Chapter 5

Abuse of Dominance

Abuse of a dominant position, or monopolization, is one of the most challenging areas of competition law in both developed and emerging markets. Situations involving abuse of dominance may range from predatory behavior by firms in isolated local markets for low-technology products (for example, industrial waste collection) to high-tech industries in which access to a network is restricted for anticompetitive purposes.

Abuse of dominance cases may have special importance in transition economies. For example, competition law provisions relating to abuse of dominance may have an important role to play in addressing anticompetitive practices that entrench former state-owned monopoly enterprises. Abuse of dominance provisions may also be useful for easing restrictions on access to distribution systems in local markets.

In cases involving abuse of dominance or monopolization it is essential to ensure that application of the law does not inadvertently curb efficient business practices. It is important to recognize that firms may achieve legitimately a dominant position in a market (for example, through innovation, superior production or distribution methods, or greater entrepreneurial efforts). Moreover, many practices that appear anticompetitive (such vertical market restraints as tying or exclusive dealing requirements) can serve legitimate procompetitive purposes in some circumstances.

Competition law provisions regarding abuse of a dominant position typically include several common elements. First, before the law can be applied it is necessary to define the relevant market in which the possible abuse is realized. Second, it is necessary to establish the existence of a dominant position by a firm or group of firms.[1] Third, it is important to identify specific practices that may be harmful to competition and assess their overall effects in the relevant market(s).

The specific content and application of these elements can vary significantly among countries. For example, some countries' laws specify that a dominant position can be inferred largely or entirely on the basis of a large market share. In contrast, some countries' statutes require consideration of entry conditions and other factors that influence the ability of firms with large market shares to exercise market power. An additional key distinction is that in some countries the mere charging of high prices or the carrying out of other exploitative acts may be treated as abuses, while in others the law focuses on exclusionary conduct by firms that harms the competitive process (that is, conduct preventing competing firms from entering or expanding).

In many—perhaps most—abuse cases fines and imprisonment are not appropriate remedies, because there is no criminal nor anticompetitive intent. In fact, the firm that committed the abuse might well have thought its behavior to be

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completely legitimate. Rather, the appropriate remedies will be either "behavioral" orders to cease conduct that thwarts the competitive process or structural measures—when permitted under the law—to eliminate the ability of the dominant firm to commit the abuse. Certainly if companies do not comply with the decision of the antitrust authority a large fine or other penalty will be appropriate.

In extreme cases efforts by incumbent firms to deter entry by potential rivals may extend to outright criminal conduct (for example, threats to the safety of individuals or corporate facilities, extortion, and so on). Then, competition agencies should seriously consider requesting the assistance of the police or other authorities to bring criminal charges.

Allegations of abuse of a dominant position may sometimes relate to industries that are natural monopolies—those in which a single firm can supply the market at lower costs than two or more independent firms can, usually because of large economies of scale. Such industries may include electricity transmission, natural gas distribution, and, possibly, parts of telecommunications and transportation.[2] In such industries there may be a need to regulate prices. Such regulation might be undertaken either by a specialized agency set up to oversee conduct in the particular industry or by the competition agency itself. But even where there are effective regulatory controls, there may still be a role for competition policy in maximizing the scope for market forces to work and ensuring that regulated firms do not engage in anticompetitive practices in unregulated markets. (For a related discussion, see the later section on remedies.)

ASSESSING THE EXISTENCE OF A DOMINANT POSITION

Determining whether a firm occupies a dominant position in a market involves two principal steps: defining the relevant product and geographic markets and assessing the degree of dominance exercised by the firm(s) within the market.

Defining markets in abuse cases

Specifying relevant product and geographic markets is essential in the development of most competition law cases (see also chapter 1. For additional background on the issues discussed in this section, see Anderson, Khosla, and Monteiro 1996.) As well as providing the basis for analysis, defining markets contributes directly in assessing competitive effects. It often has an important bearing on the application of specific statutes and on the disposition of a case. A narrow definition of a market will tend to result in higher market shares for incumbent firms, often important in establishing market power and, therefore, anticompetitive effects of some business practices.[3]

In most abuse cases definition of the relevant market is likely to be based on functional characteristics of the product and on consumer behavior. These may include physical characteristics of the product, uses to which the product is suited, and evidence about buyers' willingness to switch from one product to another as relative prices change. Other factors, such as switching costs and parallel price movements that indicate substitutability, also may be relevant. Similarly, defining the relevant geographic market is likely to be based on factors, such as transportation costs and perishability, that limit the ease with which products can be moved over long distances.[4]

Markets in antitrust (especially merger) cases are sometimes defined using the "prospective price increase" or the "hypothetical monopolist" approach. This asks whether consumers, faced with a price increase, could easily switch to an alternative product or another supplier. If the answer is yes, then the alternative product and source of supply is included in the relevant market for the case.[5]

The underlying principle—the focus on consumer responses to price increases—can also be useful in defining markets in abuse of dominance cases. The application of these principles, however, is different. That is, abuse or monopoly cases typically relate to a lessening of competition that has already occurred rather than what may occur as a result of a proposed merger. In abuse cases it is likely that prices will already have been raised above competitive levels. And any further increase will probably result in massive substitution by consumers. Such evidence of substitutability is, however, entirely consistent with the exercise of market power in a properly defined market in an abuse of dominance case. Of course, at the investigation stage it is not certain that an abuse has occurred and that prices are currently above competitive levels, but the investigator should be aware of this possibility.

This point is illustrated by the U.S. cellophane case, which involved allegations that the du Pont de Nemours & Company had monopolized the supply of cellophane in the United States in violation of the Sherman Antitrust Act.[6] The U.S. Supreme Court defined the relevant market as consisting of a broad range of flexible wrappings, including waxed paper and other materials, as well as cellophane. The Court found that these products were perceived as reasonably interchangeable by consumers. Some commentators, however, say that the Court was wrong in defining the market so broadly. In particular, it failed to recognize that consumer willingness to switch to alternative products at a monopoly price is fully consistent with the exercise of market power by a monopolistic firm. As a result it failed to appreciate the extent of market power exercised by the du Pont Company.

More generally in abuse cases, defining the relevant product and geographic markets should take into account the impact of alleged exclusionary practices, which typically sit at the heart of the case. An example: contrast the relevant market useful for assessing a merger of banks offering Visa and MasterCard services with the relevant market necessary for analyzing alleged exclusionary conduct by Visa and MasterCard toward a new low-priced card entrant. The first case would include new card issuers who would enter the industry if the price of credit card services rose significantly. But such potential entrants would be excluded in the second case because firms that would enter only at a higher price are not relevant to assessing the feasibility of entry by a low-price firm (which could result from the elimination of the exclusionary practices; for further discussion of this example, see Salop 1993).

In some cases it may be preferable to look for direct evidence of exploitation of market power (for example, abnormally high prices or profits) rather than focus on market definition. Alternatively, one may look for historical evidence of a decline in output or excessive price increases following implementation of alleged exclusionary practices. The use of such evidence can carry significant problems of interpretation and reliability, however (Fisher and McGowan 1983), but it could be relevant in some cases.

Evaluating the existence of a dominant position

Once the relevant markets have been defined, it is generally a straightforward analysis to determine whether a firm occupies a dominant position. This depends on two main factors: the market share of the dominant firm and the extent of entry barriers.[7]

THE ASSESSMENT OF MARKET SHARES. In general, the greater the market share of an alleged dominant firm, the more likely it is to exercise market power. It is nearly impossible to set out market share thresholds at which a firm can be judged to have or not have significant market power. It is unlikely, however, that a firm with a market share of less than 35 percent would have the ability to reduce output or impose a significant price increase above the competitive level. Conversely,

where a firm has a market share of 65 percent or more, it is much more likely to exercise market power, if significant entry barriers exist.

