# Rent Seeking and the Social Costs of Monopoly


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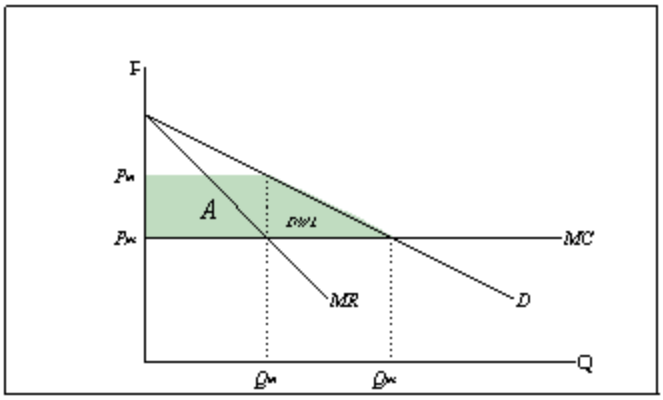
**Attention to the social welfare loss under monopoly conditions was led by the pioneering work of Harberger in 1954. Subsequent writers have considerably expanded our understanding of the extent of the losses involved. Alan Dunne, in this paper, reviews this material, the focus on the application of rent-seeking theory to monopoly, its type, cost implications and solutions.**


Economic theory suggests that monopoly results in a social loss because output is restricted below its optimal level, meaning that marginal benefit and marginal cost are not equated. Traditionally this social loss has measured in terms of the deadweight loss (DWL) of monopoly. However, this measure of social loss assumes that the monopoly is costlessly created and maintained. In fact, the opportunity to earn monopoly rents results in resources being invested in unproductive activities in their pursuit. In other words, rent seeking occurs. This essay examines the theory of rent seeking as applied to monopoly. The types, cost implications and solutions to rent seeking are discussed in turn. In conclusion, it will be evident that the costs of rent seeking are largely determined by the precise nature of the rent seeking game.

### The Social Cost of Monopoly

The theory of monopoly states that a monopolist earns supernormal profits by restricting output and hence increasing prices above its perfectly competitive level.

*Figure 1.*




When price rises above this level, a transfer of income from consumers (who continue to consume the good) to the monopolist (measured by area A in the diagram) occurs. A further loss, known as the deadweight loss (shaded triangle), is incurred by people who stop buying the product. This refers to the consumer surplus that would have been generated by consumption of the good between Qm and Qpc, a quantity now neither produced nor consumed. However, this analysis hinges on the assumption of the monopoly being created and maintained costlessly. In fact, the deadweight loss underestimates the social cost of monopoly as the existence of an opportunity to earn monopoly profit (or rent) attracts resources into efforts to obtain and maintain

monopolies. This activity is known as rent seeking. Furthermore, resources may be expended wastefully by opponents to the creation of a monopoly; in other words, a reaction such as "rent protection" may be provoked.

Tullock (1967) employs the analogy of theft to explain the problem of rent seeking. The transfer of wealth from victim to thief involves no social loss; it is a direct transfer and, summing over all individuals, society's wealth remains unchanged. However, the opportunity for such transfers encourages the thief to invest his resources (human capital and tools) in theft, that is he engages in rent seeking. The potential victim, meanwhile, aware of the possibility of theft, will invest in locks, and alarms to prevent the transfer of wealth, i.e., rent avoidance. The fact that both parties have employed resources unproductively implies a social loss to society, regardless of the outcome. From a societal point of view, it would be much more beneficial if the threat of theft was absent and both parties invested in the production of goods merely for society's consumption. The net result is the inefficient use of resources by society, and therefore a location off the production possibilities frontier.

## What types of costs?

Any cost incurred in the competition to obtain or maintain a monopoly is a cost of rent seeking. Types and magnitudes of costs will vary depending on the type of monopoly. Typically, monopolists will incur both strategic and administrative expenses. Strategic expenses may include research and development expenditure (R&D) in an attempt to obtain a patent, or the accumulation of capital as a barrier to entry.Tirole (1988) points out that since a patent is a winner-take-all game, firms may have a tendency to over-invest in research and development in order to obtain a patent and also invest in "risky" technology which has a potentially high profit. Both activities lead to the dissipation of monopoly rents.

Furthermore, a monopolist may invest in capital as a signal or precommitment to potential entrants of his long-term interest in the industry. Such investment may be necessary to make the threat to fight potential entrants credible. In theory, a firm may dissipate all profits in this manner, particularly in the short run, to maintain its position or to develop a reputation for fighting entrants.

Administrative expenses include the cost of lobbying, and also the substantial cost of human capital invested in a bid for monopoly. As part of their lobbying effort, firms may bribe or give favours to a government official (for example, one who allocates a licence). One could argue that there is no social cost incurred here as the result is simply a direct transfer. However, Krueger (1972) points out that individuals will have to invest time, energy and resources in competing for the position of licence official in the knowledge that success will be rewarded with bribes and favours, leading to a dissipation of rent in unproductive activities by individuals vying for such a position.

