

MGT 104

Microeconomics

Opportunity Cost

Opportunity cost refers to the value of the next best alternative foregone. It measures trade-offs.

Spending Tk. 500 on a book means missing a concert you could attend.

A worker can earn Tk. 500/day as a teacher or Tk. 600/day as a shop manager.

Opportunity cost of teaching = TK. 600 (income forgone).

Importance of Measuring Opportunity Cost

- ✓ Helps efficient resource allocation**
- ✓ Aids rational decision-making**
- ✓ Enables cost-benefit analysis**
- ✓ Guides business and policy decisions**

Methods of Measuring Opportunity Cost

Monetary Measurement – measured in money value

Real Measurement – measured in goods or time

PPC Approach – slope shows trade-off between goods

Monetary Measurement

A worker can earn Tk. 500/day as a teacher or Tk. 600/day as a shop manager.

Opportunity cost of teaching = TK. 600 (income forgone).

Real Measurement

A farmer can produce 100 kg of rice or 50 kg of wheat.

Opportunity cost of 1 kg wheat = 2 kg rice foregone.

Opportunity Cost on PPC

- PPC (Production Possibility Curve) shows combinations of two goods that can be produced with limited resources.

Production Option	Food (Units)	Clothes (Units)	Opportunity Cost of 10 Clothes
A	100	0	-
B	90	10	10 Food
C	70	20	20 Food
D	40	30	30 Food

- Increasing opportunity cost: As more clothes are produced, more food must be sacrificed.

A country can produce either 200 units of computers or 400 units of phones. What is the opportunity cost of producing 1 computer?

Opportunity cost = Phones forgone / Computers produced = $400 / 200 = 2$ phones per computer.

- ✓ **Opportunity cost = value of next best alternative foregone.**
- ✓ **Measured in money, real terms, or PPC.**
- ✓ **Crucial for rational economic decisions.**

Theory of Firm

- Market Structure
- Equilibrium of Firm and Industry
- Price Determination under Different Market Conditions

Theory of Firm

The Theory of Firm explains how firms make decisions regarding production, cost, and pricing.

- ✓ It focuses on profit maximization as the central objective.
- ✓ Firms operate under various market structures such as perfect competition, monopoly, monopolistic competition, and oligopoly.
- ✓ Understanding firm behavior helps analyze resource allocation and price mechanisms in the economy.

Example: A bakery decides how many cakes to bake daily to maximize profit, given ingredient costs and local demand.

Market Structure

Market structure = the way markets are organized.

Four main types:

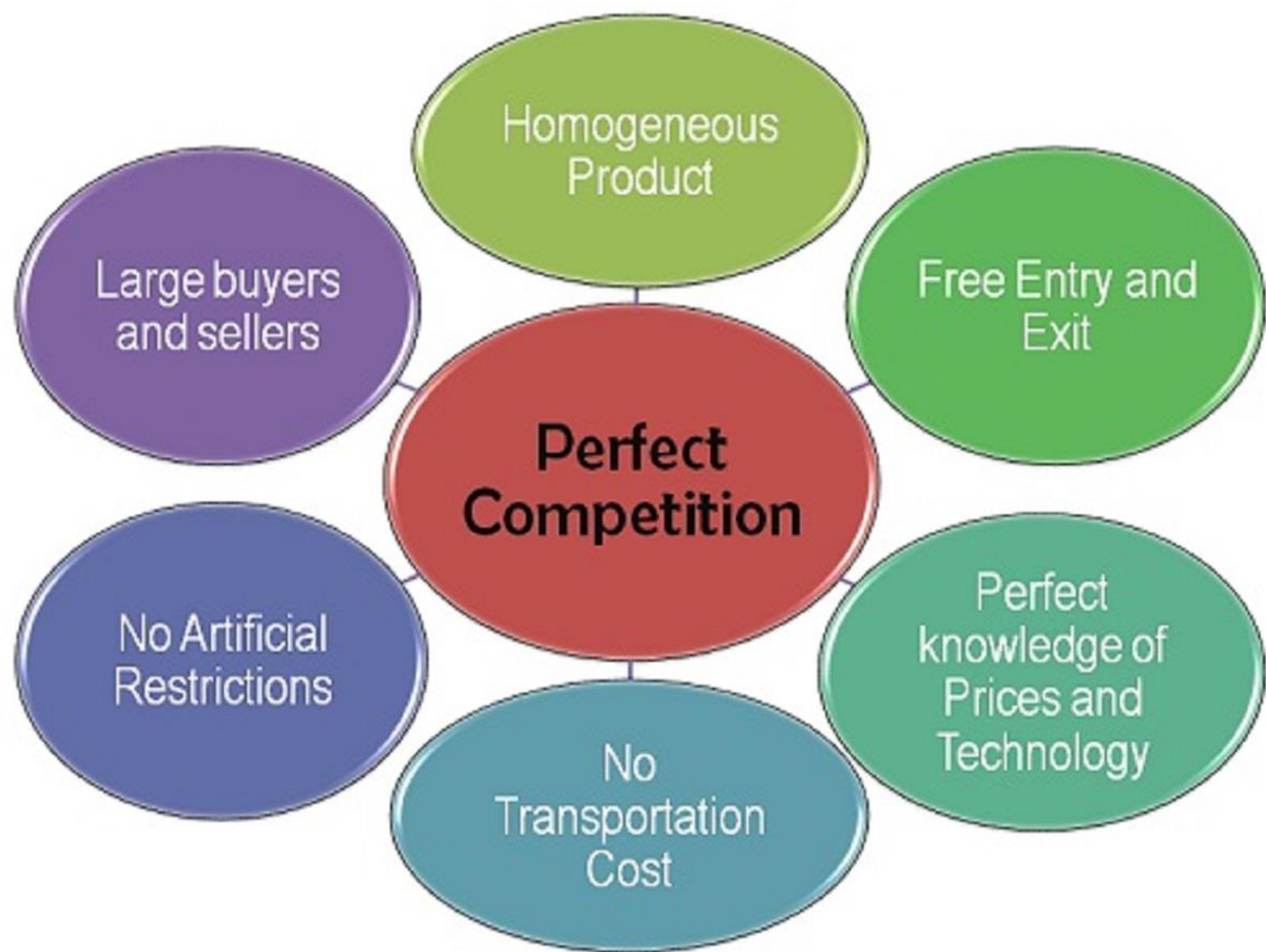
1. Perfect Competition – e.g., agricultural markets like rice or wheat.
2. Monopoly – e.g., Bangladesh Power Development Board (BPDB).
3. Monopolistic Competition – e.g., clothing stores, restaurants.
4. Oligopoly – e.g., mobile telecom industry (Grameenphone, Robi, Banglalink).

