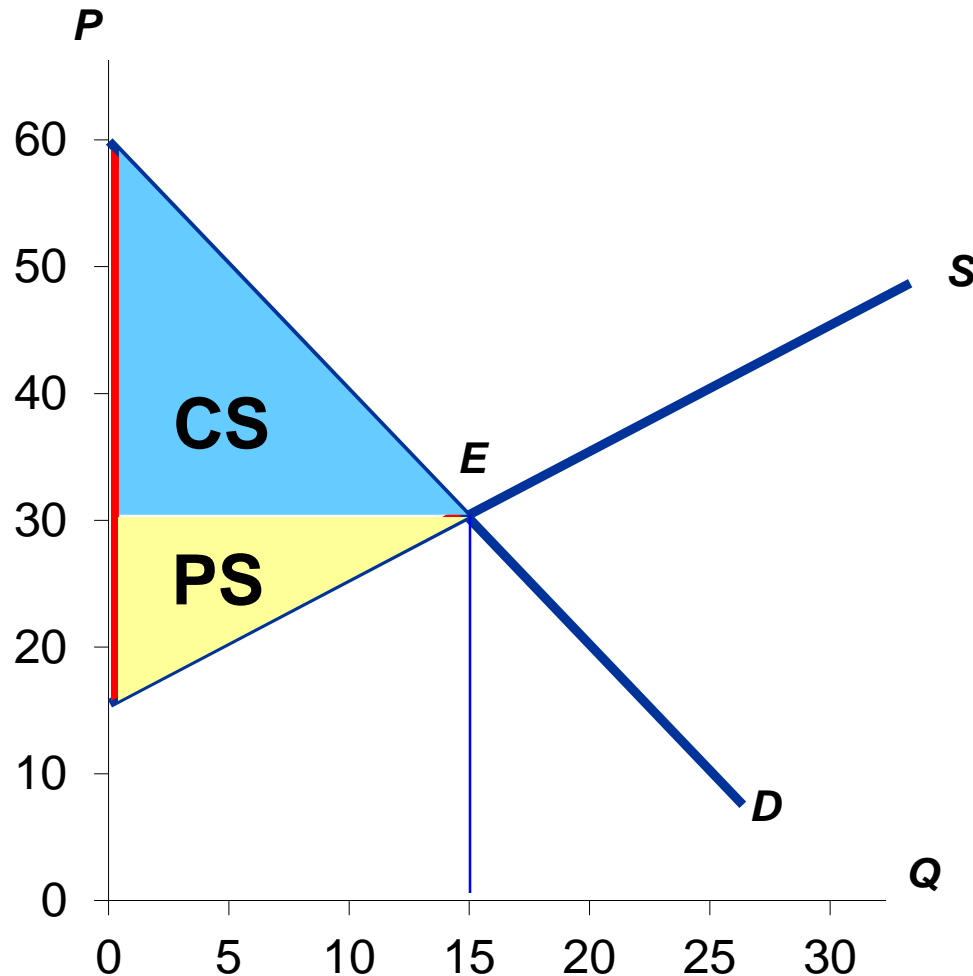
Topic 5:

