Auction - allocation mechanism for a "prize".

people expend resources.

(↓ social welfare).

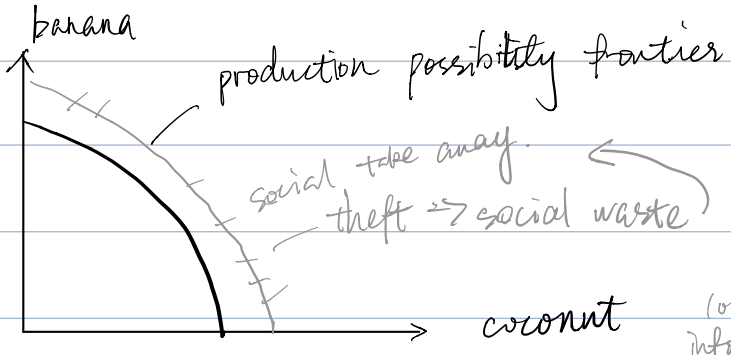
all-pay auction : resources → can be a social waste.

? political competition → may no social value ?

↳ influence voters vote differently.

(surplus)

rent seeking (google ??)



allocate the existing good to right person

$E[V_{(1)}]$ expected value of prize $= ER + nES$

(expected seller revenue

= sum of bidders' payment (effort)

do not creat value ⇒ (x have to be given to seller, just pay for getting prize ⇒ just matter who spent)

or they will not tell the truth.
(only when they have private info).
information rent
expected surplus

Information rent → 0 as $n \to \infty$ (last class).

↳ "informationally small" (information system with /wo you).

value ↓ when competition ↑

when $n \to \infty$ $[\underline{v}, \bar{v}]$.

$E(v_{(2)}) = ER + nES$ try to show ?

$\downarrow \quad \downarrow \quad \downarrow$

$\bar{v} \quad \bar{v} \quad 0$

Second Price all-pay auction

└ winning bidder pays the second price

$n=2$ the war of attriction

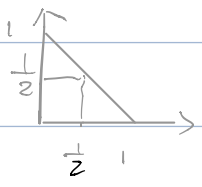
Auction → uncertanty on the side of market

- only one unit sold
- whether the unit has to be produced
- what if there are multiple sellers

consider a seller of **known cost** (who can produce any any number (real number) of unit)

seller could set reserve price → inefficiency due to monopoly power

above the MC

if 

$MC=\frac{1}{2}$, rp 70-5

face a continuous of buyers

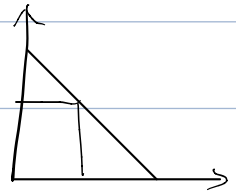
valuation drawn from same distribution of $F(v)$

$F(v)$ also represents the fraction of consumers whose valuation is v or lower

seller know the demand curve.

can not get all of the price

though discrimination profits



(due to private info).

cost ⇒ assymetric info.

(increasing n only decreasing uncertainty
but get the same on average
production does not make different ⇒ [only one unit
whether to produce

Exchange economy with uncertainty on both sides
(assymetric info).

M N

buyers sellers

F G (distribution function)

The effect of increasing M, N, keeping $\frac{M}{N}$ constant.

① pick minimum of M, N, match that number of buyers and sellers.
and do bilotical bargoing with the pairs

announcing a single price to all buyers and sellers.

⇒ Y or N

m Y ⇒ allocate units to right people ✓.

n Y

trade is at wrong price, but the problem disappears.
(inefficiency)

when $n \to \infty$

competition solve ——.