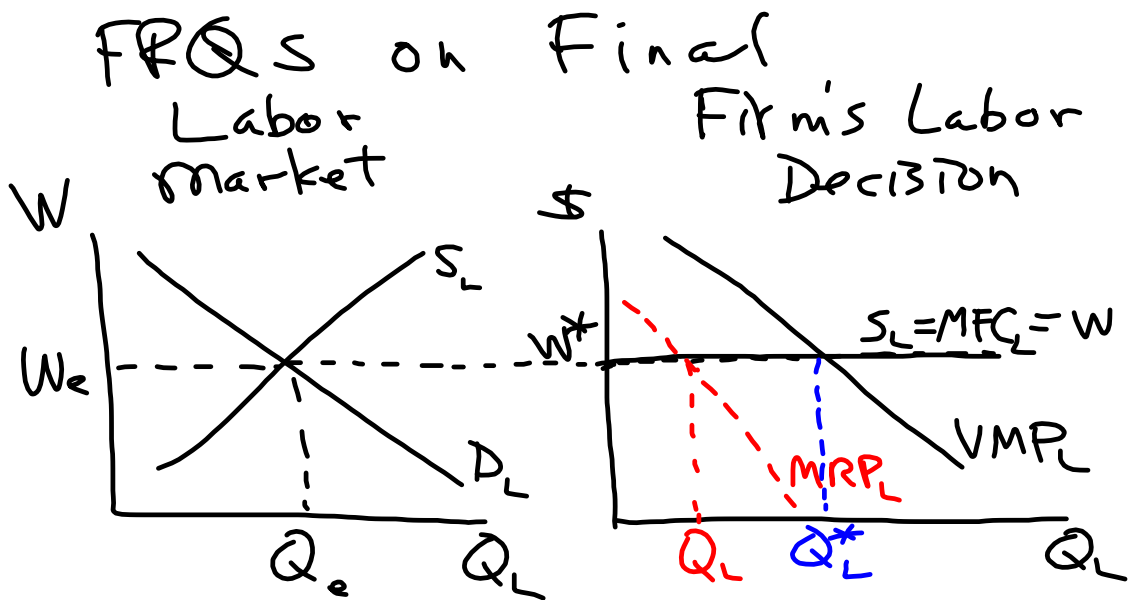
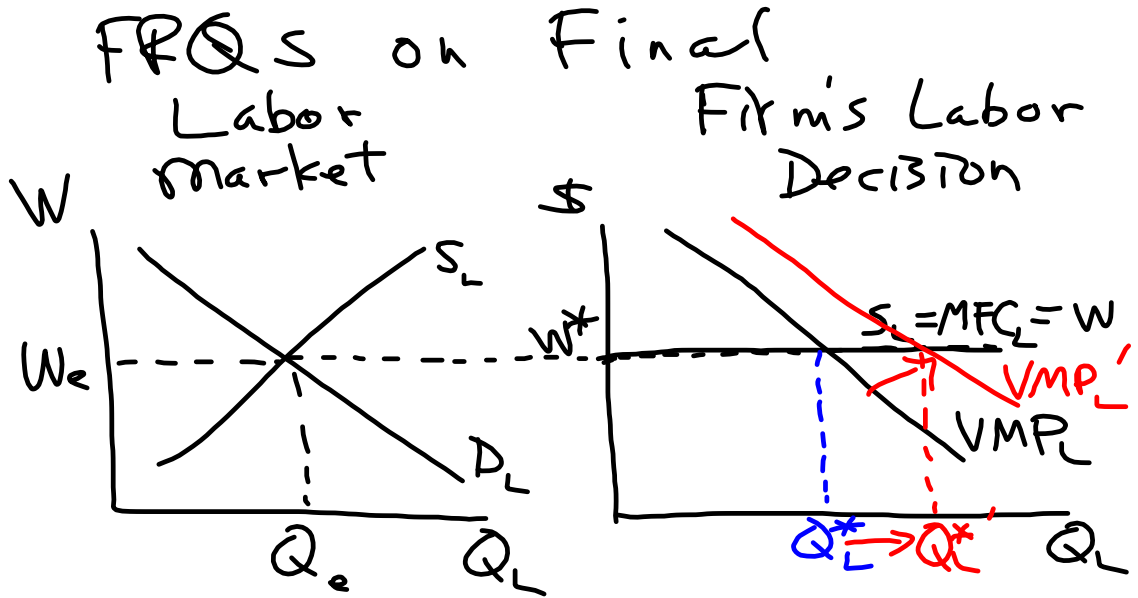


