CHAPTER 12 : Oligopoly

Key terms

1. Cartel : a group of firms that have made a formal agreement to limit competition in the market
2. Collusion : collective agreements, either formal or tacit, between firms that restrict competition
3. Concentrated market : a market where most of the output is produced by a few firms and where therefore the concentration ratio is high
4. Formal collusion : when firms make agreements among themselves to restrict competition, typically by reducing output, raising prices and keeping potential competitors out of the market
5. Game theory : the analysis of situations in which players are interdependent
6. Limit pricing : when firms set a low enough price to deter new entrants from coming into the market
7. Oligopoly : a market structure where there is small number of firms in the industry and where firms are interdependent with one another, creating uncertainty, barriers to entry are likely to exist
8. Predatory pricing : a pricing strategy where an incumbent firm lowers its prices when a new entrant comes into the market in order to force the competitor out of the market, and then puts prices back up again once this objective has been achieved.
9. Price leadership : when one firm, the price leader, sets its own prices and other firms in the market set their prices in relationship to the price leader
10. Price wars : a situation where several firms in a market repeatedly lower their prices to outcompete other firms, the objective may be to gain or defend market share
11. Prisoner’s dilemma : a game where, given that neither player knows the strategy of the other player, the optimal strategy for each player leads to a worse situation than if they had known

12. Tacit collusion : when firms collude without any formal agreement having been reached and where there is no explicit communication between firms about strategies, and example is price leadership

1. Characteristics of oligopoly

- Few firms dominate in the market
- High concentration ratio
- Different products
- Firms are price makers
- High barrier to entry / exit
- Interdependence
- Non-price competition and price competition

2. Barriers to entry and exit

- Advertising and promotion
- Product innovation
- Brand proliferate
- After sales services
- Economies of scales
- Patents

3. Collusion

: Firms agree to work together which can splits into Formal collusion,Tacit collusion, Price leadership

3.1 Game theory

: related the concept of the interdependence between firms when making decision in an oligopoly.

For example

		MR.A	
		confess	DENY *
MR.B	confess	5 yrs. / 5yrs	1 yr. / 10 yrs.
	DENY *	10 yrs. / 1yr	2 yrs. / 2 yrs.

- It can be explained using " Prisoner's Dilemma", which is a model two prisoner who have choice either confess or deny. The consequence depends on what other prisoner choose.
- Prisoner not allow to communicate
- **Nash equilibrium** : is the concept within gam theory where the optimal outcome of game is where there is no incentive to deviate from their initial strategy. In this case, Confess and confess is the Nash equilibrium
- **Dominant strategy** : is considered as better than other strategies, no matter what other might do. In this case, Confess is dominate strategy for MR.A and MR.B
- If collusive is allowed, both prisoner could "deny". This concept of the theory refers the optimal strategy taking into account what optimal choice chosen !

3.2 Cartel

: is where there is a wide-range of agreement among several firms in a market. In this type of formal collusion, firms often agree to limit their output so they can raise prices. Eg. OPEC

4. Types of price competition in oligopoly

4.1 Price wars

: Price wars occur between firms that are interdependent and competing against each other.

: Price wars tend to drive prices down to levels where firms are frequently making losses.

: This is different to an individual firm cutting its prices to boost sales. This may involve holding sales of discounted goods and it is not the same as a price as price war.

4.2 Predatory pricing

: occurs when an established firm is under threat from a new entrant into the market. The established firm responds by setting such a low price that the new entrant cannot make profit

