

## CASE 7

# Facilitating Practices: The Ethyl Case (1984)

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### INTRODUCTION

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Section 1 of the Sherman Act makes “every contract, combination . . . or conspiracy in restraint of trade” illegal. The most obvious application of Section 1 is to price-fixing agreements, and through its prohibition of price-fixing agreements Section 1 seeks to protect consumers against supracompetitive prices. However, the economic theory of oligopoly teaches us that there are circumstances in which a group of firms can achieve supracompetitive prices without the need for any formal agreement.

This case study is about this “oligopoly problem” and the efforts of the antitrust authorities to deal with it. It involves an antitrust case brought by the Federal Trade Commission (FTC) against the four manufacturers of lead-based antiknock gasoline additives, who were alleged to have succeeded in substantially eliminating price competition among themselves without entering into any formal price-fixing agreement.

Lead-based antiknock compounds have been used in the refining of gasoline since the 1920s to prevent engine “knock,” the premature detonation of gasoline in the engine’s cylinders. From the 1920s until 1948, the Ethyl Corporation was the sole domestic producer of lead-based antiknock compounds. Demand for the compounds increased with the increase in gasoline use, however, and in 1948 DuPont entered the industry and cap-

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tured a substantial market share. In 1961, PPG Industries began to manufacture and sell the compounds, followed by the Nalco Chemical Company in 1964. From 1974 to 1979 (the relevant period for the case), these were the only four domestic producers of lead antiknock compounds. DuPont had 38.4 percent of the market; Ethyl, 33.5 percent; PPG, 16.2 percent; and Nalco, 11.8 percent. There were no significant imports into the United States.

In 1973, the Environmental Protection Agency (EPA) required that all automobiles manufactured in the United States beginning in 1975 be equipped with catalytic converters. Since the lead in antiknock compounds fouls such converters, almost all new cars sold in the United States since 1975 have required unleaded gasoline. As a result of this and other measures, the use of lead antiknock compounds declined from more than 1 billion pounds in 1974 to approximately 400 million pounds in 1980.

The drop in demand resulted in substantial excess capacity, a situation that economists would normally expect to lead to intensified price competition. Nevertheless, the FTC claimed that during the 1974 to 1979 period the companies substantially eliminated price competition among themselves and charged uniform supracompetitive prices. The FTC did not claim that this was the result of an agreement among the firms. Rather the absence of effective price competition could be traced to several specific practices that some or all of the firms employed, within the framework of a highly oligopolistic market structure. The FTC asserted that these practices “facilitated” the elimination of horizontal competition and ought to be prohibited.

## ANTITRUST AND OLIGOPOLY: THE POLICY DILEMMA

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A traditional horizontal price-fixing agreement is an effort by a group of firms explicitly to coordinate their activities so as to eliminate competition among themselves and thereby achieve noncompetitive prices and supranormal profits. These kinds of price-fixing agreements have long been regarded as unlawful.

The classic economic theories of oligopoly, on the other hand, do not focus on explicit efforts to coordinate conduct but instead on the profit-maximizing behavior of individual firms in an interdependent environment. The typical oligopoly model posits a number of firms, each deciding what level of a homogeneous output to produce. Since the market price depends on the sum of all firms’ output, each firm must make certain assumptions about the combined output of its competitors and how that output will change in response to its own decision. On the basis of these assumptions, the firm chooses its own profit-maximizing course of action.

The collective result of all such individual decisions can be a price above the competitive level.<sup>1</sup>

The emphasis of oligopoly theory on individual profit maximization, as opposed to explicit coordination, is highly significant for antitrust policy. Since the applicability of the Sherman Act seems to turn on the existence of an agreement, and since by assumption there is no explicit agreement in a classic oligopoly situation, it would appear that firms can enjoy the supracompetitive prices and profits that are associated with price fixing without violating the Sherman Act. If so, there is a potentially troublesome gap in the coverage of the antitrust laws. One could argue that oligopolistic behavior leading to supracompetitive prices could be brought within the scope of the Sherman Act by characterizing the end result of oligopolistic interdependence as “tacit” or “implicit” agreement. Unfortunately, the semantic simplicity of such a solution masks a very serious underlying difficulty.

The problem can be illustrated with a simple example. Consider two essentially identical gas stations selling private-brand gasoline directly across the road from one another on a long, isolated highway with no rivals for miles around and no likelihood of new entry. Prior to today, both stations have been charging \$1 a gallon, which we assume to be the competitive price. Since the two stations are regarded by consumers as offering virtually identical products, we assume that, at the \$1 price, each enjoyed 50 percent of the total gasoline sales.

One station (station A) is contemplating raising the price to \$1.25, which its resident economist has computed to be the profit-maximizing monopoly price: the price that would maximize total profits if both stations were to charge the identical price. The scheme will be profitable for A only if station B matches the \$1.25 price, since if A raises the price and B does not follow, all of A’s customers will switch to B.

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<sup>1</sup>The basic Cournot (1963) model is typical of the methodology and the results of the early models. Under the simple (and probably unrealistic) assumption that rivals’ output will not be influenced by changes in the output level of the individual firm, Cournot established that the collective result of each firm’s individual profit-maximizing output decision would be an industry output level that deviated sharply from the competitive level as the number of firms became smaller. Thus, for example, a two-firm industry—that is, a duopoly—would yield a price that was much closer to the single-firm monopoly price than to the competitive price without the firms’ having had any explicit communication or agreement. Other early models employed different reaction functions but generated similar results. Chamberlin (1933), for example, showed that if each firm expected its rivals to follow perfectly its own behavior, then the collective result of each firm’s individual profit-maximizing behavior would be the monopoly price, even with a large number of firms.

