

Agenda

Applications of Perfectly Competitive Markets

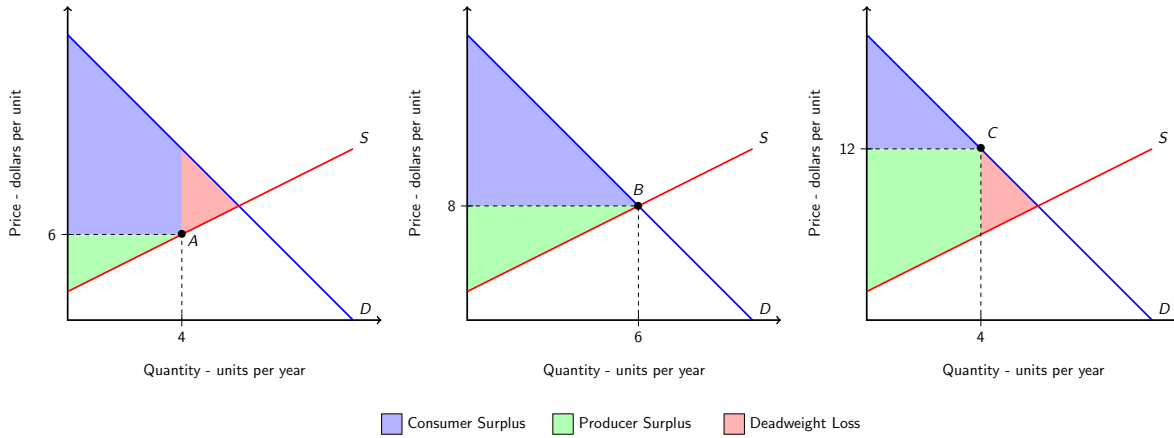
1. Taxes
2. Subsidies
3. Price Ceiling
4. Exercise: Minimum Wage
5. Production Quotas

Ways to Analyze Markets

- ▶ **Partial Equilibrium Analysis:** An analysis that studies the determination of equilibrium price and output in a single market, taking as given the prices in all other markets.
 - ▶ Example: Effect of rent controls on market for housing.
- ▶ **General Equilibrium Analysis:** An analysis that determines the equilibrium prices and quantities in more than one market simultaneously.
 - ▶ Example: Effect of rent controls on market for housing, and what impact it has on furniture prices.

The Invisible Hand

- ▶ Invisible Hand forces market to most efficient allocation.

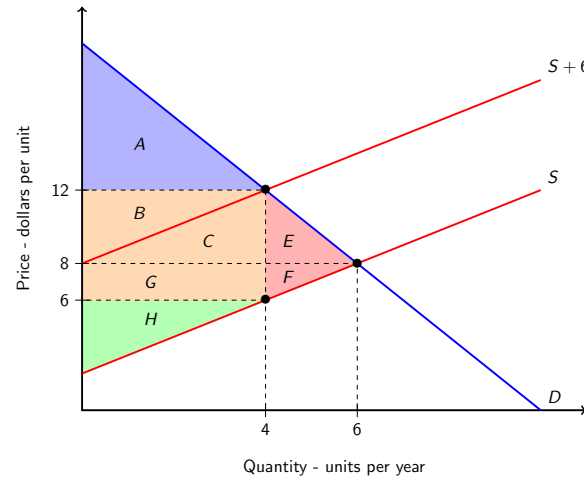


- ▶ **Deadweight Loss:** A reduction in net economic benefits resulting from an inefficient allocation of resources.

Application #1: Excise Tax

- ▶ Industry faces tax of \$6 per unit.

