IN THE MATTER OF

# ETHYL CORPORATION, ET AL.

## FINAL ORDER, OPINION, ETC., IN REGARD TO ALLEGED VIOLATION OF SEC. 5 OF THE FEDERAL TRADE COMMISSION ACT

*Docket 9128. Complaint, May 30, 1979—Final Order, March 22, 1983*

This Final Order requires the nation's two leading producers of lead-based antiknock gasoline additives, among other things, to cease announcing price changes in advance of the period contractually required for advance notice to customers, and using a "most-favored-nation" clause in any contract for the sale or delivery of lead-based antiknock compounds. Further, when stating a delivered price for any lead-based antiknock compound, the companies must also quote the product's point of origin price, a separate price for shipment, and allow customers to arrange for their own shipping and delivery. While the order does not prohibit the companies when acting individually from selecting their own customers, establishing their own prices, and selling at a delivered price or point of origin in good faith to meet the equally low price of a competitor, it does not exempt the companies' pricing practices from antitrust law.

*Appearances*

For the Commission: *Robert A. Burka, Edward T. Colbert, Thomas J. Keary, Stephen C. Palmer, Peter M. Kazon* and *Raymond T. Diamond.*

For the respondents: *Daniel K. Mayers, John H. Harwood, David Westin* and *Kathleen M. Russo, Wilmer, Cutler & Pickering,* Washington, D.C., for Ethyl Corporation. *Daniel M. Gribbon, Allan J. Topol, Terry Coleman* and *Edward R. Mackiewicz, Covington & Burling,* Washington, D.C. and *W.E. MacIntyre,* in-house counsel, for E.I. du Pont de Nemours and Co. *Alan S. Ward, Shirley Z. Johnson, Thomas J. Segal* and *Phillip A. Proger, Baker & Hostetler,* Washington, D.C., *Louis R. Sernoff* and *Michael Kelly, Morgan, Lewis & Bockius,* Washington, D.C. and *John W. Thomas,* in-house counsel, for PPG Industries, Inc. *Champ W. Davis* and *David C. Bogan, Chadwell, Kayser, Ruggles, McGee & Hastings,* Chicago, Ill. and *James S. Lambe,* in-house counsel, for Nalco Chemical Co.

## OPINION OF THE COMMISSION

BY PERTSCHUK, *Commissioner:*

This case involves the four U.S. companies which produce "lead antiknock compounds," the product added to gasoline to reduce engine-knocking. In brief, the complaint alleges that the four companies have independently followed certain practices over an extended period[1] which have had the effect of reducing competition in the industry by "facilitating" uniform, [2] supracompetitive prices. Unlike a case based upon Section 1 of the Sherman Act, which requires a finding of an agreement, the theory of this case is that the practices pursued independently and in parallel fashion by the four respondents, nevertheless significantly reduced competition and violated the Federal Trade Commission Act.

The complaint challenges four specific types of practices—use of advance notice of price change clauses in sales contracts and providing notice in excess of 30 days, providing advance notice of price changes to the press and others, use of "most favored nation" price clauses in sales contracts, and use of uniform delivered pricing. The complaint alleges use of these practices were unfair methods of competition and unfair acts or practices by reducing price competition and consequently contributing substantially to uniform, supracompetitive prices. After a trial on the merits, the administrative law judge found that the respondents had engaged in these practices and that, under the circumstances of this industry, the practices were unlawful under Section 5 as unfair methods of competition and unfair acts or practices. He entered an order which barred use of advance notice of price increases, limited announcements of price changes to the press and others, permanently prohibited use of most favored nations clauses for Ethyl and DuPont, and prohibited uniform delivered pricing.