The more recent oligopoly literature has criticized these simple reaction functions. Stigler (1964), for example, emphasized the links between industry concentration and the likelihood that rivals will follow a price increase. Others (see Scherer and Ross [1990, ch. 6] for a brief survey) have emphasized the dynamic aspects of oligopolistic interdependence and have argued, among other things, that where firms confront one another frequently over time, they will learn something about the way their rivals will react. The model presented in this case study, if interpreted within the context of the traditional oligopoly literature, emphasizes how firms can behave so as to influence their rival’s reaction functions in an effort to produce Chamberlin-type conduct.

At first glance, it appears risky for A to go ahead with the price increase without prior assurance (i.e., agreement) that B will follow, since a possible strategy for B is not to match A's price increase and to capture all the business. However, if A raises the price to \$1.25, it will learn very quickly whether B has followed, since the same signs that communicate B's price to potential customers can be seen by A.<sup>2</sup> If B has not followed the increase, A can promptly restore its \$1 price. In the interim, A will have lost some sales, but as long as it is able to detect B's price cutting and responds immediately, the losses will not be too great.

Station A's ability to detect and respond quickly to B's failure to match A's price affects B's optimal strategy. By keeping the price at \$1, B would enjoy a brief period when it would capture nearly 100 percent of the business. However, once A retracted its increase, the firms would go back to sharing the market at \$1. If instead B were to match A's increase (which it can do easily by observing A's prices directly), it forgoes the brief period of extra business in return for a possible long-term equilibrium in which it shares the market with A at \$1.25. Hence, B has an incentive to go along with an increase by A, and A, knowing that B's best strategy is to follow, can initiate the price increase with minimal risk.

If the scene unfolds as described, the firms jointly achieve monopoly profits without the need for any formal agreement of the kind usually involved in a Section 1 price-fixing case. What we want to consider is whether it is feasible to bring the situation within the reach of the Sherman Act by labeling it a tacit or implicit agreement and arguing that the antitrust laws ought to extend to such agreements.

To see the difficulty of applying the Sherman Act to such conduct, consider how one would explain to a judge or jury precisely what A did that is objectionable, or how one would fashion an effective remedy. It seems foolish to argue that A should have ignored the fact that B would likely follow an increase by A. This is essentially requiring A to pretend that it is in perfect competition rather than in a situation of duopoly. What the argument comes down to, then, is that A should have kept its price at \$1 even though it knew that \$1.25 would be more profitable.

But if that is the argument, what is the criterion for determining when A has acted illegally? Is it simply the fact that B followed A's price increase? Surely not, since that would essentially make any price increase that is not subsequently rescinded (because rivals failed to follow) illegal. Can A never initiate a price increase without risking a violation of the antitrust laws in the event its rivals follow? (Of course if rivals do not follow, the price increase is useless to A.) Would we interpret the law to mean that A can increase prices only when and to the extent that costs go up?

Similarly, it is difficult to argue that B committed an antitrust violation

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<sup>2</sup>Even if A could not observe B's price directly, the immediate and large shift in business from A to B would be an almost certain indication that B was keeping its price low.

when it matched A's increase, knowing that if it failed to match, A would simply retract the increase. Can B ever follow an increase by A without itself violating the antitrust laws? Can it follow A's increase only if it is cost justified? (Is the cost justification based on A's costs or B's? Or B's estimate of A's cost?) Finally, if the relationship between price and costs is to be determinative, are the federal courts equipped to carry out this regulatory function? These questions suggest the great difficulty of attempting to apply the antitrust laws to classic oligopolistic behavior.<sup>3</sup>

## THE DIFFICULTY OF OLIGOPOLISTIC COORDINATION IN COMPLEX MARKETS

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Although the policy dilemma posed by the classic oligopoly model as described in the preceding section is analytically troublesome, the dilemma may be more theoretical than real. In this section we focus on the difficulties faced by an industry seeking to achieve supracompetitive prices and profits under more realistic conditions and assess how likely the industry is to achieve those prices and profits without some kind of explicit effort at coordination. We then seek to describe an antitrust approach that "picks up" most such efforts, even those that cannot be described as "agreements."

### Complicating Factors

To focus the discussion, it will be helpful to revisit the gas station example. The key to eventual success for the gas stations was that station A was willing to initiate a price increase without any formal agreement from station B to follow. Nevertheless, A was quite confident that B would follow and that there would be little risk associated with initiating the price increase. (Station A also knew that, even if B did not follow, A could retract the price increase without having suffered any serious financial consequences.)

The confidence of A that B would follow the price increase was based on two factors: (1) Since B could readily observe A's price, it would not be difficult for B to follow A's increase exactly, if B wanted to, (2) Since A would promptly withdraw the price increase if B failed to follow (so that B would enjoy only the most temporary gain in sales), it was in B's interest to follow A's increase, if B could do so. The two factors, ability and incentive, are equally important. If B is unable to follow A (because it does not know what A has done), it does not matter that B would like to follow. And, if it is not in B's interest to follow, it doesn't matter that B is able to.

