Market Structure

1. Perfect Competition

- Many firms
- Identical products
- No market power
- Firms are **price takers**

2. Monopoly

- One firm
- Unique product
- Huge market power
- Can set price

3. Oligopoly

- Few large firms
- Products may be identical or differentiated
- Firms are interdependent
- Potential for collusion

4. Monopolistic Competition

- Many firms
- Differentiated products
- Some market power
- Example: restaurants or clothing stores

Marginal Revenue (MR)

Why does MR < Price for firms with market power?

Because to sell an additional unit, the firm must:

1. Lower the price on the **extra** unit
2. Lower the price on **all previous units** as well
   (Assuming the firm cannot price discriminate)

How Firms Choose Quantity & Price

Step 1: set MR = MC
Step 2: get Q
Step 3: plug Q in D and get P

Regulation & Efficiency

Perfectly competitive markets were shown to be **efficient**.
But firms with market power:

- Charge **higher prices**
- Produce **lower quantities**
- Create **deadweight loss**
  This is why imperfect competition is considered a **market failure**.

Government Regulation

Antitrust Laws

Government policies to prevent markets from becoming too uncompetitive. US Sherman Antitrust Act (1890)

- **Illegal monopolies**
- **Illegal cartels/collusion**
- **Merger review** (to prevent harmful mergers)
- **Blocking anti-competitive behavior** (price fixing, predatory pricing, etc.)

Natural Monopolies

Some industries are **more efficient when a single firm produces everything**.
Examples: electricity, water, natural gas pipelines, telecom.

Usually we have decreasing marginal cost and very high entry cost, leading to high average cost, which is decreasing as Q increases.

It is usually better for one or few firms serving the whole market.

Government response

- **Allow the monopoly**
- **Regulate its price** to prevent exploitation

- Often a **public utility commission** sets prices

Long-Run Entry and Exit

Entry

- If firms earn **positive economic profit**, new firms enter the industry.
- Entry shifts **supply right**, lowering price. May flatten the firm's (residual) demand and shift back.
- This continues until **profit = 0**.

Exit

- If firms earn **negative economic profit**, firms leave the industry.
- Exit shifts **supply left**, raising price. May steepen the firm's (residual) demand and shift out.
- This also continues until **profit = 0**.

  Long-Run Equilibrium

  With free entry and exit:

$$P = \text{Average Cost} \quad \text{and} \quad \text{Economic Profit} = 0$$