

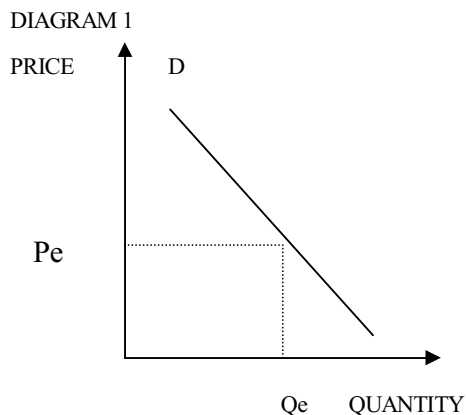
ECONOMIC'S ESSAY

“Discuss and evaluate the proposition that perfect competition is a more efficient market structure than monopoly.”

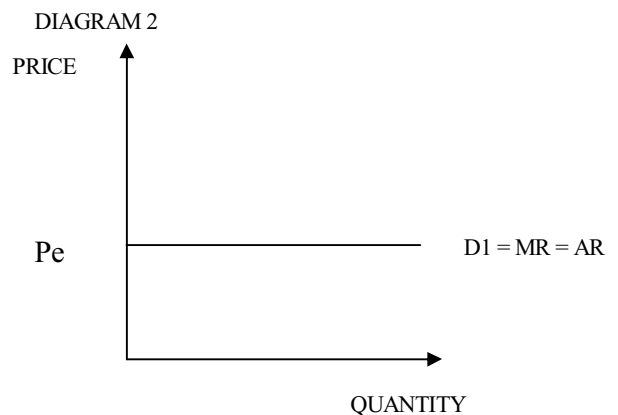
Adam Smith said that competitive forces function like an “invisible hand” to ensure that people pursuing individual interests simultaneously serve interest of society. Competition among economic agents would therefore narrow selfish interest of each person in a sociable desirable direction¹. Therefore perfect competition would lead allocative or economic efficiency. On the other hand monopolies could lead to lower cost due to economies of scale. Although in the real world it is very difficult (almost impossible) to have a pure perfect competition or monopoly, both of them, in theory, bring benefits to society. In order to evaluate whether perfect competition is a more efficient market structure than monopoly, there has to be a direct comparison between the two market structures to draw conclusions.

In theory, the existence of positive economic profits in any given industry attracts new firms, therefore the supply increases and the price lowers to the point where normal returns are earned by the representative firm. Perfect competition is a market model. It has various characteristics. The market contains a large number of buyers and sellers. Each buyer and sellers has a perfect knowledge about prices and product. The product being sold is homogeneous; this means that it is not possible to distinguish the product of one firm from that of other firms. There are no barriers to entry into or out of the industry; this means that there is a freedom of entry and exit. All firms are price takers; no single seller has control over the price.

Industry Demand in Perfect Competition



Firm Demand in Perfect Competition



The industry demand in perfect competition is a common demand curve, the demand decreases as price increases (Diagram 1). There are many sellers within the market;

¹ ROY J. RUFFIN, PAUL R. GREGORY, “Principles of Economics” Chapter 30 pg.563 Fifth Edition

therefore the effect of one of them would be insignificant. The firms in a perfect competition environment are said to be price takers. The demand curve of a perfectly competitive firm is perfectly elastic at the going market price like diagram 2 shows. This means that the seller can sell all their products at the market price without affecting this price.

The theory of perfect competition also is based on the assumption that firms seek to maximize profits. Economic profits indicate whether or not resources are being directed to their best use. They *represent the amount by which revenue exceed total opportunity costs*². For example, Santiago has a motorcycle business. Santiago has placed \$60,000 of his money into his own business. However, he could earn \$2,000 per month working as a motorcycle seller at another motorcycle shop. Moreover, Santiago's capital investment in his own business might earn \$500 monthly elsewhere. The sum of this two (\$2,500) is an implicit cost of doing the business. The explicit or accounting costs involve are Santiago's rent payments on the building, inventory costs, business taxes and wage payments to mechanics and sellers. All of these add up to \$37,000 per month. Santiago's total monthly opportunity cost for operating his business is the sum of implicit cost (\$2,500) and explicit costs (\$37,000) = \$39,500. Supposing that Santiago's business has monthly sale of \$40,000, Santiago's accounting profit would be \$3,000 per month. Santiago's economic profit is only of \$500 because the total opportunity costs are \$39,500. If in this case the accounting profit was below \$2,500, Santiago would not have entered the business because he would not earn a normal profit.