$= MP_L \times P$   
 $\uparrow$   
 product

$VMP_L$  Value of Marginal Product (Labor)  
 $MFC_L$  Marginal Factor Cost (Labor)

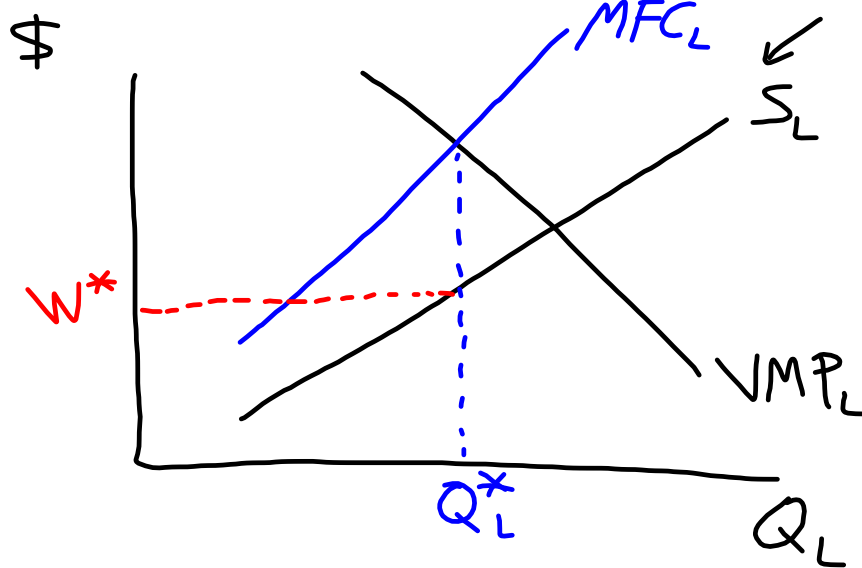


What if: product market is not perfectly competitive?  
 $MRP_L < VMP_L$

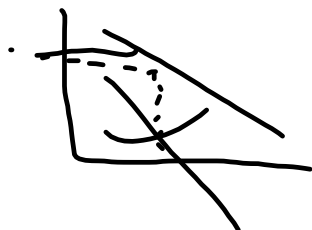


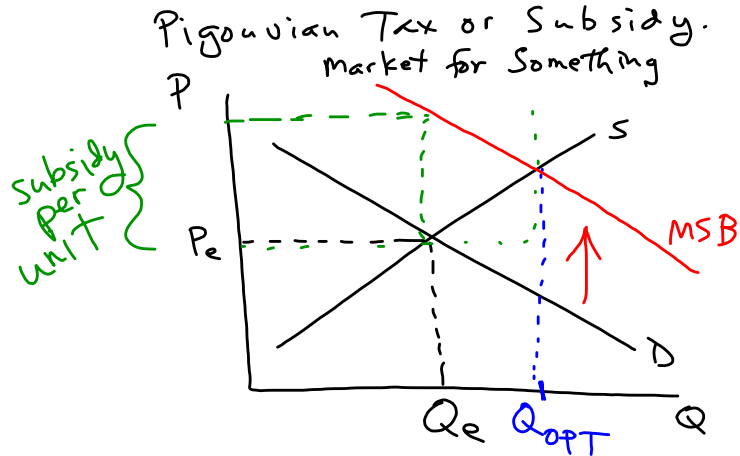
What if: Demand increases for the product?  
 $VMP_L \uparrow$   $Q_L^* \uparrow$

Monopsonistic Labor Market - Firm Curves

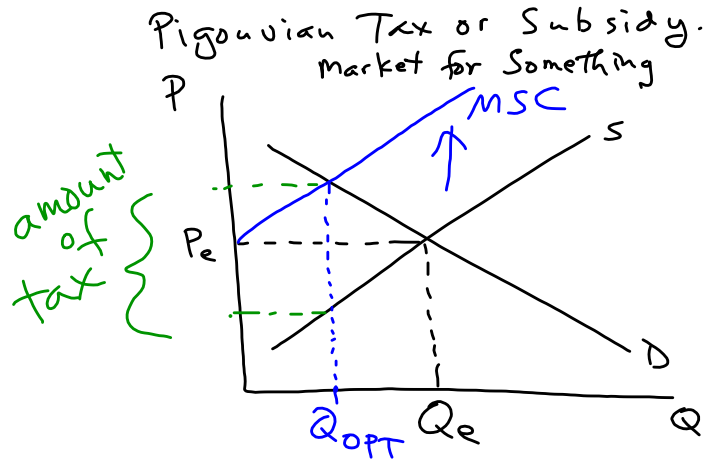


$MFC_L$  Marginal Factor Cost for Labor





Socially optimal quantity is greater than  $Q_e$ . Positive externality. Subsidy.



