

### Announcements

1. Check MT link: MT Guide (**rules, topics**) exam seating by GSI
2. Extra OH Week 3 F 1-3, Room 651

3. Recent Material Items to **Skip**

Chapter 11 examples pp 383-4

11.9 and 11.10, pp 287-8: I discussed this in class Idea important, but not calculations

Exercises 11.2, 11.3

Economic naturalist 13.3, p 336

### The Occupational Demand for Labor

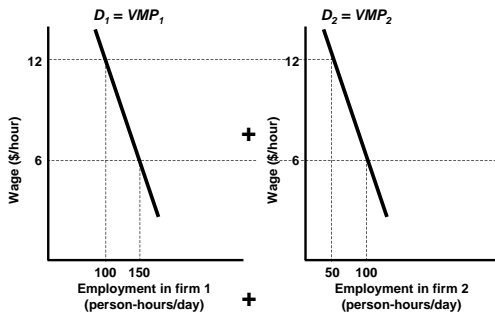
Labor demand is a derived demand

Firms producing output demand the labor to produce the output.

Labor is paid according to value of what it produces. It is paid it's "net contribution" to value. Eg.  $P=10\$$  and materials cost  $\$1$  labor paid  $\$9$  for each extra unit produced.

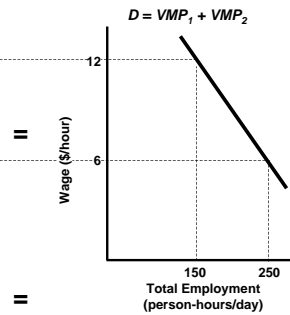
Labor paid its Value Marginal Product= $VMP$

### The Occupational Demand for Labor



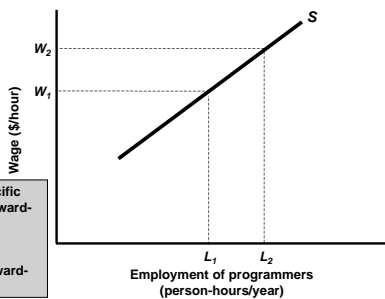
Slope from dim marginal returns

### The Occupational Demand for Labor



Horizontal sum

### The Supply Curve of Labor

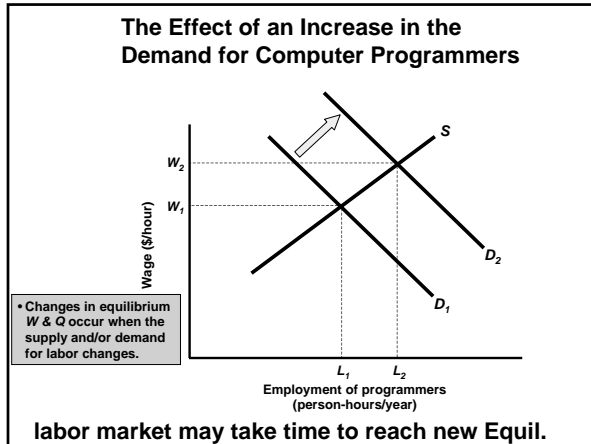


- Supply for a specific occupation is upward-sloping.
- Supply for the economy may be vertical or downward-sloping.

