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Imperfectly Competitive Firms, Non-Price Competition, and Rent Seeking

by

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1. Introduction

Rent seeking is the competitive struggle for monopoly privileges. Rent seeking, as distinct from profit seeking, is *defined* as the use of resources in interpersonal (or interfirm) competition that determines merely the distribution of monopoly privileges without causing outputs to increase. Thus, rent seeking uses resources in the quest for private gain in ways that are socially wasteful (TULLOCK [1967]). Although the initial emphasis in the rent-seeking literature was on competition for government-created monopoly privileges such as tariffs, the prevalent opinion is that rent-seeking wastes are common in purely private settings as well (COWLING and MUELLER [1978]; ROWLEY and TULLOCK [1988]).¹

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¹ BROOKS and HEIJDRRA [1988] distinguish the "DUPE" ("directly unproductive expenditures") branch of the rent-seeking literature from the branch, led by Gordon Tullock, that is simply called the "rent-seeking" branch. BROOKS and HEIJDRRA [1988, 45] argue that DUPE theorists (foremost among whom is BHAGWATI [1982]) merely *assume* certain expenditures of effort or resources to be wasteful, while the rent-seeking branch "does not define waste from the outset". Rather, according to these authors, waste for the rent-seeking school "is the *outcome* of the rent-seeking process, and not an assumption built into the analysis" (BROOKS and HEIJDRRA [1988, 32]; original emphasis). While I do not deny that fundamental differences exist between the DUPE branch and the rent-seeking branch (see, e.g., ROWLEY [1988]), I am unconvinced by Brooks and Heijdra's claim, that rent-seeking theorists successfully avoid implicit value judgments when they distinguish profit-seeking activities from rent-seeking activities. See DiLorenzo [1984, 1988] who argues that seemingly positive analyses that purport to objectively identify rent-seeking wastes are inevitably built on value judgments. HAZLETT [1987] makes the same point with reference to the waste identified in standard monopoly theory. DiLORENZO and HAZLETT owe much to DEMSETZ's [1982] pioneering argument that no economic distinction exists between property rights and monopoly rights: All property rights exclude people from using resources. (We call those restrictions whose effects we like "property rights," while those restrictions whose effects we do not like are called "monopoly rights.")

A frequently mentioned source of wasteful private-sector rent seeking is non-price competition that serves merely to shift consumer demands among firms in an imperfectly competitive industry. When expenditures on sales promotion or product differentiation by one firm in an industry only cancel the effects of sales promotion or product-differentiation efforts by its rival firm(s), such expenditures are typically reckoned as rent-seeking wastes. A useful name for this type of non-price competition – i.e., non-price competition that is nothing more than an intraindustry struggle for a fixed number of sales – is “combative” competition.² The only purpose, or effect, of combative competition is to take customers away from other firms in the industry. Combative competition has no effect on industry output.

This paper argues that expenditures on non-price competition, even when combative, are not legitimately classified as rent-seeking wastes. In fact, such expenditures are *productive* from society’s perspective; they represent a return of surplus back to consumers from imperfectly competitive firms.

The paper begins with a review of the argument that combative competition is an instance of wasteful rent seeking, while section 3 discusses the important distinction between rent-seeking expenditures and rent-seeking wastes. Section 4 argues that expenditures on non-price competition, even if combative, not only cannot be said to constitute social waste but, in fact, represent positive transfers of utility to consumers. A conclusion is offered in section 5.

2. Combative Competition

The assumption that advertising is socially wasteful if the advertising efforts of one firm cancel similar efforts by other firms in the industry is old. Norman BUCHANAN [1942], for example, used this assumption in his classic analysis of advertising. Industrial-organization theorists who insist that advertising is socially wasteful if it cancels, or is cancelled by, the advertising of industry rivals include SIMONS [1948], KALDOR [1949–50], SCHMALENSSEE [1972], DIXIT and NORMAN [1978], and COMANOR [1985].³ According to DIXIT and NORMAN [1978, 6]

to the extent that oligopoly is noncooperative, we should expect the advertising levels chosen by the sellers to be even more excessive than is the case with monopoly, since advertising under oligopoly to some extent simply shifts demand from one seller to

² The term “combative” is taken from COMANOR [1985, 977] who applies it to advertising that merely reallocates customers among industry rivals.