Applications on Demand, Supply, and Government Policies

Topics

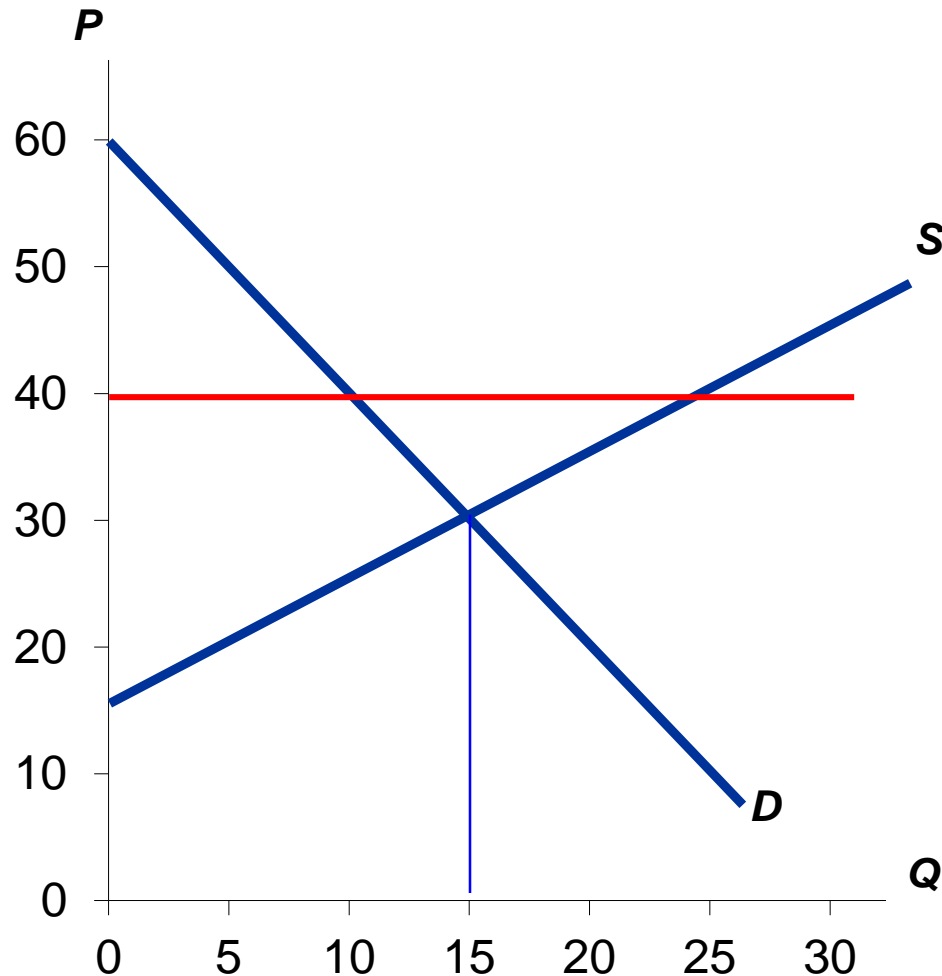
- Price floors (Minimum Price)
- Price ceilings (Maximum Price)