### The Occupational Demand for Labor

Supply & Demand shifts: eg. change in technology

**Increased demand for computer programmers as production processes become software driven.**



### The Occupational Demand for Labor

Goal of having theory: explain differences in wages

- Human capital
- Unions
- Compensating Differentials
- Discrimination

### Unions & Wages

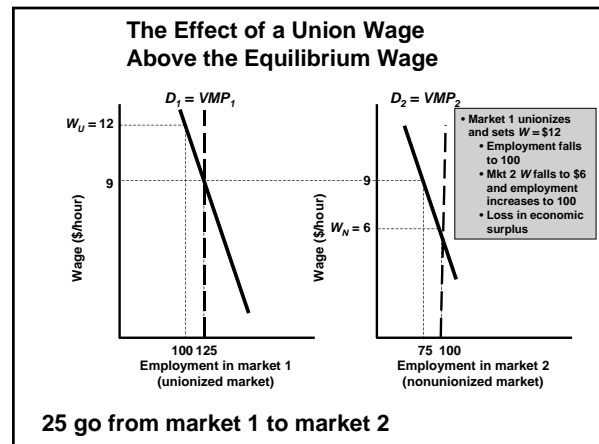
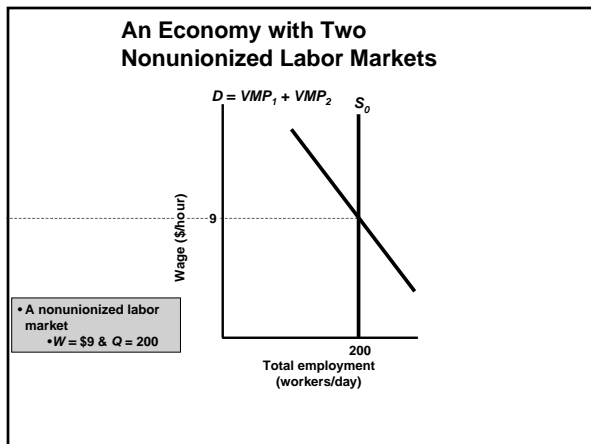
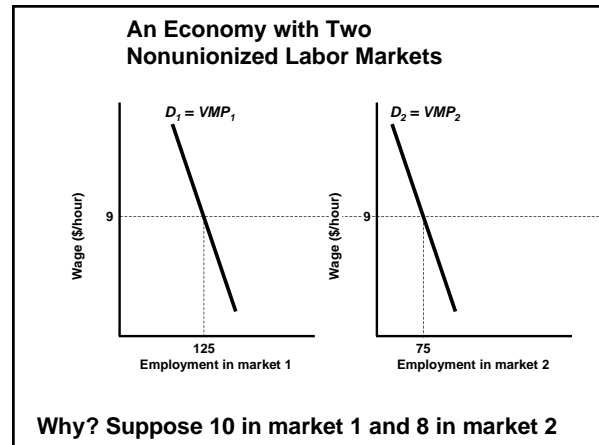
Group of workers who bargain collectively

Suppose fixed supply of labor = 200

Two markets

Initially equilibrium established by S&D

With union, get differential



### Human Capital & Wages

Inherent differences in training, skill, intelligence drive differences in wages.

To become a lawyer, a plumber has to undergo substantial investment in training

### Compensating Differentials & Wages

**Differences due to unpleasant occupational conditions**

**Skyscraper construction worker**

**Ad writer for tobacco "bad cause"**

**Need premium on wages**

### Discrimination & Wages

**Arbitrary preferences by employer for one group.**

**Eg. equally productive, in LR women and male wages same for given industry & job type**

**to get only males, have to offer premium**

### Summary

**Demand for labor is a derived demand**

**Labor is paid the value of its marginal product**

**Supply and Demand in labor market establishes equilibrium wage**

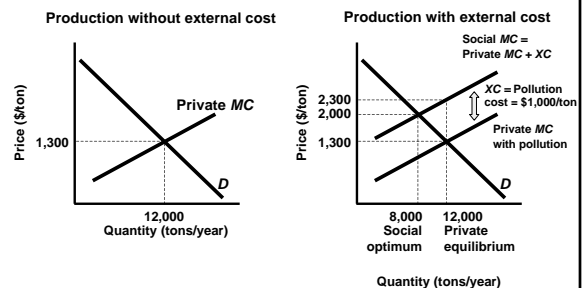
**Unions, human capital, compensating differentials explain differences in wages**

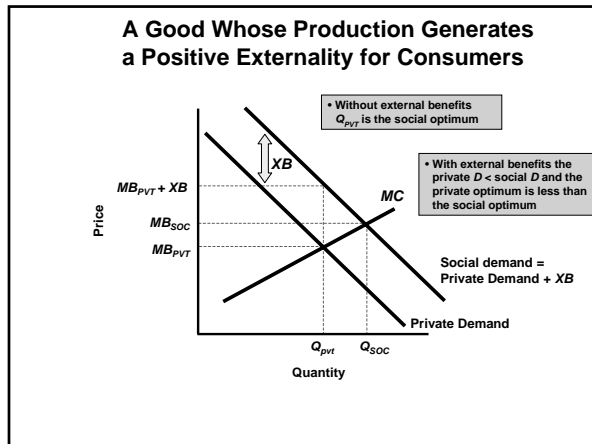
### Externalities

Equilibrium in a perfectly competitive market without interventions results in maximum social welfare. It is also a social optimum.