In addition to its own market share, a firm's ability to exercise market power may also depend on the size of other firms in the market. For example, even if a firm has a market share of 50 percent, its ability to exercise market power may be limited if the rest of the market consists of a small number of competing firms that compete vigorously with the leader as opposed to a cluster of weaker firms that simply adopt prices established by the leader. Finally, even where a single firm has an overwhelming share of a market, it may be unable to exercise market power if entry by new firms or expansion by existing competitors is easy.

ASSESSMENT OF ENTRY CONDITIONS. Identifying entry barriers in abuse cases is not so different from other antitrust cases, for example, merger cases (see annex 1). There are, however, two special considerations in abuse of dominance cases. First, as in defining relevant markets, assessment of barriers to entry should take into account the theory of the case. Barriers that would be ineffective if prices were raised higher than prevailing levels may still be relevant in assessing exclusionary practices that prevent prices from falling below current levels.

Second, the conduct being investigated can in some cases be the most significant barrier to entry. The ability of firms to deter entry through behavioral as opposed to structural barriers is increasingly recognized (Ordover and Saloner 1989). Such entry-deterring conduct includes predatory pricing, exclusionary contractual provisions, tying requirements, and use of fighting brands. Thus valid cases of abuse may sometimes involve markets in which there are few barriers in the more traditional, structural sense of specialized physical assets.[8] Of course, traditional structural barriers in a market would reinforce concerns about the potential anticompetitive effects of restrictive business practices.

IDENTIFYING AND INVESTIGATING ABUSES

Two broad types of business conduct have traditionally been recognized as abusive by competition laws and enforcement agencies:

- Exploitative abuses, in which a firm takes advantage of its market power by charging excessively high prices to its customers, discriminating among customers, paying low prices to suppliers, or through related practices.
- Exclusionary abuses, in which a firm attempts to suppress competition—for example, by refusing to deal with a competitor, raising competitors' costs of entering a market, or charging predatory prices.

These practices are abusive when put in place by a dominant firm because the market does not offer alternatives for consumers. However, when there is sufficient competition in the market, such behavior (especially potentially exclusionary acts) may enhance market efficiency and benefit consumers because it is motivated by the need to compete efficiently, not to make anticompetitive profits. Thus because potentially abusive acts and practices can help promote competition, determining whether such practices constitute abuse is among the most difficult tasks facing a competition agency. A thorough economic analysis of the anticompetitive effects of alleged abusive behavior is needed, even when a firm clearly enjoys a dominant position.

It is worth noting that in some legal systems there is a presumption that certain practices by dominant firms are inherently unfair. This approach has the merit of facilitating the design and enforcement of new competition laws.

With exploitative abuses it is often difficult to clearly say what is an acceptable exercise of market power. For an enforcement agency it is

almost impossible to define the "right" price a dominant firm should charge for the sale of products or services, since accurate and timely information on costs and demand is generally unavailable or expensive to acquire. Therefore, competition agencies should seek to minimize the extent to which they regulate prices of individual firms and focus more on seeking to prevent dominant firms from engaging in exclusionary acts that threaten competition. Some countries specify that setting "excessive prices" can constitute an abuse, but competition agencies are more likely to promote a healthy market economy if they limit their involvement in direct price regulation. Moreover, if firms expect that their prices will be regulated if they grow and capture a sizable share of a market, their incentives for innovation and entry into new markets will be diminished, damaging consumer welfare in the long run.

Exclusionary abuses also require careful analysis. This should take account of the competitive environment in which the firm operates, because a potentially abusive practice (such as exclusive dealing) may also help firms compete more efficiently (by, for instance, improving the quality of service to consumers). A dominant firm may compete aggressively, say, as a reaction to a threat from its competitors not simply to exclude others from a market. Such behavior should not necessarily be considered abusive since it may provide substantial advantages for consumers.

In industrial economies it is important to assess possible efficiency rationales for potentially abusive behavior because competition authorities should not discourage firms to compete aggressively nor punish those that are successful through legitimate means. This concern may not be as great in transition economies, in which dominant positions may be the result of recent privatizations and restructurings, not superior performance over an extended period. (For a further discussion of abuse of dominance cases in transition countries, see appendix 5.2 to this chapter.) Nevertheless, competition agencies should always be aware that potentially abusive acts can in some circumstances yield efficiencies, even for firms with large market shares. Thus efficiency considerations should always be taken into account in analyzing the competitive effects of business practices.[9]

Excessive prices

Prices may be high for many reasons, including surges in demand, high unit costs, and exercise of market power. To prevent a dominant firm from abusing its position and charging excessive prices, antitrust enforcers should be more concerned with the reasons that lead to high prices and profits than with the prices themselves. This is partly because it can be difficult and time consuming for a government agency to determine a firm's costs, which must be known to judge whether prices charged are excessive and to set the "right" price. It can be difficult to determine costs when a firm makes only one or a few products; it can be impossible for a firm that produces lots of products. Moreover, price differences among firms can often be explained, at least in part, by quality differences among products. Thus it is not easy to conclude confidently that prices charged for particular products are excessive and should be reduced.

There is another, serious risk with regulating prices. In a market economy profits serve a critical function: when firms earn high profits, they create an incentive for others to enter the industry. When firms earn relatively low profits, they have an incentive to exit. By responding in this way, firms are more likely to produce goods and services that are highly valued by consumers—efficient and good for consumers and firms. This process requires that prices for the most part be unregulated. When government agencies regulate prices, the crucial role played by profits in providing incentives to enter and exit does not work well.

Of course, some firms cannot or do not enter markets even when profits are high. This is often the case in industries in which firms have been granted a legal monopoly by the government, as in most public utilities.[10] However, many other sectors of the economy may be heavily regulated, making it difficult for a new and more efficient firm to enter the market. Thus an important role for a competition agency can be to advocate removal of legal barriers to entry. Competition agencies can provide recommendations to legislative bodies and other government agencies on how laws and regulations can be modified to strengthen competition and improve efficiency.[11]

There are, however, some industries in which the market can support only one firm even when there are no legal barriers to entry. These natural monopolies can arise when economies of scale or economies of scope (or both) are so strong that the costs of production are lowest when a single firm supplies the market. Examples may include electricity transmission and local water supply.[12] In Western economies the prices and practices of natural monopolies are often not under the jurisdiction of the competition agency but reviewed by regulators. Transition economies may wish to consider a similar approach.

When a regulatory agency does not exist, the competition authority would likely be responsible for ensuring that the industry performs as competitively as possible. If the industry is truly a natural monopoly (that is, cost considerations dictate that only one firm should supply the market), then the competition agency may need to consider regulating prices and practices of the firm. But given the difficulty of regulating prices, such action should be taken only when it is clear that the market is indeed a natural monopoly and that entry cannot be expected to help restore competitive pricing.

Finally, excessive prices may not result from superior efficiency of the dominant firm but from exclusionary practices aimed at abusively extending or maintaining dominance. For example, a vertically integrated dominant firm may refuse to sell some of its products to other firms. Such practices can promote higher prices. For instance, a telephone company may refuse to sell information on subscribers, so that it can be the sole provider in the markets in which such information is most valuable (for example, mailing list services, direct marketing, and marketing research). Competition might then be reduced in these markets. The best course of action is to put a stop to the practices that restrain competition, eliminating the firm's ability to charge excessive prices.

