

Chapter 3

AGREEMENTS

Agreements among competitors, often referred to as “horizontal” agreements, are implicit or explicit agreements that restrict competitors’ ability to act independently. The term encompasses a broad range of conduct, from joint ventures, joint advertising or marketing, or trade association activities, to price-fixing and bid rigging. There are also agreements between upstream and downstream firms that are deemed to fall within the scope of competition policy, often termed “vertical” agreements. Part I of this chapter discusses horizontal agreements, and part II provides a brief introduction to vertical agreements from a perspective of competition law and policy.

PART I: HORIZONTAL AGREEMENTS

Not all agreements between competitors hurt competition. Many joint activities are competitively beneficial—they may foster efficiencies, reduce risk, create new or improved products or methods of distribution, or improve information flow and thereby the competitive functioning of a market. For example, competitors may jointly construct a new plant that none could build independently, conduct research and development that none could afford independently, jointly purchase supplies and thereby reduce their costs, form a network of suppliers to offer

a new product or reduce costs (such as local moving companies joining together to offer a nationwide moving service or accountants forming an accounting firm), or form a trade association to gather statistics and operational information that each can use to make their operations more efficient.

By contrast horizontal agreements among competitors may simply eliminate competition, restricting output and raising prices. Or, horizontal agreements may serve some procompetitive purposes but at the same time unduly restrict competition. A competition agency must distinguish between agreements that reduce competition on balance and those that promote competition on balance or are at least competitively neutral. A policy that is too restrictive will preclude competitively beneficial conduct; a policy that is too lax will allow competitors to suppress their natural rivalry, raise prices, and reduce output, thus injuring both consumers and the economy.

DISTINGUISHING BETWEEN PROCOMPETITIVE AND ANTICOMPETITIVE AGREEMENTS

Certain horizontal agreements are anticompetitive. Without question these agreements are intended solely to eliminate competition among companies. These agreements do not involve integration of operations, creation of a new prod-

This chapter was prepared by principal team members Gerald Meyerman, Mary Jean Moltenbrey, and Judy Whalley, with input from Eugen Jurzyca.

uct or method of distribution, or any other joint effort intended to further competition. Such agreements are often referred to as “naked” restraints of trade, cartel behavior, or collusion. Examples are price-fixing, bid rigging, and allocation of territories or customers—and boycotts or refusals to deal in support of these practices. These agreements are unambiguously harmful; they have no redeeming economic or social benefits. Most countries view cartel agreements as the most serious competition offenses, and in some countries cartel agreements are prosecuted as crimes.

In fact, some countries treat cartel agreements as illegal regardless of whether the set prices or output restrictions are reasonable or not. Under such an approach—called a *per se* approach in the United States—the prosecutor or victim need only prove that the agreement was made and that it could be anticompetitive. It is no defense that the agreement was not carried out or that it did not have an anticompetitive effect. Nor does the plaintiff need to prove that the defendants have sufficient market share to raise prices or reduce output. Use of such a rule eliminates the necessity for the prosecutor or victim to prove that prices are higher than they would have been without the agreement or that prices are unreasonable. Use of this rule also prevents the conspirators from arguing that competition should not be the rule in an industry.

Other countries do not employ a *per se* rule, but cartels are treated strictly everywhere. In the European Union cartels are prosecuted vigorously as violations of Article 85 of the Treaty of Rome, and large fines may be imposed. In the United Kingdom restrictive agreements must be registered, and in practice cartel agreements are subsequently rejected by authorities.

The use of straightforward rules, such as the *per se* prohibition, simplifies the judicial process and provides clear guidance for businesses. But it is important that such rules not sweep too broadly, stifling conduct that could

enhance competition. Thus in recent years the U.S. courts, for example, have restricted application of the *per se* rule to agreements that will not enable potentially procompetitive integration of the companies’ economic activities or create a new product or distribution methods.

Agreements that may enhance competition should be evaluated to determine whether they are procompetitive or anticompetitive on balance. A five-step analysis can be employed:

- Is the restraint inherently likely to restrict output and raise prices?
- Is the restraint naked or is it obviously related to some procompetitive integration of economic resources?
- Will the restraint restrict output and raise prices, or otherwise create or facilitate the exercise of market power?
- Is the restraint necessary to achieve the asserted procompetitive goals?
- Do the restraint’s procompetitive benefits outweigh its anticompetitive risks?

Answering all five questions requires a complex analysis, but there are several shortcuts. If the agreement involves a naked restraint inherently likely to restrict output and raise prices, such as bid rigging or price-fixing, the analysis can end because the restraint is clearly illegal. Otherwise, the restraint must be evaluated more fully in light of the markets involved, the effects or potential effects of the agreement, the market positions of the parties to the agreement, and the relationship between the restraint and the alleged procompetitive justification. If there is a weak relationship between the restraint and the alleged procompetitive justification, a full market analysis may not be necessary to conclude that the restraint is on balance anticompetitive. Similarly, if the parties to the agreement together do not control a significant share of the market, it may be possible to conclude without a full market analysis that the agreement could not have anticompetitive effects. It follows, then, that the

greater the joint market share of the parties, the closer the scrutiny that should be given to the alleged justifications.

Determining whether the agreement will enable the exercise of market power can be done directly if the restraint has been in place for a substantial period of time. Have prices risen or output fallen? If the restraint has not been in place for long or its effects are ambiguous, a structural approach can be used. It calls for defining the relevant product and geographic markets, measuring the market shares of the parties to the agreement and the ease with which other firms may enter the market, and examining how the restraint is likely to operate within the relevant market.

Focus then turns to an evaluation of whether the restraint is reasonably necessary to achieve a legitimate procompetitive goal. First, the relationship of the restraint to the procompetitive goal must be evaluated—the relationship should be clear. If so, then it must be determined whether there is an alternative means to accomplish the goal that poses less of a threat to competition. The parties need not choose the least restrictive means, only a reasonable means, given the alternatives.

In most instances such analysis will resolve whether an agreement is likely to have anti-competitive effects. Only rarely should an enforcement agency or the judicial system have to explicitly balance procompetitive benefits against the risk of anticompetitive harm.

CARTEL AGREEMENTS

The attractiveness of cartels to business people has long been recognized. Adam Smith, often recognized as the father of modern economics, wrote in 1776 in *The Wealth of Nations*, “People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices.”

Specific cartel agreements

There are many possible types of cartels, but all reduce output and raise prices by eliminating competition among the parties to the agreement. The most common types of cartel agreements among sellers are price-fixing agreements, bid-rigging agreements, customer allocation agreements, territorial allocation agreements, and output restriction agreements. The most common among buyers are price-fixing agreements, allocating agreements, and bid-rigging agreements.

Cartels may not eliminate all competition. Competitors may agree only to eliminate competition for certain customers or in certain areas of the country. Or, cartel members may agree on price but still compete on service or on quality. Some or all of their monopoly profits may be “competed away” in these restricted forms of competition. Limited cartels are still harmful, however: prices will be higher and output lower than they otherwise would be. Cartels may be imperfect in another way—some members may cheat, for example, by selling below the agreed price or outside their assigned territory. A cartel may have to make a substantial effort to keep or bring members back in line. While such nonprice competition and cheating may reduce the harm of the cartel, it does not eliminate it.