## How large are the costs of rent seeking?

Posner (1975) argues that when the total expenditure by firms to obtain the rent is exactly equal to the rent, the expenditure has no socially valuable by-products, as the total cost of monopoly will equal the deadweight loss plus the monopolist's rent. Total rent dissipation occurs when competition for rents is perfectly competitive. Each firm invests in rent seeking to the point where the last dollar spent equals the improved probability of obtaining the rent, for example, in equilibrium ten firms with a 10% chance of getting a rent of £10m will each invest £1m. In the circumstances, the social cost of monopoly can be measured by measuring area A + DWL in diagram 1.

Early measures of the social cost of monopoly have been subject to much criticism. Posner criticised Harberger's deadweight loss for neglecting such effects of rent seeking. In particular, he criticised the rates of return used to calculate the monopoly

price increase. He argued that while many monopolists enjoy supernormal rates of return *ex post*, unless account is taken of expenditures by the firm in obtaining and maintaining its monopoly position, the percentage of the monopolists revenue that is attributable to monopoly pricing is underestimated. Hence monopoly profits, rates of return and the associated deadweight loss are all underestimated.

Posner overcame these problems by obtaining from industry studies estimates of demand at the relevant points along the demand curve. Using these estimates, Posner calculated that the social cost of monopoly was as much as 30% of industry sales in some industries. However, it must be recognised that the validity of these results depends crucially on the validity of his initial assumptions.

## Are rents totally dissipated on socially wasteful expenditure?

Posner's results may be questioned on a number of counts. There are many reasons to suggest that the value of rent seeking expenditures will not equal the total value of rents. Firstly, monopolies can be obtained through mere luck or chance rather than foresight, as such a product may be invented and patented without excessive expenditure in R&D. Secondly, the contenders may not compete from an equal footing.

Some interests are better organised than others, ie. they may be in a stronger position, have strong contacts, more information and so on, and may be expected to have a higher probability of becoming a monopoly, In this case not all of the rent will be dissipated because firms will realise that one firm has a particular advantage and so they may not enter into the competition in pursuit of the rent. In general, assuming a limited number of players, and knowledge as to the probaility of success the total value of rent seeking expenditures will be equal or less than the total value of rents. This is because it would be irrational for a firm with only a 50% probability of obtaining a rent worth £10 million to invest more than £5 million in rent seeking activities. However, with larger numbers of players and uncertainty regarding probabilities of success, firms will not be able to make rational decisions based on perfect information. In this case expenditures could be less than , equal to or exceed the total value of rents. When one considers that many other firms may also engage in rent avoidance then this argument is plausible. Indeed, Posner argues that due to rent avoidance the social cost of monopoly may be high even for a monopolist earning only a normal return. If this occurs, the observed monopoly profits is an industry will underestimate the social costs. The cost of maintaining a monopoly may also be difficult to measure, for example an inefficient state monopoly may exist which would perform more efficiently if exposed to the rigours of the marketplace. However, workers and trade unions will lobby to prevent deregulation and may threaten industrial action. At the same time the government may be lobbied by private interests who wish to enter the market. In such cases, the social cost of the rent seeking is virtually impossible to measure.

Dissipation of rents is costly only to the extent that no socially valuable by-products are produced. However, are rent seeking expenditures socially wasteful ? In the era of a regulated monopoly position being allocated on the basis of lobbying influence, the expenses are socially wasteful. However, if the allocation is achieved by an auction the expenses are received by the government and are not wasted, (assuming the government employs the resources productively). There will also be many intermediate cases, perhaps R&D expenditure for a patent, advertising or capital accumulation as a barrier to entry. Thus, the extent to which any socially valuable by-products result from the process depends on the nature of the game involved.

Monopoly rents may be partially transferred to input suppliers. Assuming the input supply does not increase in response to this transfer then it is not considered to be socially wasteful. However, rent seeking activities by individuals trying to gain employment in industries with monopoly rents would be described as socially

wasteful.

Thus there are strong reasons to suggest that the assumption in Keynes' analysis does not hold. However, the value of rents are as likely to overestimate as to underestimate the value of rent seeking expenditures. Also, in many of the cases we analyse, particularly the case where a licence is allocated on the basis of lobbying, there are few socially valuable by-products. This implies that, while Posner's estimates of the cost of monopoly may be crude and inaccurate, they do depict the general picture in many industries in that the cost monopoly are evidently quite substantial.

## Conclusion

Rent seeking greatly increases the social cost of monopoly. However, the true cost of rent seeking is dependent on the particular "game" or determination of monopoly. However, from some empirical evidence, it is apparent that in many industries the social cost of monopoly is significant. In general, prevention of that social cost can only be achieved by restricting entry into the activity for which a rent has been created. However, Krueger (1972) points out that doing so would have serious negative political implications, in that such a process would engender the scepticism of the electorate if the government was deemed to be showing favouritism. Efforts at reducing rent seeking costs should focus on altering the game so as to promote efficiency, such as allocating a licence by auction rather than by traditional lobbying. Therefore while the costs of rent seeking can in theory be significant, costs can be reduced by focusing on reducing inefficiencies in individual cases.

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