IF S and D schedules reflect true costs and benefits to society

### How External Costs Affect Resource Allocation





Externalities

Negative Externality: too much is produced and consumed. True social costs are more than reflected in S&D

Positive Externality: too little is produced and consumed. True social benefits are more than reflected in S & D

Externalities

Remedies:

Interventions in market

Bargaining to compensate victims.  
Given Coase Theorem

Laws

Externalities

tax for negative externality

subsidy for positive externality

examples second half

Externalities

Bargaining to compensate victims.  
Given Coase Theorem

Coase Theorem: If negotiation costless, property rights assigned, private parties can bargain to get efficient solution to externality problem

Examples second half

Externalities

Laws

Speed limits: too high speed, social cost  
Snow tires: too slow, social cost

Zoning: too high building, social cost  
Pollution limit: too high pollution, social cost

Trees on Hillside: too few trees, loss in social benefit

**Optimal Externality Not Zero**

Eg. Pollution

Zero pollution means, for instance

zero driving! Vs some car emissions

zero hotdogs! Vs some runoff

**Summary**

**Perfectly competitive markets work well if S & D reflect true social costs & benefits**

**In general have positive and negative externalities.**

**Optimal level non-zero**

**Remedies are private bargaining, government intervention, laws**

**Public vs Private Goods**

Models we have considered were for private sorts of goods.

Market determines Q & P for private good

With public goods get Free rider problem

With commons goods get overuse: Tragedy of Commons

With collective good get inefficiency from charging fees

**Public vs Private Goods**

		<b>Nonrival</b>	
		<b>Low</b>	<b>High</b>
<b>High</b> <b>Nonexcludable</b>		Commons (fish in ocean)	Public (national defense)
		Private (Hot dog)	Collective (Pay per view TV)
	<b>Low</b>		