Frequently, businesses pursue the shelter of collusive arrangements as a retreat from the challenges of the marketplace. Companies in many countries, especially those with previously centrally planned economies, may see collusion as bringing order to the marketplace, assuring a healthy industry or eliminating ruinous competition. But the operation of competitive forces is now almost universally recognized as being the best means of allocating resources in the economy and maximizing economic welfare.

Collusion seriously undermines this process by suppressing the natural rivalry among firms. Collusion causes firms to function more

like a monopoly. This conduct has an immediate, negative impact on consumers. They are consuming fewer products and paying more for them. Collusion may negatively affect all stages of the production cycle because it can lead to price increases or restrictions on the availability of intermediate goods or other needed inputs. This situation has a direct impact on the profitability of firms and on their ability to compete. The increased cost of raw materials due to collusion by input suppliers can result in serious cost disadvantages to intermediate-goods producers, as well as higher costs to ultimate consumers.

An effective and well-enforced competition policy prohibiting collusion will help to achieve broader economic goals by encouraging greater efficiency and economic growth. Competitive markets can enhance international performance, increase employment, and lay the groundwork for higher standards of living. Collusion is also damaging in that it undermines public confidence in the competitive market system.

PRICE-FIXING. Price-fixing is a term generically applied to a wide variety of actions taken by competitors having a direct effect on price (see box

3.1). The simplest form is an agreement on the price or prices to be charged to some or all customers. If customers have no alternatives to the cartelized product and cannot easily reduce their consumption, the price increase may be very large. At a minimum, cartels will generally set prices above those of the least-efficient producer in the market.

In addition to simple agreements on which price to charge, the following are also considered price-fixing:

- Agreements on price increases.
- Agreements on a standard formula according to which prices will be computed.
- Agreements to maintain a fixed ratio between the prices of competing but nonidentical products.
- Agreements to eliminate price discounts or to establish uniform discounts.
- Agreements on credit terms that will be extended to customers.
- Agreements to remove products offered at low prices from the market so as to limit supply and keep prices high.
- Agreements not to reduce prices without notifying other cartel members.
- Agreements to adhere to published prices.

Box 3.1

Price-fixing in the sugar industry

For several years three leading sugar-producing firms conspired to restrict output and inflate prices of sugar. They also agreed on a strategy to control the supply of sugar in particular areas. Sugar, whether produced from cane or beet, is a homogeneous product. At the time of the conspiracy sugar substitutes were not readily available, and customers had no alternatives. The conspirators controlled the only three sugar refineries in the market, accounting for approximately 90 percent of sales.

The producers partially controlled direct sales to large customers, such as wineries, candy manufacturers, and small independent sugar importers,

by paying a premium above the world price to foreign producers. These purchases were made through offshore corporations and re-invoiced at a much higher price to the refinery.

When a new, competitive refinery tried to enter the market, the cartel notified foreign producers that they would stop purchasing sugar from anyone who supplied the new refinery. The leading manufacturer designed a new way of pricing sugar, and this system was immediately adopted by the others. The new entrant took 10 percent of the market, but the remaining share was split exactly as it had been before the arrival of the new competitor.

- Agreements not to sell unless agreed-on price terms are met.
- Agreements to use a uniform price as the starting point for negotiations.

Usually, price-fixing schemes include mechanisms for detecting and punishing cheating (this is discussed further below).

BID RIGGING. Bid rigging is an agreement between parties over which competitor will win a tender—often from government agencies (see box 3.2). This agreement may be accomplished by one or more bidders agreeing to refrain from submitting bids, or by the bidders agreeing on a low bidder and then bidding above that firm’s intended (and inflated) price. The tendering process is designed to promote fairness and ensure that the lowest possible prices are received. Bid rigging subverts this competitive process.

The mechanisms for bid rigging are numerous and varied, but generally fall into the following categories:

- *Bid suppression.* One or more competitors agree to refrain from tendering or to withdraw a previously submitted tender so that another company can win the tender. The parties to the agreement may administratively or judicially challenge the tenders of companies that are not party to the agreement or otherwise seek to prevent them from tendering, for example, by refusing to supply materials or quotes for subcontracts.
- *Complementary bidding.* The competing companies agree among themselves who should win a tender, and then agree that the others will submit artificially high bids to create the appearance of vigorous competition. Or, the losing companies may submit competitive prices, but along with other unacceptable terms.
- *Bid rotation.* The competitors take turns being the winning tender, with the others submitting high bids. The companies agreeing will generally try to equalize the tenders won by each over time. A strict pattern of rotation is often a clue that collusion is present.

Box 3.2
Bid rigging in printed business forms

Continuous, manifold business forms used for computer printout paper, snap-set forms, and similar products were supplied to a government by four major printers. Historically, the government tendered original orders but placed re-orders with the firm that had supplied the first order. After concluding that it could get better prices by tendering all orders, the government began doing so from a list of qualified printers, including the four major firms. The resultant price declines became a concern to the major companies and their sales managers. Not only were profit margins lowered, but also the executives felt the pinch in reduced sales commissions and management bonuses.

The sales managers of the four companies met and agreed on a bidding strategy. The price book of the market leader, available to all, was used to determine benchmark prices for each product for

all of the companies. It was agreed that when a tender was called, the previous supplier of the particular form would bid at or below the benchmark price, whereas all others would bid higher. After a while the companies concluded that this method was too difficult and agreed that the former supplier would simply tell the competition how much it was bidding and the others would bid higher or not at all.

During the conspiracy, about 300 separate tenders were called by the government, and bidding patterns were consistent with the agreements. The arrangement started to break down after the entry of a new competitor, which began winning bids. The new firm was approached to try to induce it to join the existing arrangement. The new competitor complained to the authorities and provided the initial information that led to the start of the investigation.

CUSTOMER AND TERRITORIAL ALLOCATION. Prices can be controlled by agreements among firms to allocate markets or customers among them, thus eliminating competition (see box 3.3). Market-division agreements may have a greater impact on competition than price-fixing. The single remaining market occupant is freed of competition with respect to prices, service, quality, and innovation. Market-allocation agreements eliminate the need to police the pricing practices of the companies party to the agreement and the need for producers with different costs to agree on appropriate prices. Thus market allocation may eliminate some of the pressures that frequently cause price-fixing agreements to break down.

Firms can decide to allocate markets geographically or according to customers or classes of customers. When the colluding companies face competition from other firms, these companies may allow each other to compete freely while continuing to allocate those areas or customers with which they do not face outside competition.

Prosecution of cartels

In virtually all jurisdictions cartels are illegal. In many countries cartel agreements receive severe sanctions, usually in the form of heavy

fines. In the United States and Canada cartels are prosecuted as crimes. Corporations may be fined many millions of dollars—in 1996 a U.S. corporation was fined \$100 million for the price-fixing of lysine, an animal-feed additive. In some countries culpable individuals may also be fined. In the United States individuals convicted of cartel activity may be sentenced to jail terms of up to three years for each violation.

