<u>Chapter (15): Monopoly</u>

<u>A. Introduction:</u>

If a firm finds that it has:

1. No close substitutes to its product in the market
2. No close competitors to its product in the market
3. An influence or control on setting and determining the price of its product

then this firm is classified as an imperfectly competitive firm.

Imperfect competition prevails in an industry whenever the individual seller or firm have some measure of control on setting and determining the price of its product in the market. As a result, any imperfectly competitive firm is considered a price maker (compared to a perfectly competitive firm which is considered a price taker), and as such, its DD curve will be a downward sloping curve.

In an economy, there exists 3 different types of Imperfectly Competitive Markets:

1. Monopoly
2. Oligopoly
3. Monopolistic Competition.

<u>B. Monopoly:</u>

I<u>. Definition:</u>

A Monopoly is a market where one single big seller supplies the entire market.

II. <u>General Market Characteristics:</u>

1. One big seller supplies the entire market.

2. No close substitute for the product in the market.

3. A monopoly firm is a price maker, that is it charges and sets the price for its product in the market.

4. No entry allowed (no firm can easily enter this market). In other words, barriers to entry are extremely high that makes the entry to this market sometimes quite impossible, and as such competition does not exist (or very low as it is the case in other imperfectly competitive markets other than monopoly)

<u>"Barriers to Entry"</u> remains one important reason of creating monopolies or any other type of imperfectly competitive firms in markets, because it makes the entry of other firms not easy and possible into these markets.

Barriers to entry have three main sources:

1. **<u>Economic Barriers</u>**: This is the case of a single firm owning a key resource in the country which is not owned or possessed by any other firm in the market. A thing which makes this firm a monopoly due to a certain economic variable (resource) owned by this firm alone. This resource possession makes no other firm is able easily to enter the market of this firm due to economic barrier related to its possession of a particular resource which is not owned by any other firm.

2. **Natural Barriers** or **Natural Monopoly**: This is the case where the costs of production make a single big producer more efficient in producing a certain product or service than having a large number of producers due to existence of economies of scale (huge quantity of production).

3. **Legal Barriers**: Legal barriers or restrictions are government actions undertaken to restrict entry of different into a specific industry by providing:

    a. **Patents**: are very special form of legal restrictions to entry. A patent is granted to an inventor to allow exclusive use of the product. Example are Polaroid Cameras. Polaroid has an absolute monopoly over the market of instant cameras because of patent protection. Patents are provided to business firms to encourage incentive activity of businesses in areas of inventions and innovations.

    b. **Entry or Exit Restrictions**: Governments also impose entry or exit restrictions on many industries. These are granted to local utilities in water, electricity, natural gas and telephone lines. In return for such a monopoly power, firms allow governments to regulate their prices and business operations.

    c. **Tariffs and Quotas on foreign products**: Tariffs are taxes imposed on foreign products entering the domestic market of a firm. Quotas are restrictions on the quantity imported of a foreign good. These barriers tend to exclude and discourage many foreign producers from entering certain markets. A thing which will create an element of barrier to entry. Thus imperfection results in the market.

III. Objective, Important Decisions and Operations of a Monopoly:
Objective: Max TP which is achieved at the point where MR = MC.

Important Decisions:
1. P: The optimal price at which profits are maximum.
2. Q: The optimal quantity of production and sales at which profits are maximum.

Operations of a Monopoly:
Any monopoly will operate at the point where its MR = MC to achieve its maximum profit objective.
At this point, the monopolist sets and determines its maximum-profit price and quantity.

To determine how much are these maximum profits, the firm should determine its AP level. AP = P – AC and from this, it determines its total economic profits.

Situation (1): Refer to figure 15-4 pp 324 on your book:
If P > AC, the monopolist achieves positive economic profits. We advice this firm to continue its operations in the market.

Situation (2)
If P < AC, the monopolist incurs negative economic profits (economic loss), and the decision will be to shut down and exit from the market.

The rule to operate of any monopolist is this:
As long as the monopolist achieves positive economic profits (P > AC), the firm continues its operations in the market.
As the monopolist incurs negative economic profits (P < AC), then the firm will immediately shut down and exits from the market, and another monopolist takes its position.