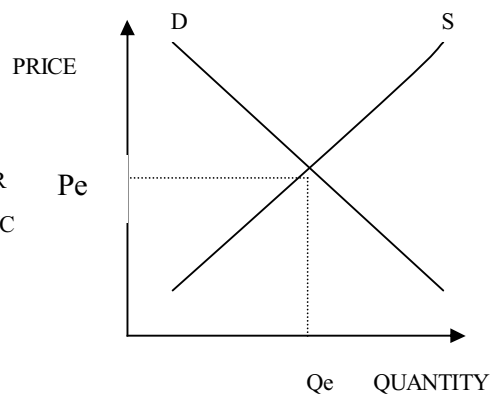
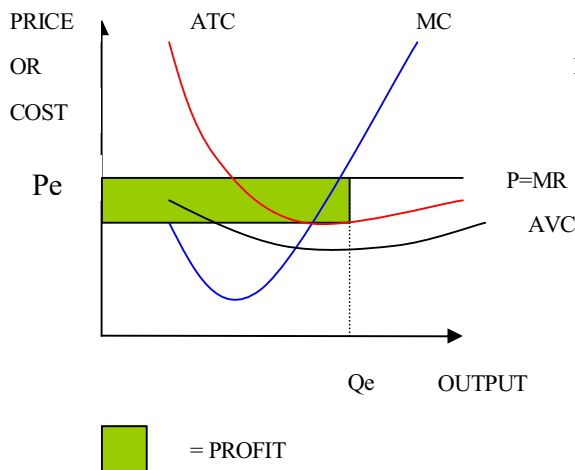
In order to maximize profits marginal cost (MC) must equal marginal revenue (MR). A firm will always produce at the point when $P=MC$. The diagram below shows the short term equilibrium of a firm and the market in a perfect competitive market.

The Representative firm

The market

Fig.3

Fig.4



² ROY J. RUFFIN, PAUL R. GREGORY, "Principles of Economics" Chapter 30 pg.566 Fifth Edition

As long as the ATC curve is underneath the price line (P) there would be an economic profit as shown in the diagram. The important point of this is perfect competition in the long run. A long-run equilibrium is achieved for competitive industry when economic profits are zero and long-run average cost are minimized.

The Long-run equilibrium: The firm

The Market

Fig.5

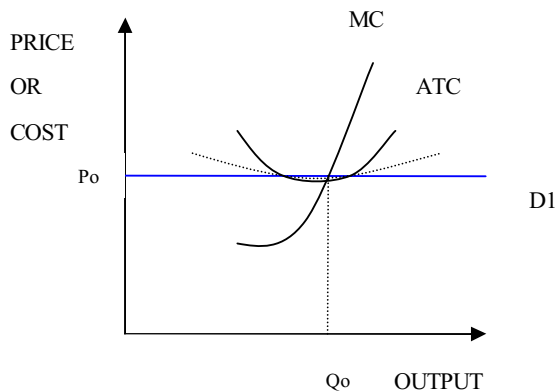
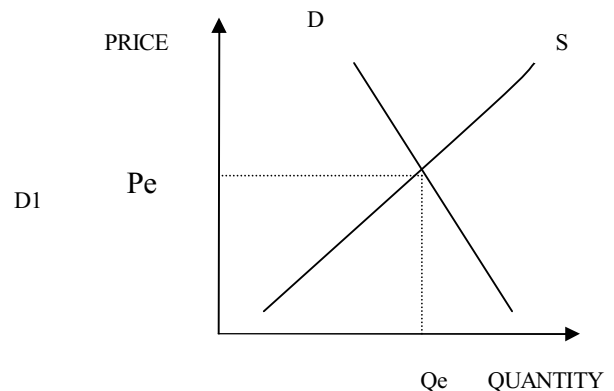


Fig.6



The theory of perfect competition would therefore tell us that economic profits will be eliminated in the long run by the entry of new firms, also that when markets are in equilibrium, price and marginal cost will be equal. The most important characteristics of perfectly competitive industries are: First that they would operate at minimum average cost in the long run and secondly that they would produce the quantity of output at which price equals marginal cost both in short and long term. These characteristics are very important to evaluate and compare against other market structures such as monopoly.

Monopoly means “single seller”. A pure monopoly exists when there is one seller in the market for any given good or service that has no close substitutes. There also need to be barriers to entry to protect the seller from competition. Like in perfect competition, it is very difficult to find a pure form of monopoly. First of all there is almost always some kind of substitute for any given product. Second a sole supplier may not be a pure monopolist firm if it fears the entry of other firms and so acts cautiously to prevent attracting potential rivals.