It is important that fines or other penalties be sufficiently severe to create a deterrent. Cartels are difficult to detect, and unless penalties are very stringent, conspirators may feel that the benefits from the illegal conduct will outweigh the risk of punishment. Thus fines must substantially exceed the expected cartel profits. In this regard prosecution of individuals involved in cartel activity is an especially effective deterrent.

Attempts to justify cartels

Sometimes firms that participate in cartel agreements attempt to defend their activities as proper and beneficial. These arguments are in fact challenges to the value of competition itself in particular industries or under particular circumstances. Such arguments have generally been rejected by competition agencies and judicial authorities, because in most circumstances

Box 3.3

Territorial allocation in pipe sales

The six major suppliers of cast-iron pipe allocated sales among themselves. First, they designated “reserved cities” in which one supplier was granted the right to make all pipe sales. The other firms agreed to bid higher on all tenders and not to seek negotiated sales in those cities. In other cities the right to be the winning bidder was itself put up for bid among the conspirators. The highest bidder in the firms’ secret auction had the right to all sales in that city for a designated period of time and the other five divided the price paid for that right among them-

selves. At other times the right to win a particular contract was auctioned among the conspirators.

The remaining cities in the area served by the six firms were declared “free,” and all six were free to compete for sales there. This agreement persisted for many years before it was detected and the firms were prosecuted. Adjustments in the allocated cities were made over time to reflect the changing strengths and weaknesses of the companies, but purchasers of cast-iron pipe consistently paid inflated prices.

competition will generate the best outcome for consumers and the overall economy.

THE INDUSTRY CANNOT FUNCTION WITH COMPETITION. The industry claims that cutthroat competition will destroy small companies, and the remaining firm will have a monopoly. This is the most common argument made in favor of cartels. But in very few cases—as in natural monopolies—will competition drive out all but one firm. Most sectors have room for a number of firms that can be profitable in the long run, since a firm that is big enough to be efficient is still much smaller than the entire market.

Why, then, is this argument so commonly made? Probably because it often seems true to competitors, especially in times of change or intense competition. If a market has shrunk, if new competitors have entered, if some competitors have become more efficient, or if a new technology has been introduced, all firms will feel pressure; competition will weed out the less efficient firms. For a period of time all firms may show losses. Eventually, however, a number of efficient, profitable, competing firms will remain. It is true that competition may drive less efficient competitors from the market, but this is part of the dynamic process of competition. Less efficient competitors will be compelled to reduce costs or exit the market, and consumers will obtain the best possible goods at the lowest possible prices.

THE INDUSTRY COMPETES ON SERVICE AND QUALITY. Participants claim that consumers will benefit if all firms agree on one price and then compete to provide better service or better quality. If a cartel succeeds in raising prices, firms may still compete by offering better service or quality. But this is not what consumers demand. If it were, the improved quality or service would be provided without an agreement to raise price. Some firms would offer better quality or service at a higher price, and customers could choose to buy

from them. The cartel takes this choice away from consumers.

SAFETY AND QUALITY WILL DECLINE. In some markets determining product quality may be a problem—but a cartel is not the answer. Quality judgments are usually best left to the consumer. But in a few cases the consumer cannot determine quality. An example is medicine or medical service. The consumer is not qualified to judge the quality of medicine or medical service, and the consequences of making the wrong choice may be harmful. In such markets some kind of government regulation is often required. Sometimes nongovernment institutions will be created to provide the necessary safety information. Either way, safety and quality concerns can be addressed directly. A cartel is not necessary.

Companies may also argue that if they face significant competition on prices, they will spend less on safety. In fact firms may feel pressured to cut their costs on safety-related items, but a cartel will not solve that problem. Even within a cartel some firms are more efficient than others. Regulation may be needed to prevent firms from cutting back on safety, but a cartel will not solve this problem.

A CARTEL IS NECESSARY TO STOP UNFAIR AND UNETHICAL COMPETITION. In making this claim companies want to be able to easily monitor compliance with the cartel price. Discounts, rebates, better terms of sale, and similar arrangements are common forms of competition, especially in oligopolistic industries with public price lists. Industry's ideas of "fair" trade are generally that no one cheats on the cartel price.

Detection and proof of cartels

Cartel cases are difficult to investigate because of the inherent difficulties in detecting covert arrangements and because of the scope and complexity of many cartels. The prosecutor must discover and prove that a crime has been

committed, as well as discover and prove who the perpetrators were. Cartels take many forms, ranging from explicit written agreements to informal arrangements, which the law must address. Competition laws frequently allow both direct and indirect evidence of conspiracy. Most conspiracies must be proven through insiders and through circumstantial evidence. Often the only people who know that a cartel is operating and how it is operating are the participants.

Indications that a cartel is functioning may come from customers, competitors, or disaffected members of the conspiracy or may be seen in market performance. The competition agency must have a visible public presence so that those concerned can confidently present complaints. The agency should also monitor the media, trade publications, statistics, and documents of public record for indications that a market is not performing competitively. One criterion for identifying collusion that has proven effective in the United States and that was recently adopted in Canada and the European Union is to offer immunity from prosecution or leniency in punishment to companies (and individuals) that provide evidence that can be used to prosecute other culpable parties.

HOW CARTELS OPERATE. To uncover cartels, one must understand how they operate. It is particularly important to understand the problems that cartels face and how they deal with those problems. A cartel must convince most of the significant competitors in the market to raise prices above the competitive level and keep them there long enough to earn monopoly profits. Cartel members must agree on which price to charge, which output to produce, or how to allocate markets or customers, and they must prevent cheating. The cartel is likely to reveal its existence in dealing with each of these complicating factors.

If prominent competitors are not members of the cartel, it cannot function successfully for long. These outsiders may sell for a price lower

than the cartel price and increase output, putting pressure on the cartel members to reduce their price or lose sales. If an outsider competes more directly with one cartel member than with others, the outsider may create internal conflict within the cartel.

Attempts to enlist universal participation may create evidence of the cartel. Documents internal to the cartel complaining about an outsider's failure to participate may surface. Or letters or other documents that refer to the cartel may be sent to the outsider. An outsider approached about joining a cartel can report the attempt. Talking to companies that were approached but did not join, as well as those that did join, is useful because they may have been given an explanation of the cartel's activities. To secure the cooperation of parties with inside information, the authority may promise complete or partial immunity from prosecution for an individual or company.

It is important to note that a cartel can sometimes operate without including all firms. A competitive fringe of small firms may operate outside a cartel. If the firms in that fringe cannot expand their output easily, the cartel can function without including them. Similarly, some customers may not be able to turn to companies outside the cartel, for example, because of their location or because of the customers' particular product requirements. Companies may cartelize sales to those customers even if they compete on sales to other customers.

The cartel members must agree on the cartel's fundamental terms, such as price. But cooperation may not be easy because different firms may prefer different prices: a firm with higher costs will prefer a higher cartel price, while a firm with lower costs will want a lower price—but one that will still generate a monopoly profit. If several products are involved, the cartel members may have to agree on an entire schedule of prices. If one firm's product is not identical to another's, the members will have to

agree on the ratio of the two prices. They may also have to decide if certain extras are included, such as delivery.

