

Monopoly
Table 1 p 305

π max
 $MR = \frac{\Delta TR}{\Delta Q} = MC = \frac{\Delta TC}{\Delta Q}$

$MR = MC$
if $Q \downarrow \pi \downarrow$ $Q \uparrow \pi \downarrow$

<u>D curve</u>		P · Q	$\frac{P}{Q}$	$\frac{\Delta TR}{\Delta Q}$	
P	Q	TR	AR	MR	
11	0	0	0	10	MR < AR because AR ↓
10	1	10	10	8	
9	2	18	9	6	
8	3	24	8	4	
7	4	28	7	2	
6	5	30	6	0	
5	6	30	5	0	
4	7	28	4	-2	

elastic

↑

↓

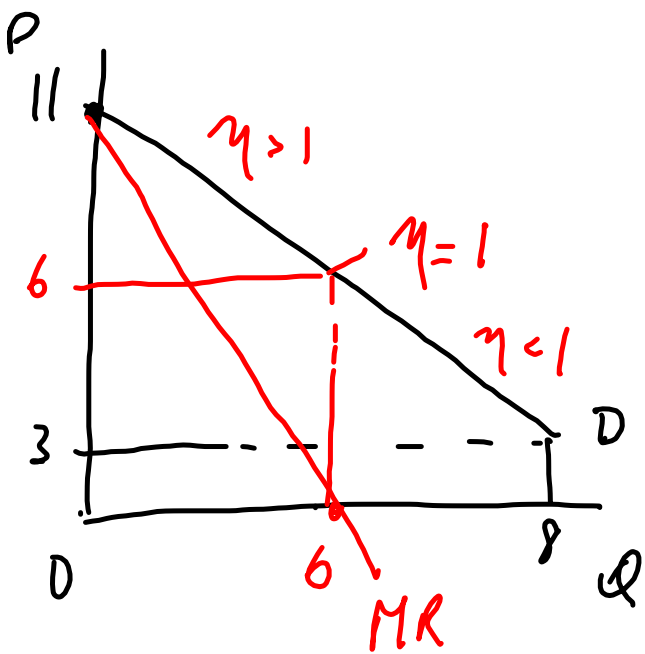


Fig 3

$\eta > 1 \quad MR > 0$

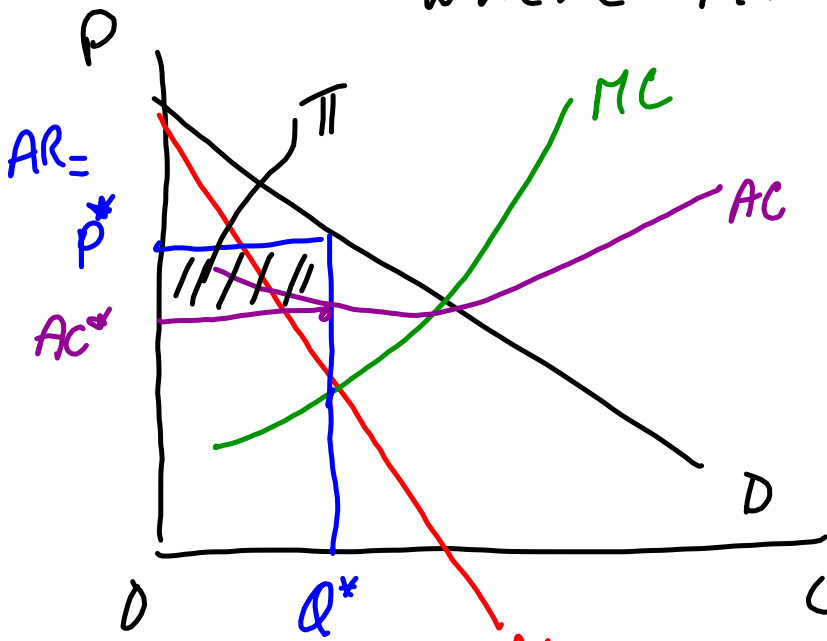
$\eta < 1 \quad MR < 0$

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

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

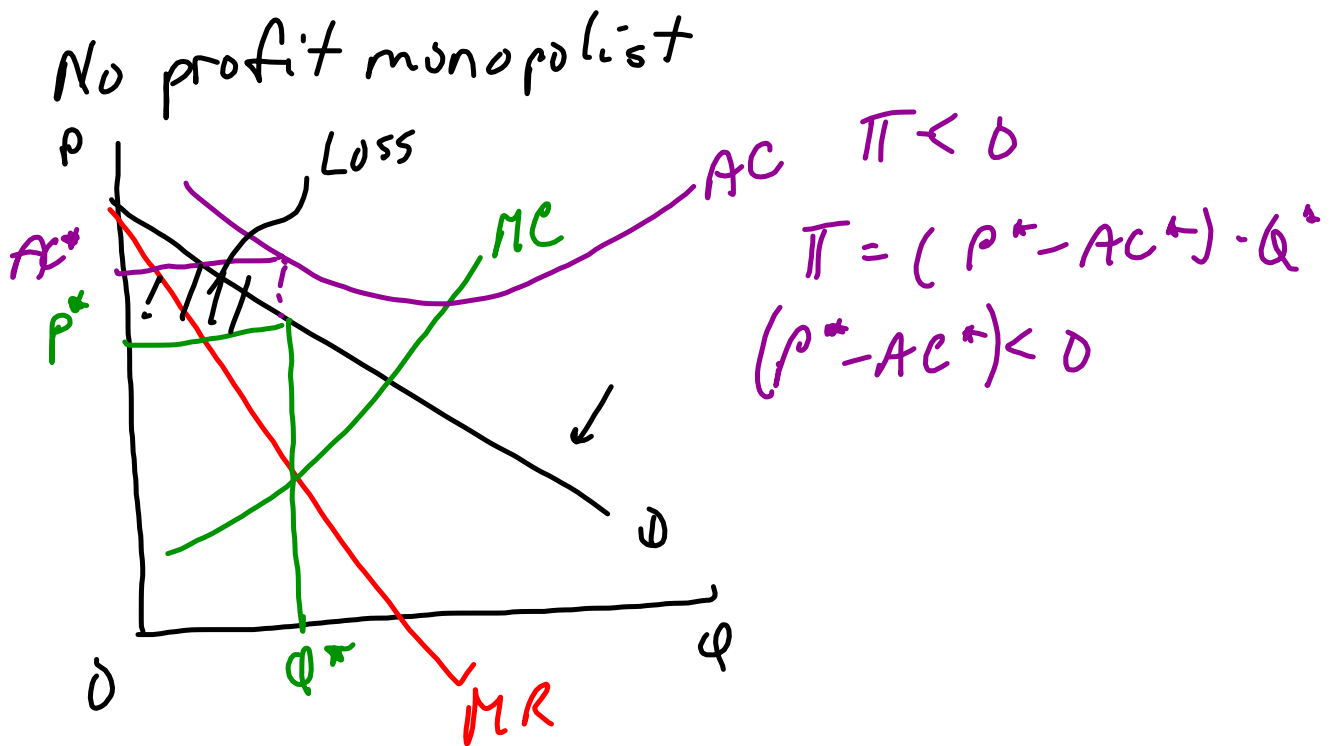
$TR \downarrow \quad MR < 0$

Max $\pi \rightarrow MR = MC$ choose Q
 where $MR = MC$



left of Q^*
 $MR > MC$
 lose potential π
 Right of Q^*
 $MR < MC$
 lose actual π

MR $\pi = (P^* - AC^*) \cdot Q^*$
 markup \leftarrow



Skip 15-3 - for now

extension of monopoly power - $\pi \uparrow$

- bundling or tie-in sale

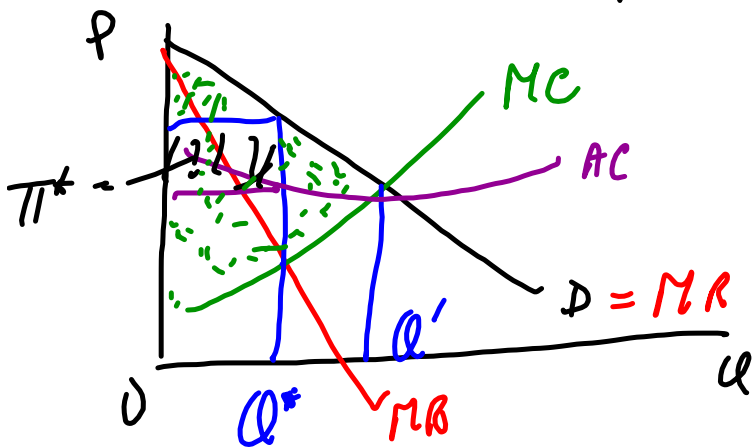
Xerox - monopoly dry copy process

- leased rather than sold copiers

- buy paper from Xerox - markup
extended monopoly power to paper

- price discriminate
 - segment market → same good.
 - - prevent resale
 - charge different prices
- }
- exploit demand elasticity of D