However, B's ability to follow A's increase depends critically on the facts that B can easily observe A's prices and that A's prices are unambigu-

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<sup>3</sup>For a more extended discussion of this argument, see Turner (1962). For an argument that the Sherman Act can be applied to oligopolistic pricing, see Posner (1969, 1976).

ous in their meaning. The same mechanism that informs consumers about A's price increase (the large signs facing the highway) promptly informs B as well. Moreover, there is little chance of any confusion on B's part as to what the signs mean. In our simple model, A sells only a single variety of gasoline (e.g., regular unleaded), and there is no ambiguity about what the customer gets for the posted price (one gallon of the gasoline). Finally, the products sold by A and B are regarded by consumers as perfect substitutes, so that if B does increase its price by the same dollar amount there should be no shift in the distribution of business.

Likewise, B's incentive to follow A depends critically on the fact that B's failure to follow would be detected by A, who could retract the price increase promptly. Even if A could not observe B's prices directly, the fact that there are only two firms means that any increase in B's business would result in a corresponding drop in A's business. Hence, station A would immediately feel the impact of B's increase in business and is very likely to conclude that the reason for the shift in business is B's lower price. Moreover, the impact on A would be substantial enough that A's only realistic strategy, once it has suspected that B has not followed the price increase, is to withdraw it; and B knows that.

Real markets, however, are frequently more complicated, so that a firm that seeks to initiate a price increase to noncompetitive levels cannot always be confident that the move will result in increased profits, either because its rivals will be unable to raise their own prices in the exact amount necessary to preserve the preexisting distribution of business or because they will not want to do so (or both). The following is an illustrative (not exhaustive) list of the factors that are likely to complicate oligopolistic coordination.<sup>4</sup>

### **Nonpublic Prices**

An obvious and important characteristic of the gas station example was that B had no trouble following A's price because it always knew precisely what A's price was. The same mechanism used to inform A's customers (signs) promptly and accurately informed B. Similarly, A had no trouble determining promptly whether B had in fact followed. While this might be characteristic of most goods sold off the shelf in retail outlets, there are many marketing contexts (e.g., sales to industrial buyers) in which the process of informing actual or potential customers of prices (and price changes) does not necessarily inform rivals. This is not to say that rivals can never find out about a price increase, but the time delay and potential for inaccurate information increase the risk to the initiator of a price increase that a rival will not follow. The same phenomenon also affects rivals' incentives to follow a price increase as well as their ability to do so. If A will not learn promptly whether B has matched the increase, the

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<sup>4</sup>For a more extensive treatment, see Hay (1982).

profits that B can make in the interim are higher, thereby increasing B's incentive not to follow and increasing A's risk in initiating the increase.

### **Lumpy Sales**

In the gas station example, A did not lose much business in the brief period during which its prices were higher than B's. This is because any station's total gasoline sales are made to a large number of separate buyers in relatively small amounts spread throughout the day or month or year. In some contexts, however, sales occur in large, discrete batches. An example is the process whereby the major auto manufacturers bid once or twice a year on a contract to supply the major rental car companies with new cars. Suppose Ford became aware that GM intended to raise prices during the next round of bids. If Ford were to refuse to follow GM, GM would almost certainly find out, but probably not until Ford had won a major contract for the coming year. This big chunk of sales may give Ford an incentive not to follow GM even though the result may be for GM to rescind its increase during the next round of bidding. More generally, the lumpiness of sales increases the incentive not to follow a leader's increase and thereby increases the risks in initiating one.<sup>5</sup>

### **Complex and Nonfungible Products**

Where the product in question is simple and fungible across sellers, it is easier for rivals to follow a price increase in such a way as to maintain the preexisting distribution of sales. Where there is not a single product but an entire product line, there are more prices to coordinate. The broader the array of products, the more complicated the problem. In addition, when the products are not fungible across sellers, coordination is difficult because if A charges a particular price, it is not obvious that market shares will be stable just because B matches that price.

One important dimension of fungibility is associated with location. For a steel customer in Detroit, the steel from a manufacturer in Gary, Indiana, and the steel from a manufacturer in Birmingham, Alabama, are not perfect substitutes if the buyer has to pay the freight from the manufacturer's plant. Hence, the fact that FOB prices are the same from both manufacturers (or are increased by the same dollar amount) does not mean that buyers will be indifferent as to their source and that market shares will not shift after a price change. Alternatively, if freight rates change frequently, market shares may shift even if FOB prices remain unchanged,

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<sup>5</sup>While lumpiness often occurs "naturally" (e.g., for business reasons on the part of the buyer or seller that have nothing to do with oligopolistic behavior), buyers sometimes have the ability to lump their purchases into big batches precisely to provide an inducement for sellers to cut prices. This can be done either by actually purchasing and storing large quantities at one time, or by entering into a long-term contract calling for delivery over the life of the contract. It is also worth noting that frequently both lumpiness and secrecy are present, and the effect is, of course, cumulative.

and compensating changes in FOB prices will have to be coordinated to restore the preexisting distribution of sales.