Similarly, a cartel that allocates customers, geographic territories, or bids must agree on how to divide them up. The members may have to engage in bargaining, for example. In general, the process of reaching an agreement is likely to produce evidence of a cartel's existence, and the more complicated the agreement, the more evidence is likely to be created.

Cartels are inherently unstable. Generally, each member is capable of producing and selling more than the amount allowed, because a cartel operates by raising price and restricting output. Any member can increase its profits greatly by producing more and selling it for less than the agreed price. But if all members renege on the agreement, the cartel will break apart.

Therefore, the cartel's collective interest is to ensure that no member cheats by lowering its price. Members can also cheat in a variety of other ways: offering secret discounts, raising the quality of their product, or paying delivery or similar costs. Cartels that typically experience such deception take steps to prevent, detect, and punish it. Some of the best evidence of a cartel agreement can be found from such policing. For example, cartel members may communicate with each other about suspected cheating, they may selectively lower prices in the cheater's area, or they may threaten the cheater.

MARKETS LIKELY TO HAVE CARTELS. Considering the problems of cartels described above, it is possible to identify the characteristics of markets that are most likely to have cartels. These characteristics will assist in selecting fruitful investigations.

Markets are most likely to have cartels if many of the following characteristics apply:

- There are few firms, or only a few large important firms (it is easier for a few players to agree than for many to agree).

- The firms are similar in cost structure, processes, goals, degree of vertical integration, or number of products produced (similar firms can agree more easily).
- The relevant product is homogenous, such as flour, sugar, or cement. In such a market an agreement on price can be relatively simple.
- The product does not have close substitutes. If it did, a price increase would drive customers to switch to the substitute.
- Customers will not or cannot significantly reduce the amount of product that they purchase, even if the price increases. That is, demand is inelastic at the competitive price (and the cartel can raise the price relatively easily).
- Information about sales transactions, that is, who sold how much to whom for what price, is widely available. The more such information that is available, the easier it is to police a cartel.
- A bidding process is involved. Markets with bidding often have bid-rigging cartels, perhaps because a bidding process often involves a few similar firms with available information on their sales.

THE CARTEL QUICK CHECKLIST. It is always useful to begin an investigation of a cartel by asking three questions:

- What do you suspect? Theorize about a cartel agreement that might exist. Does the theory make sense?
- How would the cartel have worked? Consider the steps needed to build such an agreement. How would the cartel have been formed? How would it have included all important sellers? How would members have reached the terms of the agreement? How would they have policed the agreement?
- What evidence might exist? What evidence would have been created at each step of the process?

EVIDENCE USUALLY FOUND IN CARTEL CASES. Direct evidence is the clearest and best. Examples include written agreements among firms, a statement by a participant, an internal memorandum written to report a meeting with competitors in which an agreement was reached, notes of telephone conversations with competitors, or a statement by a person who was approached by the cartel to join it.

It is rare, but not unheard of, to find written agreements setting out all the terms, conditions, and details of a collusive agreement. In such cases the industry may not have considered itself subject to competition law, and agreements among competitors were thus readily published. This phenomenon is more common in countries in which competition law is relatively new. Usually, however, if such written agreements exist, participants are aware of the risks involved and take steps to hide the documentation. Copies of agreements have been found under rugs, above false ceilings, and in executives' homes. These documents are generally created because it is often unwise to trust one's co-conspirators.

Even if no specific written agreement is found, most participants tend to keep notes of important events. Diaries, internal memos reporting on meetings, telex messages, faxes, letters, computer files, and e-mail are valuable sources of information. An executive may destroy incriminating information but his or her secretary may keep a copy. The key for the investigator is to think about likely hiding places or forgotten pockets of information.

In some jurisdictions search warrants may be served on companies or individuals likely to have relevant evidence. In other jurisdictions document demands and subpoenas for testimony may be used. Simultaneous searches or service of document requests on all suspected cartel participants can minimize the destruction of evidence. Declarations or written depositions under oath are also frequently used to provide essential evidence and to fill the gaps between

documentary and circumstantial evidence already obtained.

Circumstantial evidence may be used to support direct evidence, and in some cases it may constitute the bulk of the evidence. Care must be taken in interpreting indirect evidence, however. Investigators should look for behavior that makes sense only if a cartel exists. For example, suspicions should be raised if all the competitors in a market announce on the same day that their prices will increase by exactly the same amount. Further investigation may eliminate other possible explanations, such as a sudden increase in costs, a sudden change in demand for their product, or a sudden change in the price of a substitute product.

Similarly, if a series of projects is put out for public bidding and two competitors always alternate in winning the bid, bid rigging should be suspected. Another fertile area to look for circumstantial evidence is in the policing behavior.

It is important, however, to distinguish between indirect evidence pointing to the existence of a cartel and evidence of consciously parallel conduct in concentrated industries. In economic theory *conscious parallelism* refers to uniformity of behavior, whether in pricing or in other competitive conduct, commonly exhibited by firms in an oligopolistic industry selling a homogenous product. Uniformity arises not from agreements but from each firm taking into account its rivals' likely reaction in determining business strategies, for example, recognizing that a price cut will be matched by all competitors, thereby producing only a brief competitive advantage. Such uniformity by itself is not proof that a cartel has been operating. Antimonopoly investigators often find evidence of similar or identical practices that may be informative but is nearly always ambiguous.

The investigator must look beyond such uniformity. Potentially fruitful matters to investigate are how prices have been established and how they have changed. For example, suppose

that historically prices changed frequently and varied slightly among firms. If pricing suddenly were to become identical and stable, an investigation should focus on that time period. Similarly, if prices were stable for long periods but occasionally became volatile for short periods, a cartel might be operating. The episodes of volatility could indicate cheating. Was policing attempted when the first firms reduced prices? How did prices become stable again? Answers to these questions can help determine whether there was a cartel.

Other indications that conduct is collusive rather than simply consciously parallel include opportunities to conspire, such as meetings or telephone calls among members of the industry. Perhaps the most powerful indicator is evidence that particular conduct would be in an individual firm's best interest only if that party knew that the other firms would engage in the same conduct.

Noncartel agreements among competitors

What if an agreement is not a naked restraint of trade? What if the agreement involves an integration of some or all of the companies' research, manufacturing, marketing, or distribution operations, or entails the creation of a new or improved product or method of distribution? If the interfirm cooperation increases efficiency, this conduct should not be condemned out of hand, as are cartels that offer no potential efficiencies. Once a restraint is shown to potentially enhance efficiency, then the investigator must determine whether the restraint is necessary to achieve the asserted procompetitive goals and whether the agreement also has the potential to create or facilitate the exercise of market power.

If the agreement has potential procompetitive and anticompetitive effects, the competition authority faces the difficult problem of trying to balance the risk of harm against the potential for benefits. Luckily, the net competi-

tive effect of most horizontal restraints will become clear before the competition agency is forced to perform this task. Many restraints will have no significant potential for competitive harm, particularly those in which the parties to the restraint together have only a small share of the market or those in which the restraint on the independent market action of the parties is quite limited. Other restraints will not create procompetitive benefits, or such benefits could be obtained with much less restraint.

