

# MONOPOLISTIC COMPETITION AND OLIGOPOLY

## I. MONOPOLISTIC COMPETITION

### a. CHARACTERISTICS

#### i. RELATIVELY LARGE NUMBER OF SELLERS

1. Each firm has a relatively small percentage of market share
2. No collusion by firms to restrict output or set prices
3. Independent action; no feeling of interdependence

#### ii. DIFFERENTIATED PRODUCTS (often promoted by heavy advertising)

1. PRODUCT ATTRIBUTES: may mean physical or qualitative differences in products themselves
  - a. Neopolitan or Chicago style pizza
2. SERVICE: conditions of sale
  - a. 1 day over 3 day dry cleaning
3. LOCATION
  - a. Accessibility to stores; convenience stores
    - i. Motel's proximity to interstate
4. BRAND NAME AND PACKAGING
  - a. Brand names, trademarks, packaging and celebrity connections
  - b. Bayer aspirin or Kleenex
5. SOME CONTROL OVER PRICE

- a. Due to product differentiation, monopolistic competitors have some control over pricing.
  - iii. EASY ENTRY AND EXIT FROM INDUSTRY
    - 1. Easy compared to monopolies and oligopolies
    - 2. Compared to pure competitors, financial barriers might arise in order to differentiate from competitors
  - iv. ADVERTISING
    - 1. Monopolistic competitors tend to heavily advertise
    - 2. Goal is product differentiation and advertising differences: NON-PRICE COMPETITION
  - v. MONOPOLISTICALLY COMPETITIVE INDUSTRIES
    - 1. Jewelry, asphalt, wood pallets, commercial signs, leather goods, plastic pipes, grocery stores, gas stations, real estate sales, medical care
- II. PRICE AND OUTPUT IN MONOPOLISTIC COMPETITION
  - a. THE FIRM'S DEMAND CURVE
    - i. Highly, but not perfectly elastic
      - 1. 2 reasons why not perfectly elastic
        - a. Has fewer rivals
        - b. Products are differentiated, not perfect substitutes
  - b. THE SHORT-RUN: PROFIT OR LOSS
    - i. Figure 9.1a (economic profit) and 9.1b (economic loss) on page 208

- ii.  $MR=MC$
- c. THE LONG-RUN: ONLY A NORMAL PROFIT
  - i. In the long-run, a monopolistically competitive producer will only break even (explicit plus implicit costs; normal profit)
  - ii. In figure 9.1a, where firms are making an economic profit, firms enter the market
    - 1. When entry of new firms has reduced demand to where demand curve is tangent to the ATC curve at the profit-maximizing output, the firm is just making a normal profit (Long-term definition)
  - iii. When industry suffers short-run losses (figure 9.1b), demand curve will shift to the right (rise) to D3 (figure 9.1c) and will incur long-run normal profit

### III. MONOPOLISTIC COMPETITION AND EFFICIENCY

- a. THE EQUALITY OF P AND ATC YIELDS PRODUCTIVE EFFICIENCY
- b. THE EQUALITY OF P AND MC YIELDS ALLOCATIVE EFFICIENCY
- c. NEITHER PRODUCTIVE OR ALLOCATIVE EFFICIENCY
  - i. In monopolistic competition, neither occur in long-run equilibrium
  - ii. Figure 9.2 on page 210; work within section.
- d. EXCESS CAPACITY:
  - i. The gap between the minimum ATC output (Q4 in figure 9.2) and the profit-

maximizing output ( $MC=MR$  or  $Q3$ )  
identifies EXCESS CAPACITY.

1. Plant and equipment are underused
2. Monopolistic competitive industries are overcrowded with firms and each is operating below optimal capacity.

e. **PRODUCT VARIETY AND IMPROVEMENT**

i. Monopolistic competitive firms has two notable virtues

1. Promotes product variety
2. Promotes product improvement

ii. Monopolistic competitive firms are rarely satisfied with the situation on figure 9.1c on page 208 because it only yields a normal profit

1. It will try to gain competitive advantage through further product differentiation, innovation and advertising.
2. These are benefits to society; ones that may offset the cost of inefficiency associated with this market structure.
3. Society benefits from new and improved products.

IV. **OLIGOPOLY**

a. **CHARACTERISTICS**

i. **DOMINATED BY A FEW LARGE PRODUCERS OF A HOMOGENEOUS OR DIFFERENTIATED PRODUCT**

1. “Big Three,” “Big Four,” or “Big Six”

- 2. HOMOGENEOUS OLIGOPOLY  
(steel, zinc or cement) OR  
DIFFERENTIATED OLIGOPOLY  
(consumer goods such as autos,  
tires, cereals)
    - 3. Considerable non-price competition
  - ii. CONSIDERABLE CONTROL OVER  
PRICES
    - 1. Price maker so it has control to set  
prices and output levels to  
maximize profit
    - 2. Needs to consider how rivals will  
react
  - iii. NEED TO CONSIDER POSSIBLE  
REACTION OF RIVALS TO ITS OWN  
PRICING, OUTPUT AND  
ADVERTISING DECISIONS
    - 1. Strategic behavior: self-interested  
behavior that takes into account the  
reaction of others
    - 2. Mutual interdependence: each  
firm's profit depends on strategies  
of other firms as well as own
- b. ENTRY BARRIERS
  - i. Same barriers that contribute to  
monopoly contribute to oligopoly
  - ii. Economies of scale are important to  
barriers, such as aircraft, rubber, and  
copper industries
- c. MERGERS
  - i. Some oligopolies have emerged through  
internal growth but others have achieved  
oligopoly status by merger (combining  
two or more firms in the same industry)
    - 1. Can greatly increase market share