- Tax/subsidy

Market Equilibrium



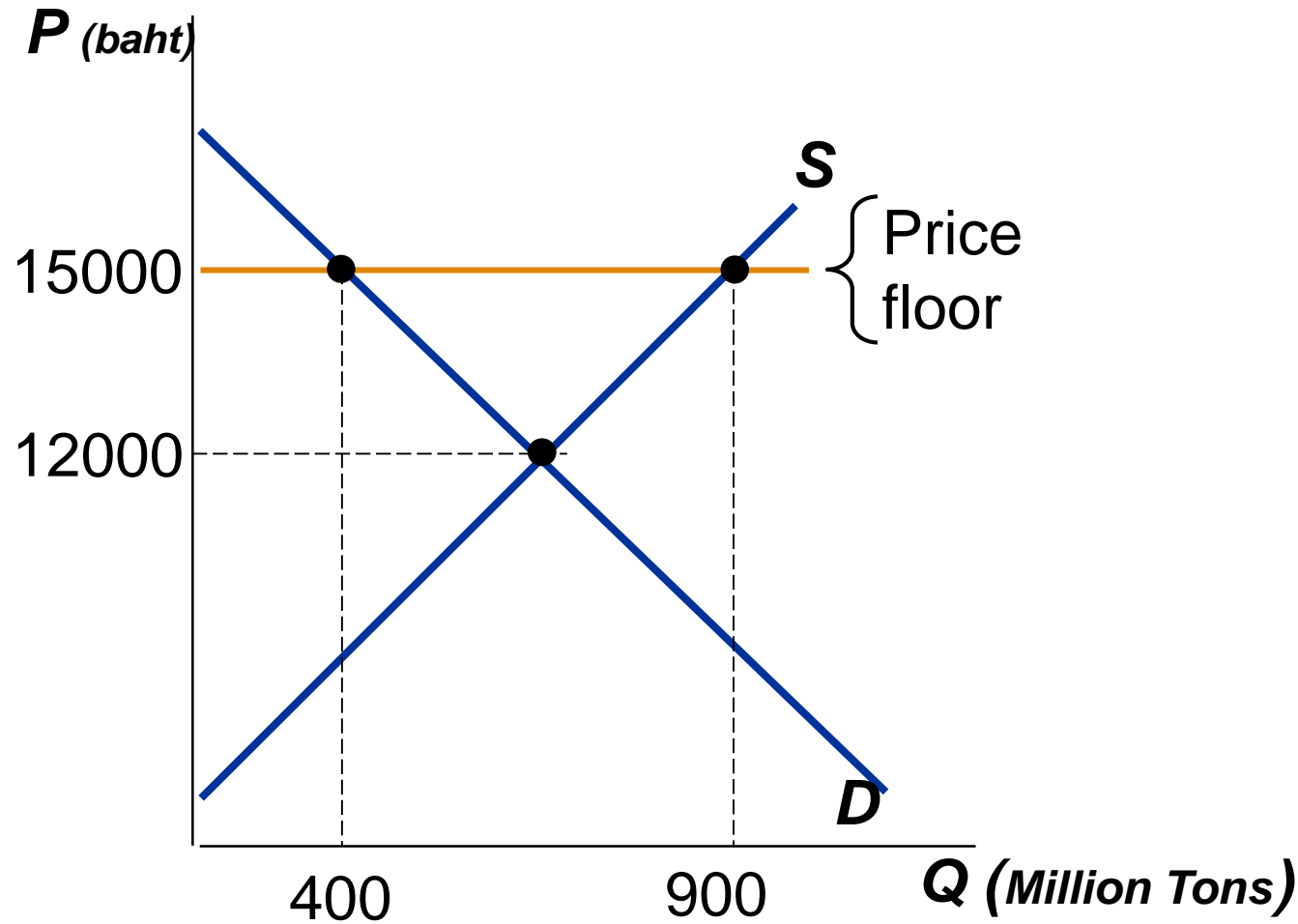
- Recall:
Total surplus (or social welfare) is maximized at the market equilibrium.

