Determination of Wages and Employment Shifts in Labor Demand Shifts in Labor Supply Sticky Wages

Labor Market Supply and Demand

ECO 120: Global Macroeconomics

Unit Goals

- Define demand and identify what influences labor demand
- Define demand and identify what influences labor supply
- Predict how wages and level of employment are determined by supply and demand.
- Use these skills to make predictions about changes in wages and employment.

- External reading posted on Canvas: Taylor, Principles of Economics 2e, Chapter 4
- Canvas Quiz due Wednesday 11:59 PM.
 Multiple-choice, 10 questions, unlimited attempts allowed, only best score counts
- Homework/In-class Exercise due Friday 11:59 PM. We will work together in class on Thursday.

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- In the market for labor, the price of labor is the wage, and the quantity of labor is total hours of employment
- The quantity of labor demanded is the amount of worker time that employers are willing and able to hire in a given time period at a particular wage.
- Labor demand follows the law of demand: All other things remaining equal, the higher is the wage, the lower is the quantity of labor demanded.

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Labor Demand Schedule

Point	Wage	L_D
Α	\$25	0
В	\$20	50
C	\$15	100
D	\$5	150

Labor Demand Curve

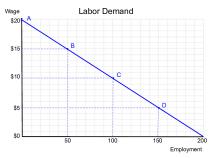


- Law of demand makes the labor demand curve downward sloping.
- Change in quantity labor demanded: when there is a change in wage causing a movement from one point on the labor demand curve to another point.

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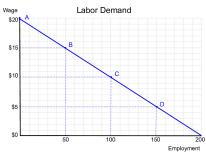


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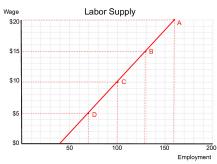
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Point	Wage	Ls
Α	\$20	160
В	\$15	130
C	\$10	100
D	\$ 5	70

Labor Supply Curve

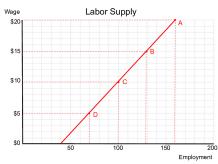


- Law of supply makes the labor supply curve upward sloping.
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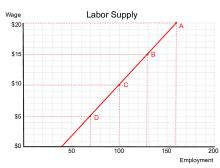


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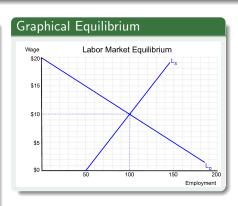
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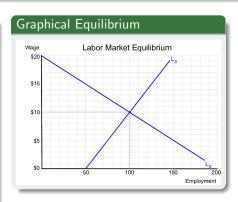
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Equilibrium

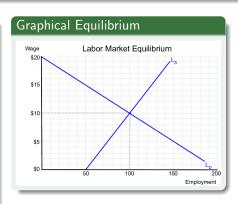
- The equilibrium wage is the wage where the quantity of labor supplied is equal to the quantity labor demanded.
- The equilibrium employment is the corresponding quantity of labor.
- This is the wage and level of employment that should prevail in the long-run in the labor market



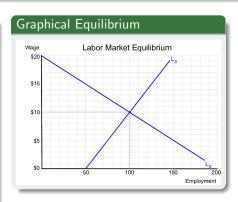
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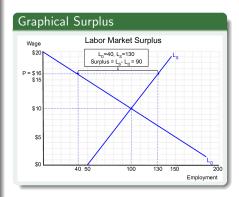


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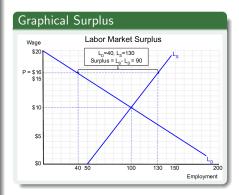


Labor Surplus is Unemployment

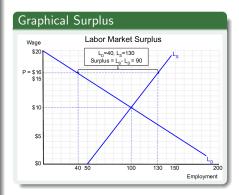
- When the prevailing wage is above equilibrium wage, quantity of labor supplied exceeds quantity of labor demanded
- Quantity of labor supplied ≡ people who want work
- Quantity of labor demanded = how much employers want to hire
- Difference is the surplus = unemployment
- In an unregulated market, market forces will push wage lower toward equilibrium



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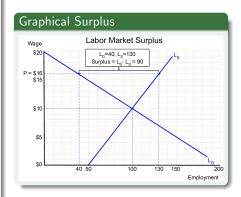