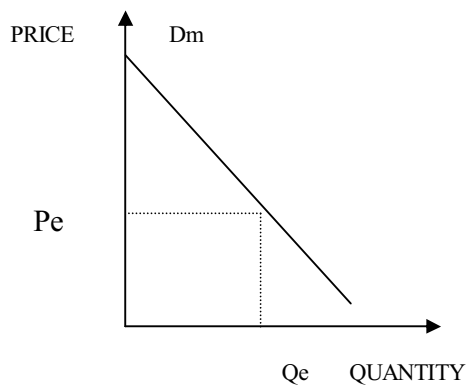
In theory, monopolistic firms need barriers of entry to protect them from competition. This could be economical or legal barriers which include: Economies of scale, economies of scope, patents, exclusive ownership of raw material, licensing and other legal means. Monopolies can take advantage from economies of scale. This way it is very difficult for other firms to enter the industry to compete against the monopoly. If a firm enters the industry, it would be productively inefficient. A natural monopoly

occurs when economies of scale are so large that there is only room for one firm in the industry. Examples of this are local public utilities such as telephone, gas water and electric power. Also it is sometimes cheaper to produce two related products in a single firm rather than in two separate firms. This are called Economies of scope. Close example of firms which have economies of scope is the major motor companies which produce both cars and trucks because it is cheaper than if two separate firms did it.

The most fundamental difference between perfect competition and monopoly lies in the determination of the price. Perfectly competitive firm is a price taker while monopolist firms are price searchers.

Price Searcher Graph

Fig.7



The demand curve for a price searcher faces a downwards sloping. Unlike the perfect competitor, the price searcher cannot sell all it wants at the going market price. Price searchers are price makers because they have power to set their own price. Their decision is based towards maximizing profits. Profits are maximized also when marginal revenue (MR) and marginal costs (MC) are equal.

Monopoly Profit Maximization

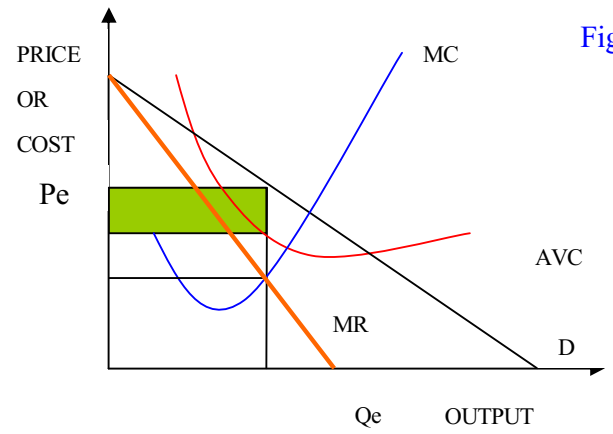


Fig.8

= PROFIT

In the case of monopolist, the distinction between the short run and the long run is not important because barriers prevent new firms from entering the industry and systematically eliminating monopoly profits. The diagram shows that monopoly market structure has different implications. First monopolies, unlike perfectly competitive firms do not need to produce where average costs are minimised. Monopolists also charge a greater price than marginal costs. The firms in a monopoly market structure also only produce where demand is elastic. This is done so that the firm maximises the profits because if $MC=MR$ the demand schedule has to be elastic to have profits and not losses. There is no supply curve either for monopolies due to the fact that the amount of output is decided not on the price, but on the marginal revenue depending on the elasticity of demand.

Monopolies in order to maximise their profits price discriminate between buyers. This means that they can sell the same product for different prices to different buyers. Monopolies do this to maximise their profits and price discriminate basing on time, place and income. Monopolist can only price discriminate when they face different demand curves from separate groups, when they can split the markets into distinctive buyers and when they are able to maintain these markets separate at relatively low cost.

To determine whether perfect competition is more efficient than monopoly, efficiency has to be defined. Efficiency concerns how well the market allocates the resource available. Efficiency is divided basically in two groups, static efficiency (which concerns efficiency at a given point of time) and dynamic efficiency which is how well resources are allocated over a period of time. Productive efficiency and allocative efficiency are static kinds of efficiency. Productive efficiency exists when production is achieved at the lowest cost possible. This means it would exist only if there is a technical efficiency. Technical efficiency is when the quantity of output is produce with the minimum number of inputs. Another type of efficiency is allocative efficiency or economic efficiency. This type of efficiency is concerned with whether resources are use to produce the goods and services that consumers wish to buy. Therefore it exists when it is impossible to make everyone better off by reallocating resources.

It is argued that perfect competition is economically efficient as a result of the right balance between consumer utility and costs of production. The competitive price would reflect this balance. Customers will be able to buy at the lowest price that is possible because firms are only able to make a normal profit in the longer term (Fig. 5). The perfect competition long run diagram (Fig. 5) shows how the price for buyers and sellers is the same; consequently each consumer pays the same price. *The price of a good measures it's marginal benefit to society because each utility-maximizing consumer equates the good's marginal-utility divided by price ratio to that of all other goods.*³ This means that costumers compare the price-benefit ratio to that of other goods or services to determine how valuable a specific good or service is. In this sense perfect competition is allocative or economic efficient, because no one could be better off in a given industry of perfectly competitive firms. This is reaffirmed by the fact that producer would expand production until price and marginal costs are equal. As a result there are no profit opportunities. The use of society's resources to produce a good is minimized when each producer has the same marginal cost. Market equilibrium is the state in which a good is produced at minimum cost in a quantity that yields a marginal

