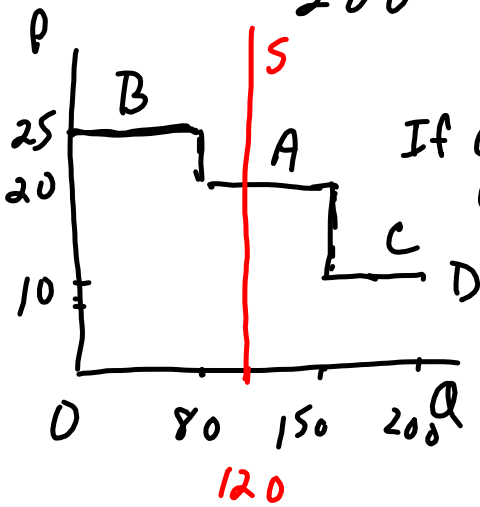


Q. 10 - permit market -  $SO_2$   $NO_x$   
↳ need a permit (quantity)  
to emit → buy a permit  
or reduce emissions  
- idea → emission target at  
lowest possible

Thomas Crocker - Wyo. } 1968  
John Dales Toronto. }

| Firms | Initial   | Cost | Permits   | Command & Control. |
|-------|-----------|------|-----------|--------------------|
| A     | 70        | 20   | 40        | 600                |
| B     | 80        | 25   | 40        | 1000               |
| C     | <u>50</u> | 10   | <u>40</u> | <u>100</u>         |
|       | 200       |      | 120       | <u>1700</u>        |



Price = \$20

If Cost > \$20 Buy  
 Cost < \$20 Sell

B buy from C @ \$20 Transfer  
 B buys 40 → Cost 800  
 C sells 40 → " 500  
 A use 40 pay \$20 · 30 600  
1100

other examples

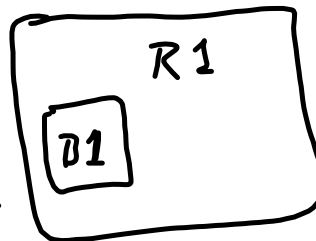
- beneficial → subsidy - reduce cost  
↳ economic impact of program or facility

Universities - community

Stadiums

Arts / Cultural.

Zoning regulations - land use type  
ex B1 - retail  
- restaurant  
- bar



- negative externalities  
- spatial.

Try Q3 & Q1 p213

Information Asymmetries Chapter 22  
parts 1+3

- moral hazard &

↳ behavior of buyer affects performance of product & seller can't observe behavior

- lowers cost to buyer

- adverse selection & - type

- terms of sale attract (costly) wrong buyers

- screen buyers - information  $\left\{ \begin{array}{l} \text{past behavior} \\ \text{health} \end{array} \right.$

Adverse selection.

→ range of quality (types) = High  
 Price → expected value (EV)

$$EV = Prob_H \cdot H + (1 - Prob_H) \cdot L$$

Akerlof - "Lemons" Problem

$$EV = Price = Prob_H \cdot H + (1 - Prob_H) \cdot L$$

owner knows good or bad  
 Sell → EV or Price used vs

EV of new  
 own a good car  $P_L^u < P_L^N$  - experience  
 bad car  $P_L^u > P_L^N$  - "

Buyer of used car - offer lower price  
 expect  $P_L^u > P_L^N$

$$P_L = 0.5$$

initial.

$$V_L = \$100$$

$$V_G = \$200$$

$$EV = 0.5 \cdot 200 + 0.5 \cdot 100 \\ = \$150$$

But if own good car  $\$150 < V_G$  so  $P < WTA$

$$\textcircled{2} P_L = 0.55 \quad P \downarrow \text{ from } \$150 \\ P_G = 0.45$$

$\textcircled{3} P_L = 0.6$  - Adverse selection  
 $P_G = 0.4$  leads to market  
collapse