Perfect Competition

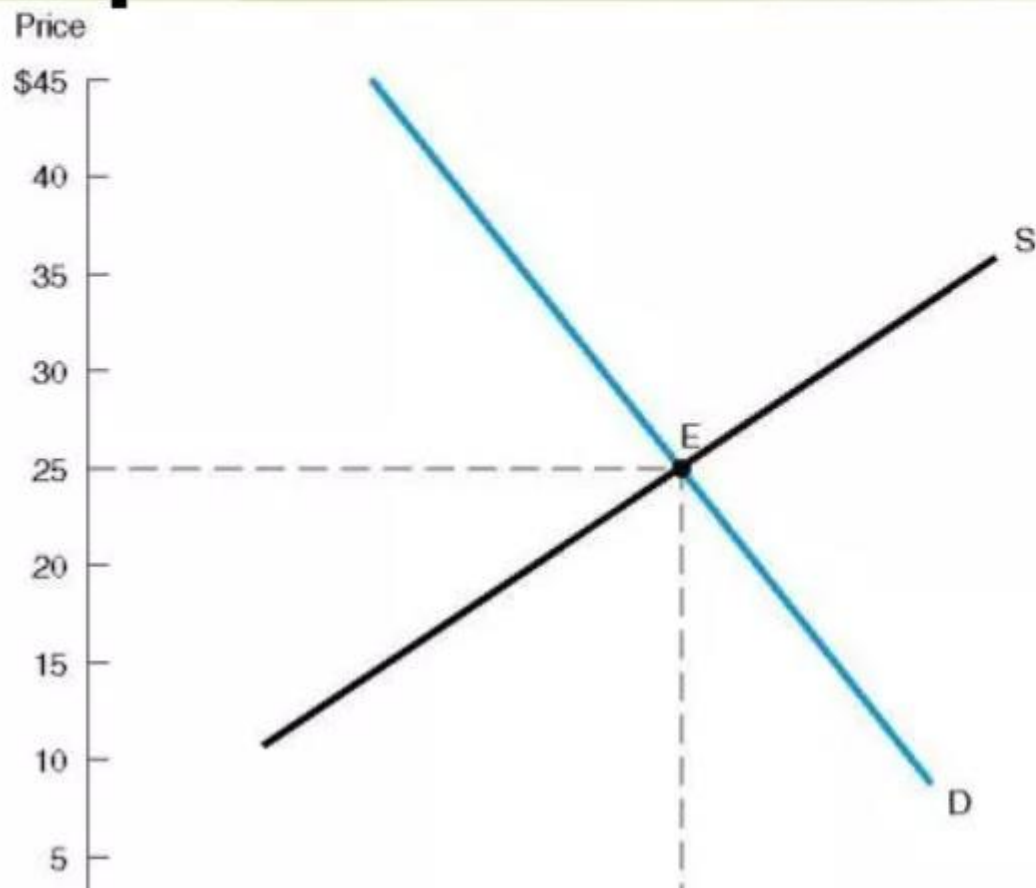
Many small firms, identical products, no entry barriers.

Price determined by demand and supply.

Example: Farmers selling potatoes in a local market. Each farmer must accept the market price.