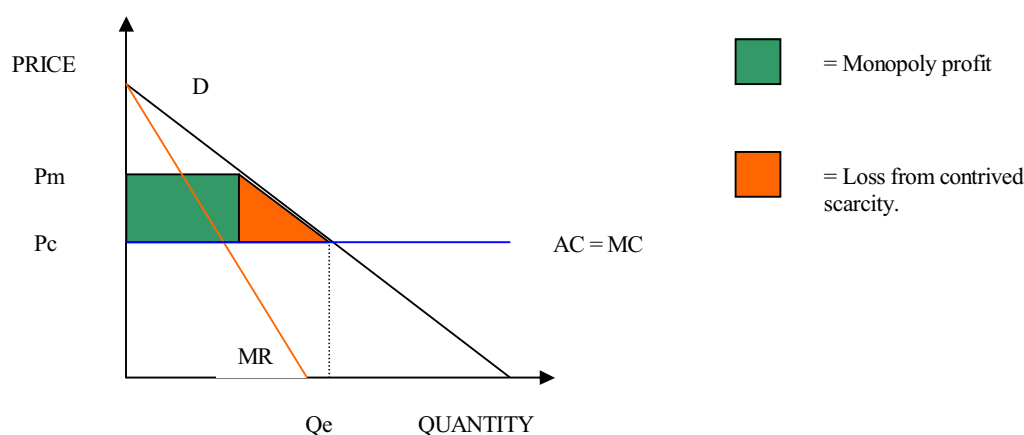
³ ROY J. RUFFIN, PAUL R. GREGORY, "Principles of Economics" Chapter 30 pg.610 Fifth Edition

benefit (price) equal to the marginal cost. Thus an economy at market equilibrium is allocative efficient. But the market equilibrium also implies a productive efficiency. The firms in a perfectly competitive industry will, in the long –run, be productively efficient. Perfect competition would assure that firms produce at lowest average cost possible.

On the other hand monopolies aren't either allocative or productive efficient. Monopoly has three sources of inefficiency. First it maximises its profits by restricting output. Hence monopoly leads to contrived scarcities. Contrived scarcity occurs when the economy would be more efficient if more of the monopolized good were produced.

Monopoly and Competition Compared

Fig.9



Monopolies maximize profits where $MR = MC$, but $P > MR$. Therefore price will exceed marginal cost at the output that maximized monopoly profit. The loss from contrived scarcity is a deadweight loss because nothing is received in exchange of this loss. Therefore Monopoly is allocative and productively inefficiently whereas perfect competition is not.

Second, monopolies are inefficient because the resources used to maintain the monopoly could be use more effectively in other places. The opportunity cost of maintaining a monopoly is high. A monopoly rent seeking behaviour is the use of political power and its accompanying resources to achieve or maintain a monopoly in order to gain the monopoly profits⁴. Third, monopoly doesn't encourage efficiency in production. This implies that there could be an organizational slack characterized by costs that are higher than necessary. This is called X- Inefficiency, a term invented by

⁴ ANNE KRUEGER, "The Political Economy of the Rent-Seeking Society." *American Economic Review* 64 (June 1974).

economist Harvey Leibenstein⁵. Some economists do not agree with this point, arguing that X-Inefficiency is more a gain to the monopolist rather than a social cost.

Despite this perfect competition is only static efficient whereas monopoly can be more dynamically efficient. The lack of incentive to create technological advances within a perfect competition makes it dynamically inefficient. In contrast, monopoly has an incentive to innovate due to the fear of losing its monopolistic position. Therefore monopolies have clear dynamic advantages. Perfect competition would also be allocatively inefficient if externalities are taken into account. Externalities exist when economic activity results in direct economic cost or benefits for third parties not immediately involved in the activity.

Consequently the statement of perfect competition being more efficient than monopoly is not entirely true. In conclusion, although perfect competition is more economically and productively efficient than monopoly, monopolies have dynamical advantages. Monopolies can exploit economies of scale and economies of scope which in theory would lower cost. Also perfect competition doesn't include externalities in which case it wouldn't be efficient. Even though it is almost impossible to have a pure monopoly or a pure perfect competition market structure in an economy, perfect competition seems to have an advantage regarding static efficiency over monopoly. The question now is whether a perfect competition market model is more desirable over a monopoly market model.

⁵ HARVEY LEIBENSTEIN, "Allocative Efficiency vs X-Inefficiency", American Economic Review 56 (June 1966)

Economics Essay

By: Santiago Caicedo 10-5

Topic: Perfect competition and Monopoly.

Research question:

“Discuss and evaluate the proposition that perfect competition is a more efficient market structure than monopoly”.