Price discrimination

Price discrimination is the practice of a seller charging different prices according to the profile of the customer and in the absence of appreciable cost differences that might justify different prices. A discriminatory strategy can also involve charging the same price to customers even though there are different costs of supplying them. With price discrimination, a firm may earn higher profits than when it charges a single price (net of costs) to all consumers. Some extra profits may come from increased sales; thus price discrimination can increase a firm's total production.

Price discrimination requires that a firm identify different consumers who are willing to pay different prices.[13] The firm must also be able to prevent arbitrage, that is, prevent the disadvantaged consumers from purchasing the product from the consumers who buy it at a favorable price. In theory, there are few markets where arbitrage is not possible, but in practice arbitrage may require complex contracts or that consumers overcome inertia, uncertainty, and instability—or both. Thus competition agencies should not use theoretical arguments to conclude too quickly that discriminatory practices cannot occur. Nor should they assume too easily that the

conditions for successful price discrimination are easy for a firm to meet.

Showing that price discrimination is harmful to consumers can be difficult. In many cases the difference in price may not be discriminatory because it can be explained by differences in the cost of serving different consumers. For example, consumers who pay higher insurance premiums or higher interest rates may be more risky—and thus more costly to supply—than consumers who pay lower rates. In other cases price differences for what appears to be the same product can be explained by quality differences. To rule out such cost-based or demand-based explanations, competition agencies would have to estimate a firm's costs. But it is well known that such analysis can be time-consuming and uncertain. Therefore, price discrimination investigations should not be made a high priority.

In theory, discrimination can be exclusionary when a dominant firm charges lower prices to buyers more likely to switch to other suppliers. It is difficult, however, to distinguish this practice from that of a firm selling to customers willing to pay only a lower price and not the nondiscriminating price. This practice (referred to in the economic literature as third-degree price discrimination) can result in more customers being supplied than would be the case with a single price for everyone. In general, if a discriminatory strategy leads to an increase in the quantity sold, then it should be considered procompetitive.

Another way of discriminating among customers is to set up discount schemes. Discounts usually refer to large single orders in which some economies of scale (for example, in transport) lead to a reduction in the total unit cost of supply. Other types of discounts are granted in relation to the total orders placed by a customer in a certain period, for example, a year. Such an effect is greatly increased when a dominant firm sells many products and the discount scheme operates for all sales, irrespective of the quantities of each product bought.

Although they might increase the cost of entry especially when imposed with long-term contracts, discount schemes are a powerful instrument of competition and normally benefit consumers. Moreover, they can be justified on efficiency grounds, since they allow a firm to pass on to customers substantial cost reductions—for example, because they bring about a significant reduction of sales efforts.

Discounts can be restrictive if they become similar to exclusive contracts—that is, if they are granted only to customers that agree not to buy from other competitors, thereby raising barriers to entry. In this case, however, what matters is the exclusive aspect of such contracts (how binding and how lengthy is the exclusivity clause). In fact, the restrictiveness of discount schemes must be analyzed case by case and should be assessed according to the costs they inflict on new entrants and by the disadvantages suffered by consumers.

Tie-ins

A tie-in is the sale of one product (the tying good) on condition that the buyer purchase another product (the tied good). In general, such behavior should not be considered abusive if the firm does not have market power in the tying good. Even when the firm does, establishing that a tie-in is abusive requires detailed analysis of the purpose of the tie-in and the market context.

Sometimes two products are vertically related, with one good an input in the production of the other. If so, the competition agency must try to understand the reasons for the tie-in. In general, a tie-in cannot be motivated by abuse if the two products are used in fixed proportions (as might be the case in an industrial process): the dominant firm could maximize profits by charging a sufficiently high price in the tying market, and the tie-in practices would not increase profits.[14]

Tying is often motivated by the firm's desire to maintain or increase its reputation for qual-

ity or product reliability. This should not be considered abusive since it increases efficiency and market demand. For example, poor servicing of a dominant firm's product by an independent company may negatively influence the reputation of the dominant firm and result in lower sales. To avoid this the dominant firm might sell its products and services together through a tie-in contract. Nevertheless, it is worth considering whether the legitimate aim of the dominant firm to maintain or increase its reputation could be reached by less restrictive means, such as an improvement of its quality control processes.

Tying raises concerns for competition policy when it allows supranormal profits to be made in a properly defined market. This might be the case when tie-in practices raise entry barriers to competitors and enable the exercise of market power in the tied market. Tying can also be an abuse if used to evade price regulation on the tying good. Suppose a dominant firm has market power in its primary product. Suppose further that the dominant firm's price is regulated, which effectively prevents it from earning all of the monopoly profits that it could if there were no regulation. The dominant firm would have an incentive to sell its regulated product on condition that another product is purchased (whose price is not regulated) and then set the price of the bundle to capture all monopoly profits in the regulated good.

Some tie-ins could be used in moderately competitive markets to exploit consumers. In particular, consumers who have bought a relatively expensive durable good may have no reasonable choice but to go to the manufacturer when replacement parts or service is needed—the so-called lock-in effect. Even when the primary product market is competitive, the seller might be able to take advantage of consumers who have already purchased the good and do not have many alternatives for replacement parts. If future consumers of the good are informed of this practice, however, they will consider parts prices when they make their original purchase. In this situation, if the manufacturer also faces competition for the original product, its ability to exploit locked-in consumers will be reduced if not eliminated.

The competition agency must determine whether the conditions necessary for anticompetitive lock-in—imperfectly informed consumers, weak efficiency explanations for the tie-in—exist in sufficient measure to raise competitive concerns. If, for example, the cost of replacement parts is substantial in relation to the price of the durable good, as, say, with a motor car, the replacement parts market would not constitute a properly defined relevant market. Consumers would switch to a different car should they be charged monopoly prices in the replacement parts market. In other words, if consumers were informed about all costs they would incur by purchasing a given product, then the tie should not be worrisome for antitrust authorities since competition in the primary market could provide enough discipline to the firm.

Of course, consumers may be unable to anticipate all costs related to the use of a product and might be subjected to abusive behavior by a dominant firm trying to exploit a possible asymmetry of information.[15] Such a situation may not be common. It refers in general to products bought infrequently, and where exploitation would not appreciably affect future demand for the firm's product. In general, consumers learn from experience. If they are exploited with a tie-in contract and there is competition in the primary market, then their ability to easily switch suppliers may deter the abuse.

Refusal to deal

Competition law does not generally impose on firms a duty to cooperate with competitors. When a firm (even a dominant one) refuses to deal with another firm with which it has a vertical relationship, the result may not be anti-

competitive. For example, a dominant pipeline company's refusal to deal with an oil producer could reflect various procompetitive rationales: poor reputation of the oil producer, efficient management issues, or peak load concerns. In this example, there are circumstances, however, in which a refusal to deal with an additional customer would be anticompetitive. This would be the case if a powerful group of existing customers were to threaten the pipeline owner that they would build another pipeline, should it grant access to some other firms.

Refusal by a dominant firm to grant access to a firm producing a scarce input necessary to operate in a downstream market in which the dominant firm also operates may be an abuse. This may occur when the price of the scarce input is regulated and the firm tries to extend its dominant position in a vertically related (but unregulated) market. The monopolist finds it profitable not to deal with a downstream competitor because it can overcome regulatory constraints on profits by keeping the competitor out and supplying the service itself. Profits would be earned not on the regulated market but on the competitive (unregulated) one. This behavior is particularly common in recently deregulated industries in which some markets are open to competition but others are still legal monopolies.

