# **Managerial Economics**

M.Com. IV Sem.

Mr. Abhi Dutt Sharma

Date: 17/04/2020

# **Monopolistic Competition**

CONTENTS

Objectives

Introduction

- 11.1 Features of Monopolistic Competition
- 11.2 Price and Output Decisions
- 11.3 Application of Monopolistic Competition
- 11.4 Summary
- 11.5 Keywords
- 11.6 Self Assessment

## **Objectives**

After studying this unit, you will be able to:

- State the features of monopolistic competition
- Discuss the short run and long run equilibrium of a monopolistic firm

## Introduction

Monopolistic competition has an element of product differentiation. We can define a monopolistic competitive market as a market in which there are a large number of firms and the products in the market are close but not perfect substitute. The real world is widely populated by monopolistic competition. Perhaps half of the economy's total production comes from monopolistically competitive firms. The best examples of monopolistic competition come can be retail trade, including restaurants, clothing stores, and convenience stores.

## 11.1 Features of Monopolistic Competition

Monopolistic competition is a form of market structure in which a large number of independent firms are supplying products that are slightly differentiated from the point of view of buyers. Thus, the products of the competing firms are close but not perfect substitutes because buyers do not regard them as identical. This situation arises when the same commodity is being sold under different brand names, each brand being slightly different

from the others. For example, Lux, Liril, Rexona, Hamam, etc., are brands of toilet soap, or Colgate, Cibaca, Prudent, Promise, etc., brands of toothpaste.

Each firm is, therefore, the sole producer of a particular brand or "product". It is a monopolist as far as that particular brand is concerned. However, since the various brands are close substitutes, a large number of "monopoly" producers of these brands are involved in keen competition with one another. This type of market structure, where there is competition among a large number of "monopolists" is called monopolistic competition.

The differentiation among competing products or brands may be based on real or imaginary differences in quality. Real differences among brands refer to palpable differences in quality such as shape, flavour, colour, packing, after sales service, warranty period, etc. In contrast, imaginary differences mean quality differences which are not really palpable but buyers are made to imagine or are "conditioned" to believe that such differences exist and are important. Advertising often has the effect of making buyers imagine or believe that the advertised brand has different qualities. When there is product differentiation, each firm has some degree of control over price.

As a result, under monopolistic competition, the demand or average revenue curve of an individual firm is a gradually falling curve. It is highly elastic but not perfectly so. Therefore, the marginal revenue curve of the firm is also falling and lies below the average revenue curve at all levels of output. It is in this respect that monopolistic competition differs from perfect competition.

In addition to product differentiation, the other three basic characteristics of monopolistic competition are:

- 1. There are a large number of independent sellers (and buyers) in the market.
- 2. The relative (proportionate) market shares of all sellers are insignificant and more or less equal. That is, seller concentration in the market is almost non existent.
- 3. There are neither any legal nor any economic barriers against the entry of new firms into the market. New firms are free to enter the market and existing firms are free to leave the market.

In other words, product differentiation is the only characteristic that distinguishes monopolistic competition from perfect competition.

Firms selling slightly differentiated products under different brand names compete not only through variations in price but also through variations in product quality (product variation) and changes in advertising or selling costs. Thus, under monopolistic competition, an individual firm has to maximise profits in relation to variations in three policy variables, namely, price, product quality, and selling costs. (In contrast, under perfect competition there is competition only through price variation).

#### Assumptions in Analysing Firm Behaviour

We analyse the conditions and process of long run equilibrium under monopolistic competition with the assumption that competing firms keep their selling costs and product quality constant and compete only through price variation. We then assume that

- 1. The demand curve of each individual firm has the same shape (elasticity) and position (distance from the y-axis). That is, we assume the demand curves of all firms to be symmetrical. This assumption implies that market share of every firm is the same and equal to a constant proportion of total market demand. That is, if total market demand is Q and an individual firm's demand is q then q=KQ, where K is a constant fraction for all firms.
- 2. The cost curves, both average and marginal, are symmetrical for each firm.