VI. Economic Costs or Disadvantages of having Monopolies in the Market:

To determine the economic costs created by monopoly' firms, we need to compare it with those of perfectly competitive firms:
The economic costs or disadvantages or wastes created by a monopolist are mainly three:

1. Distortion in quantity of production: A monopoly firm produces a deficient quantity of output compared to that of a perfectly competitive quantity, where:

   Q of monopolist < quantity of a perfectly competitive firm.

2. Distortion in Prices: Price charged by a monopolist is higher than the price of a perfectly competitive firm, if we assume that this product is produced and sold by a perfectly competitive firm. So:

   P of monopolist > price of a perfectly competitive firm.

3. <u>Distortion in Income and Profits</u>: With a very high price charged by a monopoly compared to that of a perfectly competitive firm, this what allows for excessive high profits to be achieved by monopolies in the market compared to acceptable profits achieved by perfectly competitive firms. So The disadvantage or economic cost here is the distortion of income where excessive profits are attained by monopoly firms relative to other producers. So inequity results.

V. Public Policies to Curb MONOPOLIES:

The possible public or government policies to minimize the costs of monopolies are:

1- **Antitrust Laws**:

Trying to make monopolized industries more competitive, some governments initiated the Antitrust Laws. Increasing competitiveness is achieved by prohibiting certain kinds of behavior (such as number of firms joining together to fix their prices) to be allowed among business firms specifically if these firms are of the same sector or industry.

Unlike regulatory laws which tell businesses what to do, and how to price products, Antitrust laws or policies are passive in that they tell businesses what NOT to do.
The aim of such laws it to promote competitive rather than monopolies in the markets. That is why they will interfere and prevent companies from coordinating their activities in ways that make markets less competitive.

Example is the merger between Coca-Cola and Pepsi Co. which was closely examined by the Federal government and rejected because it was found that this merger will make the US soft-drink market less competitive and highly monopolized.

2- **Public Ownership of Monopolies**:

In this case, the government will run the monopoly itself. It is a common practice in many European countries, where the government owns and operates utilities such as the telephone, water, electric companies; however, it is rarely applied in USA, because they believe that companies run by the private (business) sector are more efficiently run and managed than by the public (government) sector.

3- **Taxes**:

By taxing monopolies, the government can reduce the monopolist profits. But it does little to reduce the distortion of output. So taxes have no effect on output. It might sometimes even cause the monopolist to reduce Q more and more.

4- Price Controls:

Usually price controls are used in war times. By these policies, profits will shrink (decrease), but still the distortion of Q persists.

5- Government Economic Regulation of monopolies.

Economic regulation refers to government rules and laws issued to control the prices, quantity of production and operations of monopolies in the economy so as to maintain efficiency and equity as much as possible. It is in fact a government control without government ownership of these business organizations.

Example of Economic Regulation: Public-Utility Regulation of a Natural Monopoly (Firm-x_): This is the case of a public utility company, for example, an electricity company. The major reason behind regulation is to prevent monopoly high pricing to occur.

Before regulation, the monopoly achieves excessive profits at Pm and Qm. These Pm and Qm are the maximum-profit price and quantity for firm (X) occurring at the point where MR = MC.

With regulation, a commission is formed to regulate and control P and Q of the monopoly firm. This economic regulation will require to reduce the Pm, increase Qm and reduce the monopolist's excessive profits. This regulation will require price of the monopoly to be set at a point where only normal and not excessive profits are to be achieved by the firm. Normal profits are attained at the point where Pr = AC (Pr = Regulated Price). With Pr, a new Qr (regulated quantity will be maintained)where Pr < Pm, and Qr > Qm, as a result profits are reduced to Normal Level as Pr= AC now.

But are Pr and Qr the ideal price and quantity for this firm. The answer is: NO. Ideally, the price and quantity that we can consider them the most optimal and ideal price and quantity of any firm are those of a perfectly competitive firm.

The Pp.c should be equal to MC (P = MC) but if the regulators ask the monopolist to set this price for their product, this P = MC for the monopolist will occur at that level where P < AC which means a loss to the monopolist. A thing which the monopolist will not accept to operate at and will decide to shut-down and exit from the market.

That is why the ideal price where P = MC is not practical to be applied in economic regulation. And that is why again the Pr is applied at the level where Pr = AC and not Pr =- MC so that both the government and the monopolist will be satisfied.

To conclude: the regulated price of the monopolist set at the level where P = Ac is the acceptable practical price but not the ideal price. The ideal price for any firm is that where P = MC.