Perfect Competition



Equilibrium

$$Q_D = Q_S$$

Ex:

$$Q_D = 13 - .2P$$

$$Q_S = .4P - 2$$

Find equilibrium
price and quantity

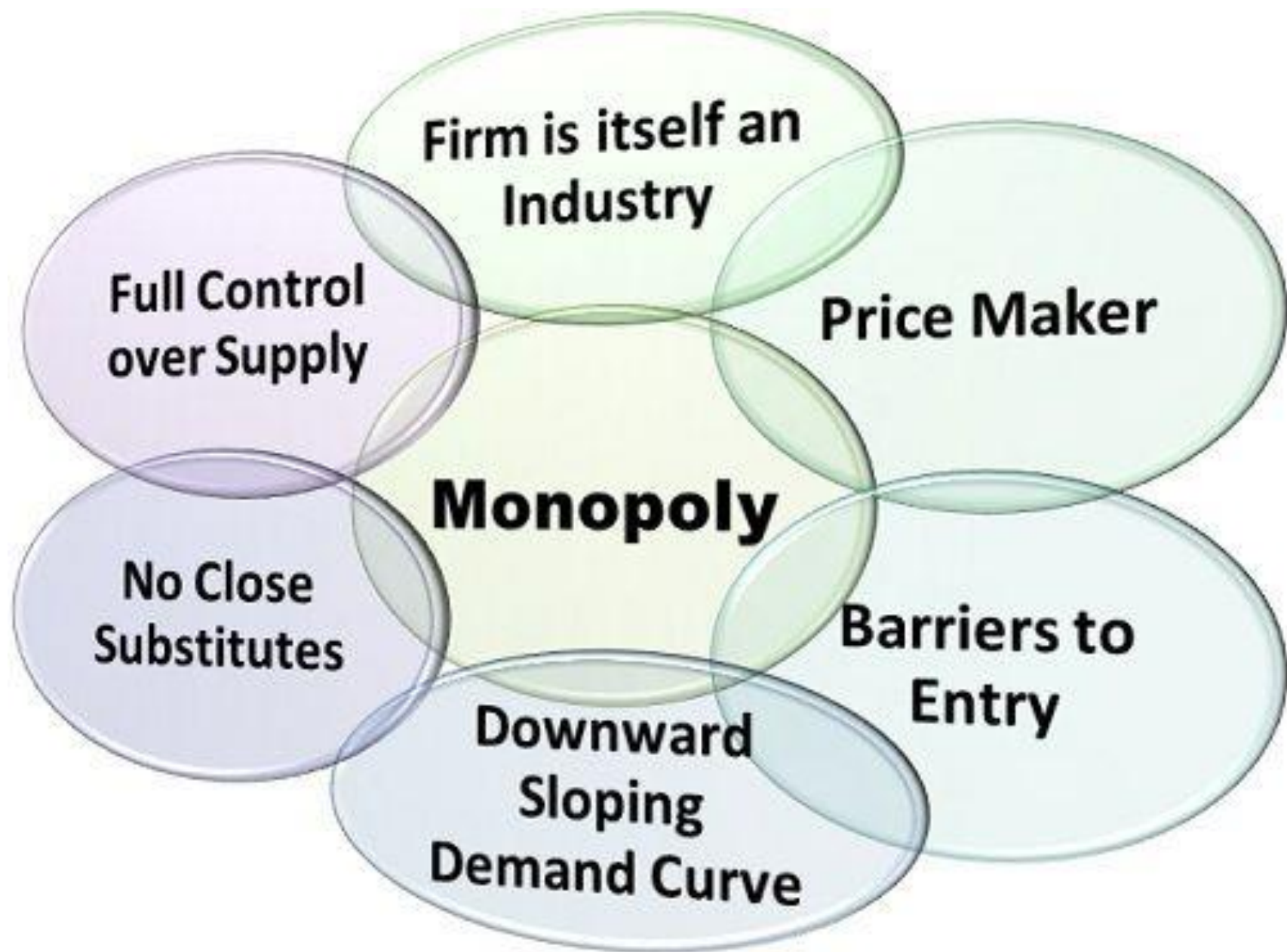
Monopoly

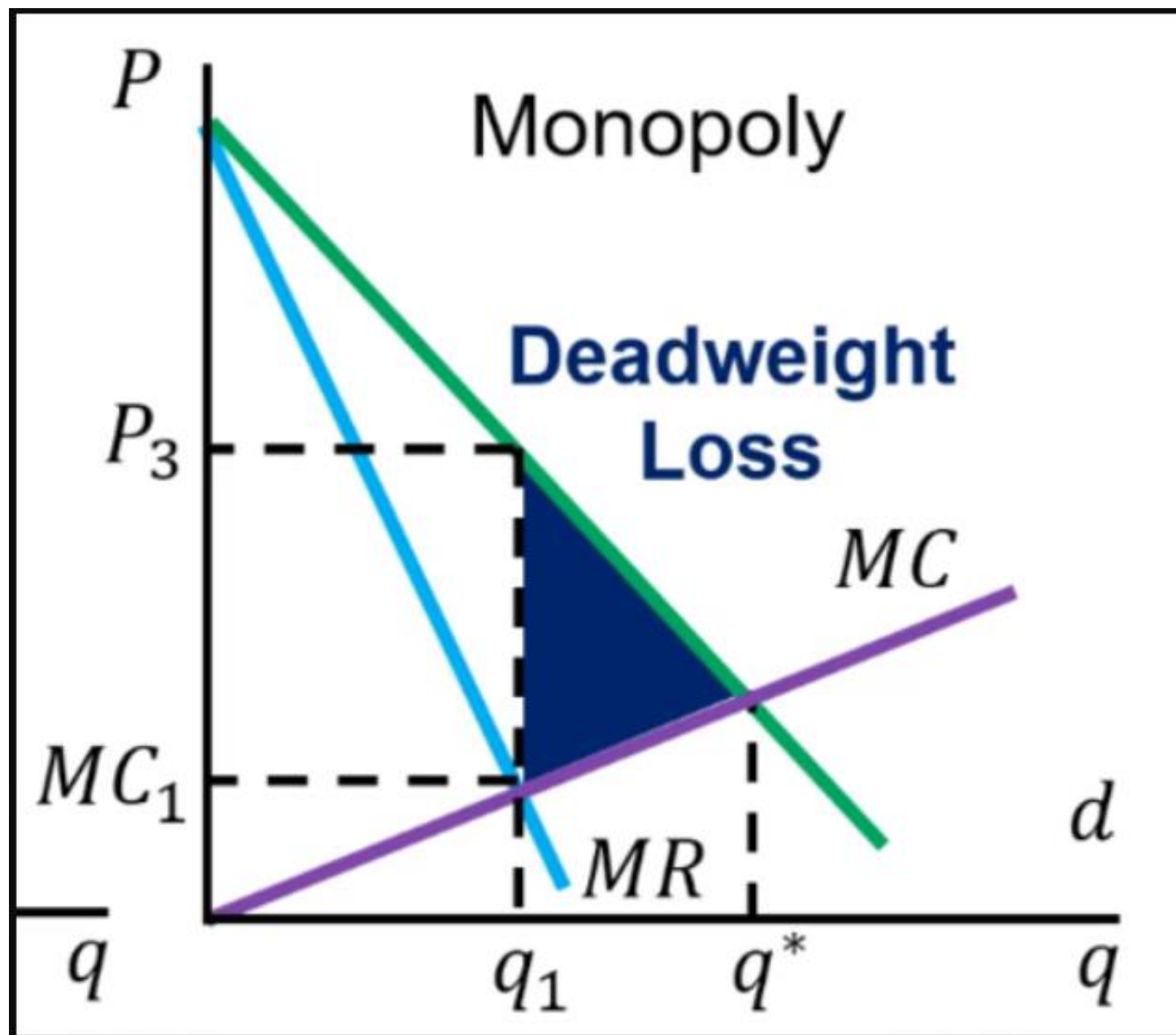
One seller, no close substitutes, high entry barriers.

