

1) Monopoly is less efficient than perfect competition ---Do you agree?

Monopoly and perfect competition are alternative market structures and differ, on a general level, in the degree of competition that exists between the firms and the industry they are supplying to.

We can define perfect competition as being a market structure in which there are many firms, as opposed to a monopoly where there is just one firm in the industry, and therefore little or more likely no competition from within the industry. A perfectly competitive market has unrestricted entry and because of the number of firms nobody in the market believes that their actions will have an effect on the market place. Firms will therefore behave very differently in these two market structures, being influenced by cost conditions and demand. This behaviour will have subsequent effects on performance in the market, mainly their efficiency. We therefore have two aspects to consider that will affect the efficiency of a firm, the market structure and behaviour. They are crucial to our understanding.

Perfect competition is uncommon, in fact there are only a few industries that work under this market structure. A good example is that of agriculture where there are a large number of farmers supplying the market yet none can influence price as none are large or powerful enough. If a farmer decides to double output supply will increase, pushing the supply curve to the right. However, why is this change so difficult to see on supply graphs? This can be explained if we remember that a farm is so small that the increase in supply will be very limited and it will be impossible to distinguish it on the demand curve:

Price will not change, as the extra output is so insignificant. A farmer, therefore, does not have the power to raise prices and influence the market. A horizontal demand curve is therefore achieved:

It is now time to turn our attention to the issue of monopolies. Examples of monopoly include rail transport (i.e. the Channel Tunnel link run by Eurostar) and water supply. Water is a necessity and therefore the water companies have considerable market power. We have stated that price change in perfect competition will not influence the market, however, a monopoly firm *is* the industry and can only increase sales by reducing prices due to the downward sloping demand curve:

or increasing price by reducing sales. We can say that the downward sloping demand curve is also the average revenue curve. To understand the concept of efficiency it is crucial to discuss average (AR) and marginal (MR) revenue. That is the average receipt per unit sold (AR) and the receipts from selling an extra unit of output (MR). For a firm in perfect competition, marginal revenue is constant at all levels of output and equal to market price as the firm sells its entire output at the ruling market price. This means each additional unit of output sold *“adds exactly the same amount to total revenue as each preceding unit sold.”* (Anderton) It is suggested that the allocation of resources under perfect competition is superior to that achieved under monopoly. This is assumed because output is pushed to the point at which marginal cost equals marginal revenue. Therefore, under perfect competition an optimum allocation of resources is achieved. Under monopoly the monopolist has to charge a price greater than the marginal cost. We can say, therefore, without much doubt that under monopoly there is an efficiency loss in terms of the allocation of resources. This can be demonstrated with a simple graph showing the net social cost if a perfectly competitive industry becomes a monopoly:

To summarise, we can say that under monopoly a firm will produce at its profit maximising position where $MC=MR$ and price on its demand or average revenue curve. A perfectly competitive industry would produce where demand equals supply (price = MC) and where output is OB and price is OE. Output is therefore lower and price higher in a monopoly. In other words it is allocatively inefficient. It is possible to say that monopoly is a form of market failure.

In order to grasp a fuller understanding we must now turn our attention to consumer surplus, that is the difference between the value of a good and its price as it is crucial to our understanding of the question. This is represented by the green triangle:

With monopoly, consumer surplus is decreased as output is restricted to Q_m . Consumers will therefore have to pay more for what is available and also get less of the good. The monopoly gains the difference between P_m and P_c on Q_m (the quantity sold). This cannot be described as inefficient as it is a “redistribution from consumers to the monopolist” (Parkin et al.) There is still a consumer loss represented by the stripy grey area due to restricted output. Producer surplus (difference between producer’s revenue and opportunity cost of production) is lost again due to restricted output. The loss of consumer and producer surplus is called the deadweight loss and is therefore a measure of the degree of market failure, and as previously mentioned monopoly can be described as a form of this market failure due to inefficiency in its market. However, we must remember that society still benefits in terms of lower prices and greater output than would exist under perfect competition.