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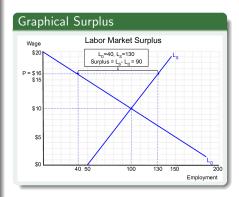
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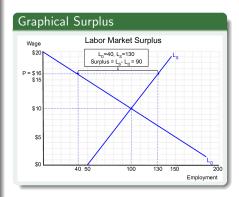
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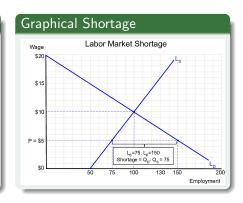


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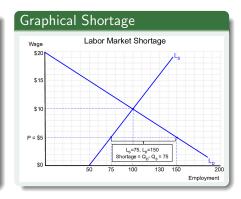
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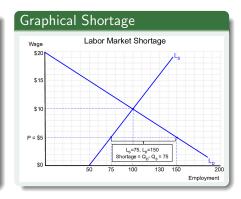
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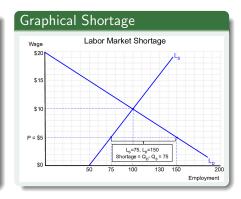
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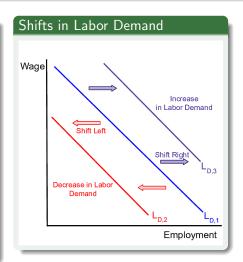
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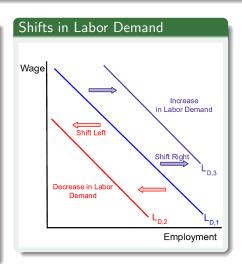
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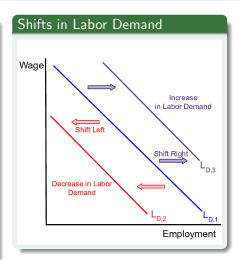
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- Something that increases labor demand shifts the labor demand curve to the right
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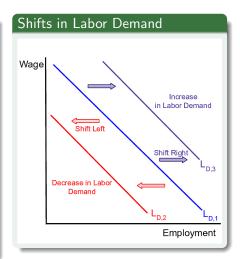
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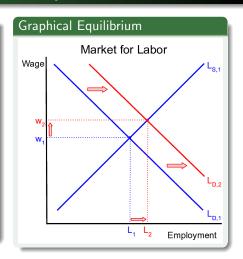


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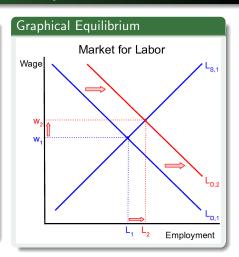
Mechanism

- If labor productivity improves, workers can produce more goods and services per hour of work
- This generates more revenue for firms per hour of work hired
- This will shift labor demand right
- Equilibrium wage increases, employment increases
- Improvements in technology improve labor productivity at an aggregate level

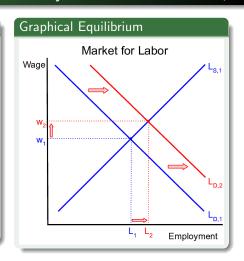


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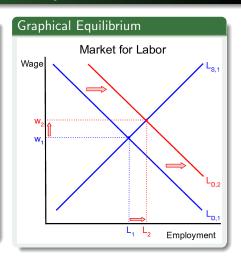
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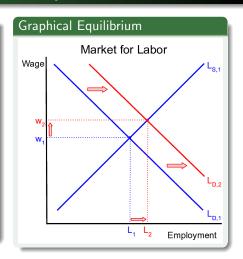
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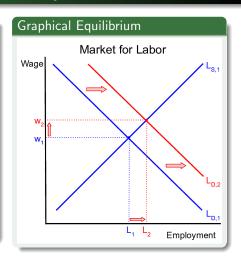
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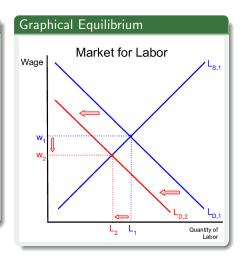
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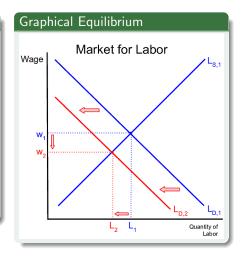
Destruction of Capital Stock