### **Market Concentration**

A basic tenet of oligopoly theory is that the less concentrated is the market, the more likely are individual firms to find it in their own self-interest to undercut a noncompetitive price.<sup>6</sup> The reasons have to do with the potential for a small rival to increase profits significantly above its share of the “cooperative equilibrium” if it lowers prices while rivals’ prices remain unchanged. In an industry of many firms, rivals may not notice when one firm increases sales by taking a little from each of them, and even if they notice, retaliation may not be worthwhile. Hence, the more unconcentrated the market, the harder it will be to maintain an equilibrium at supracompetitive prices.

### **Facilitating Practices**

Once we move beyond the simple oligopoly models, or uncomplicated but unrealistic examples such as the gas station case, complicating factors such as those just described are likely to be present in many markets to a degree that firms in those markets are unlikely to be able to approximate the monopoly level of prices and profits solely as the result of perceived interdependence; something more will be needed. In many cases, what is required is explicit agreement—the usual stuff of a Sherman Act Section 1 price-fixing case—and nothing less will suffice.<sup>7</sup> However, this is not the only possibility. In this chapter we want to consider a situation in which some explicit behavior that falls short of a traditional agreement will serve to *facilitate* a noncompetitive equilibrium. This is behavior that, either by design or happenstance, helps the firms in the market overcome the complicating factors that make pure oligopolistic interdependence infeasible or insufficient to yield monopoly profits.

A focus on the specific practices used to facilitate the noncompetitive result circumvents the major policy problem of dealing with oligopolistic interdependence—the absence of culpable conduct. The treatment of facilitating practices need not differ fundamentally from the treatment of agreement under Section 1, where firms are guilty not merely because they have achieved noncompetitive prices, but because they have done so by entering an agreement. Under a “facilitating practices” approach, it would be unlawful to achieve noncompetitive prices via the use of one or more facilitating practices.

While such an approach to dealing with oligopolistic behavior seems

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<sup>6</sup>The classic derivation of this theorem is from Stigler (1964).

<sup>7</sup>Market structure will sometimes be sufficiently unfavorable that even explicit agreement will be inadequate to produce supracompetitive prices and profits for any significant period of time.



attractive, we need to determine if it can be implemented under the antitrust laws. Several possibilities exist. First, it will sometimes be the case that, although there is no agreement to fix prices, there is an agreement on the part of several firms to implement the facilitating practices, such as an agreement to exchange current prices when each firm's prices would not normally be observable by its rivals. If so, there is no special legal issue. Section 1 applies to any agreement in restraint of trade, and it need be proved only that the agreement, here the agreement to exchange prices, does in fact result in a diminution of competition.<sup>8</sup> Moreover, the agreement need not be contained in a formal written or oral agreement.

Second, in the case in which a noncompetitive outcome is achieved through the use by one or more firms of certain facilitating practices, without any explicit agreement on price or any agreement to use the facilitating practice, one could simply define the noncompetitive outcome (the "meeting of the minds") that is achieved through the use of facilitating practices to be an illegal tacit or implicit agreement. The major policy objection to using the tacit-agreement approach to pure oligopolistic interdependence—the absence of identifiable culpable conduct and the lack of effective remedy—is not present in the facilitating practices approach.<sup>9</sup>

Finally, it may be possible to avoid the Sherman Act altogether. Section 5 of the Federal Trade Commission Act prohibits "unfair methods of competition." Traditionally, the FTC has interpreted Section 5 to cover more or less the same conduct as that which is covered by the Sherman Act. Specifically, in oligopolistic situations the FTC has traditionally alleged at least a tacit, if not an explicit, agreement. But neither the statutory language nor the legislative history would appear to limit the FTC to situations involving agreement, and facilitating practices could arguably be condemned as "unfair methods of competition."<sup>10</sup>

Our case study involves the last approach. It involves an action brought by the FTC under Section 5, in which the FTC declined to characterize the conduct as constituting an agreement. The action was a deliberate effort to test the limits of Section 5 in relation to oligopolistic behavior.

## THE LEAD-BASED ANTIKNOCK INDUSTRY AND THE FTC COMPLAINT

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The lead antiknock compound market had several of the characteristics generally viewed by economists as being conducive to noncompetitive

<sup>8</sup>There have been several major antitrust cases along these lines, including *United States v. Container Corp.*, 393 U.S. 333 (1969).

<sup>9</sup>For an example of this approach, see the Justice Department's memorandum on the degree of modification governing General Electric and Westinghouse in their marketing of turbine generators, *United States v. GE Co.* (1977-1) Trade Cas. (CCH) 712.

<sup>10</sup>These aspects of the FTC Act are discussed in some detail in the various opinions in the *Ethyl* case. Two major consequences of relying on the FTC Act are that there is no right of private

outcomes. There were only four domestic sellers, with two firms (DuPont and Ethyl) dominating the industry. The two larger firms apparently had similar costs of production. The product was relatively simple. There were two basic lead antiknock products—tetraethyl lead (TEL) and tetramethyl lead (TML)—that were usually combined in various proportions. Individual antiknock compounds of a given type produced or sold by one of the firms were substantially similar to those of the same type sold by the others—that is, the product was essentially fungible. The product had no reasonably close substitutes and constituted such a small percentage of the cost of refining a gallon of gasoline that the overall industry demand faced by the sellers was highly inelastic: increases in the industry price would result in relatively small reductions in consumption.