³ This hostile view of combative non-price competition is commonplace also in industrial-organization textbooks. See, e.g., MARTIN [1988, 209] who says that oligopoly “may result in...excessive advertising. If oligopolists succeed in controlling price competition, they may well divert their rivalry into marketing efforts. In this case, some advertising may be interneconomic, aimed solely at neutralizing the advertising of rivals.” SHEPHERD [1985, 310] refers to combative advertising as “functionless expenditures.”

another. This demand-diverting effect is formally like an external diseconomy for group profits; competing oligopolists neglect the effect and advertise more than their joint interests warrant.

DIXIT and NORMAN [1978, 11] conclude that “the effect of advertising on industry demand is the relevant magnitude for welfare evaluations”. If industry output does not increase, advertising is considered unambiguously to be wasteful.

SCHMALENSSEE [1978] and SCHERER [1983, 1986] apply this line of reasoning to vertical restraints. In SCHERER’s [1978, 704] view

vertical restraints are more likely to be efficiency reducing, the more the competitor’s service efforts simply cancel each other out, i.e., cannibalize each other’s sales, rather than adding to the overall level of market demand. The more cannibalization, the more likely it is that the restraints are inefficient.

The conclusion that combative competition among imperfectly competitive firms is wasteful because it does not increase industry output is accepted in the rent-seeking literature and is used as an example of private-sector rent-seeking waste. TOLLISON [1982, 587] lists “non-price competition among imperfectly competitive firms” as an example of wasteful rent seeking that occurs in the private sector, as does COLANDER [1985], and COWLING and MUELLER [1978, 1981]. TULLOCK [1988, 469] offers a recent statement of the prevailing opinion regarding advertising:

It is clear that to some extent advertising increases the information of the purchaser, and hence makes the market work better. It is also clear that to some extent advertising simply is a competitive arrangement in which one firm’s advertising *cancels* another’s. We like the first kind of advertising and dislike the other... [emphasis added].

A typical example of combative competition among imperfectly competitive firms involves advertising by Coca-Cola and Pepsi. Suppose, it is argued, that Coke and Pepsi are the only producers of soft drinks, and that these two firms collude (explicitly or tacitly) to set price at the joint-profit-maximizing level. Further assume that entry is impossible, that both firms are adamant in sticking to the agreed-upon price, and that initially there is no non-price competition in the industry. With successful collusion, each firm earns monopoly profits commensurate with its capacity. Assume for simplicity that the firms have identical cost functions so that each company serves 50% of the soft-drink market.⁴

Now let Coke successfully advertise in an attempt to attract customers away from Pepsi.⁵ If Coke’s advertising is combative, its increased sales come solely out of Pepsi’s sales. Buyers are merely shifted from one brand to the other, with no increase in overall soft-drink output. But Pepsi will not stand idly by letting

⁴ Further assume that “soft drinks” define the relevant market.

⁵ Deceptive advertising is assumed away. Deception is not the reason economists generally consider advertising to be wasteful. See, e.g., COMANOR and WILSON [1974, 1 and 248, n. 11] and SCHMALENSSEE [1972, 4].

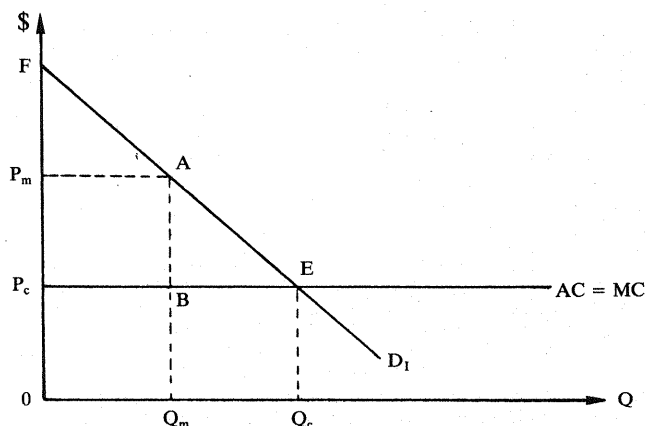


Figure 1

Coke cut into its market share. Suppose Pepsi retaliates by initiating its own combative advertising campaign that succeeds in retrieving the customers that Coke's advertisements attracted away. Not only does the advertising of each firm merely cause consumers to switch brands, but market shares are the same when both firms advertise as when neither firm advertises. However, both firms are worse off because their profits have been spent on useless advertising campaigns. More importantly, society is worse off because real resources were employed in a manner that yielded no benefits to anyone: Coke and Pepsi each have the same relative and absolute market share as before the advertising began but now their profits are lower, while consumers have the same number of soft drinks now as compared to the period before the advertising commenced. Apparently, additional resources were spent without any corresponding increase in output.⁶

This rent-seeking process is depicted in Figure 1. D_1 is the aggregate demand for soft drinks. P_c , Q_c are the competitive price and rate of output, and P_m , Q_m are the monopoly price and rate of output. Perfect collusion between Coke and Pepsi result in price P_m and total industry profits of $P_m ABP_c$. Each firm thus enjoys excess profits of $1/2 P_m ABP_c$. If the costs of collusion incurred by the two soft-drink producers is negligible, $P_m ABP_c$ is a transfer from consumers to producers, and the social cost of the monopolistic restriction is limited to the triangle ABE.