2. Achieve greater economies of scale
- V. OLIGOPOLY BEHAVIOR: A GAME THEORY OVERVIEW
- a. GAME THEORY- study of how people or firms behave in strategic situations
  - b. Review The Prisoner's Dilemma on page 214
  - c. Review figure 9.3 called the PAYOFF MATRIX
    - i. Mutual interdependence is visually depicted in figure 9.3
  - d. COLLUSION: Figure 9.3 shows that oligopolies could benefit from collusion or cooperation among rivals
    - i. In figure 9.3 with collusion, each rival could earn \$12MM
    - ii. How do the competitors avoid the low profit from cell D? Collude
  - e. INCENTIVE TO CHEAT
    - i. Either rival cheats on collusive pricing agreement, on figure 9.3 can increase profit to \$15MM
- VI. KINKED-DEMAND MODEL
- a. Model where there is no overt collusion
  - b. Section 1 of Sherman Act of 1890 outlaws conspiracies to restrain trade; known as PER SE VIOLATIONS
  - c. KINKED DEMAND CURVE
    - i. Review figure 9.4 on page 217 with discussion on pages 216-7
    - ii. Demand above  $P_0$  is highly elastic; below  $P_0$  is highly inelastic
    - iii. If rivals ignore a price increase but match a price decrease the MR curve of the oligopolist will have an odd shape
    - iv. PRICE INFLEXIBILITY

1. Figure 9.4 explains why prices are generally stable in noncollusive oligopolistic industries; there are both demand and cost reasons
  2. The broken MR curve in figure 9.4 suggests that even if an oligopolist's costs change substantially, the firm will have no reason to change its price (the broken line between f and g)
- v. PRICE LEADERSHIP: implicit understanding by which oligopolists can coordinate pricing without outright collusion
1. Dominant firm, usually largest and most efficient, initiates price changes and other firms follow
  2. Follows following tactics:
    - a. Infrequent price changes; not made day-to-day
    - b. Communication: release ideas in trade publications; speeches
    - c. Avoidance of Price Wars: damage industry profits

## VII. COLLUSION:

- a. CARTEL: group of producers that typically create a formal written agreement specifying output and price; overt is rare; covert is more common
- b. JOINT PROFIT MAXIMIZATION;
  - i. Analyze figure 9.5 on page 220; example is three oligopolistic firms colluding as if they were one monopolist with three different plants
  - ii. Same outcome for society as a monopoly

iii. Review Cartels and Collusion on page 221

c. OBSTACLES TO COLLUSION

i. DEMAND AND COST DIFFERENCES:  
If oligopolists face different demand and cost curves, it will be difficult to agree on prices

1. Most oligopolists have different demand and cost curves

ii. NUMBER OF FIRMS: Larger number of firms, harder for collusion or creating a cartel

iii. CHEATING: As per Game Theory, cheating can undermine collusion

iv. RECESSION: Long lasting recession serves as enemy to collusion due to increasing ATC

v. POTENTIAL ENTRY: Greater prices and profits that result from collusion will attract new entrants, especially foreign firms

VIII. OLIGOPOLY AND ADVERTISING

a. Firm's share of market is typically determined through product development and advertising for two reasons

i. Product development and advertising campaigns are harder to duplicate than price cuts or pricing policy

1. Can produce more permanent gains in market share

ii. Oligopolists have stronger financial resources to engage in product development and advertising campaigns

b. POSITIVE EFFECTS OF ADVERTISING

- i. Low cost means of customers obtaining product information
  - ii. By providing information, reduces monopoly power
  - iii. Efficiency-enhancing activity
  - iv. By increasing sales and output, lowers long-run ATC by increasing economies of scale
- c. NEGATIVE EFFECTS OF ADVERTISING
- i. Manipulate or persuade consumers
  - ii. By creating misleading or extravagant claims, will confuse rather than inform consumers
  - iii. Brand-name loyalty which creates monopoly type power
    - 1. Kleenex, Tylenol
  - iv. Over time, consumers lose competition advantage and experience disadvantage of monopoly power
  - v. When advertising leads to monopoly type power, inefficiencies result

## IX. OLIGOPOLY AND EFFICIENCY

- a. INEFFICIENCY: figure 9.5
- i. Oligopolists experience sizeable economic profits year after year
  - ii. Production is below the output which ATC is minimized.
    - 1. Neither productive efficiency ( $P = \text{minimum ATC}$ ), or allocative efficiency ( $P = MC$ ) occurs
  - iii. Informal collusion may yield price and output results similar to a monopoly
- b. QUALIFICATIONS TO THE INEFFICIENCY VIEW

- i. INCREASED FOREIGN COMPETITION: example is the auto industry
  - ii. LIMIT PRICING: lower pricing to create barriers to entry
  - iii. TECHNOLOGICAL ADVANCE: economic profits go to increased R & D; barriers to entry may allow oligopolists to reap rewards of successful R & D
  - iv. In short-run economic inefficiencies of oligopolists may be partly or wholly offset by their contributions to better products, lower prices and lower costs over time (technology)
- c. Review the Oligopoly in the Beer Industry

example on page 226