In *De Montis Catering Roma v. Aeroporti di Roma,* a state-owned company controlling the Rome airport and having an exclusive license to provide maintenance and ground services denied access to the airport premises to a company wishing to compete for airline catering, a service in which the licensee had a de facto monopoly but which was not covered by its exclusive rights. The Italian Antitrust Authority found no justification for the refusal and Aeroporti di Roma was charged with trying to extend its monopoly power in a related market and with hindering competition and damaging users of catering services because of higher prices and lower quality of services supplied by the airport to airlines.

In general, to assess abuse in cases of refusal to deal it is necessary to look at: the market power of the firm, the rationale for the refusal, and the resulting competitive harm. As always, it is critical to properly define the relevant markets. If the relevant downstream market is such that the shut-out firm can sidestep the refusal and still be a competitor, the refusal to deal cannot be anticompetitive. Even when this is not possible, it may be that the facility could be duplicated at reasonable cost in a reasonable time.

Especially in refusal to deal cases, competition agencies should be careful not to mistake injury to competition with injury to individual competitors. Orders requiring firms to provide mandatory access to "essential" facilities should be sought only when the benefits of providing such access clearly outweigh the costs. Thus competition authorities should avoid embracing an excessively broad "essential facilities doctrine," that is, routinely compel firms to deal with rivals, which often benefits competitors but not competition.[16] Indeed, competition agencies that regularly impose on large firms a duty to deal with competitors run a serious risk of discouraging firms from investing in new goods and services for fear that they could not earn an adequate return.

Predatory pricing

Predatory pricing is the practice of a dominant firm selling its products at prices so low as to drive competitors out of a market, prevent new entry, and successfully monopolize the market. The cost can be high, but a predator expects future discounted profits to outweigh present losses and forgone profits. If the firm operates in more than one market, selling its product in some markets at prices below costs may help sustain high cartel prices in others, although supply might be diverted to the market with higher prices.

Predation is condemned not because it results in lower prices now, but because it is likely to lead to reduced output and higher prices

in the future. For this to occur other firms must be weak, there must be barriers to reentry into the market so restoration of competition is not possible after existing competitors have exited, and profits to be gained in the postpredation period must outweigh all losses. These conditions are not normally present, however, in a healthy market economy, and genuine instances of predatory pricing are rare.

Some countries have ruled that prices may only be predatory if they are set below marginal cost. Prices below average variable cost (and below marginal cost), however, can be rationalized in times of distress. Since marginal cost is difficult to calculate, the rule of thumb in antitrust proceedings has been to approximate marginal cost by average variable cost, which is easier (but by no means simple) to measure or estimate. One danger in doing this arises with industries with excess capacity. For these, the average variable cost may be much higher than the marginal cost, and a firm may be accused of predatory pricing even if prices are roughly equal to marginal costs. In any case, charging prices just below competitors' marginal cost (limit pricing) may be exclusionary, but such pricing would not be considered predatory if the firm's price exceeds its marginal cost. Prices above average total cost should never be considered predatory. Prices between average total cost and average variable cost can represent an investment in promotion (they are not sustainable in the long run).

If entry into the market is easy, it is virtually impossible to claim that predatory pricing is occurring, because the firm would be unable to raise prices in the future (Joskow and Klevorick 1979). Although some competitors may suffer losses, these are due to low prices in the market (which benefit consumers), and any losses the dominant firm suffered in an attempt to monopolize the market will not be recovered. Many countries find it useful when assessing predatory pricing allegations to first consider whether there are sufficient barriers to entry or reentry to make predation a viable strategy.[17]

Raising rivals' costs

Raising rivals' costs may be less costly than predatory pricing as a means of excluding competitors from the market, because it may not require a direct reduction in profits for the dominant firm. The 1961 *Pennington* case is often referred to as a classic example.[18] This case involved the strategic use of collective bargaining arrangements by a dominant firm. It was alleged that higher wages industrywide were actively encouraged by large producers to increase the costs of smaller, marginal firms in the U.S. coal-mining industry. Supposedly, a high wage level for the industry benefited capital-intensive firms, since it had a proportionally smaller impact on their costs than on smaller, labor-intensive competitors (Williamson 1968). But it is difficult to actually prove that a dominant firm accepted high wages for its employees just for the sake of raising the costs of its competitors.

Other examples of raising the cost of a small rival is by engaging it in litigation (fixed costs weigh more on a small budget), or strategically advertising to such a degree that it raises sunk-cost investments for small rivals and potential entrants. With advertising, however, such expenses should be more properly considered an investment in the reputation of the firm. Moreover, a firm's reputation may not be limited to the market to which the advertisement is directed. Thus many firms that have gained a reputation in one market use it to enter a different market. For instance, firms with high standing in the fashion industry have used their reputation to move into other markets, such as perfumes or shoes.

Vertical restraints

Vertical restraints are restrictions that an upstream firm (for example, a manufacturer or a

wholesaler) places on its downstream firm (for instance, a retailer). Vertical restraints include exclusive territories (downstream retailer agrees to limit where it sells the product); exclusive dealing (retailer agrees not to sell rival products); and resale price maintenance (retailer agrees not to sell below prices established by the manufacturer). Sometimes they are used together; for example, exclusive territories may be used along with resale price maintenance. When such restraints harm competition, it is usually in a standard horizontal context.

There are two ways in which vertical restraints might harm competition. First, they might be used to support collusion. Second, they may raise rivals' costs, thus creating or strengthening barriers to market entry. Although the second is more relevant to abuse investigations, the first might also apply. For instance, an upstream firm with a dominant position might collude with its competitors and use the vertical restraints as instruments of policing a cartel. At the same time the competitive environment would have also weakened for retailers.

Vertical restraints can also hurt competition when they raise rivals' costs. Because vertical restraints can promote procompetitive outcomes as well as anticompetitive ones, however, it is crucial that competition authorities make this distinction. For instance, antitrust laws would not be violated if a manufacturer used vertical restraints—establishing, say, a network of exclusive dealers—to better control costs and, as a result, expand sales relative to smaller rivals. Higher-cost rivals would be disadvantaged by the dealership network, but the (more efficient) exclusive network should not be considered a violation of antitrust laws.

Another way in which vertical restraints might raise rivals' costs and hurt competition is the following. Suppose a dominant firm in a manufacturing market possesses market power but is not a monopolist, that is, it faces competition from other manufacturers, which restrains the price that the manufacturer can charge its dealers. Suppose also that downstream dealers typically carry products of many upstream manufacturers. Finally, suppose that the manufacturer negotiates with its downstream dealers contracts that contain vertical restraints—say, an exclusive dealing provision. Unless rivals can find alternative dealers, the manufacturer's exclusive dealership network raises rivals' costs of distributing products. Thus prices paid by consumers for rival products increase, permitting the manufacturer with the exclusive network to raise the wholesale price to its exclusive dealership network. Consumers are hurt as a result.

Two additional points should be made about this vertical restraint. First, there must be barriers to entry into the dealer market. If, instead, services provided by a dealer in the exclusive network could be easily replicated by other dealers (that is, barriers to entry are low), then costs of the dominant firm's rivals would not increase and there would be no harm to consumers.

Second, the competition agency must strive to link the exclusive dealership network to higher costs incurred by the manufacturer's rivals. (In some jurisdictions, profits lost are also taken into consideration.) This can be difficult, but it must be done to distinguish an anticompetitive use of vertical restraints from a procompetitive one. Note that it is not sufficient to simply look at the effects of the vertical restraint on rivals. Regardless of whether the network has anticompetitive or procompetitive effects, rivals will experience a decline in market share.