These two assumptions are 'heroic' or unrealistic but we need to make them for logical convenience in order to analyse the long run equilibrium of a typical firm under monopolistic competition.

# 11.2 Price and Output Decisions

#### Long Run Equilibrium through New Entry Competition

Under monopolistic competition, the number of independent firms selling differentiated products or brands of a given commodity is large and the relative market share of every firm is insignificant. Therefore, the entry of a new firm into the market will not have any noticeable adverse effect on the sales (or demand) of any of the established

firms. Established firms will have no reason to react to new entry by adopting practices to discourage this. Moreover, there are no legal or non-legal (economic) barriers against new entry. Hence, when high profits of the existing firms attract new entry, new firms will in fact enter the market.

#### Short-Run Equilibrium Under the Monopolistic Competition

Firms under monopolistic competition attain equilibrium when (1) MC = MR and (2) slope of MC > slope of MR. The firm's equilibrium is defined at the point E in the following figure. At this price OP, AR > AC, the firm earns a profits of PQRS. The firm may earn a profit or incurs loss or be at a no loss no profit position depending upon the demand condition and the position of the cost-curves;

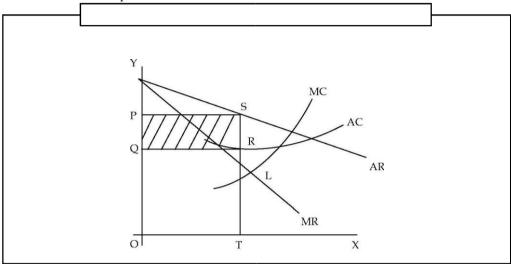
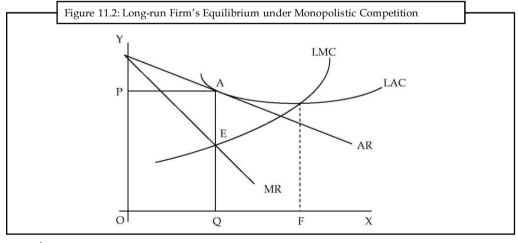


Figure 11.1: Firm's Equilibrium under Monopolistic Competition

## Long-Run Equilibrium Under the Monopolistic Competition

In the long-run, price cutting, expansion and contraction of output and new entry are possible, i.e., firms may compete with one another through price or non-price competition. The abnormal profit earned in the short-run will attract new entries, therefore the amount sold at any given price will fall resulting in the shift of demand curve until the abnormal profits are wiped out. There is no profit no loss situation since the total cost and the total revenue are equal.



 $\triangle$ 

Caution When there is competition only from new entry, the long run equilibrium of the firm under monopolistic competition is reached under the following conditions:

- 1. Price =  $AR = LAC = OP_2$  (Figure 11.2)
- 2. MR = LMC =  $EQ_2$  (Figure 11.2)
- 3. Maximum Profit = Normal Profits

However, because the firm's demand or average revenue curve is falling, the price is higher than marginal revenue. Hence, under monopolistic competition, even though the long run equilibrium price is = LAC, it is greater than LMC. This is because, at equilibrium, MR = LMC but price is greater than MR. (Under perfect competition, price = minimum LAC = LMC).

Moreover, since the firm's demand or average revenue  $AR_2$  is falling on account of product differentiation, it can be a tangent to the U-shaped LAC curve only when LAC is also falling. As shown in Figure 11.2, the long run equilibrium position E will be at a point which is to the left of the minimum LAC. Thus, the long run equilibrium output Q is less than optimum output,  $Q_m$  (where LAC is at its minimum). The difference between E and Q = (F - OQ) shows the extent of excess or under utilised capacity. Equilibrium with excess capacity is therefore the necessary consequence of product differentiation and monopolistic competition.

# 11.3 Application of Monopolistic Competition

We find many examples of monopolistic competition in real world. The best examples can be found in retail trade. As we know the main characteristics for this type of market situation is that there are many producers and many customers for the services/products, yet no company has control over the market price, consumers perceive that there are non-price differences among the competitors' products, and there are very few barriers to entry to and exit from the market.

