Understanding Monopoly

- Barriers to entry - makes it difficult for new firms to enter the market

- Allows many monopolists to enjoy long run economic profit

At high prices, demand = elastic, price effect = small

- Control of resources

- Inability of potential competitors to raise enough capital

  Monopolies established after years of growing

  Competitor needs to raise ~ $$ capital just to begin competing

- Economies of Scale ATC ↓, savings ↑

  example of natural barrier

- Natural monopoly exists because a single large firm has lower costs than any potential competitor

Government Created Barriers

- Licenses (radio/tv frequency) to minimize negative externalities
- Qualifications (practicing medicine/law)

  opportunity for corruption
- Patents
  - grants temporary monopoly rights to a product
  - incentive to innovate
- Copyrights
  - creates unintended consequences (pirating)

Firms

Perfectly competitive	Monopoly
Price takers (Price == MR)	Price maker (Price != MR) (as sole provider)
Horizontal demand	Downward sloping demand curve for entire industry

MR < MC, ↓ prod., ↑ price to max. profits
MR > MC, ↑ prod., ↓ price to max. profits
MR = MC, profit max at Q

Profit Maximizing Rule for Monopoly

monopolist goes ↑ in demand curve to find price

Profit maximized at output level (Q), MR = MC

If MR > MC, ↑ prod. ↓ price to max. profits

Competitive : P = MR Firms sell as much as they want at market price

Monopoly : P > MR To ↑ output, ↓ price
P > MC but has more long-run economic profits

When monopoly P > MR

- **Price effect - Units sold ↓ price. Itself, loss**
- **Output effect - ↑ units sold. Itself, gain**

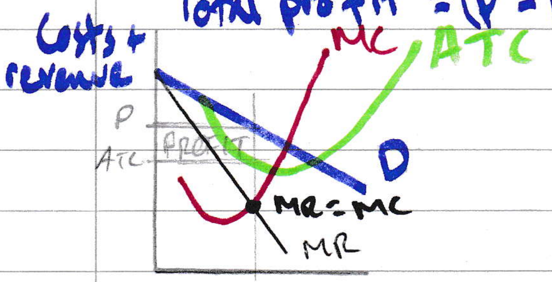
Production

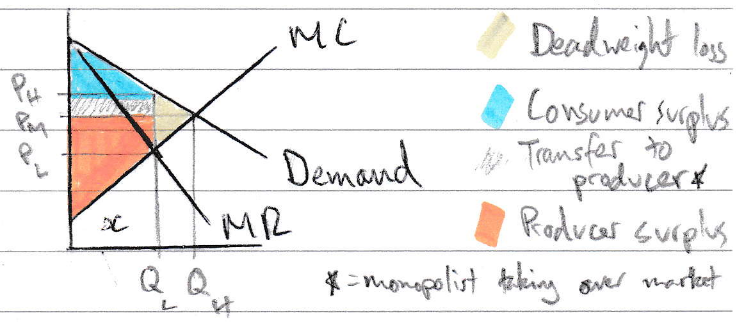
1) **Find product maximizing point. MR = MC**
2) **Find output (Q) at this point**
3) **P_A = point on ATC curve.**

Average profit per unit = P - ATC

Total profit = $(P - P_A) \times Q$

Cost = $P_A \times Q$
Profit =





Monopoly vs Competition

Demand curve downward-sloping = price maker

Revenue = producer surplus + x + (transfer to producer)

$$Q_{monopoly} < Q_{competition}$$

$$P_{monopoly} > P_{competition}$$

Deadweight Loss - Monopoly > 0

Competition = 0

Deadweight loss occurs in monopoly because some consumers who would benefit from a competitive market lose out

Deadweight loss $= 0.5 \times (P_H - P_L) \times (Q_H - Q_L)$
Consumer surplus $= Q_L \times (P_H - P_M)$

Problems

Monopolies can make societies worse by

- ↓ output so ↑ prices (inefficient output and price)
- operate inefficiently (deadweight loss) ⇒ market failure
- ↓ choices for consumers (few choices)
- no substitutes
- Can force you to buy more by bundling
- Rent seeking:
  (tariffs) tax on an import
  . Unhealthy competition among rivals to secure company profits
  . Resources used to monopolize than becoming more competitive

Solutions

(Harnessing benefits of competition)

- Splitting up large company into smaller competiting companies
- Reduce trade barriers
- Price regulation (Regulating markets)

Marginal Cost Pricing

At $P = MC$, monopoly experiences loss
$MC < ATC$, so $P < ATC$

To fix: Government subsides. Set $P = ATC$, so $P = MC$
Government ownership.

Government Failure

Government Intervention - removes incentive to ↑ profits + efficiency
Its employees rarely fired regardless of performance.

Free Market - Firms under MC pricing has no incentive to ↓ cost
Better than government intervention and changing incentives