Vertical restraints, even when used by a dominant firm, can promote efficiency. One such use is the prevention of free riding. For example, a manufacturer may use exclusive dealing to prevent dealers from promoting its product to lure consumers into the store but then selling them a rival's product. Alternatively, a manufacturer may require dealers to set a higher retail price to induce retailers to provide important service to consumers or to carry addi-

tional inventories to reduce the chances that consumers will be unable to find the product if demand is particularly strong. Finally, upstream manufacturers may use exclusive territories to provide its retailers with a stronger incentive to promote its product, thereby promoting an increase in interbrand competition at the expense of intrabrand competition.

Abuse and intellectual property

Competition policy and intellectual property rights (including patents, trademarks, copyrights, registered industrial designs, and integrated circuits) are receiving increasing attention from policymakers. Intellectual property rights have figured importantly in several recent competition law cases in western jurisdictions.[19] There are various reasons for this phenomenon. First is the growing importance of knowledge-based industries and the role of technology in such industries. Second, as the world has shrunk and the notion of distinct national markets has become less reflective of commercial realities, there appears to be a growing focus on intellectual property rights as a way to facilitate market control.

In most cases the exercise of intellectual property rights is consistent with the goals of competition policy. Such rights generally strengthen competition in the long run by providing incentives for the development and production of new products and production processes. In most cases it is possible to find a number of substitutes in the market also for products that are protected by intellectual property rights (see, for example, McGrath 1984, 355–65). As a result, the existence and exercise of such rights should not usually be a source of concern to antitrust authorities.

Nevertheless, abuses in the acquisition and exercise of these rights can be a legitimate concern for competition authorities in some cases. Practices that may raise competition issues fall into three main categories: the acquisition of patents, the transfer of technology through licensing arrangements, and cooperative arrangements among innovating firms. These practices raise concerns when they constitute attempts to extend market power by excluding entry into a market, suppressing innovation. At the same time, these practices may also serve legitimate, efficiency-related purposes (OECD 1989).

Licensing agreements are an important means of transfer of technology between firms, especially in the international context. Such contracts are often complex and include an array of vertical and other restrictions on the licensee, including technology grant-backs, tie-ins, territorial market limitations, and field-of-use restrictions in technology licensing agreements. Broadly speaking, the factors to be considered in distinguishing anticompetitive from procompetitive licensing are the same as those in relation to other anticompetitive practices.

In 1995 the U.S. antitrust authorities issued new Antitrust Guidelines for Intellectual Property Licensing. The guidelines emphasize that the treatment of licensing arrangements depends importantly on whether the relationships between the firms involved are primarily horizontal or vertical. Competition is more likely to be harmed when the firms are horizontally related (that is, they are, or in the absence of the license would be, competitors). In this case the licensing arrangement may harm competition by raising prices in an existing market or reducing the pace of innovation. But the licensing arrangement's possible efficiency-enhancing effects should also be considered.

The guidelines set out an antitrust safety zone, within which licensing arrangements will not normally be challenged. These include those in which there are no per se rules and in which the licenser and its licensees together account for no more than 20 percent of the relevant market or markets.

Arrangements falling outside the safety zones depend on various factors:

- Their implications for market structure, coordination of pricing or output, and foreclosure of access to inputs.
- The extent to which they impose exclusivity. The guidelines refer to two specific types: exclusive licenses, which restrict the right of licensors to license others or to use the technology themselves (or both); and exclusive dealing, that is, when a license restrains a licensee from using competing technologies.
- The history of rivalry and the pace of innovation in the markets affected.
- Efficiencies resulting from the arrangement. If these outweigh anticompetitive effects, the arrangements generally will not be challenged (U.S. Department of Justice and Federal Trade Commission 1995, 18–22).

In the past, developing countries have been especially concerned with the use of restrictive licensing practices (for example, tying requirements, exclusive territories, exclusive grant-back clauses, or field-of-use restrictions) in international technology licensing agreements. Competition enforcement should address such practices case by case. A strict approach is likely to be self-defeating. Sweeping prohibition of restrictive practices in international licensing agreements would raise costs or reduce incentives (or both) for technology owners to enter into voluntary arrangements. Voluntary arrangements are also more likely to promote the host country's technological advance rather than to promote compulsory measures; they are more likely to be accompanied by transfer of nonpatented know-how and capital investment, which are necessary to effectively use information protected by intellectual property rights.

ASSESSING ABUSE RESULTING FROM GOVERNMENT INTERVENTION

Broadly, competition laws apply to firms' practices not to government decisions. If a (validly enacted) statute or regulation limits competition unnecessarily, however, a competition agency may have an important role in advocating procompetitive change to the legislation.

In this context it is useful to introduce a kind of hierarchy of the discretionary power of firms. A firm is clearly responsible for its practices if it makes decisions independently of any public intervention. The same is true if the government merely encourages firms to move in certain directions but does not require them to follow specific practices. Further, even if there were a regulatory intervention and the firm had some discretion over its action, practices can violate antitrust rules if the firm could reasonably have engaged in a course of action less restrictive than that chosen.

There are jurisdictions in which a practice stemming from a government decision can still be subject to antitrust proceedings. For example, in the United States the State Action Immunity doctrine imposes implied limits on conduct that may be shielded from liability under antitrust laws by regulatory actions of state and local governments. Behavior of firms subject to regulatory intervention is exempted from the law only if the conduct is undertaken pursuant to a "clearly articulated and affirmatively expressed" state policy and is "actively supervised" by the state.[20]

The possibility of applying antitrust law to private behavior that originates from some legally binding rule or regulation is even stronger in the European Union. The Treaty of Rome, as interpreted by the jurisprudence, limits the possibility for member states to provide firms with special and exclusive rights in order to avoid conflict with other provisions in the treaty, including those on competition. In particular, a government decision can be challenged under EU rules if it leads to behavior by private firms that contradicts competition principles.

Thus public monopolies or the licensing of special and exclusive rights have been considered unlawful if they lead to a company abusing

its dominant position to the disadvantage of consumers. In one case the European Commission ruled that a telecommunications service provider could not be given the power to set standards for telecommunications equipment of which it was a major supplier. Such power would inevitably be abused by the service provider, since it could decide whether the products of its competitors could enter into specific markets.

The concept of abuse developed by the European Court of Justice extends into broader applications in situations in which government action improperly restricts entry into a market. In the case *Hofner and Elser* the European Commission held and the European Court of Justice confirmed that the Federal Republic of Germany contravened article 90 of the Treaty of Rome when it granted exclusive rights to an employment agency.[21] The European Commission concluded that the agency abused a dominant position because it was unable to fulfill consumer demand, an abuse that could exist only because entry into the market was forbidden by law. To eliminate the abuse, the court ruled that the market be opened up to competition.

In most jurisdictions private conduct that is required by regulatory intervention or by law is not subject to antitrust remedies; only practices in situations in which firms enjoy some freedom of choice are so constrained. Conduct by regulated firms outside the market in which they enjoy special or exclusive rights is most likely to be subject to antitrust scrutiny. Regulated monopolies have an incentive to extend their dominant position through exclusionary practices into other markets to gain unregulated monopoly profits.

In *Telsystem v. Sip,* the Italian national telecommunications company, which has a legal monopoly over the public-switched network, refused to lease lines to a smaller company wishing to compete in providing closed user groups services, which had been liberalized under a European directive. Denial of access caused losses and closed the market to the potential competitor, denying also a service to consumers. The Italian Antitrust Authority ruled that the unjustified refusal was aimed at preserving a dominant position in a relevant market different from that in which the monopolist has exclusive rights. The authority decided that such behavior was an abuse of a dominant position.