12/20

- Capital complements labor and makes labor more productive
- Suppose a natural disaster leads to a destruction of capital stock
- Less capital stock leads to lower labor productivity and lower labor demand
- This will shift labor demand left
- Equilibrium wage decreases, employment decreases



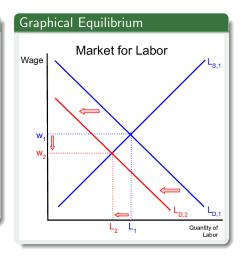
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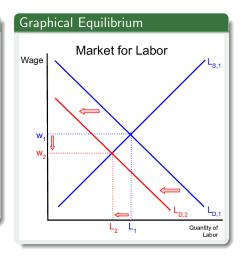
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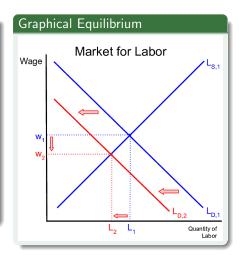
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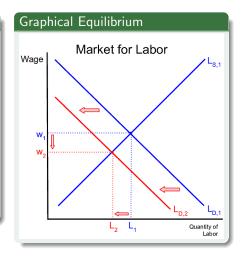
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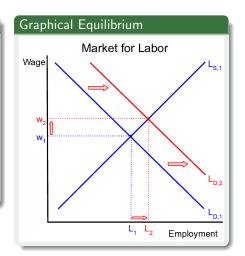
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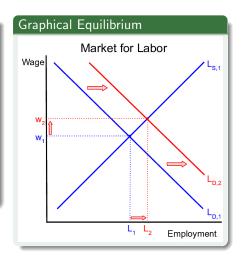
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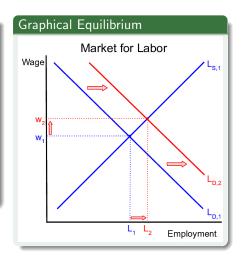
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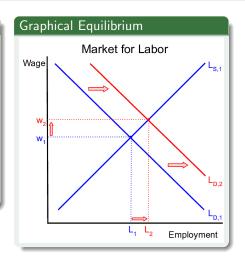
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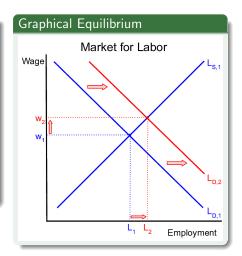
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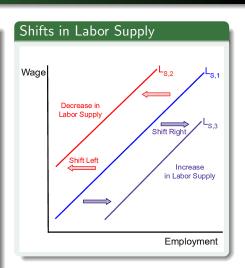
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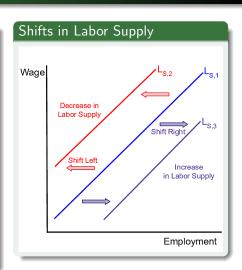
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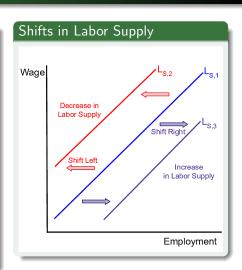
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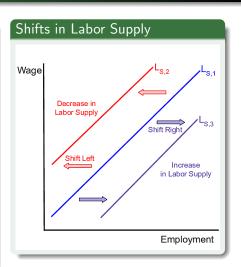
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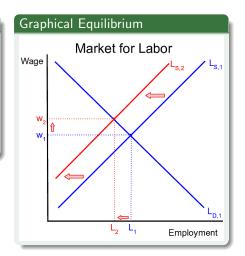
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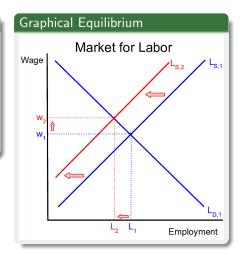
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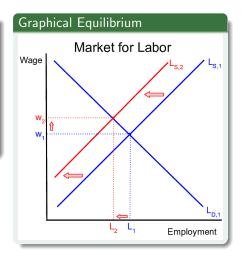
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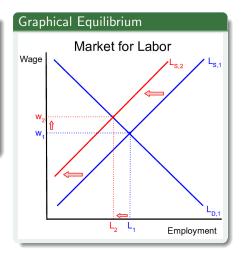
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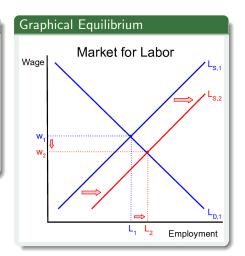