Often the first step in assessing the competitive effect of a restraint is to define the relevant markets. Restraints in unconcentrated markets are unlikely to hinder competition sufficiently to warrant concern. Similarly, even in a concentrated market, if the parties to the restraint have a small market share, they are unlikely to be able to influence pricing or output. Thus defining the market and evaluating the market shares of the active parties may be a quick way to determine potential competitive effects. But in many instances defining a market may prove to be difficult. In such cases it may be possible to reach a conclusion more quickly by evaluating the relationship of the restraint to the asserted benefit. If a benefit is not clear or the restraint is not reasonably related to the benefit, the restraint could be considered unjustifiable without fully assessing the relevant market and the positions of the parties.

Treatment of noncartel horizontal agreements in various jurisdictions

Most competition laws take a liberal view of horizontal agreements other than cartels—such agreements are allowed unless there is a good reason to prohibit them. In the United States, for example, only agreements that “unreasonably” restrict competition are prohibited. In each case the purpose and effect of the agreement are evaluated, and the agreement is prohibited only if it is, on balance, harmful to competition.

In the European Union such agreements are covered by Article 85 of the Treaty of Rome. They are prohibited if they “have as their object or effect the prevention, restriction, or distortion of competition.” But even agreements that restrict competition may be permitted if they “contribute to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit,” provided that the agreements do not impose unnecessary restrictions on the firms involved or allow those firms to eliminate competition with respect to a substantial part of the product affected.

In Canada a judge in a leading case stated (*italics added*):

As has often been said, every contract is a contract in restraint of trade: the commercial freedom of the contracting parties is limited by their obligations to perform the contract. To the extent that any general criteria exist they seem to require an assessment of *the nature and purpose of the acts* which are alleged to be anti-competitive and the *effect* that they have or may have on the relevant market. An analysis is required which takes into account the commercial interest of both parties served by the conduct in question and the *degree of restraint or distortion* of competition which results.

Article 6 of Poland’s Antimonopoly Act justifies horizontal agreements if they “are objectively necessary from a technical or economic viewpoint to conduct an economic activity and do not result in a significant restraint of competition.” The common thread through all of these antimonopoly laws is that horizontal agreements may be prohibited if they restrict competition significantly, but even an agreement that does so will be evaluated to determine whether it has benefits that outweigh the harm.

Joint ventures and agreements to work together

Competitors sometimes cooperate to become better at competing in the market. Such agreements include joint ventures and specialization agreements. The firms may have different strengths, but by cooperating they may become more effective or better able to create a new product or service that they could not provide separately. Such agreements can take many forms. For example, firms operating in different regions could form a team that together would cover a much larger area. A firm that has a good-quality product but a poor sales distribution network could team up with a firm with a mediocre product but a large and efficient sales network. These agreements are often called joint ventures, but the particular legal form of the agreement is not important.

Another form of cooperation is a specialization agreement. Suppose that two firms are both making a full line of products, but they decide that they could save money if one firm made only large products and the other firm made only small products, so that each could capture economies of scale in production. The firms might enter into a specialization agreement, or joint venture. Each would specialize in manufacturing the products that it makes best but would sell both products under its own name.

The distinguishing feature of such horizontal agreements is their intent: to make participants better competitors. One quick test of this intent is to examine whether significant competition will be left in the market. If not, then the purpose and actual effects of the joint venture must be examined more closely.

An example of the treatment of such agreements is found in the EU regulation of specialization agreements (Regulation 417/85 on Block Exemption of Specialization Agreements). This regulation allows firms that account for less than 20 percent of the market to conclude specialization agreements. Of course, this analysis requires that the relevant market be

defined and that market shares and concentration be measured.

A simple rule of thumb for evaluating such joint ventures is to ask whether competition would be harmed if the cooperating firms merged (see chapter 4 on mergers). If the competition law would not be violated by a complete merger, then any cooperative agreement that is less than a complete merger will not violate the competition law.

Joint ventures will often contain agreements that restrict competition between the participating firms. Such restrictions may be necessary to make cooperation feasible. For example, if the firms develop and sell a product together, they need to be assured of each other's loyalty. If one firm could at any time leave the joint venture and take with it all the knowledge and skill developed jointly, cooperation will not succeed. Fear of such an event might deter firms from entering into a joint venture in the first place. Thus noncompetition clauses in joint venture agreements may be necessary.

These secondary agreements are sometimes called "ancillary" agreements and should be judged by whether they further the procompetitive purposes of the venture and whether they are reasonably necessary to its success. In addition, investigators should ask whether the beneficial purposes of the joint arrangement could be accomplished with a more limited restriction on the members' ability to compete.

Facilitating practice agreements

A facilitating practice agreement calls for the adoption of a practice—sharing information, adopting a product standard, or adopting particular contracting or pricing practices—that makes it easier for a cartel to operate or for firms in an oligopolistic market to avoid competing with each other, even without any explicit cartel agreement. These facilitating practices may take many forms, including information exchanges, product standardization, most-

avored nation or price-protection clauses, and delivered pricing systems. These actions do not directly restrain competition, but they make it easier for the industry to reach a tacit (or explicit) agreement on pricing or output. As such, a facilitating practice agreement may reduce competition, although an explicit agreement on price or output cannot be proven.

These agreements are generally evaluated by assessing how likely they are to facilitate oligopolistic pricing. The steps in the analytical process are: defining the relevant market, determining its structural and competitive conditions, and determining how the practice will increase prices. If the potential for tacit or explicit cartel pricing would rise significantly then adoption of the practice is anticompetitive. Four factors characterize most facilitating agreements:

- They occur in markets whose characteristics are conducive to the formation of cartels.
- They include most of the significant competitors in the market.
- They make it easier to reach or maintain a tacit or explicit cartel price or output.
- They have no procompetitive benefits, or any benefits that do exist could be achieved with less risk to competition.

Facilitating practices fall into two functional categories: practices that make it easier to reach an agreement and practices that lessen incentives to cheat.

PRACTICES THAT MAKE IT EASIER TO REACH AN AGREEMENT. The sharing of information may make it easier to reach an agreement on price increases or output restrictions. Incomplete or delayed information about rivals' prices, transactions, and costs can complicate reaching an oligopolistic pricing accord. Agreements to share information that can eliminate or reduce this problem can take a variety of forms: post-transaction price verification, cost and customer information compiled by trade associations or the companies themselves, or public or private

announcements of future prices. The information exchange may involve either private information or information that is publicly available but difficult or costly to compile.

Information exchanges, like most other facilitating practices, can enhance competition functions. As a general rule markets perform more efficiently when firms have good information about demand and supply. But if markets are highly concentrated, thus raising the possibility of tacit collusion, sharing detailed customer- and supplier-specific information, particularly about current or future prices, or sharing future production and capacity plans may eliminate a barrier to anticompetitive behavior.

Other practices, such as agreements that all suppliers will price their products on a delivered basis (that is, absorbing freight costs), that an agreed-on differential will be maintained among products and services, or that products will be sold in standardized sizes or forms, can also make it easier to reach a consensus on an anticompetitive outcome. It is important to remember, however, that these practices are not always anticompetitive. They are suspect only when other conditions in the industry support explicit or tacit cartel conduct.