Price Floors (Minimum Price)

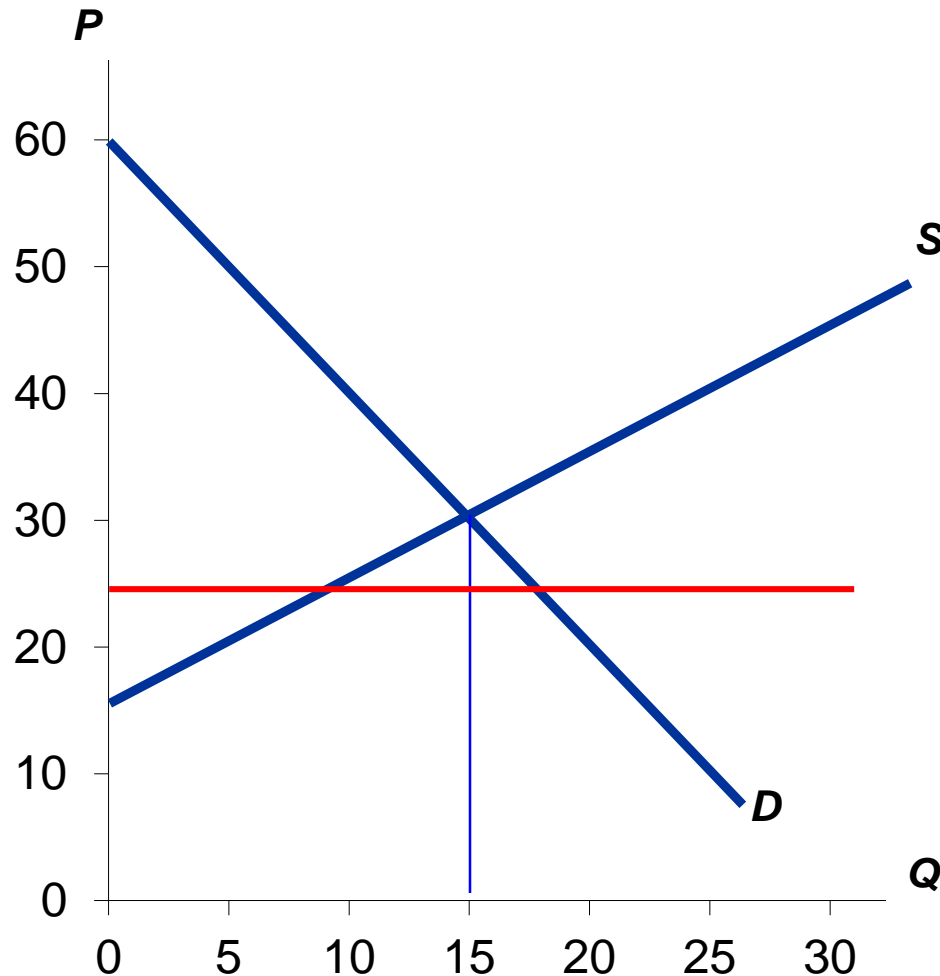


- **Price floor:** a legal minimum on the price of a good or service.
- *Example:* minimum wage
- **Question:** Can the government set the price floor below the equilibrium price?

Example: Agriculture Price Guarantee Scheme

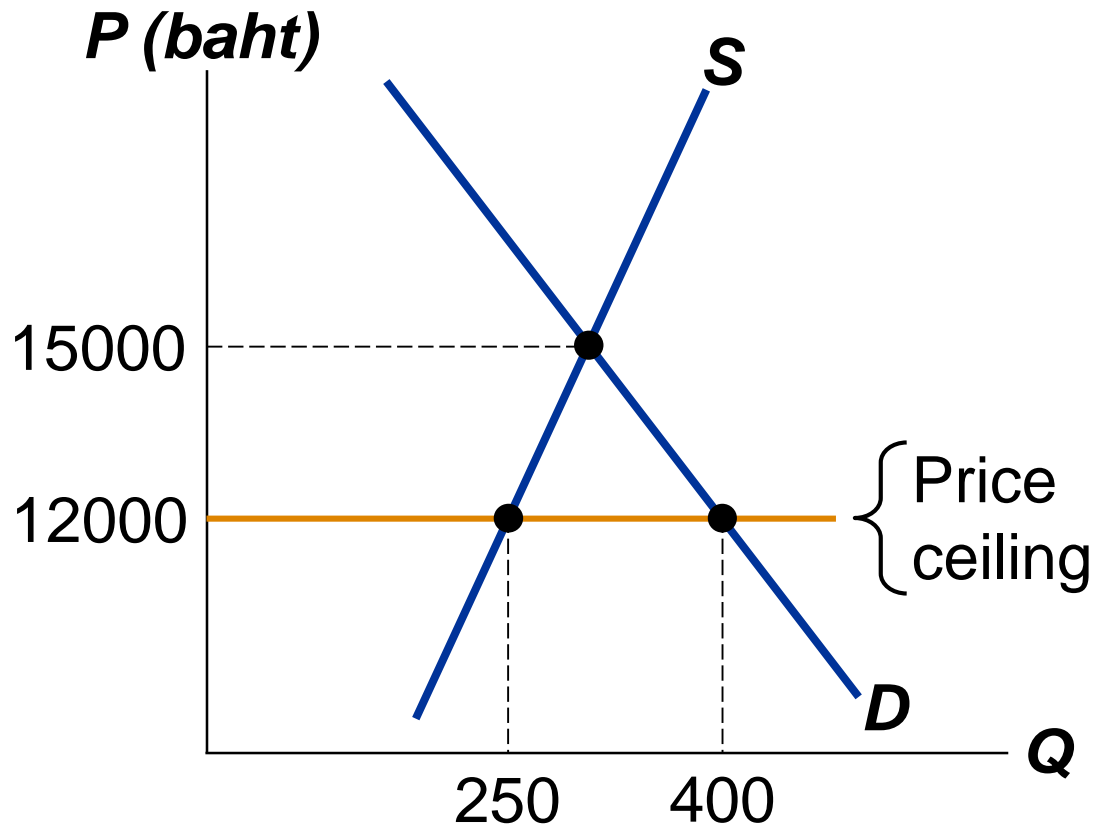


Price Ceilings (Maximum Price)



- **Price ceiling:** a legal maximum on the price of a good or service.
- *Example: rent control*
- Can the government set the price ceiling above the equilibrium price?

