UNIT 6 cont…

PRICING UNDER DIFFERENT MARKET STRUCTURES

Monopolistic Competition
Market Structure

The further right on the scale, the greater the degree of monopoly power exercised by the firm.
Introduction

- Perfect competition, with an infinite number of firms, and monopoly, with a single firm, are polar opposites.
- Monopolistic competition and oligopoly lie between these two extremes.
Introduction

- *Monopolistic competition* is a market structure in which there are many firms selling differentiated products.
- There are few barriers to entry.
Characteristics of Monopolistic Competition

Four distinguishing characteristics:

1. **Many sellers** that do not take into account rivals’ reactions

2. **Product differentiation** where the goods that are sold aren’t homogenous

3. **Multiple dimensions of competition** make it harder to analyze a specific industry.

4. **Ease of entry of new firms in the long run** because there are no significant barriers to entry
Many Sellers

• When there are many sellers, they do not take into account rivals’ reactions.
• The existence of many sellers makes collusion difficult.
• Monopolistically competitive firms act independently.
Product Differentiation

- **Product differentiation** implies that the products are different enough that the producing firms exercise a “mini-monopoly” over their product.
- The firms compete more on product differentiation than on price.
- Entering firms produce close substitutes, not an identical or standardized product.
Differentiated Products

• The “many sellers” characteristic gives monopolistic competition its competitive aspect.

• Product differentiation gives monopolistic competition its monopolistic aspect.
Differentiated Products

• Differentiation exists so long as advertising convinces buyers that it exists.
• Firms will continue to advertise as long as the marginal benefits of advertising exceed its marginal costs.
Multiple Dimensions of Competition

• One dimension of competition is product differentiation.
• Another is competing on perceived quality.
• Competitive advertising is another.
• Others include service and distribution outlets.
Easy Entry of New Firms in the Long Run

- There are no significant barriers to entry.
- Barriers to entry prevent competitive pressures.
- Ease of entry limits long-run profit.
Output, Price, and Profit of a Monopolistic Competitor

- A monopolistically competitive firm prices in the same manner as a monopolist—where $MC = MR$.
- But the monopolistic competitor is not only a monopolist but a competitor as well.
Output, Price, and Profit of a Monopolistic Competitor

• Like a monopoly,
  • The monopolistic competitive firm has some monopoly power so the firm faces a downward sloping demand curve
  • Marginal revenue is below price
  • At profit maximizing output, marginal cost will be less than price
• Like a perfect competitor, zero economic profits exist in the long run
A Monopolistically Competitive Firm: Above Normal Profit
A Monopolistically Competitive Firm: Economic Loss
A Monopolistically Competitive Firm: Normal Profit
In the long run, the firm in monopolistic competition earns a normal profit. Entry shifts the firm’s demand curve in from $D_1$ to $D_2$. Entry, which takes the form of a differentiated product, continues to occur as long as above-normal profits exist. When the demand curve just touches the average-total-cost curve, as at $P_2$ and $Q_2$, profit is at the normal level.
Output, Price, and Profit of a Monopolistic Competitor

- At equilibrium, $ATC$ equals price and economic profits are zero.
- This occurs at the point of tangency of the $ATC$ and demand curve at the output chosen by the firm.
Monopolistic Competition

- Price
- Quantity
- $P_M$
- $Q_M$

Graph showing the demand curve ($D$), marginal revenue ($MR$), average total cost ($ATC$), and marginal cost ($MC$) in a monopolistic competition market.
Comparing Perfect and Monopolistic Competition

• Both the monopolistic competitor and the perfect competitor make zero economic profit in the long run.
Perfect Competition and Monopolistic Competition Compared

The perfectly competitive firm produces at the point where the price line, the horizontal $MR$ curve, intersects the $MC$ curve. This is the bottom of the $ATC$ curve in the long run, quantity $Q_{pc}$ at price $P_{pc}$. The monopolistically competitive firm also produces where $MR = MC$. The downward-sloping demand curve faced by the monopolistically competitive firm means that the quantity produced, $Q_{mc}$, is less than the quantity produced by the perfectly competitive firm, $Q_{pc}$. The price charged by the monopolistically competitive firm is also higher than that charged by the perfectly competitive firm, $P_{mc}$ versus $P_{pc}$. In both cases, however, the firms earn only a normal profit.
Monopolistic Competition Compared with Perfect Competition Graph

- In monopolistic competition in the long run, \( P > \text{min ATC} \),
- In perfect competition in the long run, \( P = \text{min ATC} \)

**Outcome:**

Monopolistic competition

*output is lower and price is higher than perfect competition*
Comparing Monopolistic Competition with Monopoly

• It is possible for the monopolist to make economic profit in the long run because of the existence of barriers to entry

• No long-run economic profit is possible in monopolistic competition because there are no significant barriers to entry
Advertising and Monopolistic Competition

- Perfectly competitive firms have no incentive to advertise, but monopolistic competitors do.
- The goals of advertising are to increase demand and make demand more inelastic.
- The increase in cost of a monopolistically competitive product is the cost of “differentness”.
- Advertising increases ATC.
Nonprice Competition

• The firm attempts to establish its product as a different product from that offered by its rivals.

• **Differentiation** means that in the consumer’s mind, the product is not the same. Marketing is often the key to successful differentiation.
Nonprice Competition

• Firms may differentiate products by perceived quality, reliability, color, style, safety features, packaging, purchase terms, warranties and guarantees, location, availability (hours of operation) or any other features.

• **Brand names** may signal information regarding the product, reducing consumer risk.
Goals of Advertising

• The goals of advertising include shifting the demand curve to the right and making it more inelastic.
• Advertising shifts the $ATC$ curve up.
Does Advertising Help or Hurt Society?

- There is a sense of trust in buying brands we know.
- If consumers are willing to pay for “differentness,” it’s a benefit to them.
Advertising, Prices, and Profits

Product differentiation reduces the price elasticity of demand, which appears as a steeper demand curve. Successful product differentiation enables the firm to charge a higher price.
Five customers—A, B, C, D, and E—reside along a straight line. Customer C is in the middle, equidistant from B and D and from A and E. McDonald’s decides to locate a restaurant at the spot that is closest to all five customers. This is the median position, where consumer C resides. Other fast-food firms locate nearby because any other location will increase the total distance of some consumers from the fast-food restaurant, thereby causing some customers to go elsewhere.
Brand Name

• A brand name is valuable to a firm; it makes the demand less elastic and can enable the firm to earn higher profits.

• Once a consumer has had a positive experience with a good, the price elasticity of demand for that good typically decreases—the consumer becomes loyal to the product.
Monopolistic Competitor Making a Profit in the Short Run

Price is $15
ATC is $12.10

Total Profit = (Price - ATC) \times \text{Output}
= ($15 - $12.10) \times 60
= ($2.90) \times 60
= $174
Monopolistic Competitor Taking a Loss in the Short Run

ATC is $12.80
Price is $11

Total Profit = (Price - ATC) \times Output
= ($11 - $12.80) \times 42
= -$1.80 \times 42
= -$75.60