Another case involving exclusive rights granted to state-owned companies, *Sign v. Stet-Sip,* concerned access to telephone subscribers' lists by a would-be competitor in the market for information services to subscribers. In Italy, as in many other countries, the national telecommunications company has exclusive rights over production and distribution of subscribers' lists and holds dominant positions in downstream activities that use these lists to sell services to consumers and businesses. The refusal to sell subscribers' lists on CD-ROM or to provide access to the on-line database to prospective new entrants was considered an abuse of a dominant position by the Italian Antitrust Authority. The authority observed that no single company could be allowed to duplicate the database and sell the information on the market. The legal monopoly that the company enjoyed could therefore be interpreted as imposing a duty to deal with everyone.[22]

EVALUATING THE EFFECTS OF BUSINESS PRACTICES ON COMPETITION AND EFFICIENCY

In abuse of dominance or monopoly cases it is important to ensure that the law does not inadvertently curb superior efficiency or adoption of efficient business practices. Firms may achieve a dominant position through methods that are perfectly legitimate (through innovation, adoption of superior production or distribution methods, or greater entrepreneurial efforts). Moreover, many practices that appear to be anticompetitive (vertical market restraints, such as tying or exclusive dealing requirements) can serve legitimate procompetitive purposes.

Determining whether these practices are, in fact, pro- or anticompetitive is a question that should normally be resolved on a case-by-case basis. This will involve reviewing the full implication of evidence and findings of fact establishing that firms occupy a dominant position and have engaged in anticompetitive actions.[23] Thus a firm under investigation may have a high market share, and there may be substantial barriers to entry that would normally support a finding of dominance. Before reaching a final decision, however, the competition authority should consider alternative explanations for structural dominance, such as whether an industry has the characteristics of a natural monopoly. Furthermore, an absence of multiple, independent suppliers in a market at any given time does not necessarily imply that competition has been suppressed, if there are minimal barriers to entry and evidence indicates that the market position of individual firms has shifted over time. Rather, it may be that competition within the market has been supplanted by potential competition.

The views of affected consumers are essential in an analysis of the impact of business practices. The issue to be resolved in abuse cases (as in other antitrust cases) is simply how do the practices under examination affect choices available to users (Pittman 1994)? For example, if a practice such as territorial market restraints has resulted in better service to consumers by preventing free riding, then the conduct would normally be considered procompetitive. However, if a practice makes it more difficult for alternative suppliers to enter the market without offsetting advantages for consumers, it is clearly anticompetitive. Unlike rivals, customers do not have the incentive to complain about practices that lower the dominant firm's costs, but customers may be reluctant to state either informally or formally that the dominant firm is abusing its position.

Another useful analytical tool is to consider the effects of practices with reference to the dynamics of an industry. If a practice is efficiency enhancing, then small as well as large firms will have an incentive to adopt it. In this regard it is relevant to ask: did the firm engage in the practice when it was smaller? Or, if the firm never was small, do its smaller rivals engage in the practice? Or, if such firms do not exist, do firms of all sizes in the same industry in other countries (or similar industries in the same country) engage in the practice? Have the firms that have recently grown used the alleged abusive practice? If so, then the alleged practice may be important to those changes, and it may be counterproductive for competition authorities to intervene.

DETERMINING APPROPRIATE REMEDIES

Thinking about whether there is an appropriate remedy is a useful way to determine whether a case merits attention before significant public resources are committed to it. If there is no practical remedy for an apparent abuse (that is, a remedy that clearly improves the situation and does not entail excessive monitoring costs), then there may be no point in pursuing the case.

The first step in determining an appropriate remedy is to consider whether a case involves premeditated, flagrant anticompetitive conduct (say, harassment or threats of violence to potential entrants) or merely involves conduct that has restricted competition unnecessarily but is not morally offensive or beyond the normal standards of business behavior. If it is the first, then it may be appropriate to seek fines or other punitive sanctions if the relevant legislation permits such remedies. In situations of outright criminal conduct, competition agencies should consider requesting the help of police or other competent authorities and bringing appropriate criminal charges.

If a case does not involve an anticompetitive intent, however, or if there is no evidence of such intent, then fines or imprisonment are not

appropriate. Rather, it is simply a question of finding the most efficient way to reverse the anticompetitive effects. In many cases the appropriate measure will be a prohibitive order that requires the firm or firms to cease engaging in the alleged conduct. To the extent permitted by legislation, the agency may consider seeking a proactive but essentially behavioral remedy, such as requiring the compulsory licensing of technology or the provision of access to essential facilities to establish competition in markets in which it had been suppressed. Or, the agency may seek structural measures by actually breaking up the firm.[24]

In designing and implementing such remedial measures, care must be taken to avoid imposing greater costs than those incurred by the anticompetitive conduct. For example, the most effective way to establish competition in a market may be to break up a dominant firm. If this remedy would prevent the realization of overwhelming economies of scale, however, then it would not be a responsible remedy for any agency to seek.[25] Similarly, an investigation may determine that vertical market restraints (for instance, tied selling or exclusive dealing) have prevented the beneficial entry into a market by new competitors. Vertical market restraints, however, may also serve legitimate procompetitive purposes, such as preventing free riding. Remedies in such cases should seek to deter anticompetitive conduct while permitting contractual restrictions that achieve genuine efficiencies.

A checklist of possible remedies in abuse cases would include the following:

- Order to cease the abusive behavior. This will usually be combined with a fine if the infringement is continuing.
- Imposition of fines on the firm. Criteria for fixing fines include gravity of the infringement, length in time of the infringement, effect of the infringement, nonenforcement of the infringement, difficult market conditions, size and profitability of the undertaking, cooperation of the undertaking, state of the law, repeated infringement, continuation of infringement following clarification of the law, governmental pressure, and amount of unlawful profit from infringement.
- Fines on individuals and imprisonment (or both). Except in extreme circumstances, however, these sanctions are inappropriate in abuse of dominance cases, which typically do not involve criminal intent.
- Order to repay "undue profits." In jurisdictions where such a remedy is possible, however, it is rarely used because such a calculation is extremely difficult to make.
- Divestment or division of firms.
- Order to take certain action, if, for instance, it is necessary to ensure fair treatment of competitors or other market participants.
- Informal settlements. These can sometimes be preferable to lengthy proceedings but should remain an exception.
- Award of damages.
- The special case of government-origin dominance. When dominance has been established by the state, or when the state owns the company, other considerations may come into play. In many countries state companies and state agencies do not enjoy immunity from remedies if they are involved in economic activity. The question may arise, however, whether the activity has taken place under state compulsion (result: no responsibility of the company, but the state may be liable) or not (result: full responsibility of the company).

CONCLUSIONS

Investigating alleged abuses of a dominant position can be among the most challenging and difficult tasks for a competition agency. This is because practices that can qualify as abuses (predatory prices, tie-ins, vertical restraints) can also promote efficiency. Consequently, investi-

gating alleged abuses of a dominant position will require a careful rule-of-reason analysis, in which possible anticompetitive harm is weighed against possible efficiency benefits.