Example: Dhaka Water Supply and Sewerage Authority (WASA) – the only provider of piped water.

Price is set by the monopolist where $MR = MC$.

Consumers have no alternative supplier.





Monopolistic Competition

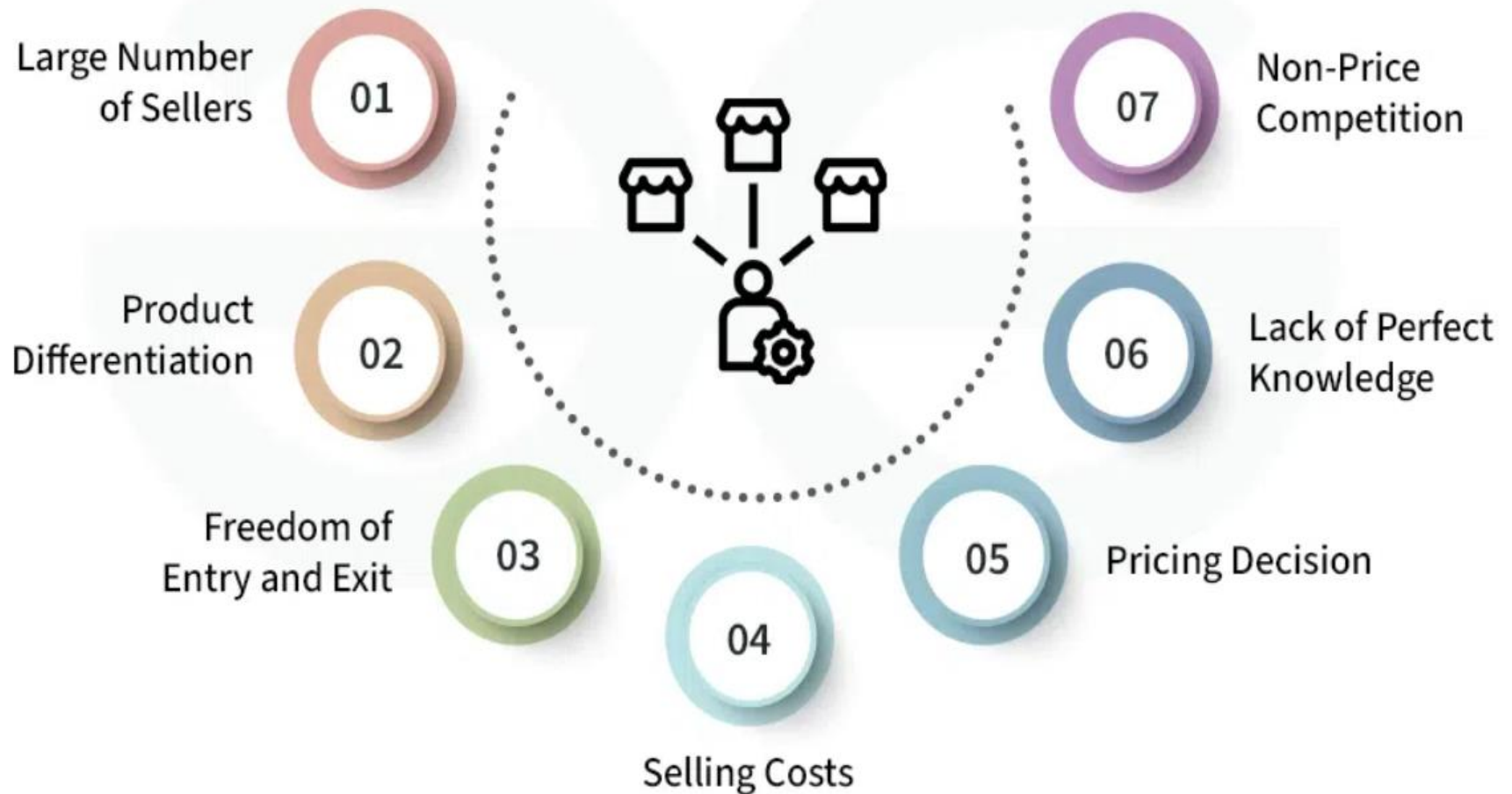
Many firms offering differentiated products.