Moreover, it seemed unlikely that high prices would be deterred or undercut by new entry. After 1964 (when Nalco, the last of the four current producers, entered the industry) there were no new entrants into the industry. Given the overcapacity that characterized the industry in 1974 and the forecasts for further substantial drops in demand due to the government regulations, there was little likelihood of new entry even if existing firms were earning “monopoly” profits.<sup>11</sup>

However, other industry characteristics reduced the likelihood that supracompetitive prices could result merely from oligopolistic interdependence. These are the “compelling factors” referred to earlier; they can be enumerated as follows:

1. Sales of antiknock compound were not made to the general public but to the major oil refiners in essentially private transactions. Hence, it was not inevitable that one firm’s price changes would immediately be observed by its rivals. This absence of transparency complicated the task of coordinating price changes so that there would be no shift in the distribution of sales and provided an incentive for secret discounts (since such discounts would not necessarily be detected quickly).

2. The major oil companies were sophisticated customers buying large quantities each year. There was ample incentive to bargain hard for discounts and to offer to shift significant business in return for discounts. Moreover, the huge excess capacity provided a strong incentive for one seller to offer a discount if it would result in significant additional sales.<sup>12</sup>

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action under the FTC Act and there are no sanctions imposed on firms that have been found to have engaged in unfair methods of competition; they are merely given an order to “cease and desist” from using the practices.

<sup>11</sup>The fixed costs of a plant of minimal optimal scale were large enough that new entry would substantially depress prices. Since many of the fixed costs would also be sunk costs, this would result in losses for the entrant. Although there was widespread agreement on the low likelihood of independent entry, the possibility of backward vertical integration by one or more of the major oil companies was perceived by the Court of Appeals to be a significant factor.

<sup>12</sup>The excess capacity meant that the marginal costs of additional output were relatively low and that the incremental profits on additional sales would be substantial.

3. The four producers had a total of six plants: one in California; one in New Jersey; one at Baton Rouge, Louisiana; and three in Texas. The customers' plants were dispersed throughout the country. While, on average, transportation costs were not large as a percentage of the price of the product (about 2%), the transportation costs to any given customer from each of the four producers could differ significantly. Hence, even if FOB prices were equal for all four producers, the effective delivered price from one producer to a given customer could be substantially different from the effective delivered price from another producer to that customer. Since the product was otherwise fungible, the lowest effective delivered price would in all likelihood get the business, with no guarantee that, after all the business was allocated on this basis, the market shares would be distributed in a way that would be "satisfactory" to all producers. Moreover, nonproportional changes in freight costs to different locations could cause market shares to shift unpredictably.

In light of these complicating factors, the FTC did not believe that pure oligopolistic interdependence could be entirely responsible for the lack of effective price competition. Rather, the FTC identified four practices that contributed materially to the noncompetitive outcome.

### Advance Notice of Price Changes

All four firms gave notice to their customers of price increases at least thirty days in advance of the effective date of the price increase. For example, if Ethyl were attempting to initiate a price increase to be effective on July 1 of a given year, it would notify customers of the increase no later than June 1 and typically a few days earlier. The FTC argued that such advance notice gave rivals an opportunity to respond so that uncertainty about whether rivals would follow would be eliminated *before* the price increase actually went into effect, thereby permitting modification or roll-back of the price increase prior to its effective date if rivals did not follow precisely. For example, Ethyl might actually announce the increase on May 28. The other firms would then have three days to make matching announcements, which would ensure that, when the price increases actually went into effect, all firms would have identical prices. Even if one or more of the rivals did not make an announcement until, say, June 3, Ethyl would at least be sure that rivals would be matching the increase no later than July 3, and if necessary, could defer the effective date of its own price increase until then.

Ensuring that the initiator will not be alone in the market with a higher effective price prevents a possible shift of short-term business to lower-priced competitors and, as a result, reduces risk associated with the price move. It also permits time for "adjustment" if one or more of the competitors should favor a price increase of a different amount. The actual

record of price increases showed that during the period 1974 to 1979, there were twenty-four price increases. In twenty instances, all the firms had an identical list price that was effective on the same date. In the other four instances, there was an identical price list and a difference of only a day or two in the effective dates of the increase.

### Press Notices

Until about mid-1977 (when the practice was stopped on advice of counsel), all the firms issued press notices concerning price increases. While the producers had other sources of information (customers voluntarily notified the other firms of one firm's announced price increase, so as to learn promptly if the others would follow), the FTC claimed that these other sources of information were not always timely and were sometimes inaccurate. The fact that information may be unreliable may make it difficult for a price leader to "communicate" its move or to learn whether rivals have followed. Either consequence increases the risk of initiating a price increase, and the press releases helped ease this uncertainty by providing early and accurate information of price moves.

### Uniform Delivered Pricing

All the firms quoted antiknock prices only on the basis of a delivered price inclusive of transportation and quoted the same delivered price regardless of the customer's location. The effective list price for any one firm was therefore identical throughout the United States. A delivered pricing formula removes transportation cost variables from the pricing structure, thus simplifying each producer's price format. A producer seeking to match a competitor's price under this system need not deal with complications engendered by freight tariffs or speculate on its competitors' transportation cost variables. Rather, a producer seeking to have the identical effective price as its rival to each of its 150 actual or potential customers need only be concerned with matching the single uniform delivered price.<sup>13</sup>

The courts had recognized for years that an agreement to use a delivered pricing formula such as uniform delivered prices has sufficient potential for eliminating price competition. Such agreements have routinely been held illegal. The FTC argued here that the same anticompetitive

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<sup>13</sup>Scherer (1980, p. 329) has commented on the role that delivered pricing plays in facilitating and maintaining uniform prices: If each producer independently and unsystematically quoted prices to the thousands of destinations it might serve, it would almost surely undercut rivals on some orders, touching off retaliatory price cuts. But common adherence to basing point formulas in effect eliminates discretion and uncertainty, and if each firm plays the game and sticks to the formulas, price competition is avoided. Identical prices are quoted to a given customer by every producer, leaving the division of orders to chance or nonprice variables (such as delivery times, special service, the dryness of martinis provided by salesmen at business luncheons, etc.—bases on which oligopolists often prefer to compete).

consequences follow even where the common use of the pricing formula is not the result of agreement.