PRACTICES THAT LESSEN THE INCENTIVES TO CHEAT. These practices either make it easier to police pricing and output in the industry, and thus to detect cheaters, or reduce or eliminate the gains from cheating. Information exchanges make it easier to detect cheating, particularly if detailed information is exchanged about transactions on a regular and current basis.

Other practices that may reduce the gains from cheating are price-protection and most-favored nation clauses. Price-protection clauses hold that the seller will either meet any price that the buyer is able to obtain from another supplier or release the buyer to purchase from the other seller. Most-favored nation clauses hold that the seller will give the buyer the best price offered to

any customer. Again, these practices are not always anticompetitive. In fact, they can benefit customers in many circumstances. When adopted by most or all participants in highly concentrated industries, however, and when other conditions are conducive to the formation of a tacit or explicit cartel, these practices can serve as self-policing enforcement mechanisms.

Firms can effectively deter cheating only if they maintain an arsenal of credible punishment threats. This is another area in which facilitating practices can have an anticompetitive impact. The most credible punishments are those that target a particular rival whose cheating has been discovered. But targeted punishments may not always be possible, and therefore maintaining general threats may be important. Meeting competition clauses can serve as such a threat, as can carrying large inventories or excess production capacity.

EVALUATION OF THE FACILITATING PRACTICE. To evaluate the likelihood that a facilitating practice will hurt competition, one must determine whether the proposed practice will reduce impediments to the creation or maintenance of a cartel. If the practice has such an effect in an industry that is otherwise susceptible to cartel formation and in which entry or fringe expansion is difficult, this conduct is likely to be injurious to competition. But in industries that already have several complicating factors, elimination or diminution of one of them would not likely harm competition.

Cooperation agreements that may restrict competition
Examples of cooperation between competitors that may hurt competition include exchange of information, restriction of advertising, and setting of standards.

INFORMATION EXCHANGES. Exchange of price information should be evaluated by considering several factors: the likelihood that the practice will

enable pricing coordination (how detailed, current, and customer- and supplier-specific it is); whether the information is publicly available or available only to competitors; whether structural conditions in the industry make pricing coordination a credible risk; the uses to which the information is put; and procompetitive justifications for the exchange. Statistical reports on historical prices (say, six months or older) or production—circulated by a third party such as a trade association—in which the data are aggregated and do not identify specific customers, suppliers, or transactions are unlikely to have an anticompetitive effect and may have significant benefit. At the other end of the scale, direct communications between or among competitors about current prices, output, or capacity utilization or expansion raise much more substantial questions about motive and competitive impact.

AGREEMENTS RESTRICTING ADVERTISING. Competitors may agree to restrict their advertising by not advertising at all, not advertising prices, not advertising in certain media, not using comparative advertising (advertising that compares one firm's product to others' products), or agreeing on the contents of advertisements. Agreements to restrict advertising could be made in connection with a cartel agreement, in which case the restriction should be treated as part of the cartel pact.

Competitors that restrict advertising may justify their behavior by arguing that advertising is undignified or inappropriate, especially within a profession or other service industry (where such restrictions are often found). They may argue that consumers will not be able to understand the important facts about the product or service and that advertising will mislead them. Or they may argue that price advertising will lead some competitors to lower prices and consequently reduce quality.

Advertising serves an important function in a competitive market: it makes information avail-

able to consumers. For example, it may identify sellers or providers, explain new products, or provide information about product quality and prices. Advertising may be an important means for a new firm to enter a market or for a firm to expand its market share. Thus eliminating or restricting advertising can reduce the effectiveness of competition and raise barriers to entry. Studies show that within a given industry prices tend to be lower if price advertising is allowed. These studies have not supported the argument that advertising, if truthful, confuses customers or leads to a lowering of quality. Although false advertising can mislead consumers, regulation is better left to a public institution than to a group of competitors with strong incentives to protect themselves, not consumers.

AGREEMENTS TO SET STANDARDS. Setting standards for goods and services generally benefits consumers and can make markets operate more efficiently. Standards inform consumers of important product characteristics, they facilitate the compatibility of products that are complements, and they can be used to establish minimum levels of quality necessary to protect consumer health and safety. Although the adoption of standards will exclude nonconforming products or services from the market, that effect by itself is not a sufficient basis for condemning the practice as anticompetitive. The benefits from standardization may far outweigh the loss of competition. Competition law must focus on competition, not on protecting individual competitors.

Standards can serve society in several ways. They may provide consumers with increased information, enabling them to make better decisions about the products they want to buy. Standards can bring the forces of supply and demand to equilibrium more quickly and can help the benefits of new technologies spread more efficiently. Standards relating to health and safety protect consumers who do not have suf-

ficient information to make their own judgments or who are buying products that cannot be easily evaluated.

Still, standards can have anticompetitive consequences. Standard setting may protect supracompetitive pricing by raising the costs of rivals, excluding them from competing effectively, or by raising unwarranted barriers to entry. For example, members of an industry may use standards to protect a price-fixing conspiracy by deliberately excluding innovative or lower-priced products through the adoption of restrictive standards.

One factor must almost invariably be present before standard setting can be competitively harmful: control over market access. Before any standard is considered to be exclusionary, it must be shown that its imposition could restrain trade or competition. If compliance with the standard is not critical to marketplace acceptance of a product or if there are viable alternatives to compliance, then it is unlikely that the standard would restrain competition.

Exclusion may take place through abuse of the certification process, that is, denying approval to products that would satisfy reasonable requirements for performance or health and safety. Or, anticompetitive standard setting may involve adopting coordination or interconnection standards (for example, relating to the interaction of different types of telecommunications devices) that are unduly restrictive. These standards may set minimum and maximum performance requirements, or impose unnecessarily detailed design requirements. Such standards are more restrictive than necessary to ensure effective interconnection or coordination, and may impede innovation and design improvement.

The most important factors to consider in evaluating a standard are fairness of the standard-setting process and certification procedures, and the nature of the criteria used in the standards. If the maker of the standards accepts input from interested parties, maintains

adequate records of the process and of the reasons for its decision, and there is legitimate justification for the standard and the way that it is applied, the procompetitive benefits are likely to outweigh any risk of competitive harm.

Standards based on performance rather than design criteria are superior. Performance criteria measure the ability of a product to do its job, rather than how it goes about doing that job. These are much less likely to deter product innovation or improvement. Similarly, standards setting forth minimum performance criteria are superior to those based on maximum criteria.

Boycotts and joint refusals to deal

A horizontal agreement among competitors not to deal with other competitors, suppliers, or customers is a joint refusal to deal or a boycott. Such agreements could be cartel conduct or part of a noncartel agreement associated with a potentially procompetitive joint venture or agreement to cooperate.

Joint refusals to deal with customers unless they agree to pricing or other terms set by the participating firms are simply means of imposing these terms. Such conduct is treated as per se illegal in jurisdictions that distinguish between per se and rule-of-reason analysis. There is no arguable enhancement of efficiency associated with such conduct. Similarly, if competitors join together to pressure suppliers or customers to stop dealing with another competitor, they are also engaging in cartel conduct. Firms that have a cartel agreement will want to punish any outsider who disrupts the cartel or any member who cheats. An effective means of doing so is jointly refusing to deal with any supplier that sells to the errant competitor or jointly refusing to sell to any customer that buys from that competitor.