⁶ GOLDBERG [1986] points out that firms can collude to avoid problems of excess advertising. Such a possibility is assumed away for purposes of this paper. However, nothing in this paper contradicts Goldberg's conclusion that such collusion among firms can be welfare enhancing.

But the valid insight of rent-seeking theory is that excess profits are not an equilibrium phenomenon: Whenever and wherever they exist, scarce resources are used in attempts to transfer these surpluses from their current recipients to others. Because the struggle is merely to determine the distribution of an existing rent, society is poorer by the amount of the resources used up in the rent-seeking contest. Thus, because Coke and Pepsi honor the agreement not to lower price below P_m , each will compete for the other's share of profits by some non-price means. In the example this non-price means of competition is advertising. If it is further assumed that the rent-seeking competition among Coke and Pepsi is 'perfect', the total value of resources devoted to advertising is $P_m ABP_c$.⁷ Because the advertising in this case merely reallocates industry demand among industry rivals, D_1 is unchanged. Industry output of soft drinks remains at Q_m with or without advertising. The conclusion is that advertising by Coke and Pepsi transforms excess profits $P_m ABP_c$ into social waste. It follows that the total cost of private monopoly with combative advertising is the trapezoid $P_m AEP_c$. Consumer surplus is reduced to the triangle FAP_m by the price-fixing agreement, while net producer surplus is driven to zero by the rent-seeking non-price competition.

But there is an oversight in the above argument. The assertion that advertising (and other forms of non-price competition) among rivals is wasteful if the equilibrium result is that "one firm's advertising cancels another's" rests on the invalid assumption that combative competition yields no welfare gains to consumers.

However, an absence of consumer-welfare gains cannot legitimately be inferred from the fact that the non-price competition of one firm cancelled the effects of the non-price competition of rival firms. As argued in section 4, methodological consistency requires economists to refrain from labeling expenditures on non-price competition – combative or not – as wasteful. However, a detour to distinguish between rent-seeking expenditures and rent-seeking waste is necessary before moving on.

3. Rent-seeking Expenditures and Rent-seeking Wastes

Not all rent-seeking expenditures are wasteful. Rent-seeking wastes occur only so far as the amounts spent by rent seekers do not find their way into the

⁷ On perfectly competitive rent seeking see POSNER [1975] and TOLLISON [1982, 1987]. This model guarantees exact dissipation of rents – i.e., the value of available rents equals the aggregate value of resources spent by rent seekers to capture these rents. Though widely used, the competitive rent-seeking model has limitations. See, e.g., FISHER [1985]. But because the main conclusion of this paper is unaffected by violations of the perfect-competition assumption, perfectly competitive rent seeking is assumed throughout for simplicity.

pockets (or utility functions) of the sellers or grantors of monopoly privileges.⁸

A sufficient condition for rent-seeking expenditures not to be wasteful is that the persons who own the right to dispose of the monopoly privilege have complete discretion in choosing the manner of competition and mode of payment for the privilege. With freedom to select their desired form of remuneration, owners of monopoly privileges will sell these privileges to those rent seekers who, rather than waste resources, *transfer* to these owners of monopoly privileges the greatest amount of wealth or utility. A competitor for a monopoly privilege who does nothing but truly waste resources stands little chance of being awarded the privilege if his rivals are using their rent-seeking expenditures to transfer wealth or utility to those with the right to grant monopoly privileges.⁹ Persons with the right to grant valuable monopoly privileges surely will not award these privileges to others in return for nothing if they have the opportunity to receive something of value for these privileges. Owners of monopoly privileges have powerful incentives to ensure that rent seekers compete for these privileges in ways that generate as little waste, and as much transfer, as possible. Freedom to choose the method of competition for the monopoly privileges ensures that the owners or grantors of these privileges will select non-wasteful methods of competition for rent-generating monopoly rights.