In an investigation of an alleged abuse case the tasks are the same as in other investigations: define the relevant market(s), explain how the alleged abuse acts might harm competition, and explore possible efficiency benefits from the practice. The second task is often called "laying out the theory of the case." Key questions include: How would the practice harm competition? Will it deter or prevent entry? Will it reduce incentives of the firm and its rivals to compete aggressively? Will it provide the dominant firm with an additional capacity to raise price? Will the practice enable the dominant firm to evade price regulation in one or more of its markets? If it is necessary to evaluate possible efficiencies (that is, anticompetitive effects are likely), the competition agency should expect the dominant firm to be able to explain how the practice at issue improves efficiency. Does it generate incentives to provide better service? Does it increase the amount of promotion or advertising? Do consumers benefit from lower prices or greater product availability?

In investigating an alleged abusive practice, the competition agency should obtain information from various sources including: customers of the dominant firm, rivals of the dominant firm, government officials who regulate some aspect of the dominant firm's behavior, competition officials in other countries, and officials representing the dominant firm. The views of rivals, of course, must be viewed with some skepticism because their interests are not necessarily consistent with the goal of competitive markets, and it is important not to equate harm to competitors with harm to competition. In this respect the views of customers are more reliable. How do they evaluate the effects of the alleged practice? Do the practices lower or increase prices and costs? Do they improve incentives? Or, do they tend to raise barriers to entry and expansion without any obvious efficiency rationale? Careful attention to these issues will ensure that abuse of dominance provisions are an effective tool for competition agencies in promoting a healthy and vibrant market economy.

NOTES

1. In some cases, it may not be necessary to establish the existence of an actual dominant position, if a country's law also provides remedies for the offense of "attempted monopolization." In such cases, however, the law usually requires that there be some probability that the subject firm would succeed.

2. It should be noted, however, that because of technological changes, many industries (that is, electricity generation and perhaps most aspects of telecommunications services) that in the past were argued to be natural monopolies are now at least potentially competitive. For this reason, competition agencies should be prepared to examine critically arguments that market dominance is justified by natural monopoly characteristics.

3. The concept of market power refers to the ability of a firm (or a group of firms acting jointly) to profitably maintain prices above competitive levels for a significant period of time. The qualifier "profitably" is important—it denotes the fact that in order to exercise market power, a firm must be in a position to raise prices without losing sales so rapidly that the price increase is unprofitable and must be rescinded, as would be the case in a competitive market (see Landes and Posner 1981, 937–96). In addition to higher than competitive prices, the exercise of market power can be manifested through reduced quality of product or service or a lack of innovation in the relevant market(s).

4. International borders can also be a factor in defining geographic markets in competition law cases, if the relevant product(s) are subject to tariffs or other kinds of government-imposed barriers to transborder movement (see Pittman 1995).

5. Department of Justice and Federal Trade Commission (1992); Canada Director of Investigation

and Research March 1993; Autorità garante della concorrenza e del mercato (1993), European Commission (1997).

6. *United States v. E.I. du Pont de Nemours & Co.*, 118 F. Supp. 41 (D. U.S. Sup. Ct. 1956).

7. In some jurisdictions, additional factors are also evaluated, such as the degree of vertical integration in the sector, and relevant technological and financial factors.

8. An example of such a case is the Canadian case of Laidlaw Waste Systems (see appendix 1 to this chapter).

9. In some legal systems, it is presumed that certain practices by a dominant firm are inherently unfair, and that no efficiency gains can justify further restricting competition in the market.

10. It should be noted that legal monopolists do not always earn high profits. One of the most important consequences of the lack of competition in a market is the resulting tendency toward inefficient behavior and the negative effect that it can have on costs and on technological progress. In many circumstances, dominant firms, especially firms that enjoy a legal monopoly, are engaging in rent-sharing activities with workers and suppliers, so that a part of their market power is shared with other participants in the production process, leading to higher costs, not necessarily higher profits.

11. The European Commission has a strong role in this respect because it can directly require, not only advocate, that member states remove all regulatory impediments to competition that restrict trade among them.

12. Technical and other progress has changed the concept of what can be considered a "natural" monopoly.

13. The issue of the willingness of different consumers to pay different prices may have a reduced relevance when substitute products are hard to come by, and especially if barriers to entry are high.

14. The possibility of establishing barriers to entry should also be borne in mind.

15. For instance, the 1992 decision of the U.S. Supreme Court in the *Kodak* case concluded that tie-ins can be used in moderately competitive markets to exploit certain consumers. See *Eastman Kodak Co. v. Image Technical Services,* 112 S. Ct. 2072 (1992).

16. Problems associated with a broadly based essential facilities doctrine are discussed in Werden (1987).

17. This approach is followed, for example, in Canada, Director of Investigation and Research, Predatory Pricing Enforcement Guidelines (1992). For an example of the European Community approach, see Case C 62/86 *AKSO v. Commission,* I ECR 3359 (1991).

18. *Lewis v. Pennington* (1961) CCH Trade Cases 70,036.

19. In the United States, intellectual property rights figured in the 1994 consent decrees entered in the Pilkington and Wave Soldering matters. See *United States v. Pilkington plc and Pilkington Holdings Inc.* (CCH 1994-2 Trade Cases ~1 70,842) and *United States v. Cookson Group plc et al.* (CCH 1994-1 Trade Cases 170,666). In Canada, intellectual property rights were a key consideration in the NutraSweet matter. See *Canada, (Director of Investigation and Research) v. The NutraSweet Co.* (1990) 32 C.P.R. (3d) 1. In the European Union, intellectual property rights considerations were at the heart of the Magill decision (*RTE and ITP v. Commission,* ECJ, April 6, 1995, joint cases C 241 e 242/91). For the principles governing European Union legislation, see Commission Regulation (EC) No. 240/96 of January 31, 1996, on treatment of certain categories of technology transfer agreements.

20. *California Retail Liquor Dealers Ass'n v. Midcal Aluminum, Inc.,* 495 U.S. 97(1980).

21. Case C41/90 (1991) ECR 1979. In this case, the state was held responsible.

22. Under European Union law and jurisprudence, horizontal and vertical situations can be distinguished. If a supplier is granted a dominant position, as far as its vertical relations are concerned, the "essential facility" doctrine may apply in the sense that access to essential facilities may not be refused.

23. Even when a country's legislation does not include an explicit overall test of market impact, agencies may wish to incorporate such a requirement in

their internal case evaluation process. If the practices being investigated in a particular case would not meet an overall test of anticompetitive effects, then it is questionable whether the case is an appropriate use of the agency's scarce resources.

24. A classic example of a structural order to establish competition in an industry that had been effectively monopolized, through a combination of corporate practices and government regulatory actions, was the break-up in the United States of the American Telephone and Telegraph Company by a court order in the early 1980s. Key aspects of the economics underlying the remedy in this case are discussed in Brennan 1987, pp. 741–93.

25. As noted in the last section, the existence of a natural monopoly is not something that an agency should accept without appropriate evidence. In particular, the mere fact that a market has been dominated by a single firm for years or even decades is not proof of a natural monopoly in an economic sense. Before the breakup of AT&T in the early 1980s, many commentators maintained that this would impose heavy costs on consumers. In retrospect, however, the breakup of this huge dominant firm is widely seen as a useful step that ushered in an era of unprecedented competition, innovation, and new service offerings in the telecommunications industry that yielded large benefits for consumers.

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Appendix 5.1

Case Examples

The Laidlaw Case

The particular practices that were the focus of the case against Laidlaw Waste Systems, Inc., a supplier of commercial waste collection services in local markets on Vancouver Island in the province of British Columbia, Canada, included.[1]

- A series of acquisitions by Laidlaw of competing businesses on Vancouver Island.
- Alleged restrictive provisions in Laidlaw's contracts with customers, including automatic self-renewal ("evergreen") clauses, and "right of first refusal" and "right to compete" clauses.
- Threats of "sham" litigation.