But even if firms have not formed an explicit cartel, it may be in their interest to exclude or disadvantage a competitor—especially if the targeted competitor is a disruptive force. For example, suppose that the firms in a market

have generally similar costs. They may have reached a tacit pricing accommodation, although not explicitly agreed-on prices or output. If a new firm begins to compete, it may threaten them, especially if this competitor is relatively more efficient and has lower costs. Even if the existing firms have not formed a cartel, it is in their collective interest to exclude the low-cost outsider or at least raise the outsider's costs.

In general, boycotts that should be treated as anticompetitive are characterized by efforts to disadvantage competitors by either directly denying or coercing suppliers or customers to stop dealing with those competitors. The boycott often shuts off access to a needed input (product, facility, or market). Frequently, the boycotting firm possesses a dominant market position. In addition, there are generally no efficiencies associated with such conduct. The likelihood of anticompetitive effects is clear, and the possibility of pro-competitive effects is remote.

However, some joint refusals to deal can create efficiency benefits, rendering markets more competitive. Some refusals to deal "serve economic efficiency or advance the group's general economic self-interest without seeking to diminish any other group's profits. Others even advance social and moral goals largely unrelated to the group's business or economic interest.... It would seem necessary, at least initially, to assess their economic impact beyond the advantage they create for the group engaged in the boycott" (Gellhorn and Kovacic 1994, 213–14).

An example of a potentially procompetitive agreement is a joint purchasing arrangement made among a group of small competitors. Such an arrangement may capture economies of scale in purchasing and warehousing, and thereby enable the group to compete more effectively with larger rivals. Such a purchasing organization may restrict membership to prevent other competitors from obtaining the cost reductions that the members receive. Excluded competitors can, of course, establish their own purchasing organi-

zations. Indeed, it is probably better for competition if several purchasing organizations are formed rather than a single large one.

The competition official must distinguish refusals to deal that are on balance harmful from those that are beneficial. The following questions should help in this process:

- What proportion of firms in the market are part of the agreement? An agreement among all or almost all firms in a market is more likely to be harmful than an agreement that represents only a small proportion of a market.
- To what extent is a competitor excluded or disadvantaged? Unless the competitor is seriously disadvantaged or rendered unable to compete, it is unlikely that competition will be harmed. If the competitor has alternative ways of obtaining the same or similar benefits, the exclusion will not likely be harmful.
- What is the purpose of the agreement? Does the agreement create efficiencies, for example, by integrating the operations of the participants, by creating a new or improved product or method of distribution, or by otherwise generating cost savings? Or is the only apparent purpose of the agreement to exclude or disadvantage competitors? What are the claimed benefits of the agreement? Have they materialized?
- Could the benefits be achieved without excluding or disadvantaging a competitor? Is the restriction reasonably related to the benefits of the agreement? How do the restrictions further the procompetitive purposes of the venture? Are there less restrictive means for achieving the same benefits? If so, and if such alternatives are not more costly or less effective, on balance the exclusionary restriction may be harmful.

Trade associations and lobbying

Trade associations carry out many legitimate, positive functions, such as educating members about technological and other advances in the

industry, identifying potential problems with products, facilitating training on legal and other administrative issues, and acting as advocate or lobbyist before governmental bodies. But trade association meetings also can provide a forum for cartel activities, and trade associations themselves may occasionally become involved in anticompetitive activities. The sharing of competitively sensitive information can foster or support tacit or explicit collusion, and trade associations are often ideally situated to facilitate such anticompetitive exchanges. Trade association meetings may also create a forum for discussing industry conditions that may range beyond legitimate bounds and result in agreements to limit output or stem price decreases. Finally, because trade association meetings bring competitors together, unlawful agreements may be hatched in informal meetings or social gatherings away from official activities.

A common trade association activity is communicating with the government on behalf of its members. In a democratic society all citizens and their organizations should be encouraged to do so. But trade associations may try to persuade the government to take anticompetitive actions. The association could ask for monopoly authority, legalized cartels, import restrictions, the setting of cartel prices or restricting of entry, or special restrictions or prohibitions on competitors. Should such activities be subject to competition law?

These issues extend beyond competition policy, including free speech and the right to petition one's government. This activity is occurring in the political arena, not the marketplace. The result of such conduct could be highly anticompetitive and harmful to consumers, but condemning such conduct under the competition law could ultimately cause even greater harm to a country's democratic institutions. There is a clear and important role for the competition agency in this context, however—that of competition advocate (see chapter 6).

The United States has created an exception to the protection of joint lobbying and permits a challenge under the competition law to joint conduct that constitutes an abuse of government process, such as filing baseless lawsuits simply to injure a competitor or filing false information with a patent claim to improperly exclude competitors. Of course, cartel conduct undertaken by government suppliers does not qualify as lobbying nor do suppliers' attempts to force the government to raise prices that they receive.

Export cartels

Export cartels concern only export transactions, and are legal in many countries, which specifically exempt such conduct from the coverage of the competition law. The logic of these exemptions is that export cartels harm only foreign consumers, who are not the concern of national governments. Even where such cartels are lawful, however, the cartel's activities may have spillover effects in the domestic market. In the course of reaching agreement on export prices or terms of sale, for example, the participants may exchange information about domestic prices or output that would permit them to reach an explicit or tacit agreement affecting the domestic market.

While export cartels may be lawful in the exporting country, they may be prosecuted by the importing countries, depending on the extraterritoriality provisions of their competition laws. In any case increased cooperation between competition authorities and pressures to harmonize competition policy worldwide are likely to result in the elimination of export cartel exemptions or at least make them impractical.

PART II: VERTICAL AGREEMENTS

Some agreements between an upstream firm, for example, a manufacturer or a wholesaler, and a downstream firm, such as a retailer, may fall

within the scope of competition policy. These agreements may be explicit or implicit. Firms may choose to enter into detailed written contracts, or they may simply rely on verbal agreements or established practices collectively known to participants.

Regardless of the specific form taken by a vertical agreement, treating participating upstream and downstream firms as a single vertical structure is central to the economic analysis of the agreement. The decisions of the vertical structure, some made at the upstream level, some at the downstream level, and some jointly, determine the costs of production, the nature and quality of the product or service being sold, the price at which this product or service is sold, the quantity sold, and the geographic markets or customers that are or are not to be served. These decisions also determine the total profits collectively earned by participating firms, subject to external constraints. The distribution of profits among the firms in the vertical structure will be determined in large part by the terms of the agreement.

The terms of the agreement also affect the decisions of participating firms, either by placing direct obligations on them or by changing incentives to make certain choices. The specific terms of the agreement therefore affect economic efficiency.

From the point of view of economic analysis, if not legal analysis, vertical agreements can be thought of as an intermediate form of vertical integration. Although firms are not necessarily integrated in terms of ownership, vertical agreements can result in varying degrees of de facto integration and coordination of decisionmaking between upstream and downstream firms. However, it is important to note that relationships between a parent company and a subsidiary should not be regarded as vertical agreements. A subsidiary is part of a parent company, that is, such a firm is already completely or partially integrated through ownership linkages.

