Final

× accumulate

✓ apply × broker ✓ RET

Format same

1 小时 15 分钟

big picture

✓ practice exam

Thursday 11:00 - 12:30 office hour

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New material will not be on exam (today)

negative ext → choose to much

positive → little.

key: tax / subsidy → externality

know utility function ← × reality

competition ✓ solve problem

problem of externality is worse when ↑ market ↑ . in asy info

× more competion, something else

Eg. Expreso machine $50

↳ can be used by you and roomate.

$v_1$ $v_2$

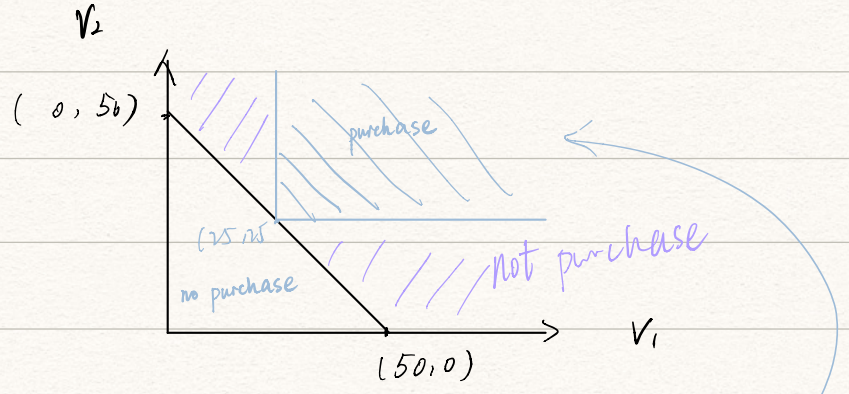
decide whether to purchase

how to split the cost. $t_1$, $t_2$.

$t_1 + t_2 = \$50$

individual ration $0 \le t_1 < v_1$

$0 \le t_2 < v_2$




Split the cost 25 both

second best mechenism

is incentive compatible

dominant strategy → Yes if $v \ge 25$

No if $v < 25$

inefficiency.

What if there are more contributers?

$n$ contributers

cost of machine is $25 \times n$

- the second best mechanism is implementable in dominant strategy equilibrium is the spilt the cost machenism

what happens to efficiency as $n \uparrow$

$v_i \ge 25$ for all $v = 1 \cdots n$

$\mathbb{P}_r [v_1 \ge 25, \cdots v_n \ge 25] = \prod_{i=1}^{n} \mathbb{P}[v_i \ge 25]$

Suppose $v_i$ is uniformly distributed between $[0, 25]$.

$\mathbb{P} = \left(\frac{1}{2}\right)^n$

$\sum_{i=1}^{n} v_i \geq 25n$

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Review

Revenue Equivalance Theorem

- bid function

  optimal reserve price

  insight into other allocation mechenism

  └ all pay

  information rent depend on n

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what happen when there is trade on both side

large market, many units to be solved

-problem of inefficiency due to asymetric info

(and market power)

vanishes as market becomes arbitrary large

- but require indepand value, use average quality

- inteedependent value. ← (informed, uninformed party)

↓ your info keeps on mattering (lemons market)

↳ adverse selection

(bad qualities drive out good qualities).

(every time info is interdepedent).

- eg. market for health care ← more competition can be banned (creamskimming)

monopoly may dominate competition.

market for capital

→ rationing.

↓ price can affect the competition,

↑ interests rate

↳ attract most risky customer.

lose least risky customers

↳ better not to raise price.

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⊘ externality ⇐ △ list of example

- activity level chosen by a player
  affect the utility level of others directly
- actors ignore this effect

negative ext ⇒ chose on your marginal level, ignore ... of others.

↳ overuse of private activities.

positive ext ⇒ underuse of ....

☆ deal with ↑ tax / subsidy ↘ set to.

↑ optimal → marginal ext.

(individual only care about margin)

simple: if can know utility function