### “Most-Favored-Customer” Clauses

A “most-favored-customer” clause in a sales contract is a promise by a seller to offer its customer the benefit of any lower price the seller gives another customer. While the precise terms of a most-favored-customer clause can vary from contract to contract, the essence of the clause in the present context was that any discount off the uniform delivered list price granted to a single customer would have to be extended to all customers of that seller. Ethyl and DuPont were the primary users of most-favored-customer clauses during the 1974 to 1979 period, although the other two firms did employ them in various ways.

As discussed earlier, one of the problems confronting any oligopoly seeking to maintain a supracompetitive price is the incentive that exists for any one firm to shade the price slightly in an effort to pick up additional sales by “stealing” them from its rivals. The incentive is particularly strong where the discount need be extended only to the incremental customer, that is, where the firm can continue to charge the prevailing industry price to its existing customers and to provide the discount only to those customers who would otherwise buy elsewhere. In many contexts, especially in sales to consumers in traditional retail establishments (such as gas stations or supermarkets), such discrimination is often impractical.

In the case of antiknock compounds, however, where sales are made privately to each of many industrial customers (the oil refiners), discrimination in the form of secret discounts is feasible and, given the difficulty of detection and effective retaliation (because sales are secret and at least potentially lumpy), probably attractive. Most-favored-customer clauses effectively prohibit discrimination. This has the effect of discouraging discounting from list prices, since cutting prices “across the board” to all customers would be less likely to be profitable than would selective cuts to targeted customers (to keep them loyal or to woo them away from rivals). In addition, where the discount is offered widely, it is much more likely to be detected by rivals.

Most-favored-customer clauses not only create disincentives to discount, they also reduce uncertainty about rivals’ prices and pricing actions in significant ways. Since such contractual provisions discourage discounting, a firm’s knowledge that its rivals employ them provides assurance that the latter’s discounting will be restrained. As a result of this reduction in uncertainty about rivals’ transaction prices, most-favored-customer clauses facilitate noncompetitive price increases by improving confidence that information regarding a competitor’s prices, gathered from only one or two sources, is applicable to all customers. Therefore, if a firm that has initiated a price increase learns from a few customers that a rival

has matched the increase for sales to those customers, it can be reasonably confident that the rival's matching increase applies to all customers.

## ISSUES FOR THE COURT

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As structured by the FTC, the case presented two main economic questions: (1) Was the industry performing noncompetitively? (2) If so, was the poor performance attributable to the challenged practices? The case also presented the legal and policy issue of whether Section 5 of the FTC Act is applicable to noncollusive horizontal conduct, and if so, what are the general guidelines for when noncollusive horizontal conduct violates Section 5?<sup>14</sup>

### Economic Issues

#### Industry Performance

The FTC made the following arguments about the antiknock compound industry's performance:

1. The overall level of prices was high, as evidenced by profit levels and industry statements about the profitability of the industry and the possibility of much lower prices if competition "broke out." The FTC compared the profit level in this business for the 1974 to 1979 period with the average return on net assets for all manufacturing and for the chemicals industry generally and found, for example, that Ethyl's and DuPont's rates of return exceeded 150 percent of any benchmark comparison in every year during the period. The FTC also made much of a document in which an Ethyl executive characterized the business as a "golden goose," and there were similar (albeit less colorful) characterizations from some of the other firms as well.

2. The structure of prices geographically was not compatible with assertions that the industry was performing perfectly competitively. Since

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<sup>14</sup>The judicial process in an FTC matter works as follows: First, on the basis of a staff recommendation, the Commission (five members, each appointed by the President for a term of seven years) votes whether to issue a complaint; if a complaint is issued, the matter is heard by an FTC administrative law judge, who issues what is called an "initial decision." The matter then returns to the Commission itself which, based on the record compiled at the hearing, along with subsequent argument by the Commission staff and the defendants, either issues an opinion and an order (normally a prohibition on certain conduct in the future) or dismisses the complaint. If the Commission's decision is adverse to the defendants, they may appeal to a U.S. Circuit Court of Appeals. Either party may seek to appeal a decision of the Court of Appeals to the U.S. Supreme Court. However, the Supreme Court accepts only a small percentage of the petitions it receives. In this case, both the initial decision and the Commission's opinion were adverse to defendants. The Second Circuit Court of Appeals, however, reversed the Commission and ordered the complaint dismissed; see *E. I. DuPont de Nemours & Co. v. FTC*, 729 F.2d 128 (1984). The matter was not appealed to the Supreme Court. In the text that follows, I refer to the three layers collectively (i.e., the administrative law judge, the Commission, and the Court of Appeals) as "the court."

delivered prices were uniform even though transportation costs differed depending on the seller's and the buyer's location, even if prices to some buyers were at the competitive level (i.e., buyers for whom transport costs were relatively high), it must be the case that prices to other buyers (those for whom transport costs were relatively low) were above the relevant marginal costs. Put simply, in a competitively functioning industry, buyers who are close to the plants of two or more sellers should pay less for delivered compound than buyers located at greater distances.

