Test 1 Wed Feb 15

Covers Ch 1 - Principles 1-7
Ch 2 - method
Ch 3 - only Farmer/Rancher example
Ch 4 - all
Ch 6 - tax example
Ch 5 - elasticity.

Practice Test Friday. By noon

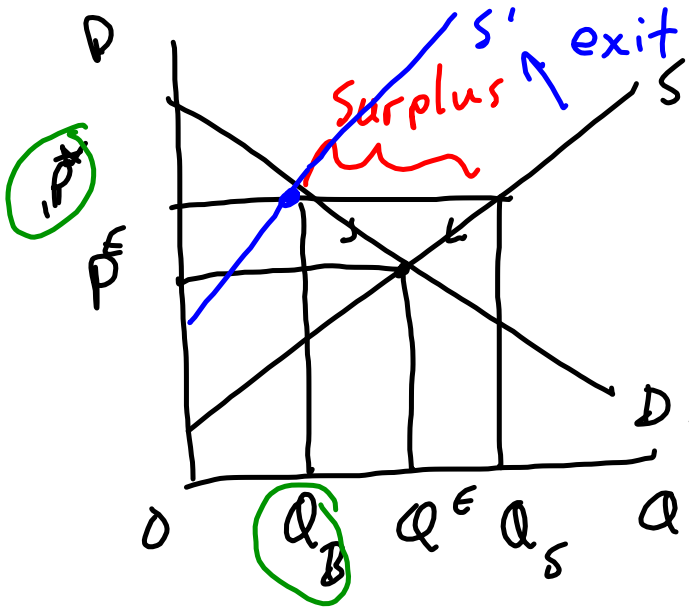
Markets D + S - model.

- can we use for prediction?
- original equilibrium (P^E, Q^E)
  - ↳ shock
    - ↳ new equil. (P', Q')
  - comparative statics

Predict effect of a tax.

$P^B \uparrow$ $P^S \downarrow$ $Q \downarrow$

~"short" side (smaller of D or S) rules. → shortages / surpluses



at P^* - surplus

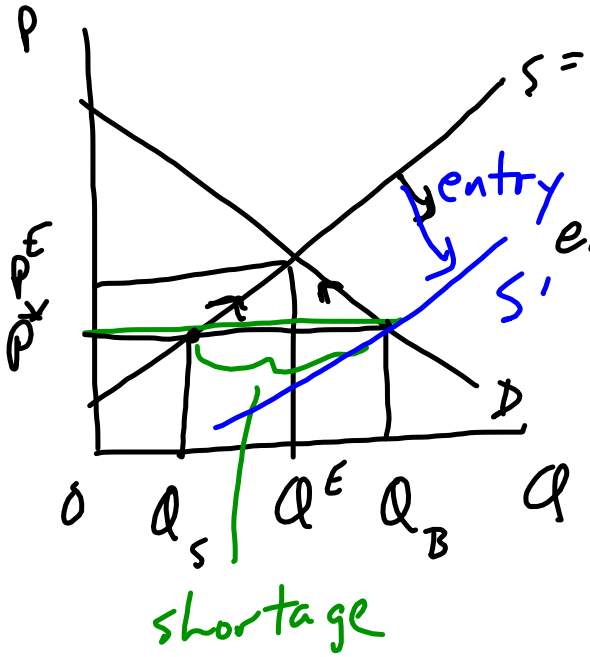
$Q_S > Q_{13}$ $(Q_S - Q_{DB})$

surplus → down pressure.

as P↓ from P^*

$Q_B \uparrow$ $Q_S \downarrow$

If p^* - legal minimum →
will surplus last forever? - no
- suppliers will leave market - shift
S to left → S' non-price adjust.



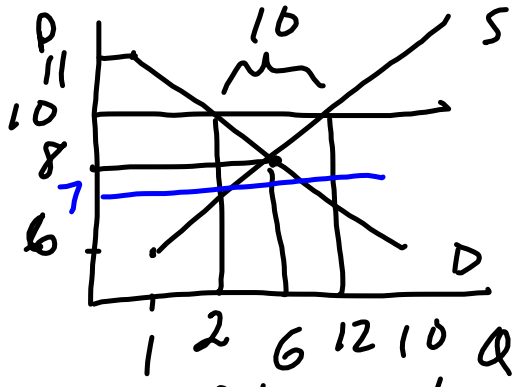
shortage ($Q_B - Q_S$)
entry new producers
- lowering cost
of suppliers
- infrastructure
- subsidy
- immigration.

Q3 chapter 6.

$ P	millions Q^D	Q^S
11	1	15
10	2	12
9	4	9
8	6	6
7	8	3
6	10	1

Inventory control.