The geographic dimension of the relevant product market was a central issue. The specific issues before the Competition Tribunal concerned the extent of several local markets for lift-on-board service on Vancouver Island. Although the Director of Investigation and Research contended that three such markets could be identified, the respondent took the position that two wider geographic markets should be considered.

The resolution of this issue turned importantly on arguments relating to the "cellophane fallacy." The respondent grounded its argument on the hypothetical monopolist approach, arguing that any attempt it made to raise prices significantly above prevailing levels would be overwhelmed by new competition from alternative suppliers in the two markets. The director argued essentially that the respondent's position was subject to the cellophane fallacy, in that it overlooked the possibility that the prices charged by Laidlaw were already above competitive levels. In this context, evidence that a further increase in prices would induce substitution toward alternative suppliers was consistent with the director's case.

Microsoft Corporation

(Consent decree first issued for public comment July 1994)

In the Microsoft case, the U.S. Department of Justice and Microsoft entered into a consent agreement to settle the department's allegations that Microsoft had violated antitrust laws by engaging in certain contractual practices with computer manufacturers. Although U.S. law does not contain an "abuse of dominant position" provision, this investigation would fall into that category because Microsoft was the leading provider of personal computer operating systems at the time the consent agreement was reached.

The central allegation made by the department was that Microsoft "used monopoly power to induce personal computer (PC) manufactures into anticompetitive, long-term licenses under which they must pay Microsoft not only when they sell PCs containing Microsoft's operating systems but also when they sell PCs containing non-Microsoft operating systems. These anticompetitive long-term licenses have helped

Microsoft maintain its monopoly. By inhibiting competing operating systems' access to PC manufacturers, Microsoft's exclusionary licenses slow innovation, raise prices, and deprive consumers of an effective choice among competing PC operating systems" (Competitive Impact Statement).

In short, although the Microsoft investigation was multifaceted, the central allegations were that Microsoft had market power in the market for operating systems; Microsoft entered into long-term contracts with manufacturers that required the PC manufactures to pay for Microsoft's operating system on each computer that the manufacturer shipped, whether or not the computer actually contained a Microsoft operating system; these contracts raised the costs of Microsoft rivals in the operating system market; and the resulting effect was a lessening of competition. The consent agreement prohibits Microsoft from entering into such contracts.

There remains some controversy in the U.S. antitrust community regarding the economic effect of Microsoft's practices. Those who conclude that Microsoft did not violate the antitrust laws argue, among other things, that Microsoft's contracting practices did nothing more than offer lower prices to buyers willing to commit to purchasing larger quantities. Since volume discounts lead to lower prices, they would not typically be considered violations of the antitrust laws. Other commentators point out that Microsoft may have had a legitimate efficiency rationale—the prevention of pirating—for its somewhat unusual contractual terms.[2]

Litigation over Microsoft's practices continued after the entry of this consent decree. In 1998 the Department of Justice filed new charges against the company.

NOTES

1. *Canada (Director Investigation and Research) v. Laidlaw Waste Systems Ltd.* (1992) 40 C.P.R. (3d) 289 (Competition Tribunal, January 20, 1996).

2. It is worth noting that this was the first widely publicized case of cooperation between the EU and U.S. antitrust authorities. In 1994 the European Commission accepted an undertaking by Microsoft that effectively ended the foreclosure effect of its license agreements concerning MS-DOS and Windows operating systems.

Appendix 5.2

Special Issues of Abuse of Dominance in Transition Economies

Countries in transition from centrally planned economies to market economies face special problems in managing the transition. It may take considerable time to complete the privatization process and to achieve the goal of truly competitive, open markets. Inevitably there will be significant disruption to the lives of many citizens, and there will be calls for measures to ease the hardships that result.

As discussed in chapter 6, Competition Advocacy, there is a natural resistance in the privatization process to the creation of competitive markets, in which former government monopolies are fully subject to competition. There is a tendency instead simply to transform public monopolies into private ones. It is an important function of the competition agency to resist that tendency and to seek to impose competitive structures in the new economy wherever possible. The competition agency and other advocates for competition are not likely to be fully successful, however. It is probable that some markets will be characterized by dominance in the period immediately following privatization. Some, of course, might be natural monopolies, or markets in which total costs of supply can be minimized only when there is just one producer. Examples of natural monopolies are distribution of water, electricity, and natural gas. In other markets, however, there might be dominant firms that are not natural monopolies. One might characterize such firms as "unnaturally" dominant. The hallmark of these unnaturally dominant firms is that they were government-created.

How should the competition agency deal with unnaturally dominant firms? Most competition experts would say that the agency should consider them as it would any dominant firm that was not a natural monopoly. If the firm abuses its dominance the agency should initiate an enforcement proceeding under the country's competition law and apply the appropriate sanction under the law, which, as described in this chapter, could range from an order to cease the abusive conduct, to fines upon the firm or responsible individuals, to structural remedies, such as partial divestitures, or at the extreme, division and restructuring of the firm. Most competition experts would also take the view that high pricing by unnaturally dominant firms should not be treated any differently from high pricing by other dominant firms, that is, it should not be regarded as an abuse of dominance. Market pressures should be relied on to eventually reduce prices to competitive levels.

Others (including political leaders and experts in other fields) might say, however, that this situation in transition countries is unique and requires special remedies. In transition countries unnaturally dominant firms not only have been created by the government but also they are in many cases sustained by governmentally imposed barriers to entry. It could be argued with some justification that such government support combined with other aspects

of transition economies that inhibit the development of new competition, such as imperfect capital markets, will sustain the unnaturally dominant firm for an intolerably long period of time, significantly delaying necessary cost-cutting and harming the country's consumers. The argument could be made that this situation requires the imposition of extraordinary remedies, including possibly limited price controls and an expanded ability to divide unnaturally dominant firms, if only for a limited period of time.

The difficulties with price controls are discussed above in this chapter. Price controls are inferior to competition when competition is possible. There may be strong public support for price controls, however, in situations in transition countries where competition is theoretically possible but not practically so for a significant period of time. If control over prices of unnaturally dominant firms is undertaken in the transition context, the competition agency should urge that the following measures also be adopted:

- Price controls should be implemented only in discrete situations and as a last resort, when no other remedy is appropriate. For example, price controls could be imposed only after the competition office has concluded that a firm has a durable dominant position.
- Price control authority in a given industry that is not a natural monopoly should be expressly limited in time not to exceed a few years.
- Price control authority should be located outside the competition office. Keeping this function separate from competition enforcement ensures at least two important results: the resources of the competition office are not co-opted for regulation, and the competition office will have continued independence to act as advocate for competition as opposed to regulation.

Alternatively, or in addition, the competition law might provide that the competition authority would have the power to break up unnaturally dominant firms in the few years immediately following their creation or privatization, even in the absence of proof that the firm otherwise abused its position of dominance. It will be recalled that the extraordinary remedy of breaking up dominant firms carries with it the risk of eliminating some or all of the efficiencies that may have permitted the firm to achieve its dominance. This risk is less significant in the case of unnaturally dominant firms, however. Those firms did not win their market power through superior performance—they were given it by the government.

A law that provides such a remedy, permitting the restructuring of unnaturally dominant firms in the absence of proof of abuse of the dominant position, should have the following elements:

- It should be applied only to firms that meet the traditional standard for dominance and whose dominance directly resulted from state ownership.
- The power should expire within a few years after the enactment of the competition law.
- The firms resulting from the restructuring should be economically viable, and the restructuring should be designed to minimize increases in the costs of the resulting firms.