Socially optimal quantity is less than  $Q_e$ . Negative externality. Tax

## Coase Theorem (mod 74)

thought about "fixing"  
externality problems

through contracts.

called. "internalizing the  
externality"

if transaction costs low  
enough, there should be  
a private solution to  
any externality.

Workers get \$100  
Widgets yield \$10 (price)

# Workers	Total Product (widgets)	Labor Cost	Total Revenue	Profit
0	0			
1	25			
2	45			
3	60	300	600	300
4	70	400	700	300

Q: What is the marginal effect on profit of the 4<sup>th</sup> worker?

GINI coefficient -  
 measure of inequality.  
 goes from 0 to 1

0 totally equal shares

1 one person has  
 everything.

Cost-minimizing input  
 combination.

Recall: utility-maximizing  
 consumption bundle:

$$\frac{MU_{\text{good 1}}}{P_{\text{good 1}}} = \frac{MU_{\text{good 2}}}{P_{\text{good 2}}} = \frac{MU_{\text{good 3}}}{P_{\text{good 3}}} \dots$$

$$\frac{15}{5} \quad \frac{15}{4}$$

$$\frac{15.5}{5} \quad \frac{14.5}{4}$$

# Costs of factor inputs:

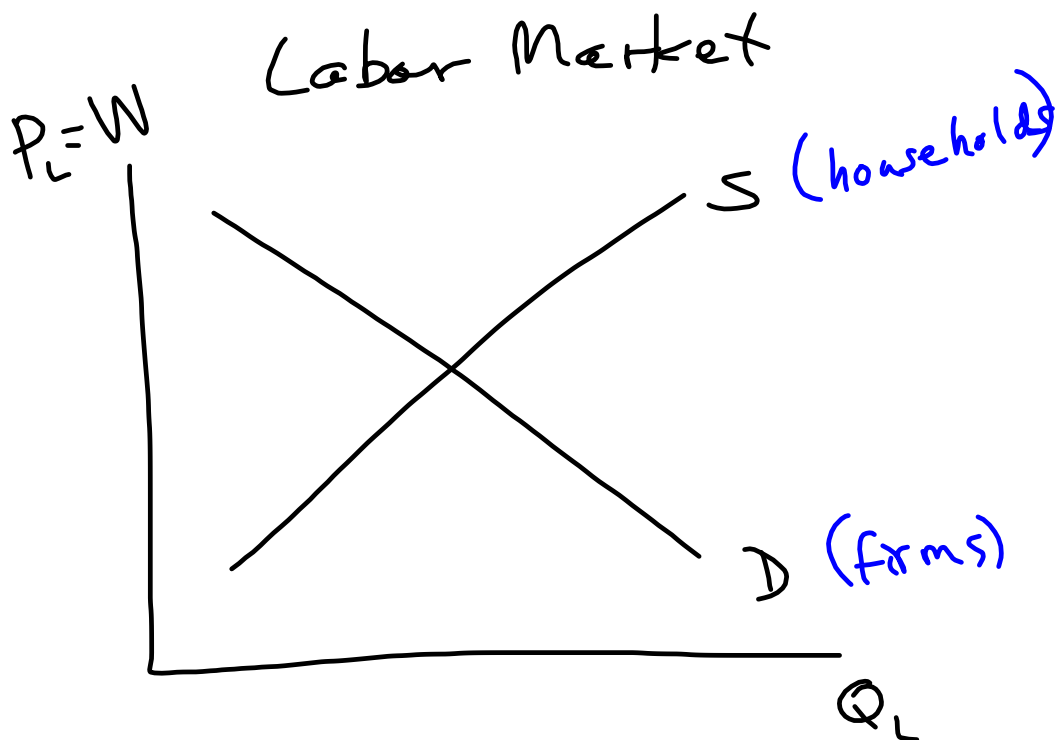
cost-min. combination

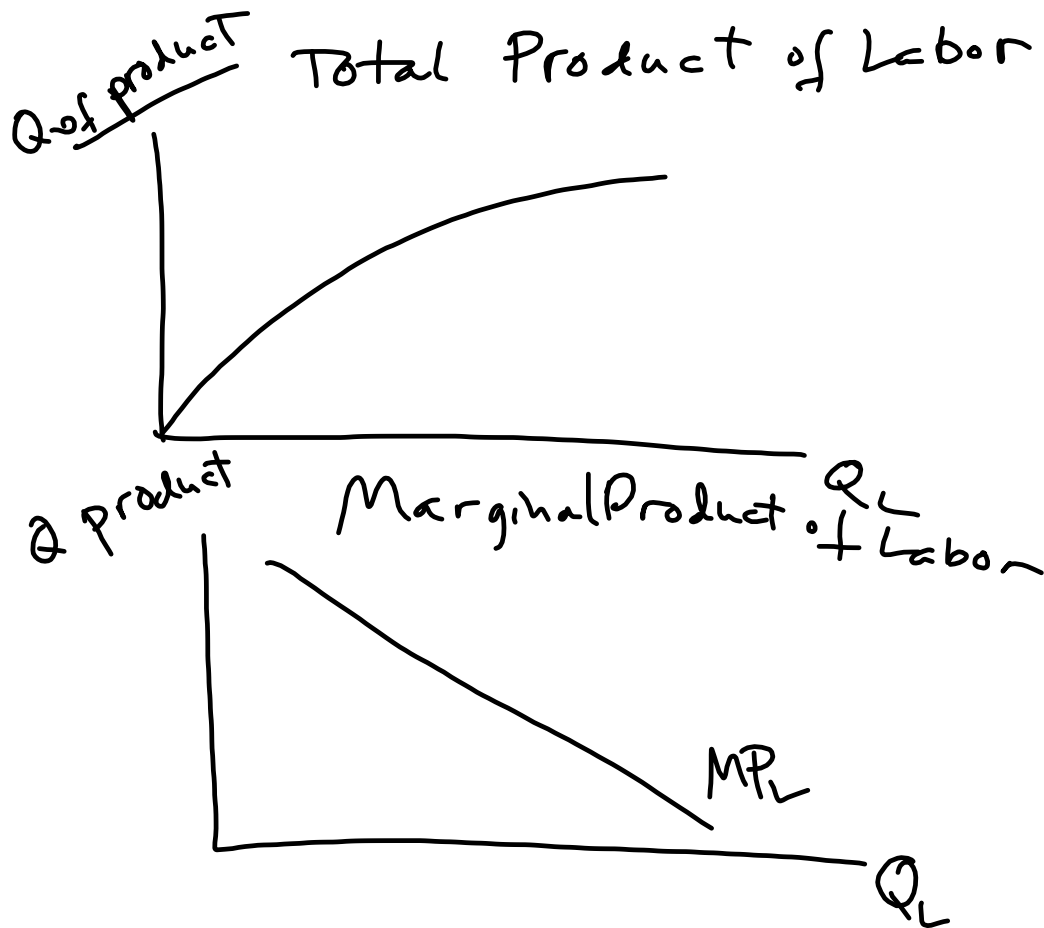
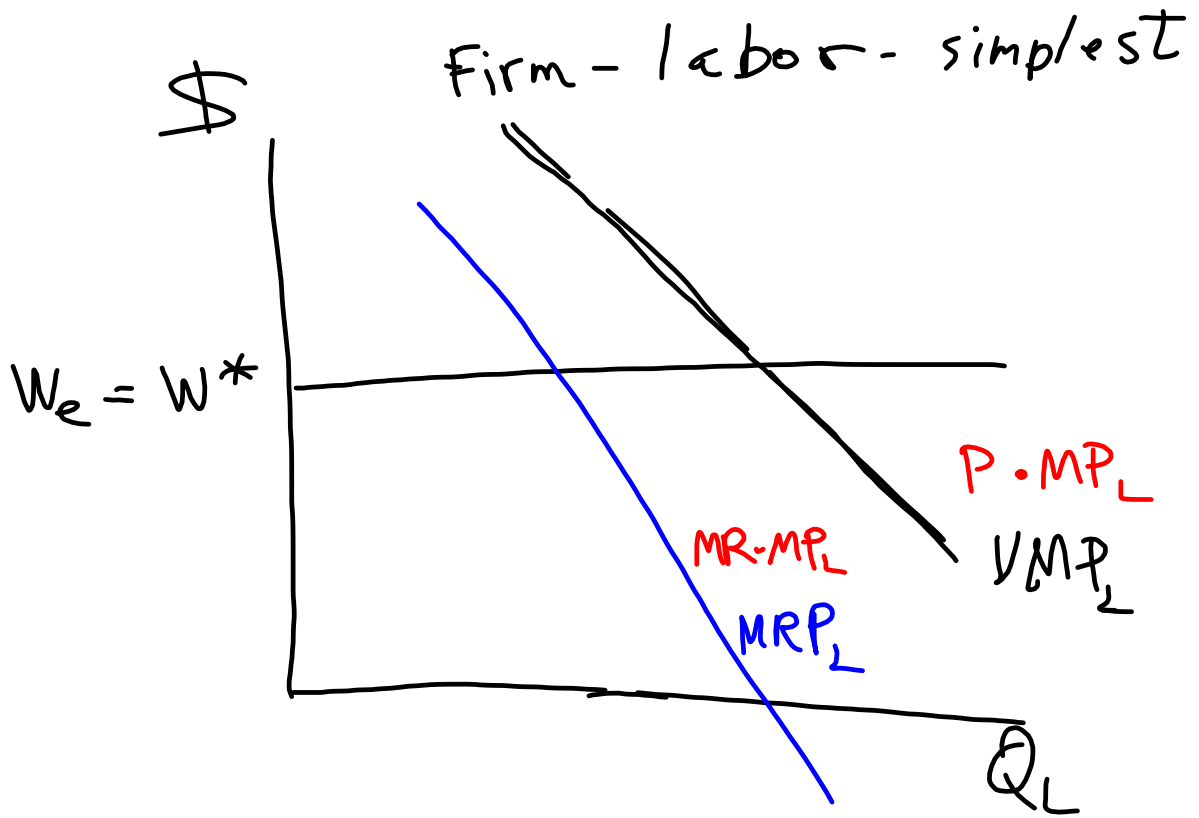
$$\frac{MP_L}{W} = \frac{MP_K}{C_K} = \frac{MP_{land}}{Rental}$$