2) Evaluate the alternative policy options for dealing with natural monopoly

Natural monopoly can be defined as an “*industry in which one firm can supply the entire market at a lower price than can two or more firms.*” (Parkin et al.)

*The Demand curve is D and the average total cost curve is ATC
One firm can meet the demand in this market at a lower cost than two or more firms can and the market is a natural monopoly*

To do this economies of scale must exist. Economies of scale lower the cost of producing a unit of a good as output ratio increases. Hence, the dominant firm in the industry, the firm with the largest output and the lowest cost, is nearly always able to force them out of the industry by undercutting them in price. This can be seen here:

Where MC (marginal cost)= MR (marginal revenue) the monopolist will produce at output OB. To make an industry more competitive would mean each firm producing half of OB, or OA. We can see that this would increase the average cost of production from OE to OG. A gain in welfare cannot be achieved, only a loss. We can say then that competition is highly inefficient as it would raise the average cost of production.

Natural monopoly, therefore, provides a barrier to the entry of new firms. If a tramline were to be built in Nottingham town centre (as one is being at the moment) , serving the same route, it would be unprofitable to have two companies having two half full trams instead of one company with a monopoly of the town centre route which would make a profit. It is therefore almost impossible for a new entrant to succeed as the new firm will not have the economies of scale needed to compete.

How can natural monopoly be changed? One way is via technology. Parkin et al. Suggests that optical fibres and cable television has allowed many competitors in the market place like ntl and Cable and Wireless. A former natural monopoly has been transformed into a fiercely competitive market.

Many companies are regulated by the government in order to respect public interest, that is to maximise total surplus by making price equal to the marginal cost:

However, firms incur an economic loss, as if the price = MC, then price is below average total cost. A firm will therefore need to somehow cover its costs.

Price discrimination is a viable option, by changing a one off cost for connection in the case of an Internet company as well as monthly charges. However, this will not always work, as is the case with the Channel Tunnel. Government intervention is therefore needed through subsidies which is raised through taxes. However taxes create a deadweight loss. This can be reduced by allowing the natural monopoly to charge a higher price than marginal cost. This is an average cost pricing rule and sets price equal to average total cost:

We can see that price is equal to average total cost (ATC) and therefore the firm breaks even.

However, the aim of any firm is to make profit and with these last two solutions profit has been achieved. If marginal revenue (MR) were to equal marginal cost, consumer surplus would decrease, increasing deadweight loss and thereby entering economic profit. However, we must consider the aspect of cost inflation. A regulated firm can increase the firms' costs by spending a lot of revenue on Inputs and thereby persuading the regulator that their cost curve is more than their true cost curve. We can see this here:

We can therefore say that the greater the ability of the firm to deceive the regulator the greater the profits achieved.

In summary, taxes and subsidies do not improve allocative efficiency as a tax on profits will not affect either marginal cost or marginal revenue. The natural monopolies will continue to produce at less than the efficient level of output. We can say that there are many policy options a firm might use to deal with natural monopoly. These include price discrimination and cost inflation. Government intervention is another factor that is widely practised.

Bibliography

Parkin, M, Powell, M, Matthews, K (2000) *ECONOMICS* (4th edition). Essex, England: Addison-Wesley.

Begg, D, Fischer, S, Dornbusch, R (2000) *ECONOMICS* (6th edition). Maidenhead, England: McGraw-Hill

Griffiths, A, Wall, S (1995) *APPLIED ECONOMICS: An Introductory Course* (6th edition) Essex, England: Longman Group Limited

Anderton, A (1993) *ECONOMICS*. Lancashire, England: Causeway Press Ltd

Sloman, J, Sutcliffe, M. (1998) *ECONOMICS FOR BUSINESS*, Essex, England: Prentice Hall.

Harrison, H (1995) *ECONOMICS* (2nd Edition), Singapore: Longman Group Limited)

<http://www.bized.ac.uk/compact/bmw26.htm>

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