

LABOR DEMAND

- Optimal Decision

- Marginal product of labor:

- Extra production for each additional worker

- Marginal Revenue product

- How much extra Revenue from hiring an extra worker

- * $MP \cdot Price$

- Rational: Marginal Benefit = Cost
Marginal Rev. = wage

Worksheet Q1 (a)

| Worker | Tot. output | MP | MR |
|--------|-------------|----|----|
| 1 | 3 | 3 | 30 |
| 2 | 6 | 3 | 30 |
| 3 | 9 | 3 | 30 |
| 4 | 11 | 2 | 20 |
| 5 | 12 | 1 | 10 |
| 6 | 12 | 0 | 0 |

Q2 (b)

If wages = 15, firms will hire 4 workers

4th MR: 20 > 15

5th MR: 10 < 15

Q1 (c)

If wages = 25, firm will hire 3 workers

3rd MR: 30 > 25

4th MR: 20 < 25

• Shifts on Labor demand

1. Changes in demand for your product

2. Scale

↳ Larger the firm \Rightarrow Lower the cost of capital \Rightarrow need more workers

- MODERN THINGS

3. Substitution Effect

↳ Substitute workers for capital

- AI

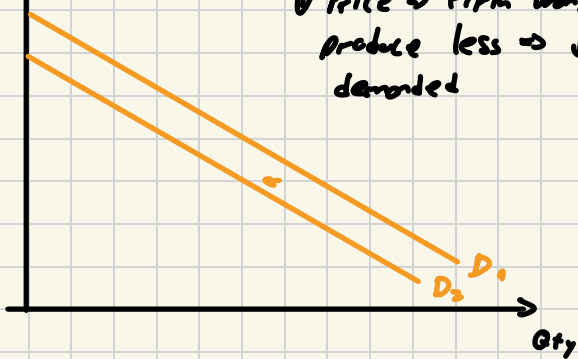
4. Productivity

5. Non wage benefits

$Q^d(p)$

Wage \uparrow

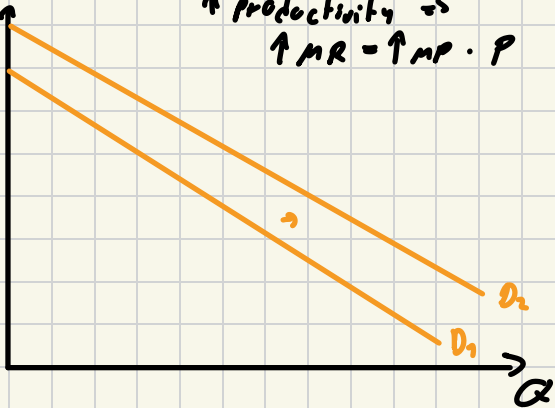
\downarrow Price \Rightarrow Firm want to produce less $\Rightarrow \downarrow$ Labor demanded



$Q^1(\epsilon)$

wages \uparrow

\uparrow productivity \Rightarrow
 $\uparrow MR = \uparrow MP \cdot P$



• Labor Supply

- Substitution Effect:

- * Higher salary makes work more attractive
- * If I pay you 100 dollars for attending to the discussion more people would be here

- Income Effect

- * Higher wages makes leisure more attractive
- * "Now I can work 6 hours and receive the same thing I was receiving when I worked 8 hours"

Question 2

- Substitution Effect:
 - \uparrow wage makes you want to work more
 - Income Effect:
 - \uparrow wage makes you achieve $\$200$ faster
- \Rightarrow you want to work less

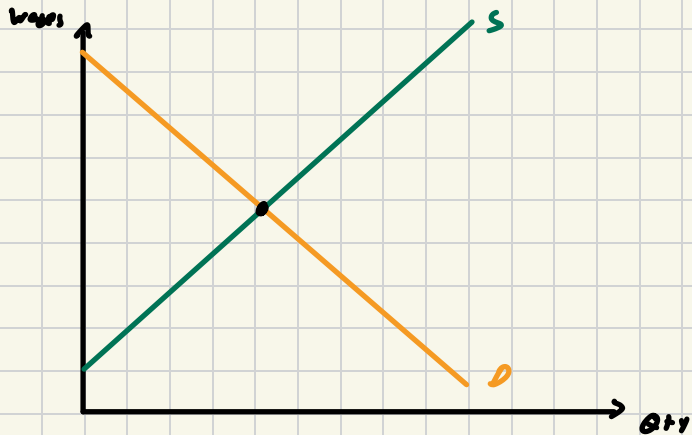
Shifts on Individual Labor Supply

1. Other use of time
2. Other source of income
3. Need for more money

Shifts on market Labor Supply

1. Increase in wages in other sector
2. Changing number of potential workers

Equilibrium



• Compensating Differences

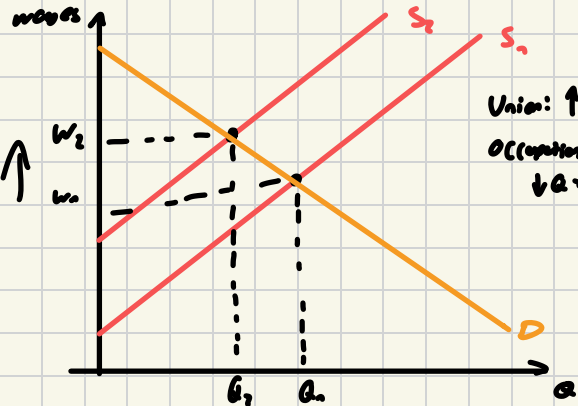
- Compensate the undesirable aspect of a job
- There are less people wanting to work with X-ray than working on a café.

X-ray pays more

- But why lawyers receive more than grave diggers
 - ↳ Education → signal
- **Efficiency wages:** Companies invest on their workers. Then, they offer higher wages to avoid losing them

• Government

- Occupational licensing / Unions



Union: $\uparrow w \Rightarrow \downarrow Q$

Occupational licensing
 $\downarrow Q \Rightarrow \uparrow w$

Minimum wages