3. While it is true that, in a "perfect" market, prices for identical products tend toward equality, there is generally enough friction in the system that the process does not work instantly or produce perfect equality. Hence, the FTC argued that it was simply unrealistic to attribute the identical prices to an abundance of competition. Especially given the presence of big, sophisticated buyers and the considerable excess capacity, one should have observed more variation in the system.

The defendants challenged the FTC's assertions about performance in two important respects. First, they established that prices were not perfectly uniform. While Ethyl and DuPont consistently sold at list price, a substantial portion of Nalco's and PPG's sales were made at a discount. Overall, approximately 15 to 20 percent of industry sales during the period were at a discount from list prices. The FTC argued that these discounts could be explained by special factors (for example, Nalco continued to give discounts to the refiners who first gave Nalco some business when it entered the industry) and were not enough to rebut the overall characterization of the industry performance as noncompetitive.

Second, there was substantial evidence of nonprice competition in the form of various free services. Most were directly related to provision of the antiknock compounds (such as safety services and product equipment and inspection services) that arguably would be provided even in a competitive environment, but others were clearly disguised discounts. Examples included installing lead tanks for refiners, paying architectural fees incurred by a refiner in building an employee cafeteria, and building a railroad spur to facilitate antiknock compound delivery. The parties disputed the significance of this nonprice competition. The FTC argued that customers would have preferred a straight price cut and that the nonprice concessions were actually a symptom of the elimination of direct price competition. Defendants, anticipating their main defense (discussed below), argued that the nonprice competition was in many cases the practical equivalent of a price cut and, in any event, the best that could be expected in an oligopolistic industry, where direct price cuts would be quickly observed and matched, thereby rendering them unprofitable.

### **Causation**

Using the documentary evidence and the opinion of its economic expert, the FTC argued that the noncompetitive performance was attribut-

able, at least in part, to the identified facilitating practices and that, but for the practices, industry performance would have been measurably improved. The FTC acknowledged that structure was important but claimed that, because of the complicating factors, structure alone could not account for the poor performance. Defendants took the position that, to the extent that the industry performed unsatisfactorily, it was the natural result of the oligopolistic structure of the industry.

Defendants also took specific exception to some of the FTC's claims about the importance of the practices.

1. As to the press announcements, defendants argued that information about price changes initiated by one firm would spread quickly to the firm's rivals as customers sought to inquire whether the other firms intended to go along with the increase.

2. The practice of uniform delivered prices was not significant in light of the relatively low transportation costs as a percent of the total price. Since the product was fungible, competitive forces would lead to freight absorption by more distant sellers in an effort to compete against more favorably situated sellers for a customer's business. Since freight rates between any two points could easily be determined, firms would have no trouble matching one another's effective delivered price even if prices were quoted on an FOB basis.

3. The most-favored-customer clauses simply put into contractual language what the firms regarded as the sensible policy from a customer relations standpoint of not discriminating among customers by giving discounts that other customers would learn about anyway. Testimony indicated that customers on an individual basis desired contractual protection against discrimination.<sup>15</sup>

These arguments on causation presented an interesting dilemma for the court. Given the FTC's admission that some oligopolistic interdependence was at work and that, even without the facilitating practices, it was unlikely that the industry would behave perfectly competitively, how should the court assess how much worse the performance was as a result of the facilitating practices? There is no obvious way to measure this factor, and the courts were left to some extent with the conflicting judgments of the parties' expert economic witnesses.<sup>16</sup> The FTC's expert claimed that in his opinion the industry would have performed significantly better in the absence of the facilitating practices, although he acknowledged that there was no scientific way to determine precisely how much. The experts for the defendants took the position that the practices really didn't matter much at all, but neither did they offer any "scientific" proof.

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<sup>15</sup>It can be entirely rational for each individual customer to demand such protection even if it would be in the collective interest of customers to have the practice prohibited.

<sup>16</sup>The court also had available, from documents and from the testimony of live witnesses, perceptions from those in the industry as to whether the practices played any role in the decision-making process. This evidence was still of limited utility, however, in assessing precisely how much of a difference they made.



Both the administrative law judge and the Commission (with a dissent by Chairman Miller) determined that the practices contributed significantly to the poor performance. However, the defendants appealed to the Second Circuit Court of Appeals, and that court's decision in early 1984 determined that the Commission had not carried the burden of showing that there had been a significant lessening of competition due to the challenged practices. The Court of Appeals argued that the degree of price uniformity was not as great as the FTC had characterized it and that the extensive nonprice competition, combined with the frequent discounts, presented a picture of a workably competitive market in which large, sophisticated, and aggressive buyers were making demands on the sellers and were satisfied with the results. Even if the industry performance was less than fully satisfactory, the Court of Appeals was prepared to attribute that result to the underlying structure rather than to the practices.

