

## Monopolistic competition

- 1) Large number of firms who compete among each other.
- 2) Firm has small market share
- 3) produces differentiated product
- 4) No entry and exit barrier

## Oligopoly market

- 1) Few sellers
- 2) Each producer has large market share
- 3) Interdependency among each other in decision making.
- 4) Products may be homogeneous but differentiable
- 5) Barriers to entry.

... Firms to gether control the market.

- Duopoly market: Two firms together control the market.
- Monopsony market: one buyer

## FACTOR DEMAND

Factor demand is called "Derived demand"

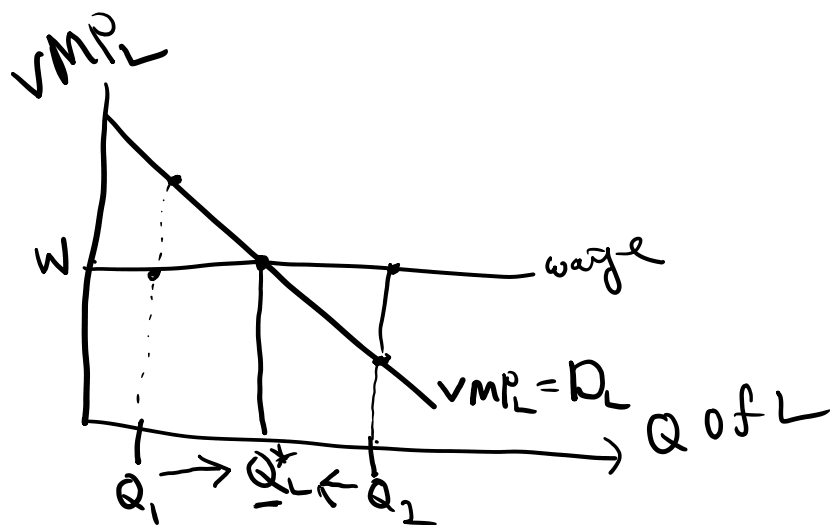
$L$	$Q$	$MP_L$	$P$	$VMP_L$	$wage(w)$	$\Delta \pi = VMP_L - w$
0	0	—	10	—	400	—
1	100	100	10	1000	400	600
2	180	80	10	800	400	400
3	240	60	10	600	400	200
4	280	40	10	400	400	0
5	300	20	10	200	400	-200

$$VMP_L = P \times MP_L$$

Value of marginal product of labor  
"Value of marginal product of Labor"

Value of Marginal Product of Labor  
 ~ "marginal Revenue product of Labor"

$VMP_L = W$  Equilibrium point of Labor demand



At  $Q_1$ :  $w < VMP_L$

At  $Q_2$ :  $w > VMP_L$

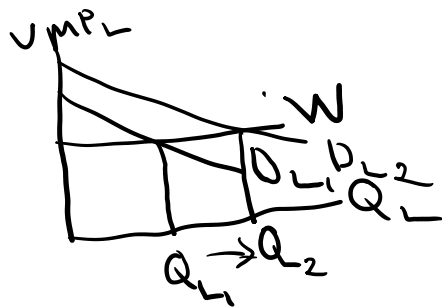
⊗ Factors that shifts the labor demand

1) output price:

$$VMP_L = P \times \overline{MP}_L$$

$\uparrow P \rightarrow \uparrow VMP_L$  (will shift to the right)

$\uparrow P \rightarrow \uparrow VMP_L$  (will shift to the right)



2) Technological change:

$$VMP_L = \bar{P} \times MP_L$$

$\uparrow MP_L \rightarrow \uparrow VMP_L \rightarrow VMP_L$  shift to the right  $\rightarrow D_L$  will increase

3) Supply of other factors:

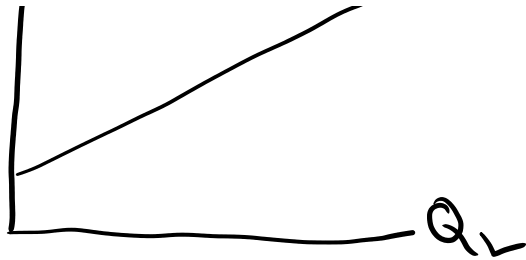
$MP_L \uparrow \rightarrow \uparrow VMP_L \rightarrow$  shift right  $\rightarrow D_L \uparrow$

The Supply of Labor

wage

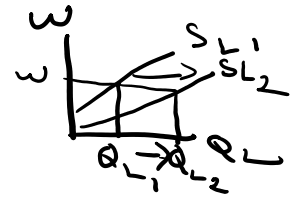


$S_L$

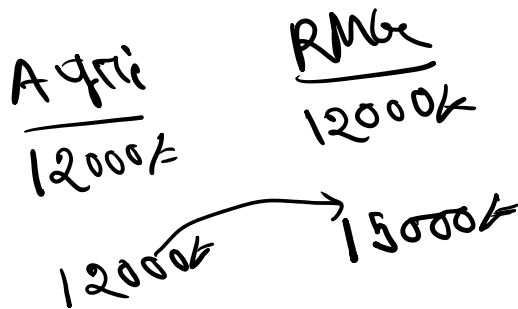


## Shifting factors of Labor supply

1) changes in preferences and norms:



2) changes in alternative opportunities



3) immigration

= equilibrium in Labor market

# Equilibrium in Labor market