Those markets which have these characteristics, the differentiation of products is often achieved by altering the physical composition of products, or through advertising to claim the superiority of the product. This can easily be seen in markets for toothpastes or soaps etc. Under monopolistic market we have many sellers, as under perfect competition). However, they don't sell identical products. Instead, they sell differentiated products-products that differ somewhat, or are perceived to differ, even though they serve a similar purpose. Products can be differentiated. Sometimes, it's simply geographical; you probably buy gasoline at the station closest to your home regardless of the brand. At other times, perceived differences between products are promoted by a dvertising designed to convince consumers that one product is different from another, and better than it. Regardless of customer loyalty to a product, however, if its price goes too high, the seller will lose business to a competitor. Under monopolistic competition, therefore, companies have only limited control over price.

If we take a closer look we find that in some industries they have it many differentiated brands and create an illusion of competition and providing a barrier to entry. For example so many brands of soaps are there, but the most of these brands are owned by 2 companies, Unilever and Proctor and Gamble. Such type of brand proliferation put barriers for new entry in the market. There is less chance of getting a good market share with so many brands. Therefore, the new firm would have an incentive to keep different brands in order to deter competitors. Another aspect of this is, merging many different brands there may be economies of scale.

Government policies often act as entry barriers in several industries. Besides, the growth of entrepreneurship is also a council element in the Indian context. Until a decade or so ago, even products like soaps and toothpastes were characterised by oligopolies. For some reason, new firms just did not enter into several product lines despite favourable government policy. It is only since the 80s that one finds competition hotting up in the country's markets. Product variations, aggressive promotional campaigns and easy entry of new firms are now commonly encountered in several consumer goods industries.

## 11.4 Summary

- Monopolistic competition is a form of market structure in which a large number of independent firms are supplying products that are slightly differentiated.
- When firms are competing only through price changes, there are three cases of long run equilibrium of a typical firm under monopolistic competition.

The long run equilibrium can be seen under three situations: when competition takes place only through the entry of new firms, when competition takes place only through price variations and when competition arises through price variation and new entry.

## 11.5 Keywords

Actual demand: The actual changes in demand arising from simultaneous reduction in price.

Equilibrium: Condition when the firm has no tendency either to increase or to contract its output.

Product differentiation: Differences among competing products.

Profit: Difference between total revenue and total cost.

# 11.6 Self Assessment

- 1. State true or false for the following statements:
  - In a monopolistic market, the demand for the product of one producer depends upon the price and the nature of the products of his rivals.
  - A firm in the long-run under monopolistic competition earns high profits like that in perfect competition but only the price is higher and output lower.
  - A firm under monopolistic competition does not enjoy monopoly profits in the long run even though it charges monopoly price.
  - Selling costs cannot change, and create demand curves.
  - Monopolistic competition is identified by a few firms producing a slightly differentiated (e) product.
  - Under monopolistic competition the firm has not the ability to collude with respect to price. (f)
  - If a large number of firms are competing, the market could be monopolistic competition or monopoly.
  - (h) Both monopolistic competition and perfect competition have firms that are price takers.
  - (i) Because of the number of firms in monopolistic competition no one firm can dominate the market.
  - Identical product is a characteristic of monopolistic competition. (j)
  - Product differentiation involves making a product that is completely different from the products of competing firms.

#### 2. Fill in the blanks:

(a	ι)	In monopo	olistic com	petition th	ne relativ	e market	share of	f al	l selle	ers are	

- Under monopolistic competition, the demand or AR curve of an individual firm is a gradually ..... curve.
- As the firm's AR curve is falling, the price is ...... than marginal revenue.
- (d) In the long run equilibrium output of the individual firm is ...... than optimum output.
- The assumed demand curve is ..... than the actual demand curve.

Answers: Self Assessment

(i)

1.	(a)	True	(b)	False	(c)	True	(d)	False
	(e)	False	(f)	False	(g)	False	(h)	True
	(i)	True	(i)	False	(k)	False		

(i) False

2. (a) insignificant (b) falling (c) higher

(d) less (e) More