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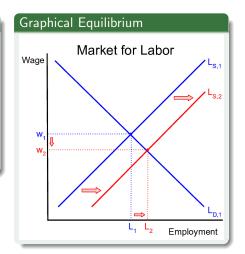
- U.S. labor force participation rate is about 62% (2021)
- Suppose more people decide to be part of the labor force
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Increase in Labor Force Participation

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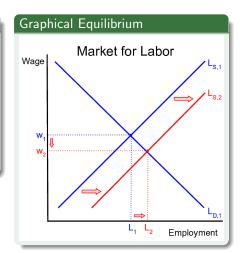
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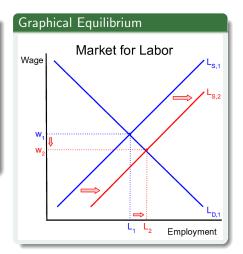
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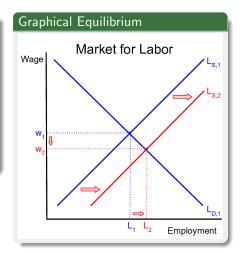
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- Usually, wages do not quickly adjust to new equilibrium levels
- Employers are hesitant to change wages until they recognize market wages have permanently changed
- Labor contracts, policies, salaries often negotiated and changed annually
- Across the board paycuts can hurt employee morale more than layoffs
- Wages can take 3 months 12 months to adjust to new equilibrium levels

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- Across the board paycuts can hurt employee morale more than layoffs
- Wages can take 3 months 12 months to adjust to new equilibrium levels

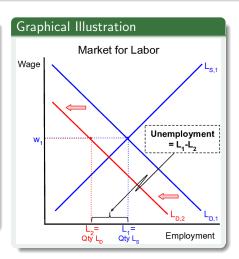
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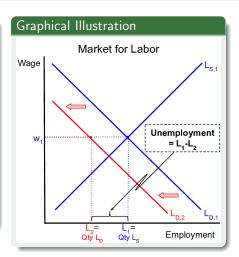
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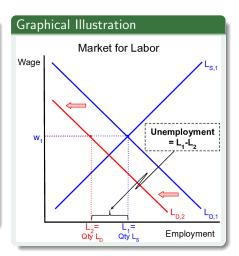
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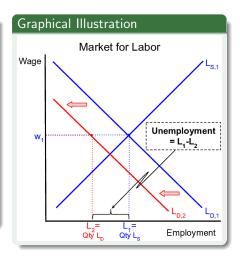
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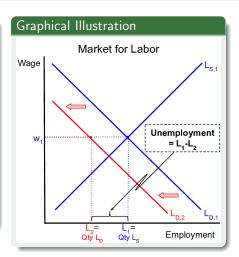
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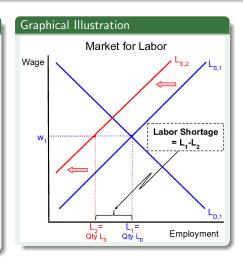
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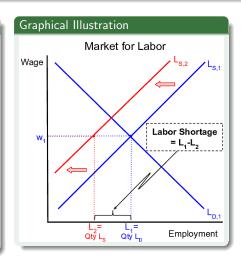
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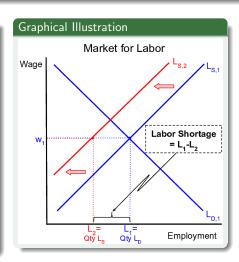
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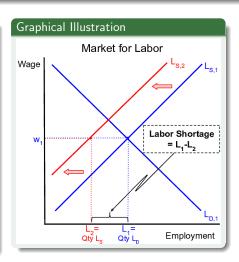
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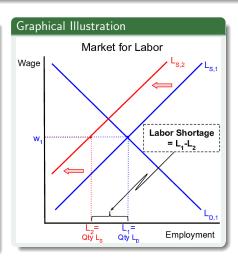
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