	No Tax	Tax	Impact of Tax
Consumer Surplus			
Producer Surplus			
Government Receipts			
Net Benefit			
Deadweight Loss			



- ▶ Effect of Tax

- ▶ Market _____
- ▶ CS and PS _____

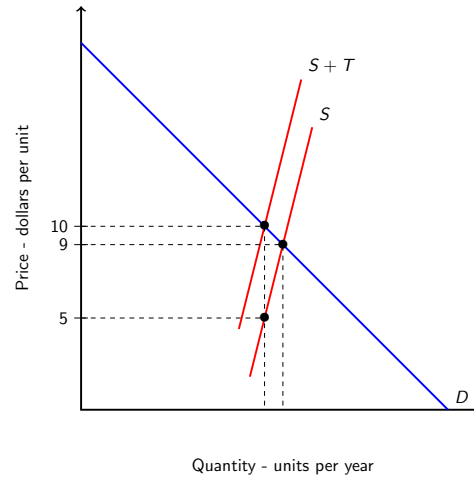
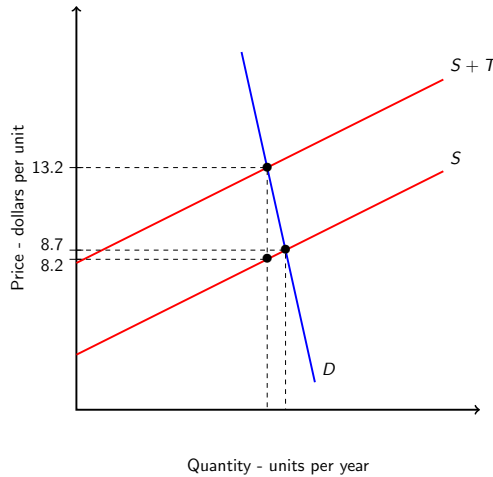
- ▶ Government receipts _____

- ▶ Tax receipts _____ decrease in CS and PS.

- ▶ Why tax?

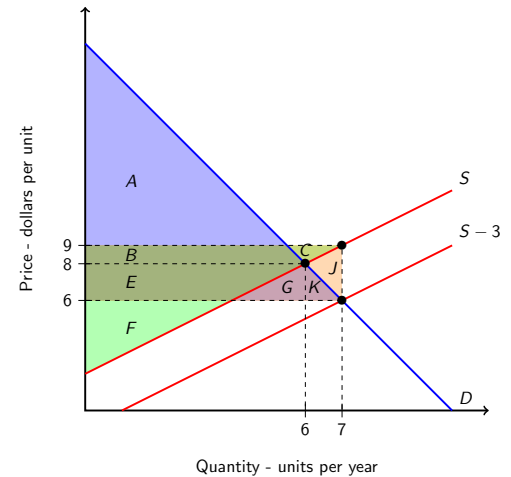
Incidence of a Tax

- ▶ **Incidence of a Tax:** A measure of the effect of a tax on the prices consumers pay and sellers receive in a market.
- ▶ Relationship between elasticities and incidence of a tax,



Application #2: Subsidy

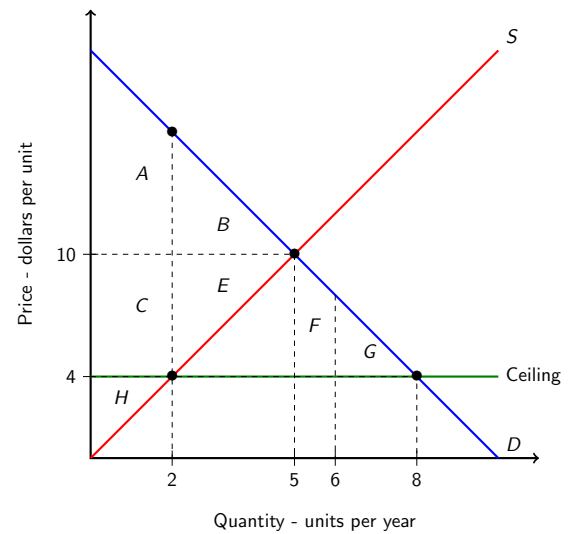
- ▶ Industry faces subsidy of \$3 per unit.
- ▶ Effect of Subsidy
 - Market _____
 - CS and PS _____
 - Government receipts _____
 - Government cost is _____ in CS and PS.