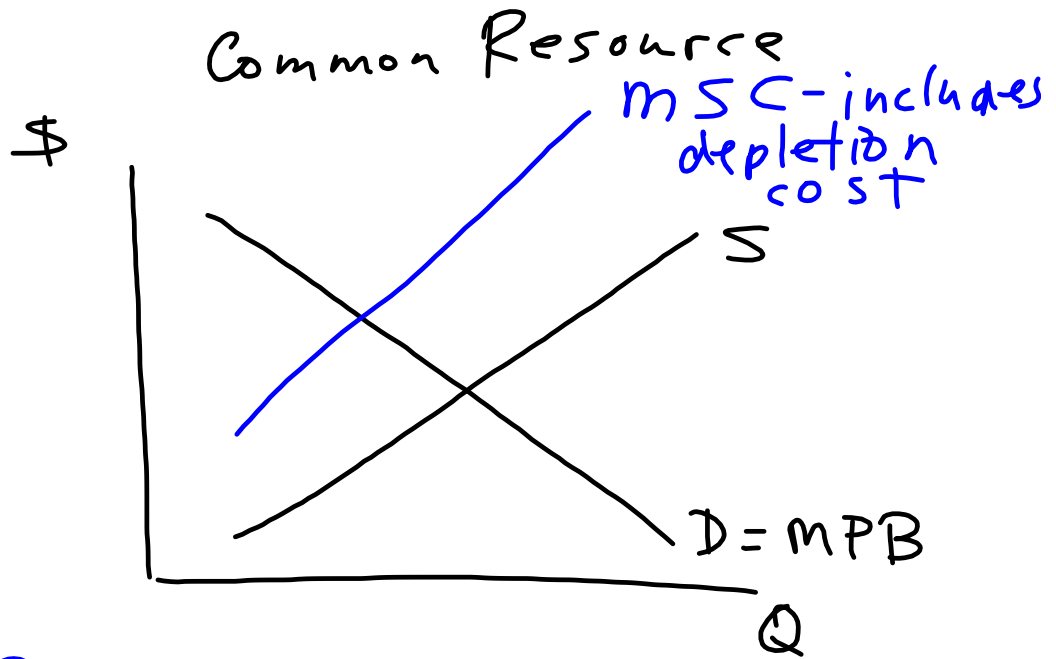
$$\frac{500}{50} = \frac{1000}{200}$$

$$10 = 5$$

← move \$ from K to L







Cost: depletion of the resource

