Chapter 14 : Mkt Structure & Power

· firm := web of contracts between inputs & outputs that regulate production to maximize profits

↳ $\pi$ = TR − TC

= PQ − TC

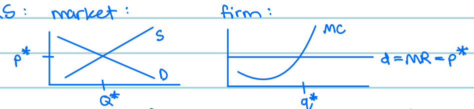
· total costs INCLUDE opportunity costs

· market power : the extent to which a firm can charge a higher price w/o losing sales

· Perfect Competition : many buyers & many sellers all producing an identical good

=> no market power

· price TAKERS : market : firm :



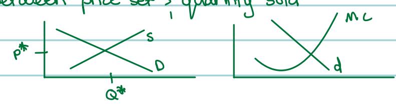

· Monopolistic Competition : many small firms compete , each selling differentiated products

=> little market power

· Oligopoly : handful of large sellers who sell homogeneous + differentiated products w/ some barriers to entry

=> some market power

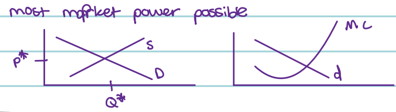
· trade off between price set & quantity sold




steeper demand
=> mor mkt power

· Monopoly : one seller of a product w/ no close substitutes & barriers to entry to keep other sellers out

=> most market power possible




mkt demand = firm demand

INCREASING MKT PWR

identical goods
many firms

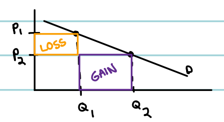
unique good
one firm

ALL MARKETS HAVE DOWNWARD SLOPING (or flat)
DEMAND CURVES ... steepness reflects mkt power

· marginal revenue = additional revenue from 1 more unit sold

↳ ≠ price in presence of market power bc selling 1 more unit requires price reduction in ALL units sold

· MR = MC is profit maximizing => P ≠ MC in presence of mkt pwr




MR = MC < P

$$MR = [P_2(Q_2 - Q_1) - (P_1 - P_2)(Q_1)] / \Delta Q$$

$$= [P_2 Q_2 - P_2 Q_1 - P_1 Q_1 + P_2 Q_1] / \Delta Q$$

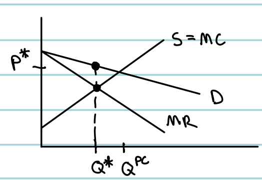
$$= [P_2 Q_2 - P_1 Q_1] / \Delta Q$$

$$= \frac{P_2 Q_2 - P_1 Q_1}{Q_2 - Q_1} = \frac{P_2 \Delta Q + P_2 Q_1 - P_1 Q_1}{\Delta Q} = P_2 + \frac{(P_2 - P_1) Q_1}{\Delta Q} = \frac{P_2 - (P_1 - P_2) Q_1}{\Delta Q}$$

$$= \frac{\Delta TR}{\Delta Q}$$

= output effect − discount effect

$$= P_2 - \frac{(P_1 - P_2) Q_1}{\Delta Q}$$




MR is steeper than demand curve
(2x steeper with linear curves)
MR decreases faster than P

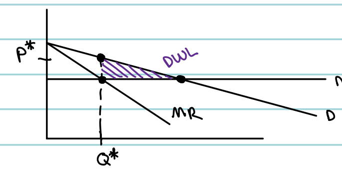
| Q | P | TR | MR |
|---|---|---|---|
| 1 | 3 | 3 | 3 |
| 2 | 2 | 4 | 1 |
| 3 | 1 | 3 | −1 |

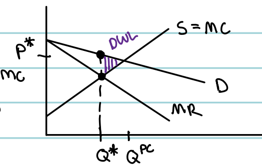
· setting prices & quantities

1. set Q* such that MR = MC
2. set P such that Q(P) = Q* (demand curve)

Problems w/ Market Power

- sellers exploit their power by lowering q to raise p
  - → mkt pwr => higher p
  - → mkt pwr => lower q (inefficiency)
  - → mkt pwr => larger $\pi$
  - → mkt pwr => less incentive to lower cost




Public Policy to Restrain Mkt Pwr

- ensure competition thrives
  - anti collusion laws to only allow good measures
    - mergers
      - competitive (good for consumers, bad for rival firms)
      - anticompetitive (bad for consumers, good for rival firms)

- minimize harm from mkt power
  - price ceilings