- extreme version - each pays different price



Q^* - simple monopolist
 - everyone pays same price

Q' - perfectly price discriminate

Price discrimination ?

- Airline tickets - unless terms same
 - convertible?
 - advance non-refundable?

- coupons - refundable

- take up rate low. -

discriminating on willingness to
send in coupon.

"time inconsistent preferences"
present bias

Monopoly as a bad thing?

structure -
 conduct \rightarrow $P \uparrow$ $Q \downarrow$ \rightarrow predation
 performance - $\pi > 0$ \rightarrow against competitors

Anti-trust legislation | drive out rivals
 - price war.

Progressive Era 1890 - 1920 -
 - increasing concentration in wealth
 - monopoly movement, restricted comp.
 - Standard Oil of NJ - bought rivals at distress prices

Sherman Anti-Trust Act 1890

structure

- prohibited monopoly through merger - Justice review merger proposals
- too much reduction in comp?

↳ degree of monopoly power

Clayton Act 1914 - extended

to cover conduct

- misleading advertising
- bait & switch selling
- bundling.

Req. for markets to work

- symmetric info \propto
- transactions cost low
search out best product

1926 *McPherson v Buick* Cardozo
prior - customer could sue

least
cost
avoider

seller

seller \rightarrow sue wholesaler

wholesaler \rightarrow sue manuf.

Uniform Commercial Code