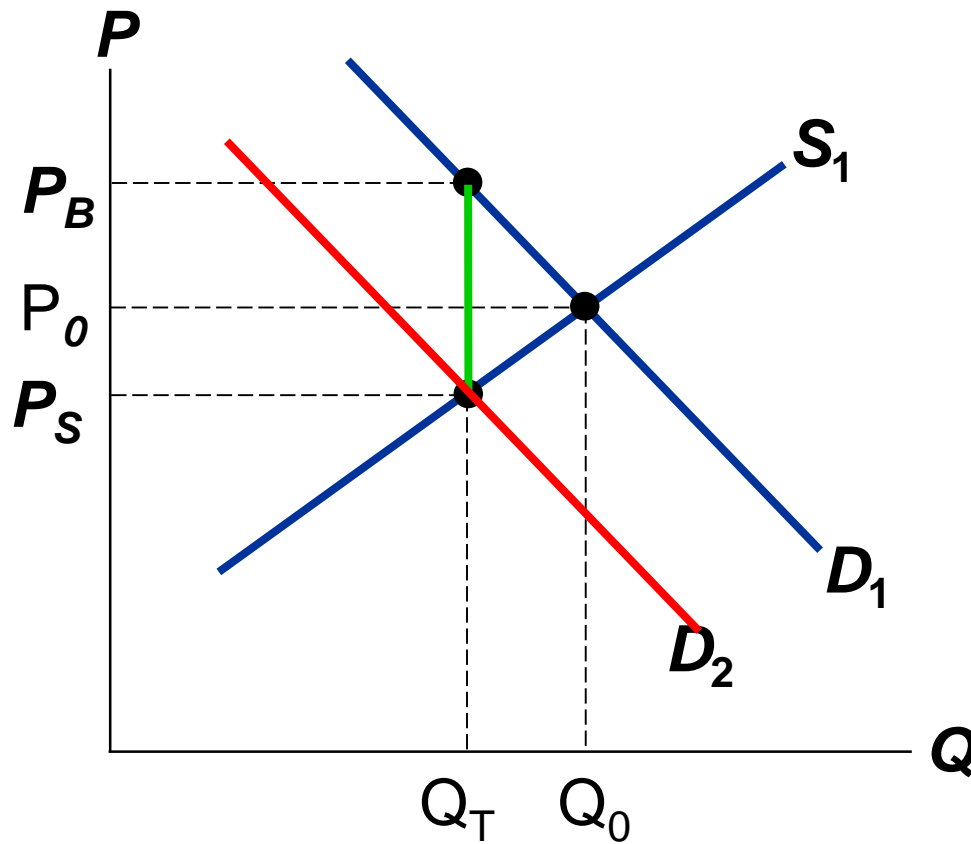
Example: The Market for Apartments



Taxes

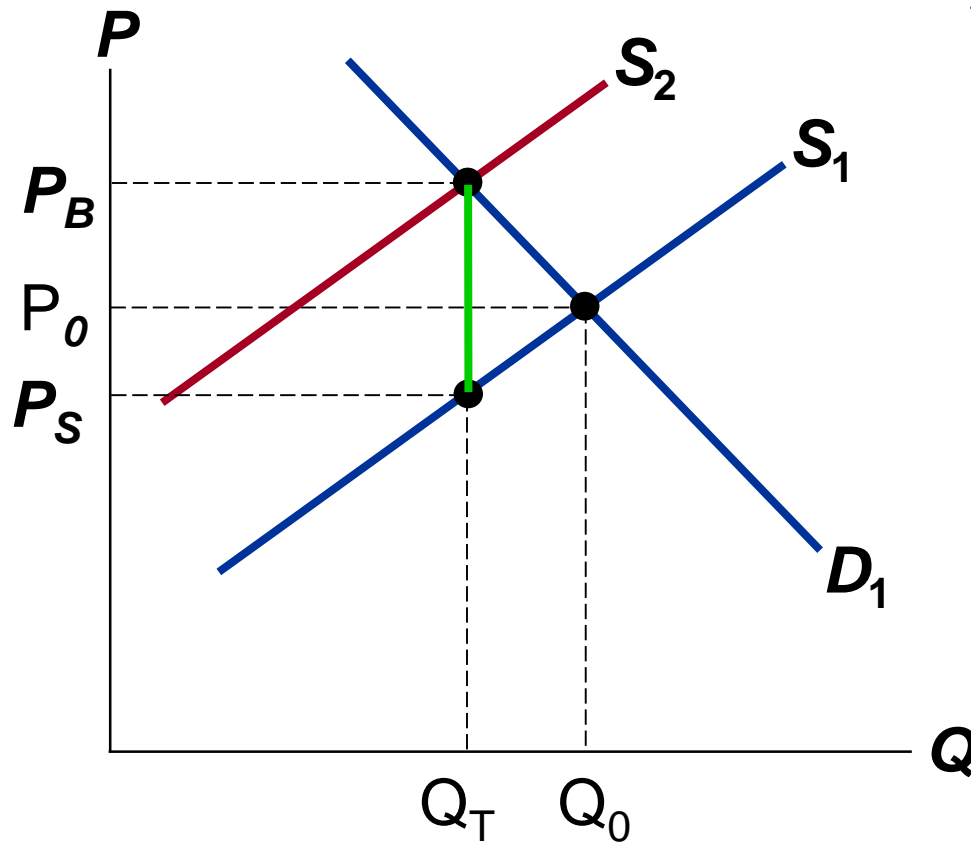
- In this class, we talk about excise taxes – taxes charged on the purchase of goods and services.
 - **Per-unit (or specific) tax**: a specific amount for each unit sold.
 - **Ad-valorem tax**: a percentage of the good's price
- The government can impose taxes on either buyers or sellers. We will show that:
 - the outcome (effect on P&Q) is the same in both cases;
 - tax burdens on buyers and on sellers are determined by relative price elasticities.

Tax on Consumers



A tax on buyers shifts the D curve down by the amount of the tax.