Example: Fast-food chains (e.g., KFC, Pizza Hut, and local restaurants) – each offers similar but not identical meals.

❑ Short-run: Firms may earn profit.

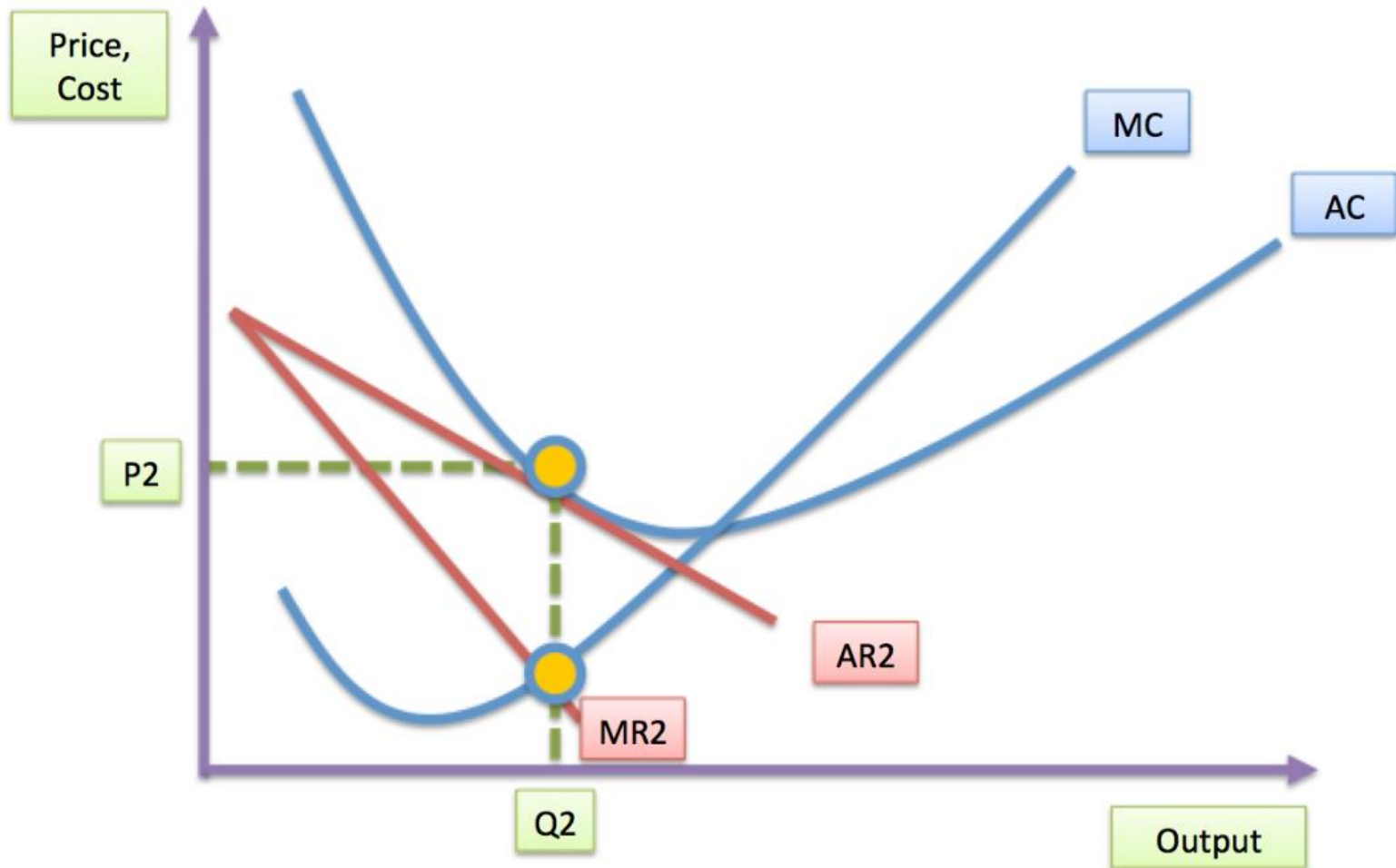
❑ Long-run: Entry of new firms reduces profit to normal levels.

