Econ 101: Principles of Microeconomics
Chapter 16 - Monopolistic Competition and Product Differentiation

Outline

1. What is Monopolistic Competition

2. Firm Behavior in a Monopolistically Competitive Industry
   - Behavior in the Short Run
   - Behavior in the Long Run

3. Monopolistic Competition versus Perfect Competition
Monopolistic Competition

A monopolistically competitive market has three fundamental characteristics:
1. Many buyers and sellers
2. Sellers offer a differentiated product
3. Sellers can easily enter or exit the market

We look at each of these characteristics in turn.

...but first consider some examples of monopolistic competition

Example Industries
**Characteristic #1: Many Buyers and Sellers**

- Under monopolistic competition, an individual *buyer* is still assumed to be a price-taker.
- ... but an individual seller, in spite of having many competitors, decides what price to charge
  - Unlike in the case of the perfectly competitive market, the firm is able to raise its price and not (necessarily) loose all its customers.
  - This is largely because the products sold by other firms are not viewed as *perfect substitutes*.
  - The firm is still constrained by consumer demand for its product.
- The assumption of many sellers, however, has another purpose
  - To ensure that no strategic games will be played among firms in market
  - There are so many firms, each supplying such a small part of the market, that no one of them needs to worry that its actions will be noticed—and reacted to—by others
  - Restaurants (in a larger city) are a good example of this

**Characteristic #2: Sellers Offer a Differentiated Product**

- Each seller produces a somewhat different product from the others
- The implication of this is that each firm faces its own, downward-sloping demand curve
- In this sense, firms in this industry type are more like a monopolist than a perfect competitor
  - When it raises its price a modest amount, quantity demanded will decline (but not all the way to zero)
- Advertising plays a key role in this type of industry, whereas it is irrelevant in either perfectly competitive or monopolistic markets
  - For the perfectly competitive firm, there is no use, given their product is standardized
  - For the monopoly, there is no need, except perhaps to protect their monopoly power
- Advertising is all too common among firms in between these extremes (roughly a $45 billion dollar industry)
Product Differentiation

- There are three basic types of product differentiation:
  1. **Differentiation by Style or Type**: Here the products differ due to differences in function or form. There are numerous examples:
     - Vehicle types (SUV’s vs. trucks vs. sedans, etc.)
     - Restaurant types (Mexican vs. Chinese vs. French, etc.)
     - Clothing stores (GAP vs. American Eagle vs. Abercrombie and Fitch, etc.)
  2. **Differentiation by Location**: Retailers often attempt to “capture” a portion of the market by strategically locating
     - Gasoline stations and hotels locate near the interstate
     - Starbucks locates everywhere.
  3. **Differentiation by Quality**: This is really a special case of the first type of differentiation.
     - Gasoline stations try to convince you that their gas makes your car run better.
     - Pizza firms try to convince you they use better ingredients.

More on Product Differentiation

- Product differentiation is a subjective matter
- A product is different whenever people think that it is
  - Whether their perception is accurate or not
    - Bleach is a good example
    - Bottle water is another
- Thus, whenever a firm (that is not a monopoly) faces a downward-sloping demand curve, we know buyers perceive its product as differentiated
- This perception may be real or illusory, but economic implications are the same in either case: Firm chooses its price
Characteristic #3: Free Entry and Exit

- This feature is shared by monopolistic competition and perfect competition.
- It plays the same role in both market types; i.e., it ensures firms earn zero economic profit in long-run.
- In monopolistic competition, however, assumption about easy entry goes further:
  - No barrier stops any firm from copying the successful business of other firms.
  - Think of recent efforts by McDonalds and Duncan Donuts to compete with Starbucks or more regional coffee shops such a Caribou Coffee.

Firm Behavior in a Monopolistically Competitive Industry

- A monopolistically competitive industry shares attributes of both the purely competitive industry and the monopoly.
- Like the monopoly, firms in this industry face their own downwardly sloping demand curve:
  - For these firms, \( MR \neq P \).
  - Indeed, in the short-run, firms in this type of industry will behave exactly like a monopoly.
  - That doesn’t mean they faces no competition or that the competitors don’t matter.
  - Indeed, the demand for its product will depend upon the pricing of other firms in the industry and the extent to which its competitors’s goods are close substitutes.
- Like the perfectly competitive industry, however, firms in this market also face competition in the long-run:
  - … driving economic profits to zero.
Short-Run Behavior
In the short-run, the firm can earn a profit, just like a monopoly.

In the short-run, the firm can also suffer a loss, just like a monopoly.
Monopolistic Competition in the Long-Run

- The distinction between a monopoly and monopolistic competition occurs in the long-run.
- For the latter,
  1. If economic profits exist in the short-run,
     - firms will enter the industry driving demand for existing firms down
     - entry will continue until economic profits are driven to zero.
  2. If economic losses exist in the short-run,
     - firms will exit the industry driving demand for remaining firms up
     - exit will continue until economic profits are driven to zero.

Long-Run Behavior

\[ P'_{M} = \frac{ATC_{M}}{Q'_{M}} \]

\[ P_{M} = \frac{ATC_{M}}{Q_{M}} \]

Marginal Cost Curve

Average Total Cost Curve

Average Variable Cost Curve

D

D'

Quantity
Monopolistic Competition Versus Perfect Competition

- The long run equilibrium for Monopolistic Competition is, in many ways, similar to that of Perfect Competition. In both cases:
  - there are many firms
  - economic profits are driven to zero

- However, these two markets differ in two key ways. For Monopolistic Competition:
  - \( P \neq MC \), whereas for perfect competition \( P = MC \)
    - This gap between \( P \) and \( MC \) for monopolistic competitor reflects the fact that they face a downward sloping demand curve (i.e., \( P \neq MR \)).
    - It is also their motivation for advertising - to draw in more customers.
  - Firms do not operate at minimum ATC under Monopolistic Competition, whereas they do under perfect competition.
    - This is sometimes described as excess capacity
    - While some argue that this is a source of inefficiency in this market structure . . .
    - . . . the tradeoff is that this industry type provides diversity that is desired by consumers.

Nonprice Competition

- If monopolistic competitor wants to increase its output it can cut its price
  - . . . moving along its demand curve

- Any action a firm takes to increase demand for its output—other than cutting its price—is called nonprice competition

- Examples include
  - better service,
  - product guarantees,
  - free home delivery,
  - more attractive packaging, etc.,

- Nonprice competition is another reason why monopolistic competitors earn zero economic profit in long-run
  - All this nonprice competition is costly
  - The firm must pay for advertising, for product guarantees, for better staff training
  - These costs must be included in each firms ATC curve, shifting it upward
A monopolistic competitor advertises for two reasons

1. To shift its demand curve rightward (greater quantity demanded at each price)
2. To make demand for its output less elastic
   - This allows it to raise price and suffer a smaller decrease in quantity demanded

Advertising clearly raises costs in the industry

However, it need not raise price.