Assume the Queen has complete freedom to choose the process of competition for whatever monopoly privileges she is empowered to grant. It is likely (though not necessary) that she will choose direct money payments as the method of competition among aspiring monopolists. Suppose the Queen announces that she will award an exclusive perpetual playing-card monopoly to the person offering her the largest sum of money. Suppose further that whoever wins the monopoly privilege will receive \$1,000 (in real purchasing power) of excess profits each year. The net present value of this stream of rents, with a 10% rate of discount, is \$10,000. Competition among bidders for the playing-card monopoly results in a total rent-seeking expenditure of \$10,000. If this expense is counted as a waste, the full social cost of the monopoly in playing cards is the present value of the annual losses due to allocative inefficiency plus the \$10,000 spent by rent seekers.

Of course, any such reckoning violates the subjectivist methodological prescription against making social-value assessments concerning pure transfers of wealth. Although \$10,000 of rent-seeking expenditures were made, the Queen has an extra \$10,000 that she would not have if she allowed free entry into the production and sale of playing cards. In this example, ten thousand dollars of spending power has simply been transferred from consumers to the Queen

⁸ The possibility that third parties receive benefits from rent-seeking expenditures is disregarded.

⁹ See BROOKS and HEIDRA [1988, 31]: "If the politician/bureaucrat is not made better off, for example, in the lobbying process, then there is no reason why he would respond to the pressure at all."

through those who bid for the monopoly privilege. None of the expenditures by rent seekers – at least at this stage of the analysis – can be judged to be socially wasteful.

BUCHANAN [1980] correctly points out that rent seeking takes place at different levels and that the discovery of rent-seeking wastes requires careful identification of the location of rent-seeking activity. If the \$10,000 transfer received by the Queen was anticipated at the time competition for the monarchy took place, such competition was more intense than otherwise because potential monarchs anticipated the additional monopoly returns to be secured through the sale of the playing-card monopoly. Such anticipation caused competing potential monarchs to increase the aggregate amount they spent in their attempts to win the monarchy. Of course, to the extent that the rents received by the Queen are unanticipated at the time competition for the monarchy takes place, these rents do not prompt rent-seeking expenditures and, hence, are agreed not to represent waste.

Do the additional expenditures at the level of competition for the monarchy represent waste? The answer depends on whether the person or persons responsible for selecting the monarch are free to choose the method of competition among potential monarchs. No waste occurs if it is assumed that a single person is responsible for selecting the monarch according to whatever criteria he or she freely selects. The same is true if the decision is in the collective hands of several people if we disregard potential collective-choice problems (which effectively make it costly or impossible for the collective to choose the joint-profit-maximizing way of selling the monopoly privilege). The most likely method of competition to be selected under this (unlikely) assumption is direct money payments. In this case, every dollar spent by potential monarchs is transferred to the person or persons who select the monarch. When potential monarchs vie for the position by spending money, someone in society necessarily receives this money. Standard methodology prohibits social-welfare assessments of transfers. Insofar as rent seeking is done exclusively by monetary outlays it is easy to see that the monopoly-profit rectangle represents nothing more than a transfer (HIGGINS and TOLLISON [1988]).

This argument suggests that the search for wasteful rent seeking must turn to cases in which real resources are spent by competitors for monopoly privilege. However, the use of real resources in rent seeking is not a sufficient condition for waste to occur. Again, no waste occurs as long as monopoly-privilege grantors are free to choose the method of competition among rent seekers.

Consider once more the example of the Queen selling a playing-card monopoly worth \$10,000. However, now suppose that instead of selling the monopoly for money, the Queen announces she will sell it for diamonds. Resources are thus diverted, at the margin, from their socially most valuable uses into the excessive mining of diamonds. Allocational inefficiencies (i.e., deadweight losses) clearly emerge, but rent-seeking *wastes* do not occur if the Queen was not constrained in her choice of criteria governing the rivalry among

rent seekers. The resources used to mine the extra diamonds cannot be said to be wastefully employed because the Queen is better off by the amount of diamonds she receives from rent seekers (which, presumably, is at least as valuable to the Queen as the maximum amount of money she could have received from the rent seekers).

The conclusion that rent-seeking expenditures are not necessarily wasteful remains valid even in those cases in which rent seeking results in the destruction of resources. Suppose the Queen, with complete freedom to select the method of granting the playing-card monopoly, chooses to give the monopoly to the person who builds the biggest and brightest bonfire. People will use real resources to construct bonfires in the hope that theirs is the biggest and brightest. This raising and burning of bonfires unquestionably destroys real resources. But no waste occurs because the Queen freely chose the method of competing for her favor. With complete freedom to select the conditions of the rent-seeking contest, why would the Queen select the size of the bonfires as the criterion for awarding the monopoly? The only plausible answer is that she expects to receive at least as much utility from seeing the bonfires as she could receive through the next-best alternative way of selling the monopoly privilege. Therefore, even though resources are physically destroyed by the rent seekers in this case, no waste occurs because the Queen receives an amount of utility at least equal in value to the size of the monopoly-profit rectangle. The transfer in this example is a transfer of utility to the Queen; it is simply more direct than if rent-seekers transferred real resources or money in their competition for the monopoly right. As in previous examples, waste cannot be found at a higher level (e.g., competition for the monarchy) insofar as those persons possessing the right to select the monarch are free to choose the method of competition for the monarchy.