Features of Monopolistic Competition



Long Run Equilibrium with Monopolistic Competition

Profits are competed away as demand shifts inwards to AR2



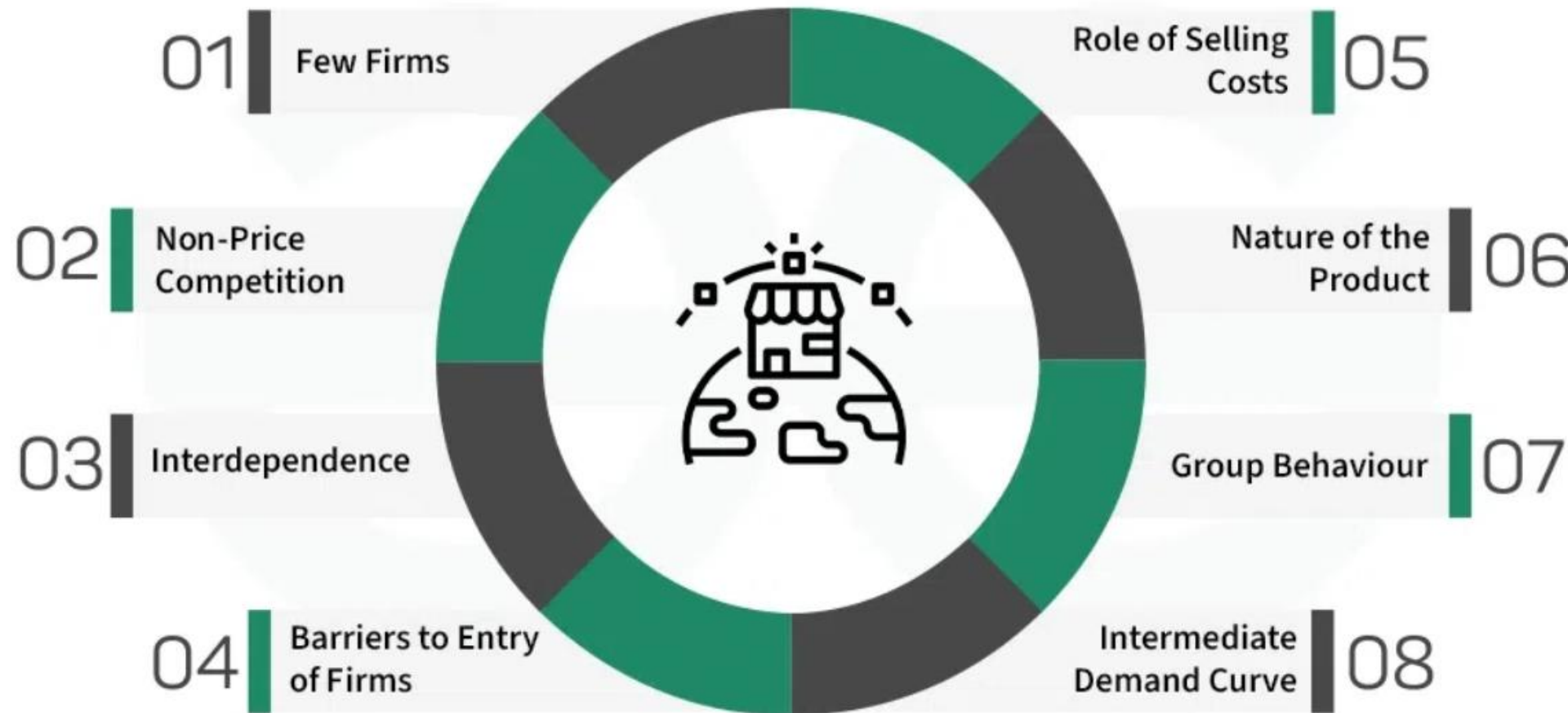
Oligopoly

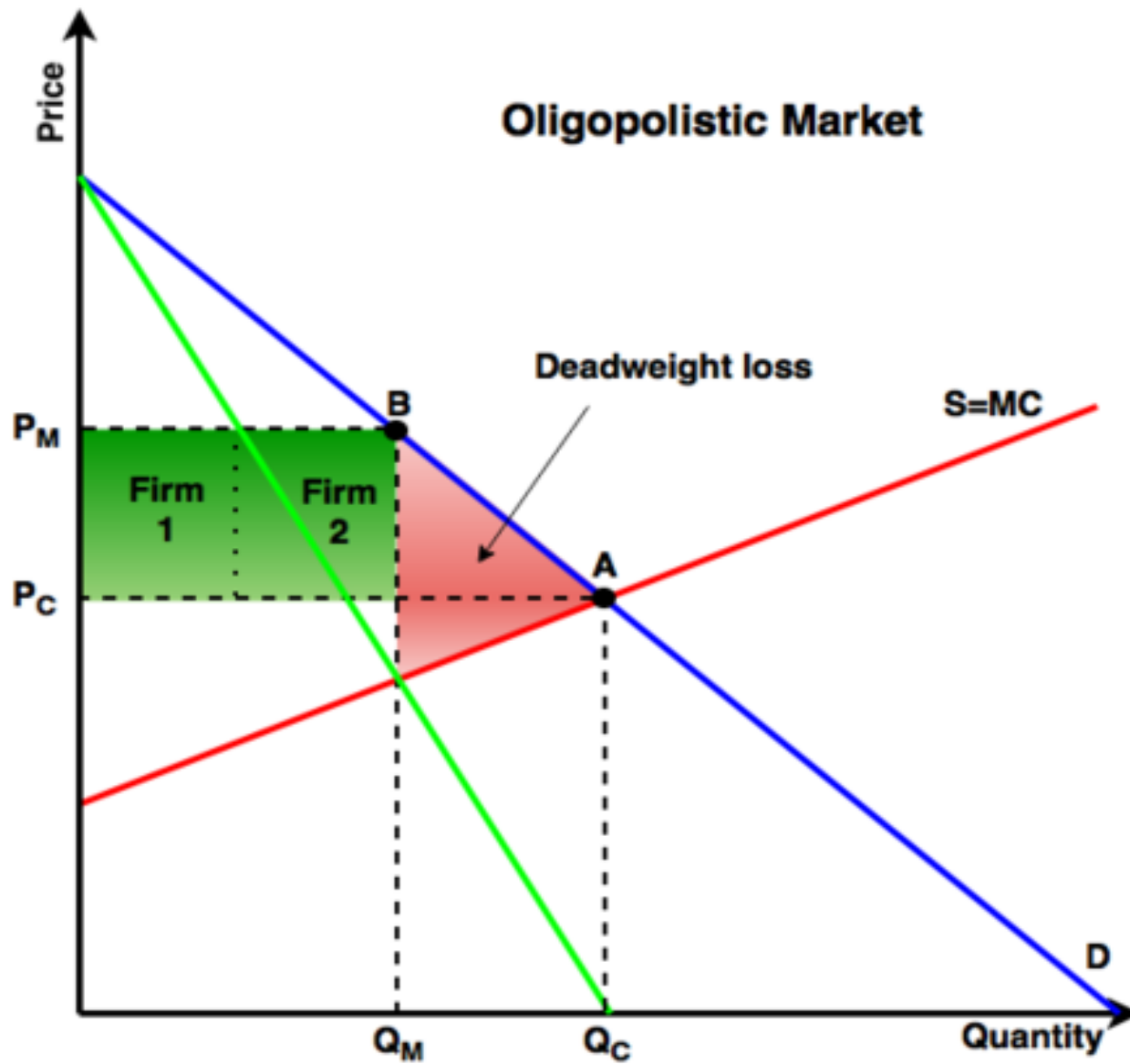
Few large firms dominate; interdependent pricing.

Example: The mobile phone service industry-when Grameenphone lowers prices, Robi and Banglalink often respond similarly.

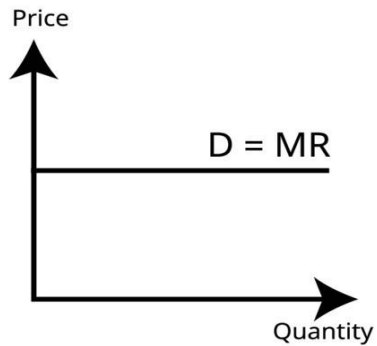
- ✓ Game theory and collusion can explain pricing behavior.
- ✓ Price rigidity is common.