**Public vs Private Goods**

**Nonrival**

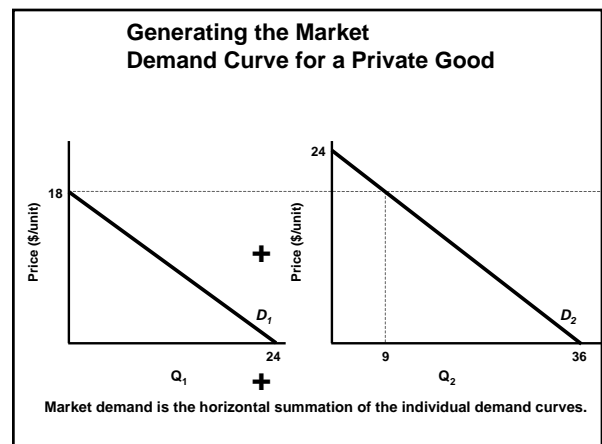
**High: MC almost zero**

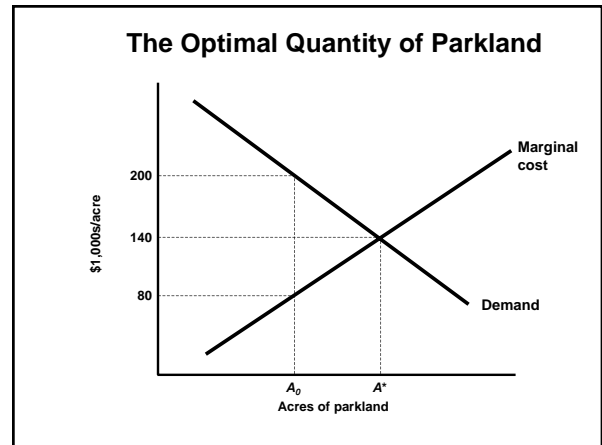
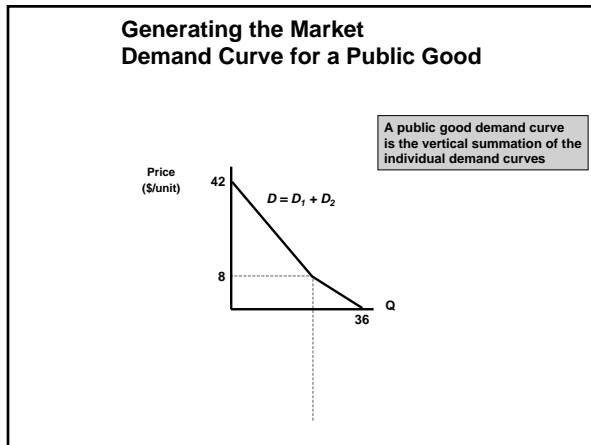
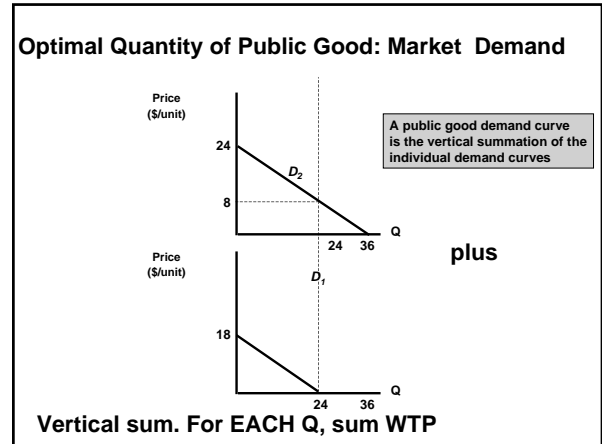
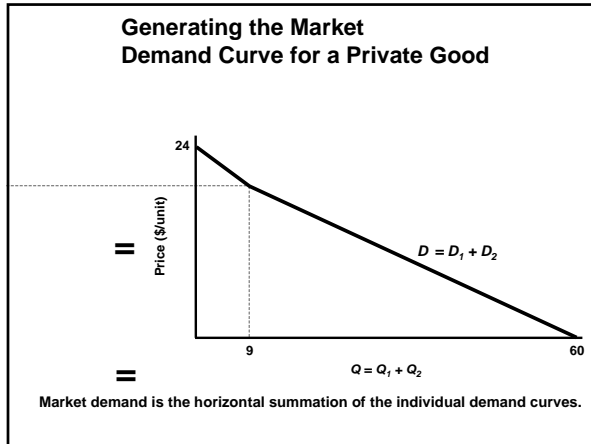
**Low: MC non zero**

**Nonexcludable**

**High: Price almost zero, can't exclude via payment**

**Low: Can exclude via payment, Price non zero**





### Public Goods Problem

**Classic Problem**

**Free Rider:** Incentive problem in which too little of good or service produced because non-Payers cannot be excluded from using it.

See example second half

### Commons Goods Problem

**Classic Problem**

**Tragedy of the Commons:** tendency of resource to be used until marginal benefit falls to zero.

Solution: form institution to optimize on joint use

Tension between individual rationality and joint (social) optimality

eg Villagers & grazing in text  
Alice and Barnaby in past mt

### Summary

**P & Q can be determined by S & D for private goods.**

**Public goods provision plagued by free rider problem.**

**Commons goods plagued by tragedy of commons problem**

### Second Half

For second half we did text problems

Chapter 11 # 2

Answer: ambiguous effect on Q soc opt

Chapter 11 # 3

Example of extra costs imposed by consumption choice. Add 3 to intercept of MCpriv to get MC soc

Chapter 11 #4

Example of remedy for externality. Govt taxes consumption

- Chapter 11 # 8 try if you want
- Chapter 15 # 1
  - Example of how payment method can result in under provision of public good
- Chapter 15 # 9
  - Discussion of free rider problem
- Chapter 13 # 1,2 try if you want
- Some student questions:
  - 1. CS/PS with perfectly inelastic D/S w/ tax
  - 2. Examples of costly consumption. So MB not as high as private MB. Show as shift of MC. See Ch 11, #3,4
    - i.e. Always show "extra cost" as shift of MC
    - Always show "extra benefit" as shift of MB.
  - 3. Tax in presence of externality eliminates externality cost from too
  - Excessive production/consumption