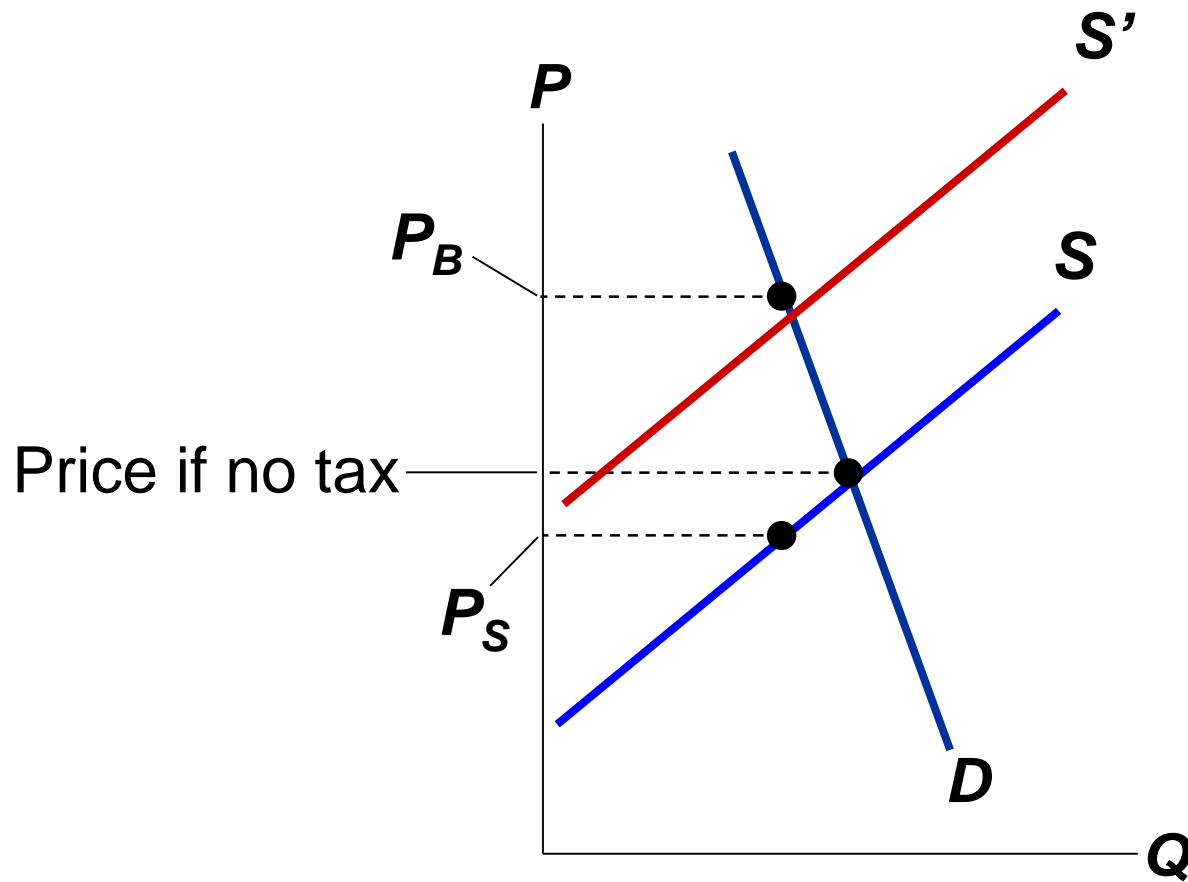
Tax on Producers



A tax on sellers shifts the **S** curve up by the amount of the tax.

Tax Incidence and Elasticity:

Case 1: Supply is more elastic than demand.