It follows that a necessary condition for rent seeking to be wasteful is that persons owning the right to grant the privilege have constraints on their ability to choose the method of competition for the source of the rent. Once restrictions are imposed on the ability of owners of monopoly privileges to choose the method of competition among rent seekers, genuine waste can emerge. For example, suppose the Queen is prohibited by tradition from awarding monopoly privileges to persons who do not first climb the tallest mountain in the land, and that neither the Queen nor anyone else derives utility from the mountain-climbing activities of aspiring monopolists. If this mountain-climbing requirement is the only restriction on the Queen's ability to set the terms of rivalry among rent seekers, then the difference between the value of resources spent by rent seekers and the value of resources or utility transferred to the Queen is the cost of climbing the mountain.¹⁰ If it were in her power, the Queen would eliminate the mountain-climbing rule in order to divert into her purse the

¹⁰ Obviously, if the cost of climbing the mountain were greater than the value of the discounted stream of expected monopoly rents, the market value of this monopoly privilege would be zero. No rent seeking would take place under such circumstances.

resources spent on mountain climbing. As long as the rule is honored, however, the resources spent on mountain climbing are indeed wasted (at least according to static analysis).

In general, the more restricted the discretion of the monopoly givers to choose the terms of rivalry among rent seekers the greater is the proportion of rent-seeking waste to rent-seeking expenditures. If potential monopolists were required by a rule, say, to memorize *War and Peace* word for word in addition to having to climb the mountain, the amount of rent-seeking expenditures remaining to be captured as transfers by the Queen is even smaller. Thus, rules and social norms that prohibit politicians and bureaucrats from exercising a free hand in selecting the terms of sale of monopoly privileges *reduce* social welfare in any *given* monopolized industry by not allowing rent seekers to spend their funds in ways that most efficiently contribute to the utility of politicians and bureaucrats.

Of course, this fact does not imply that all such restrictions should be lifted. Such rules may reduce the number of monopolies created. By decreasing the return to monopoly-creating activities, these rules decrease the quantity supplied of politicians' services in creating and enforcing monopolies. To the extent that monopoly creation by government is undesirable, these rules may be justified.¹¹ Nonetheless, for any given monopolized industry, and according to static analysis, social welfare is maximized when owners of monopoly privileges are unrestrained in setting the terms of competition for the privileges they create. Rent-seeking expenditures are transfers rather than wastes insofar as the grantors of monopoly privileges are unconstrained in selecting the method of competition for such privileges.

4. Non-Price Competition and Consumer Choice

A basic thesis of this paper is that consumers effectively possess the right to choose the method of rent-seeking competition among imperfectly competitive firms. Because consumers are free to choose to patronize – or not patronize – producers on the basis of their advertising, product differentiation, or other forms of non-price competition, such competition must generate positive utility transfers to consumers in order for individual firms to win and maintain consumer patronage. The more intense is the rent-seeking competition among firms for consumer patronage, the greater the value of transfers from firms to consumers.

Of course, consumers do not literally tell producers just what methods of non-price competition suit them best. But such "voice" control over producers is unnecessary as long as the "exit" option is available, as it arguably is in

¹¹ See the treatment of this point by LEE [1985] in which he derives a general rule for the optimal amount of rent-seeking expenditures.

typical cases of non-price competition.¹² Because consumers can freely select among competing producers by shifting their demands to some firms and away from others, vigorous non-price competition among producers ensures that the particular forms of non-price competition that contribute most to consumer welfare emerge on the market.¹³ Imperfectly competitive firms are forced by the non-price competition of their industry rivals to promote their products in ways that transfer to consumers as much utility as possible through their advertising campaigns and other methods of non-price competition. Just as political lobbyists will not gain the favor of politicians by using resources in ways that do not affect politicians' utility functions [BROOKS and HEIJDR 1988], producers who truly waste resources devoted to seeking rents from consumers by, say, advertising poorly simply will not gain or maintain the market share that is the object of their expenditures.