### Legal and Policy Issues

While the economic issues just discussed were important to the outcome of the case, in many ways the most important questions that had to be addressed were whether Section 5 could be used at all in a horizontal context in the absence of agreement (if not an explicit agreement, then at least a tacit agreement) and, if so, under what circumstances it was appropriate for the FTC to challenge behavior that firms individually engaged in, without any prior agreement to do so. Defendants observed that each of the challenged practices was initiated by Ethyl during the period prior to 1948, when it was the sole producer in the industry. For example, Ethyl began quoting prices on a delivered price basis in 1937 in response to customer demand. Each of the three subsequent manufacturers, on entry into the market, followed that practice. Customers demanded a delivered price because it would require the manufacturers to retain title to and responsibility for the dangerously volatile compounds during transit to the refiner's plant.

Similarly, Ethyl adopted the most-favored-customer clause when it was the sole producer, as its guarantee not to price discriminate among its own customers who competed against each other in the sale of gasoline. The clause assured the smaller refiners that they would not be placed at a competitive disadvantage on account of price discounts to giants such as Standard Oil, Texaco, and Gulf. For the same reason, DuPont adopted the same contractual clause when it later entered the industry. Finally, the issuance of advance notice of price increases to both buyers and the press, a common practice in the chemicals industry, was initiated by Ethyl well before the entry of DuPont or the other two producers, as a means of aiding buyers in planning their purchase decisions.

The Court of Appeals agreed with defendants' argument that, since the practices were adopted when there was no competition, it could not be that their *purpose* was to reduce competition. Furthermore, in the opinion

of the court, the conduct was not inherently collusive, coercive, predatory, restrictive, or deceitful. Thus, the essence of the FTC challenge was that at some point the practices resulted in a substantial lessening of competition. The Court of Appeals expressed great concern that a test based solely on the fact of an impact on competition would be so vague “as to permit arbitrary or undue government interference with the reasonable freedom of action that has marked our country’s competitive system.” The court asserted that before business conduct in an oligopolistic industry may be labeled “unfair” within the meaning of Section 5 (in the absence of a tacit agreement), there must be a showing of either evidence of anticompetitive intent or the absence of an independent legitimate business reason for the conduct. In a case such as *Ethyl*, in which the conduct was implemented when the original firm did not confront any competition, the absence of an independent business meaning cannot be presumed.

## CONCLUSION

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The “facilitating practices” theory was enthusiastically endorsed both by the administrative law judge who conducted the hearing and by the Commission itself in its role as a review panel. In principle, the Court of Appeals did not reject the basic approach, but its reversal of the Commission’s application of the theory to the antiknock industry at least raises a question about how frequently the evidence would be strong enough to satisfy the court’s criteria, except in those situations where there is enough interaction among the firms that the plaintiff can follow the traditional approach of asserting the existence of an agreement.

Subsequently, the combination of the unfavorable decision from the Court of Appeals and the generally more conservative attitude of the Reagan administration toward antitrust enforcement resulted in the “facilitating practices” approach not being used during the decade of the 1980s. However, in recent years there have been several cases that seem to fit that category.

In a private case involving oil refining and marketing, plaintiffs argued that defendant oil companies conspired to raise or stabilize prices for refined oil products, including gasoline. One of the allegations was that defendants disseminated information concerning their wholesale and retail prices for the purpose of quickly informing competitors of a price change in the hope that these competitors would follow the move. Key to the court’s analysis was that, for some of the information disseminated, there was no other business purpose than to facilitate interdependent or collusive interaction.<sup>17</sup>

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<sup>17</sup>*In Re Coordinated Pretrial Proceedings in Petroleum Products Antitrust Litigation*, 906 F.2d 432 (1990). The court observed that, given the system of branded franchising, the tankwagon prices are not of immediate significance to anyone other than the oil companies and their franchised dealers. Since the dealers were individually notified of the price changes, there appeared to be no legitimate business purpose served by the public dissemination.

Another private case (discussed more fully by Severin Borenstein as Case 13 in this book) involved claims that the major U.S. airlines used the computer system in which all fares are entered (and from which any fare for any airline can be retrieved by any other airline) to announce fare increases fourteen days in advance of their effective date. The plaintiffs' claim was that this practice allowed one airline to "signal" its desire to move to higher fares and to allow other airlines time to signal their assent or disagreement. This case was eventually settled without any of the substantive claims having been litigated.<sup>18</sup> Subsequent to the settlement of this case, the Justice Department filed a civil case under Section 1 on the Sherman Act on essentially the same basis, and the defendants consented to the elimination of certain of the identified practices.

Finally, in a matter brought by the FTC under Section 5 of the FTC Act, the principal manufacturers of infant formula were charged with exchanging certain information about their future conduct, which had the effect of reducing uncertainty and facilitating parallel conduct. In one instance, the information exchanged had to do with the terms on which future bids to a federal purchasing program would be made, and in the one matter that was litigated, the FTC was unsuccessful in establishing that the companies had acted unlawfully.<sup>19</sup> (There were also private cases involving the same or similar conduct.) Whether any of these cases represent harbingers of a renewed effort at applying the doctrine of facilitating practices will become clear only over time.

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<sup>18</sup>*In Re Domestic Air Transportation Antitrust Litigation*, DC NGA, no. 1:90-CV-2484 MHS & MDL no. 861, June 23, 1992.

<sup>19</sup>*FTC v. Abbott Laboratories*, 853 F. Supp. 526 (1994).

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