Features of Oligopoly Market

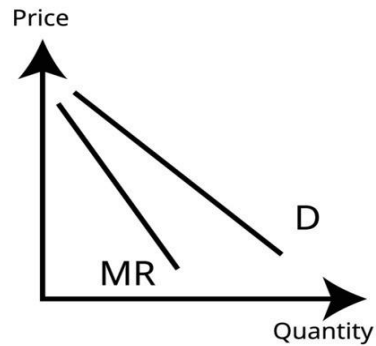




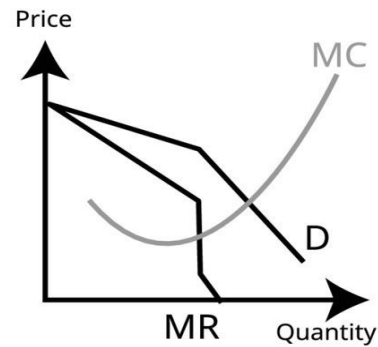
Comparison of Market Structures



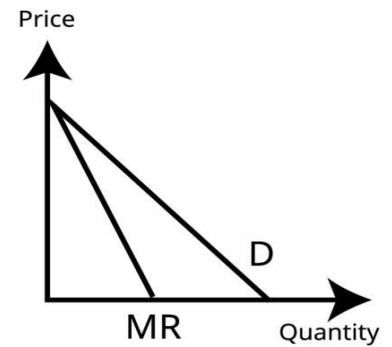
Perfect
Competition



Monopolistic
Competition



Oligopoly



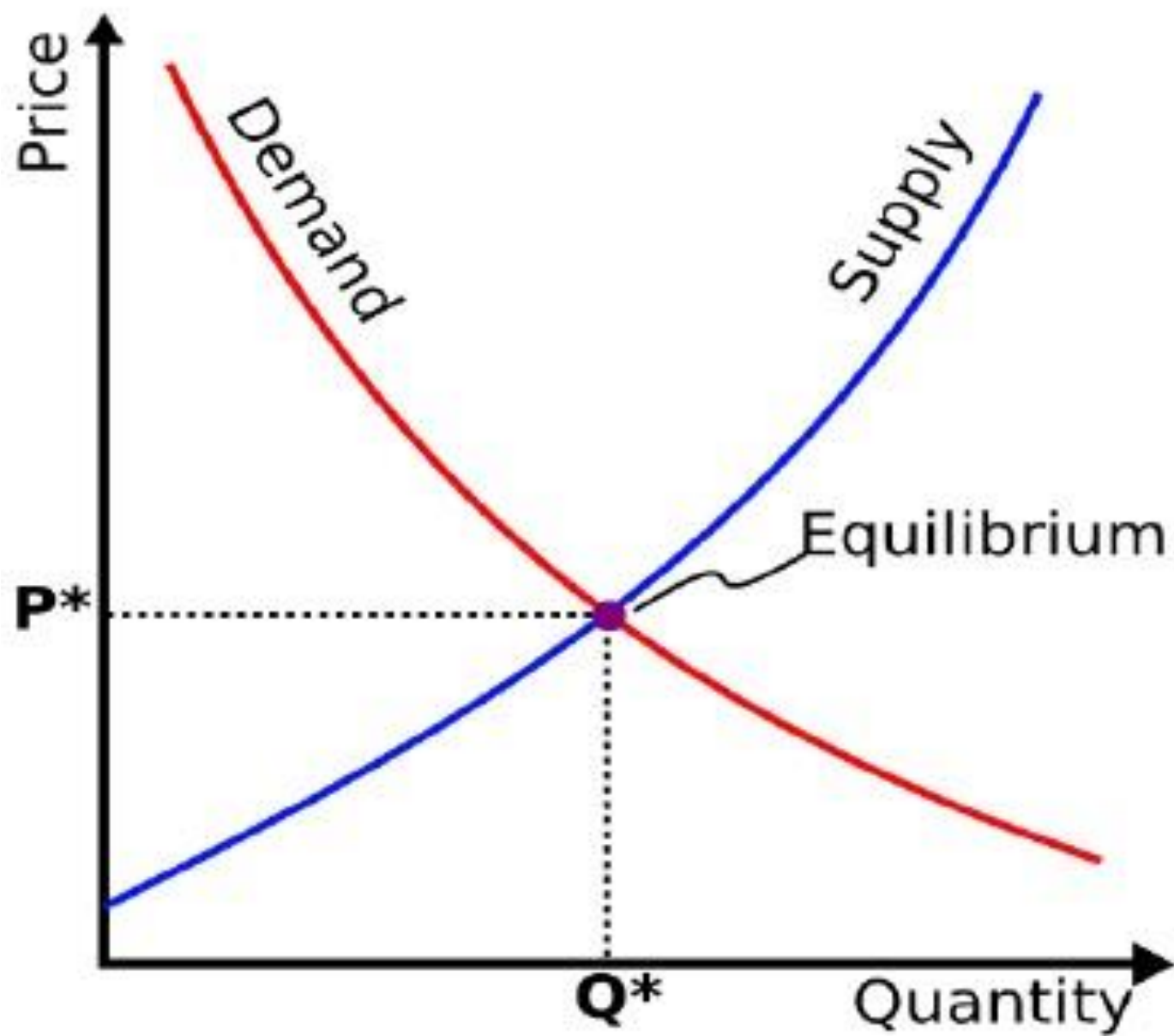
Monopoly

Equilibrium of the Firm

A firm is in equilibrium when Marginal Revenue (MR) = Marginal Cost (MC).

Example: A shoe factory increases production as long as producing an extra pair earns more revenue than its cost.

In the short run, abnormal profits or losses are possible.



Equilibrium of the Industry

Achieved when all firms earn normal profits and no one has incentive to enter or leave.

Example: In the garment industry, if all firms are earning just normal profits, new firms won't enter, and existing firms won't exit.