Imagine, for example, a soft-drink producer spending resources for a television advertisement showing a slovenly drunkard gulping down the soft drink while devouring chocolate-covered pickles. Few people (we can plausibly assume) will respond to this particular advertisement by increasing their demands for this brand of soft drink. Hence, in this case the resources spent on the advertisement can be said to be wasted. But this wastage of resources is fully internalized on the soft-drink producer. Unless and until the firm advertises in a way that makes it worthwhile for consumers to increase their demands for this product – i.e., advertises in a way that is not wasteful – the firm's sales will not increase and its advertising expenditures will represent a cost to the firm with no positive return. Consequently, this firm will soon abandon this advertisement in favor of another that it hopes will be more appealing to consumers.

Non-price competition undoubtedly results in a destruction of real resources; however, as argued in section 3, the destruction of real resources by rent seekers is not a sufficient condition for waste to emerge. Because consumers individually choose whether or not to respond to particular forms of non-price competition (say, advertising), it must be assumed that positive consumer response to a firm's advertising reflects consumer evaluation that the advertised product is superior to the unadvertised product. If this assumption were invalid, advertising would not attract customers away from the products of firms that do not advertise. Even when all competition is combative, total output has in fact increased when it is recognized that non-price competition – even purely “persuasive” advertising – itself generates an output that is valued by consumers. Without such competition, consumers receive X units of the good from each

¹² HIRSCHMAN [1970] explains the useful distinction between voice and exit as alternative methods for imposing market discipline.

¹³ There is no way to measure the value of non-price competitive activities other than to take note of the way consumers respond to such activities. If demand for the product increases or becomes less elastic, the non-price competition appealed to consumers. No criteria other than actual consumer response is available that is consistent with economists' refusal to make interpersonal value judgments.

firm. But with advertising, consumers receive X units of the good from each firm *plus* whatever ‘utility transfers’ are provided by the combative competition. To deny this point is to *assume* that positive consumer response to a firm's non-price competitive efforts is involuntary or irrational. However, as long as consumers are free to spend their incomes as they see fit, there is no good reason for believing consumers to be any more coerced into, or irrational about, purchasing more of a product in response to, say, an increase in advertising than there is for believing consumers to be coerced into, or irrational about, purchasing more of a product in response to a decrease in price. Outside observers may find it impossible to determine a sensible reason why consumers buy more Pepsi simply because Michael Jackson appears in Pepsi ads, but the tastes and intellectual abilities of outside observers are not the appropriate criteria for assessing the correctness of consumer choices.

It is not obvious why anyone would believe that non-price competitive pressures on firms within the industry are anymore wasteful than such pressures exerted on firms outside of the industry. If interindustry competition on price and non-price margins is desirable from society's perspective, why is the assessment different for *intraindustry* competition on non-price margins? A plausible, if casual, hypothesis for this difference in treatment is that, more so than interindustry non-price competition, intraindustry non-price competition is commonly assumed to fall on the “persuasive” side of the familiar distinction between “informative” and “persuasive” sales-promotion activities. (SCHERER's [1980, 376 ff] name for the latter class of activities is “image-differentiation” activities.) This distinction biases the analyst against those competitive struggles that do not appear to alter the product or to offer more information to consumers. Consequently, “persuasive” activities such as brand-name advertising become unproductive by assumption. Another possible reason for the hostility toward intraindustry non-price competition stems from economists' habit of assuming the product in their models to be given and fixed in all dimensions except price and quantity. Once the analyst puts firms into various industry classifications, any non-price competition within the industry can, by assumption, have no effect on the quality of the product. But apart from heuristic convenience, there is no more reason for believing that product qualities and types are fixed within industries as for believing that product qualities and types are fixed among industries.

In fact, it is immaterial whether increased Pepsi sales due to advertising causes consumers to reduce only their purchases of Coke or, instead, whether increased Pepsi sales come at the expense of orange-juice producers, brewers, computer-software manufacturers, or of producers of any other products. First of all, whether or not the other firms bearing the brunt of more vigorous non-price competition from Pepsi are in the same industry as Pepsi is ultimately a matter of academic definition of industries. The long-recognized problem of correct industry definition is not solved except insofar as it is generally recognized that differences between real-world industries are always a matter of

degree and never of kind. Thus, to economists or judges who define the relevant industry very broadly, increased non-price competition will more often be judged combative relative to the number of instances of combative competition found by economists and judges who define the relevant industry very narrowly.¹⁴