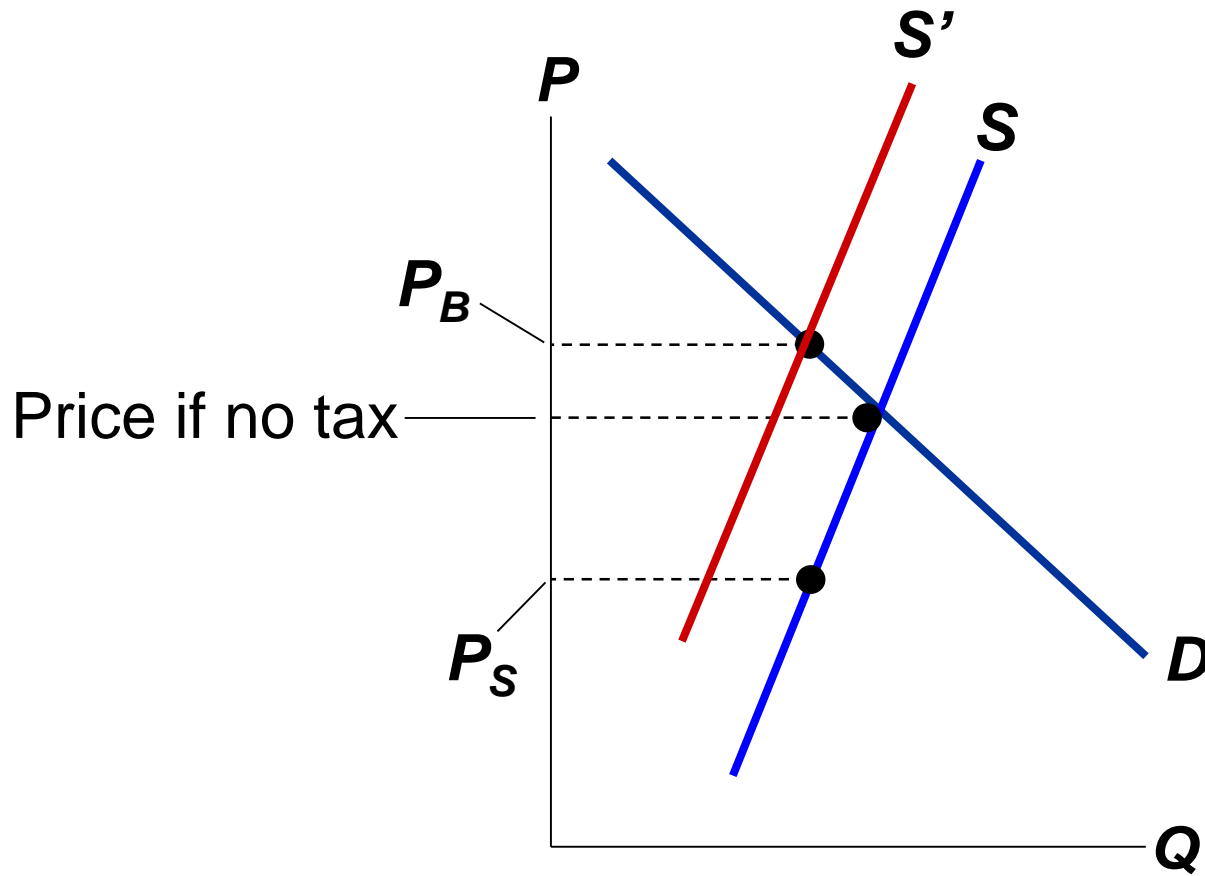


Numerical Example

- Let $P = 50 - 0.2Q_d$ and $P = 20 + 0.1Q_s$. Suppose a \$6 per-unit tax is imposed on producers. Determine the equilibrium after tax.

Tax Incidence and Elasticity:

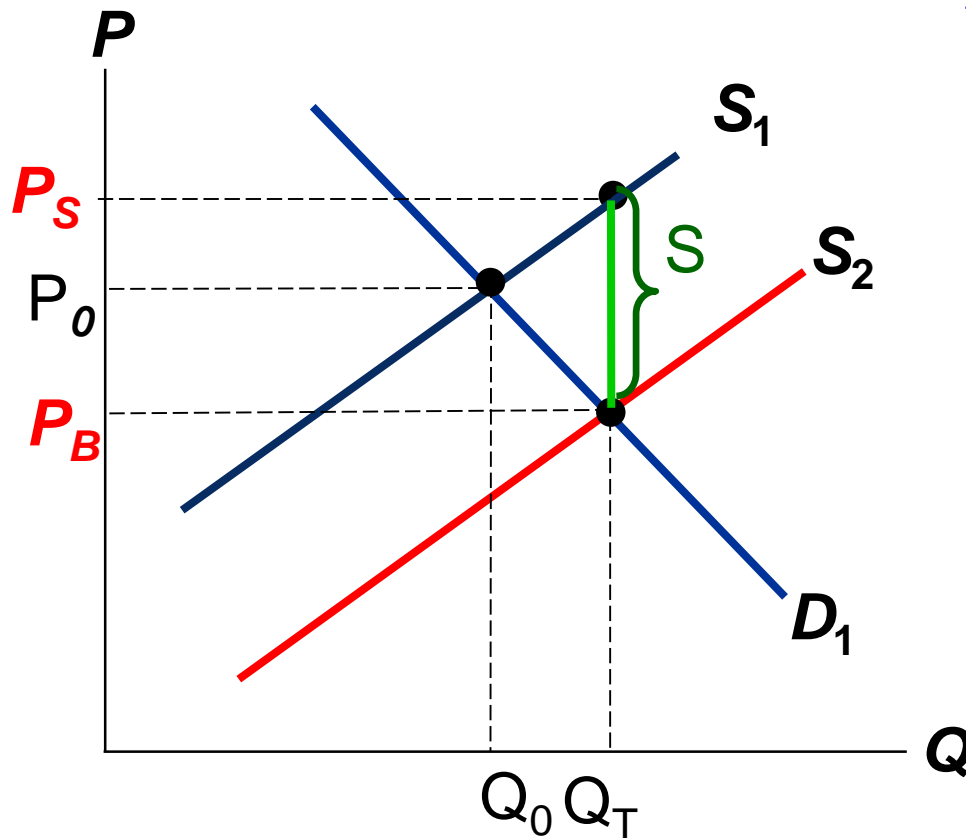
Case 2: Demand is more elastic than supply.



Numerical Example

- Continue with the example on slide #12,
 - Calculate the point elasticities of demand and supply at the before-tax equilibrium.
 - Calculate the tax burden for both consumer and producer.

Subsidy (on Producers)



A subsidy on sellers shifts the S curve down by the amount of the subsidy.

Question: Is there any welfare loss from a subsidy?