	No Subsidy	Subsidy	Impact of Subsidy
Consumer Surplus			
Producer Surplus			
Government Receipts			
Net Benefit			
Deadweight Loss			

Application #3: Price Ceiling

- ▶ Industry Price Ceiling at \$4 per unit.
- ▶ Effect of Ceiling
 - ▶ _____ in market.
 - ▶ CS _____
 - ▶ PS _____
 - ▶ Deadweight Loss is _____



	No Rent Control	Rent Control	Impact of Rent Control
Consumer Surplus			
Producer Surplus			
Net Benefit			
Deadweight Loss			

Exercise: Minimum Wage

- ▶ Suppose market for workers has the following,

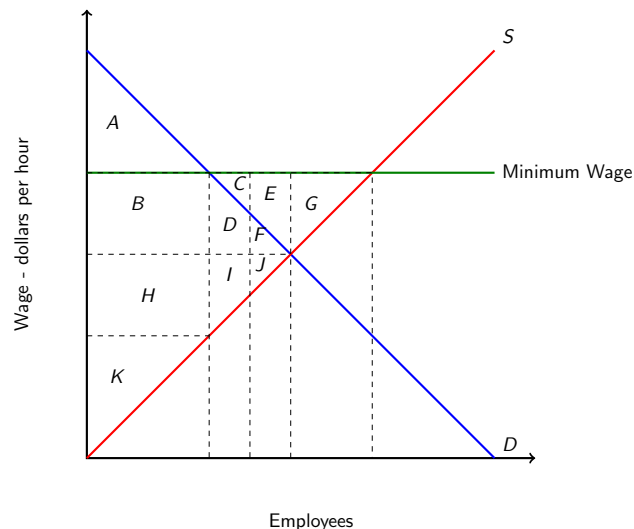
$$D(P) = 20 - P \quad (\text{Firms demand workers})$$

$$S(P) = P \quad (\text{Workers supply labor})$$

- ▶ Suppose there is a minimum wage of $P = 14$.
1. What are the equilibrium price and quantity without minimum wage?
 2. What is the consumer and producer surplus before minimum wage?
 3. What is quantity supplied and demanded with the minimum wage?
 4. What is the consumer and producer surplus after the minimum wage?
 5. Is there any deadweight loss?

Solution: Minimum Wage

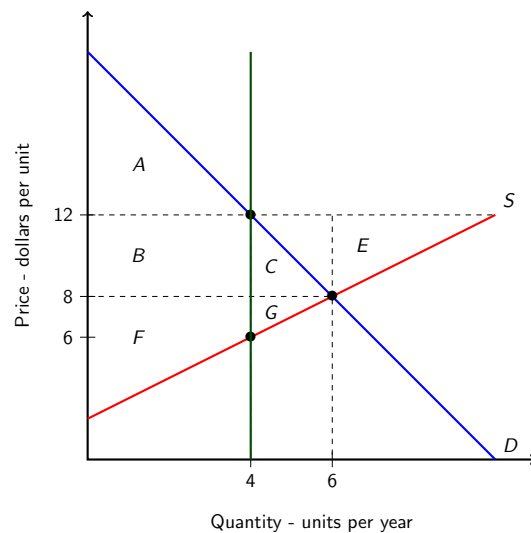
- ▶ Market Price Floor at \$14 per unit.
- ▶ Effect of Floor
 - ▶ _____ in market.
 - ▶ CS _____
 - ▶ PS _____
 - ▶ Deadweight Loss is _____



	No Min. Wage	Min. Wage	Impact of Min. Wage
Consumer (Firm) Surplus			
Producer (Worker) Surplus			
Net Benefit			
Deadweight Loss			

Application #5: Quota

- ▶ Industry faces quota of 4 units.
- ▶ Effect of Quota
 - ▶ Market _____
 - ▶ CS _____
 - ▶ PS _____
 - ▶ DWL is _____



	No Quota	Quota
Consumer Surplus		
Producer Surplus		
Net Benefit		
Deadweight Loss		