Second, increased sales of one firm almost always come at the expense of other firms. The essence of competition is to lower the demand curves facing some firms in the economy. Even assuming that relevant industry boundaries exist and can be identified, why is it welfare enhancing for a firm's additional sales to come at the expense of firms in other industries but welfare decreasing when additional sales come at the expense of firms within the industry? Suppose consumers respond positively to a firm's advertising campaign. Whether consumers choose to buy less only from other firms in the same industry, or instead from firms outside of the industry, does not matter as far as welfare is concerned. A positive response by consumers implies that consumers, by their own subjective assessments, are better off with the advertising than without the advertising. Voluntarily increased demand for a product, assuming the supply functions of all other products to remain unchanged, implies that consumers now derive more utility per dollar spent from that product than they did before the increase in demand. But to have increased demand for one good generally means that demands for other goods must be reduced. Consumers who are free to dispose of their incomes as they see fit must be assumed to make these tradeoffs in utility-maximizing ways. Whether they choose to reduce demands only for goods 'within the industry', or only for goods 'outside' of the industry, it is a voluntary choice.

Consumers would no doubt prefer that whatever services they receive from non-price competition be freely available so that expenditures on such competition would be unnecessary. However, expenditures to provide goods and services that are scarce ought not be labeled as 'wasteful' based on comparisons with a hypothetical world in which these goods and services are not scarce. Because advertising and other forms of non-price competition do not reduce consumers' alternatives, consumer choices in the face of non-price competition must be considered as leading to improved consumer welfare. The identity of the firms whose demands fall in response to the improved offerings of other firms is inconsequential as far as consumers are concerned. Moreover, the particular reason *why* consumers choose to alter the patterns of their demands

¹⁴ A cross-elasticity test will not solve the problem of 'correctly' defining industry boundaries in the case of non-price competition. Because an effect of non-price competition is to make demand for firm A's output less sensitive to actions by firm B, what is the correct conclusion to draw from a finding of low cross elasticity between the outputs of firm A and firm B? Even if the cross elasticity was high prior to the non-price competition, it is a non sequitur to conclude that consumer demand patterns existing in the absence of non-price competition are more correct or valid than the patterns that exist in response to the non-price competition (HAYEK [1961]).

is irrelevant. The reasons for consumers' relative valuations, and for the resulting demand functions, are not for economists to question.

Thus, rent-seeking expenditures spawned by non-price competition for consumer patronage result in transfers to consumers from rent-seeking imperfectly competitive firms. Expenditures on advertising and other forms of non-price competition are incurred by firms in attempts to purchase patronage from consumers, and the competitive context in which non-price competition occurs ensures that the bulk of these expenditures are transfers to consumers rather than social wastes. The standard measure of the social cost of monopoly under rent-seeking must therefore be modified for cases in which there is active non-price competition for consumer patronage. As in the pre-rent-seeking model, the social cost of monopoly power is confined to the deadweight-loss triangle (*ABE* in figure 1) in cases of non-price competition among firms that successfully collude to maintain price. However, unlike in the pre- and post-rent-seeking models, consumer surplus is here not limited to the area *FAP_m* but, instead, is represented by the larger trapezoidal area *FABP_c*. The monopoly-profit rectangle is transferred back to consumers by the process of non-price competition among price-colluding firms. Compared to the conclusions of the rent-seeking model, the social cost of monopoly is less, and consumer welfare under monopoly is greater, when rent seeking among imperfectly competitive firms takes the form of non-price competition for consumer patronage.

Of course, the conclusion that consumer surplus equals *FABP_c* with non-price competition depends upon how closely reality adheres to the assumptions of the competitive rent-seeking model. With under dissipation of rents, producer surplus is higher and consumer surplus lower than is the case when rent-seeking expenditures are exactly equal to the value of available rents.¹⁵ With over dissipation, consumer surplus is greater than *FABP_c*. Either way, however, the standard conclusion in the rent-seeking literature that non-price competitive efforts by imperfectly competitive firms are wastes is invalid; to the extent that such competition occurs, it transfers surplus from competing producers to consumers.¹⁶

¹⁵ However, in this case the social cost of monopoly is the same with under dissipation as with exact dissipation.

¹⁶ The conclusion of this paper does not hold for cases in which the non-price competition among firms takes the form of physical destruction of competitors' facilities and capital. Such 'competition' unquestionably uses up resources in socially wasteful ways. However, non-price competition generally denotes methods of competing for consumer patronage, apart from price reductions, that involve appeals to consumers to prompt them voluntarily to increase their demands for a specific product. There is a fundamental difference between acquiring monopoly profits by physically destroying the capital of rival firms and acquiring monopoly profits by persuading consumers voluntarily to purchase a product on terms more favorable to the firm. Competition that takes the form of advertising, physical product differentiation, and so on, clearly falls into the latter category. See DEMSETZ [1982] and HAZLETT [1987].