Vertical agreements can, in principle, occur at any stage of the supply or distribution process for a product or service. In practice, attention has been concentrated on restrictive agreements in retail distribution. Examples of restrictive vertical agreements include:

- Resale price maintenance agreements, whereby retail price is fixed by the producer or price floors or ceilings are imposed.
- Exclusive distribution agreements, whereby distributors are assigned exclusivity within a geographic area, or over particular types of clients, or over specific products.
- Exclusive dealing agreements, whereby downstream firms are prohibited from dealing with competing producers or distributors.
- Tie-in sale agreements, whereby downstream firms are required to purchase a certain range of products before being allowed to purchase a particular product. An extreme example of this kind of agreement is “full line forcing,” requiring downstream firms to purchase an entire product range.
- Quantity forcing, whereby downstream firms are required to purchase a minimum quantity of a product.

This list is by no means exhaustive. Agreements between upstream and downstream firms can be very complex, incorporating many mutual commitments and obligations. Franchise agreements, for example, can be quite elaborate and may sometimes incorporate one or more of the restrictive types of provisions listed above.

These provisions may have desirable effects. They may lower prices because of increased output by existing firms arising from the expansion of demand and economies of scale; prices may also fall as new firms are encouraged to enter the market. Vertical restraints generally ensure that sellers earn a minimum profit margin that allows for greater efforts to promote a product. Competition between different brands, for example, may also be heightened if competing firms provide incentives to promote their

respective brands through vertical restraints. That is, although price competition between dealers of the same branded product may be restricted by means of vertical agreements, competition between different brands may be encouraged because of the incentives for increased sales efforts that profit margins under vertical agreements provide. Vertical restrictions may also facilitate the entry of new firms. In some situations, in order for new products (or firms) to penetrate the market, heavy sales promotion rather than price competition has to be relied on.

Vertical restrictions can also have ambiguous effects. For example, vertical restrictions that require the provision of such services as detailed instructions on how to use a product may benefit many consumers, though not necessarily all of them. The cost of the additional services is added to the price of the product, but some groups of consumers may or may not be willing to pay the higher price in exchange for such services. Generally speaking, first-time buyers benefit more from detailed instructions on how to use a product than those who already have used it.

Vertical agreements can also have undesirable effects. They may be used to help cartelize an industry or prevent market entry. For example, a network of resale price maintenance agreements can be used by a group of colluding manufacturers to enforce a price-fixing agreement by making it more difficult to cheat on the cartel, since vertical agreements facilitate monitoring of the retail price of a product (see also the discussion on this subject in Chapter 4, Mergers). A dominant incumbent may also make it difficult or even impossible for rivals to enter the market by tying up scarce distribution channels through exclusive distribution agreements.

From a competition law and policy point of view, vertical agreements are most likely to be harmful when at least one of the transacting parties is dominant in either the upstream or downstream markets. For this reason, the competition effects of certain vertical arrangements or business practices are discussed in Chapter 5, Abuse of Dominance.

In this context, a three-step approach to the analysis of restrictive vertical agreements can be applied. First, the analysis should focus on signs of the collective exercise of market power or the presence of market dominance at the upstream or downstream levels. If none of the participants in the agreement is dominant in its respective markets and market structures are such that the agreement is not likely to facilitate collusion, it is unlikely that the agreement will be harmful. Second, if these structural concerns exist, the effect of the agreement on competition should be closely examined. Finally, if competitive concerns persist, the analyst should determine whether there are significant efficiency gains arising from the agreement that outweigh the harm to competition.

It must also be noted that even restrictive vertical agreements that involve dominant firms can result in efficiency gains. This requires caution in dealing with such cases so that efficient market developments are not impeded. The types of efficiencies that are relevant in this analysis are discussed in Annex 2, Efficiency Defenses.

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Appendix 3.1

CASE STUDY: PROSECUTION OF A CEMENT CARTEL IN THE SLOVAK REPUBLIC

This case provides an example of successful prosecution of a nationwide cartel agreement in a transition economy. Beginning in 1992 the Antimonopoly Office of the Slovak Republic began receiving a series of complaints from cement purchasers alleging unlawful agreements between cement producers. Customers reported that they were unable to deal with more than one producer or that they were forced to purchase more expensive cement from distant producers. Initially, after reviewing some documents and conducting oral hearings, the Antimonopoly Office was unable to confirm these allegations. Some of the producers' conduct could be explained, for example, by the poor credit records of some customers. The Antimonopoly Office nevertheless continued to monitor the cement industry and regularly visited producers and the cement producers association.

In 1993 an important breakthrough occurred during a routine visit by an investigator from a local branch of the Antimonopoly Office. The investigator found a letter from an official of the Cement Association of the Slovak Republic suggesting a nationwide division of markets. The letter, addressed to the directors of all Slovak cement producers, discussed an "application" by a firm to establish a new cement facility in a particular town. This prompted the Antimonopoly Office to conduct a statistical analysis of data on prices, production, exports, and inventories of the domestic cement producers. The pattern of price changes could not be explained objectively, which

gave rise to strong suspicions that prices had been set artificially. There was still insufficient evidence of an agreement among cement producers, however. The investigation then focused on individuals who could have had direct knowledge of an agreement.

First, the authorities contacted former employees of the alleged cartel members, particularly those who had been fired or otherwise forced to leave. Former employees were identified from company records obtained by the Antimonopoly Office. One of the people contacted provided significant details about a market allocation agreement among the cement producers.

The next step was to interview witnesses at the offices of the cement association. Since the Antimonopoly Office knew the identity of the people involved in implementing the agreement, the investigators were able to prepare for the interviews in advance. During the interviews some of the responses clearly contradicted others. Witnesses who were suspected of lying were informed of the legal consequences. Some witnesses then described the implementation of the agreement in detail in exchange for a promise not to prosecute them for their original inaccurate stories. At this point, the experts from the Antimonopoly Office decided to visit some cement producers without prior announcement. Teams of two or three investigators examined written materials relating to the case before conducting the interviews. Faced with written proof

and minutes from the legal hearings, top officials of these enterprises could not deny the basic facts of the agreement.

The evidence revealed that cement producers had entered into agreements restricting competition for at least two years. In 1991 the parties had agreed to a regular exchange of basic economic data about their firms (output, costs, exports, inventories, profits, numbers of employees, and average wages and salaries). They reported this information monthly to a consulting firm, which compiled and distributed it to the producers. The consulting firm also prepared documents establishing a geographic division of markets among the producers and suggesting production quotas for each producer. Documents prepared by the consultants contained such statements as: "The particular

region shall be supplied exclusively by the producer located therein. If there is no producer in a region, a principal supplier shall be designated." These plans were first discussed by the commercial directors of the producers and then agreed to by the managing directors.

In 1994 the Antimonopoly Office issued an order prohibiting all cement producers from engaging in market division, setting sales quotas or exchanging information that could facilitate the coordination of such illegal agreements. The office also imposed fines totaling Sk19.96 million (US\$0.7 million) on the entrepreneurs who had participated in the agreements—the highest fine that had ever been imposed by the Antimonopoly Office. The parties appealed the decision to the Supreme Court of the Slovak Republic, which upheld the decision.