: The aim of the established firm is to drive the new entrant out of the market,

4.3 Limit pricing

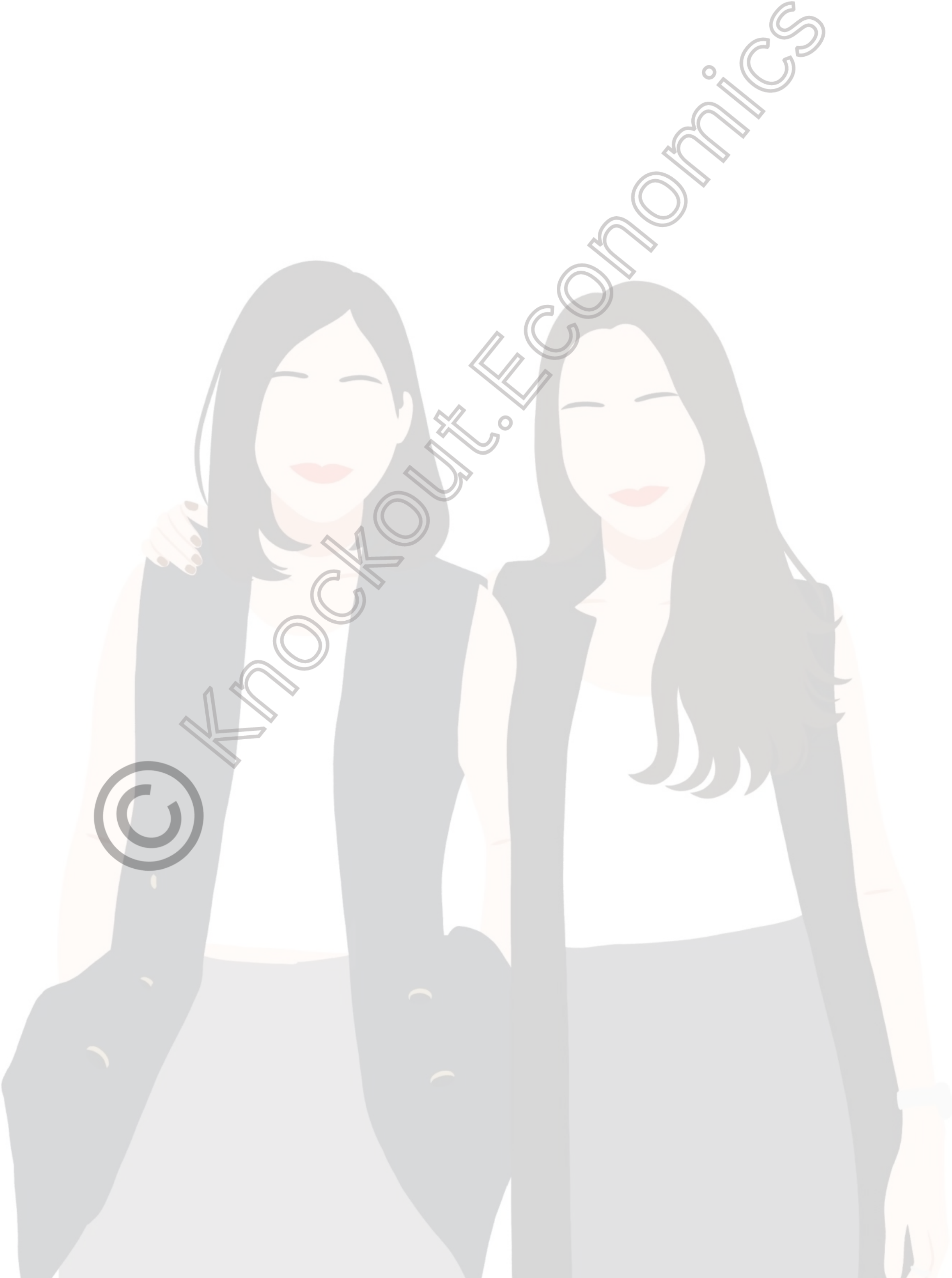
: occurs when firms set a low enough price to discourage new entrants from coming into the market

5. Types of non-price competition

- Advertising and branding
- Quality
- Endorsement
- Product placement
- After-sales services

6. Advantages and disadvantages of oligopoly

Advantages	Disadvantages
1. Firms can gain supernormal profit in short run and long run : Dynamic efficiency as it firm has more budget to invest in R&D or innovation and technology 2. Collusion : Firms can collaborate on technology : Firms can save cost and increase more efficiency 3. Firms can take advantages of Economies of scale	1. Firms charge higher price , which brings to lower customer surplus 2. If supernormal profit not reinvest in innovation and technology, as there might lack of competition in the market : There will be lower quality and less choice of goods and services 3. Higher price and higher profit : It can misallocation of resource comparing to competitive market : Productive and allocative inefficient 4. Absent of competition : There will be higher average cost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