5. Conclusion

Non-price competition among imperfectly competitive firms is not wasteful but, instead, effects a transfer of wealth or utility to consumers. Thus, the social cost of monopoly power with rent seeking in the form of non-price competition for consumers' patronage is less than the standard measure of social cost in which the monopoly-profit rectangle is added to the deadweight-loss triangle. Although this conclusion initially appears startling, it is actually quite consistent with accepted maxims of economic theory. First, it rests on the well-recognized need for theorists to refuse to second guess actual consumer choices. Second, it remains true to the standard rent-seeking model by accepting the claim that producer surplus is not an equilibrium phenomenon: When monopoly profits exist, resources are spent to gain access to them. However, this paper adds to the theory of rent seeking by explicitly recognizing that rent-seeking expenditures are not necessarily wasteful. If capturing the source of monopoly rents requires the alteration of consumers' expenditure patterns, rent-seeking firms will attempt to 'bribe' consumers through non-price competition to persuade them to switch suppliers. Competition among rent seekers ensures that only those firms offering the most attractive 'bribes' to consumers – i.e., those firms engaging in the most attractive form of non-price competition – will gain the consumer patronage that is the object of their rent-seeking efforts. Imperfectly competitive markets may still leave society short changed by the amount of the deadweight-loss triangle. However, the rent-seeking non-price competition prompted by firms' attempts to garner increased sales adds to consumer and social welfare in imperfectly competitive industries.

Summary

The fundamental insight of rent-seeking theory is that whenever excess profits exist, resources are expended in attempts to compete them away. However, rent-seeking expenditures are not necessarily socially wasteful. The extent to which rent-seeking is wasteful depends on the degree to which sellers of monopoly privileges can choose the method of competition among rent seekers. With complete freedom to choose, rent-seeking expenditures are transfers rather than wastes. Because consumers are the freely choosing grantors of rent-generating privileges in imperfectly competitive markets, non-price-competitive activities by imperfectly competitive firms are not wasteful.

Zusammenfassung

Die wesentliche Erkenntnis der Theorie des „rent seeking“ lautet, daß immer dann, wenn Überschußgewinne existieren, Ressourcen aufgewendet werden bei

dem Versuch sie wegzukonkurrieren. Ausgaben für „rent seeking“ sind jedoch nicht notwendig eine volkswirtschaftliche Verschwendung. Das Ausmaß, in dem solche Ausgaben eine volkswirtschaftliche Verschwendung sind, hängt vielmehr davon ab inwieweit die Anbieter von Monopolprivilegien festlegen können, wie um die vorhandenen Renten konkurriert wird. Bei vollständiger Wahlfreiheit sind Ausgaben für „rent seeking“ lediglich Transfers und keine Verschwendung. Da die Konsumenten die Renten erzeugenden Privilegien in Märkten ohne vollständige Konkurrenz in freier Entscheidung bewilligen, sind die nicht auf Preiswettbewerb abzielenden Aktivitäten der Firmen in diesen Märkten keine volkswirtschaftliche Verschwendung.

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Legal Restrictions and the Evolution of Media of Exchange

by

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1. Introduction

Perhaps the most important function of the good "money" is to be a commonly accepted medium of exchange (CAMOE). Yet it may safely be said that it is the least understood. Only recently have attempts been made to develop formal models of indirect exchange in barter economies without an auctioneer (see JONES [1976], KIYOTAKI and WRIGHT [1989], and OH [1989]). The implication of these studies is that radical departures from the neoclassical general equilibrium framework are necessary.

This paper is concerned with one of the consequences for monetary theory of ignoring or misunderstanding the origins and peculiar functioning of a medium of exchange. An influential example of the confusion that can arise from considering money primarily as a capital good is to be found in one of the claims made by the so-called "legal restrictions" school of monetary theorists.

According to WALLACE [1983], the use of non-interest-bearing money, i.e., ordinary currency, would disappear in favor of interest-bearing instruments in the absence of legal tender laws. The argument is clearly intended to cover the means-of-transaction aspect as well as others.

In a critique of this result, WHITE [1987], in addition to a discussion of the empirical evidence on laissez-faire banking which seems to disprove the theory, presents essentially two counter-arguments. The first is that ordinary currency does bear "interest" in the form of a service yield, i.e., by facilitating exchanges. The second (related) argument attacks the assumption of zero transaction costs in using bonds as a medium of exchange.

There are, however, at least two other points that deserve to be made. The Wallace argument seems to rest on two basic assumptions: i) that interest-bear-

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