Frisbee Q4

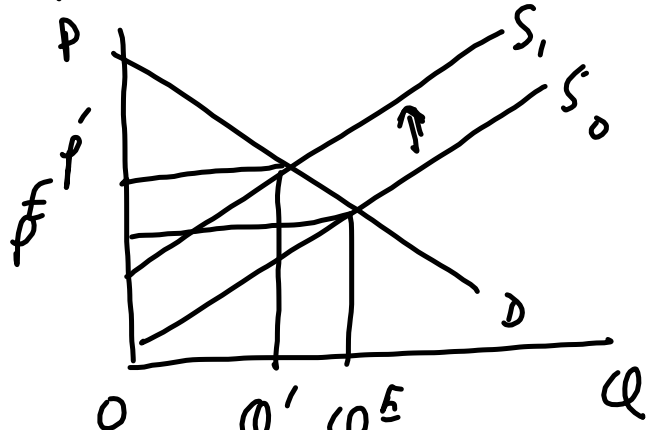


- price floor $10 (min price) surplus
- price ceiling $7 (rent control)

$Q_S = 3$ $Q_D = 8$

shortage 5

Effect of bad harvest Supply shift due to harvest↓



- other examples
  - war
  - transport infrastructure

-those who still produce gain P↑

consumer loss P↑ Q↓

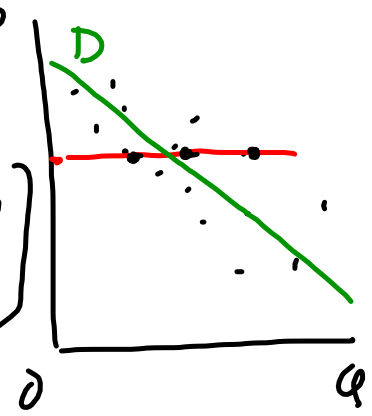
graphs show → qualitative effect
direction P & Q move

Chapter 5 → elasticity quantitative

Q: what happens to Q^D if price ↑ 10%?

Own price elasticity

$$\eta = \frac{\%\Delta Q_D}{\%\Delta P}$$ [convention drop minus sign]



$\eta = \frac{\%\Delta Q}{\%\Delta P}$ price response

Example what happens if Price gas increases $2.15 to $2.25?

gas tax $0.10/gal. -

at $2.15 sell 20,000 gal.

$2.25 " 15,000 gal.

$\%\Delta Q = \frac{20,000 - 15,000}{17,500}$

$= \frac{5,000}{17,500} = 0.30$

mid point method.

$\%\Delta P = \frac{2.15 - 2.25}{2.20}$

$= \frac{.10}{2.20} = 0.05$

$$\eta = \frac{\%\Delta Q}{\%\Delta P} = \frac{0.30}{0.05} = 6$$

$\eta > 1$ - elastic

$\%\Delta Q > \%\Delta P$

$\eta < 1$ - inelastic

$\%\Delta Q < \%\Delta P$

elastic → P↑ total spending ↓

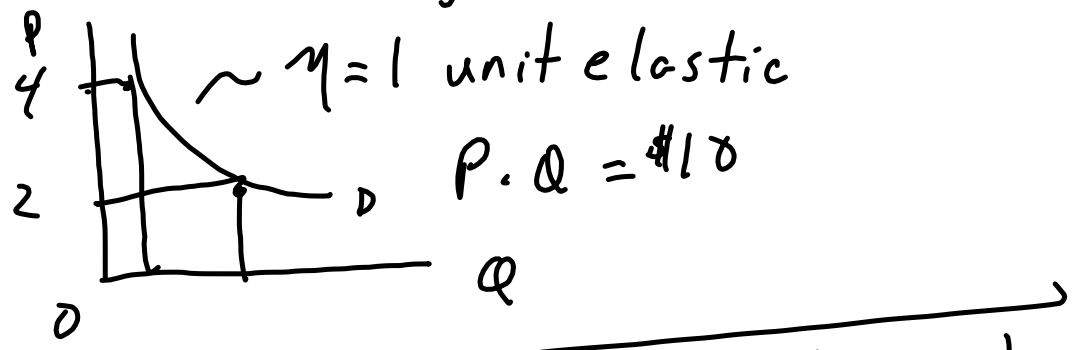
P · Q ↓

inelastic → P↑ total spending ↑

Q9 Chap 5 -

Walt - 10 gal of gas

Jessie - #10 of gas



~ $\eta = 1$ unit elastic

$P \cdot Q = \$10$

- close substitutes
- necessity
- time horizon - longer to adjust

short term long term elasticity