For the reasons discussed below, we affirm certain of the ALJ's findings, including a finding of liability for all four respondents for use of uniform delivered pricing. We also affirm [3] the finding that Ethyl and DuPont violated Section 5 by regularly providing notice of price increases in advance of contractual requirements and using most favored nation clauses. Our finding of liability is based on the charge of unfair methods of competition only; we decline to adopt the conclusion that these practices are also "unfair acts or practices" within the meaning of Section 5. We also reject the finding that press announcements violated Section 5. The order we enter today is differ-

[1] The ALJ generally focused on a core period of January 1974 to May 1979 for purposes of analysis. This period corresponds to the termination of price controls to the issuance of complaint. It is a reasonable period for analysis and is not arbitrary in duration or beginning and ending dates. We refer to this time period below as the "relevant period."

ent in several key respects from the order adopted by the ALJ, including the absence of a flat ban on advance price announcements, the absence of any time limitation on press announcements after price changes are made effective, the absence of any order provision applicable to Nalco or PPG, and a narrower provision concerning use of uniform delivered pricing.

### 1. *Legal Theory*

We are met in this case with two principal legal questions: 1) can practices followed by individual companies violate Section 5 by facilitating interdependent behavior, such as increasing prices and restricting output, absent collusion; and 2) if certain "facilitating practices" can violate Section 5, what legal standard should be used in assessing whether particular practices are unlawful?

The complaint in this matter alleges that four practices followed by respondents constituted unfair methods of competition and unfair acts and practices in violation of Section 5: 1) providing advance notice of list price changes to customers; [4] 2) issuance of press releases on these price changes; 3) use of uniform delivered prices; and 4) use of most favored nations clauses.[2] The complaint did not allege that the respondents had agreed among themselves to use any of these practices. The theory of the complaint, rather, is that use of these practices by each respondent, even though acting individually, "facilitated" anticompetitive market performance by communicating price information, reducing uncertainty on the part of respondents about current and future prices, and creating a mechanism for rapidly equating prices after a price change by one of the companies. The result of the practices, it is alleged, was a substantially higher degree of price uniformity at supracompetitive levels than would have been likely to occur in the absence of these practices.

### 1.1 *The Lack of an Agreement*

Respondents' primary argument that the complaint does not allege unlawful conduct is that a violation of Section 5 for conduct which is not predatory or monopolistic requires a finding of an agreement. In support of their argument respondents point to the court of appeals opinion in *Boise Cascade*,[3] in addition to other court and Commission opinions and statements about the reach of Section 5. In assessing respondents' legal contentions, it is useful to review the history of cases suggesting that [5] conduct by competitors could violate Section 5 even though no agreement was found.[4]

[2] PPG was not charged with use of a most favored nations clause.

[3] *Boise Cascade Corp. v. FTC*, 637 F.2d 573 (9th Cir. 1980).

[4] Prior Commission cases dealing with similar fact situations, typically base point or other pricing schemes, have been analyzed as possible unfair methods of competition. Some practices which constitute unfair methods of (footnote cont'd)

In *Cement Institute*[5] the respondents were charged with acting in concert to restrict competition through use of a base point pricing system. The Supreme Court found that an agreement had existed but in addition stated its decision "does not mean that existence of 'combination' is an indispensable ingredient of an 'unfair method of competition' under the Federal Trade Commission Act."[6] The Court cited for that proposition *FTC v. Beech-Nut Packing Co.*[7] In *Beech-Nut* the Court had also found an agreement to have existed in the context of a vertical price-fixing scheme but in dictum said an agreement was not necessarily required for a violation.[8]

In *Triangle Conduit*[9] the same year a court of appeals found the respondents had agreed to a base point pricing [6] system. As an alternate holding, the court also found that the use by individual respondents of that system could constitute an unfair method of competition.[10]

After these two cases were decided, a Senate subcommittee, skeptical of the "individual actor" theory, submitted questions to the Commission about its validity. A majority of the Commissioners agreed that *Cement Institute* and *Triangle Conduit* applied only to "conspiracy situations."[11] The subcommittee concluded that "the Commission appears to have written off the theory that 'conscious parallel action,' absent conspiracy, constitutes an unfair method of competition."[12] [7]

The next Commission case to allege a violation based on interdependent conduct alone was *Boise Cascade*.[13] In *Boise* the Commission alleged that plywood manufacturers, accounting for about 50% of southern production of plywood sheathing had, acting individually, adopted a freight pricing scheme which resulted in anticompetitive

competition have also been held to be unfair practices. *American Medical Association v. FTC*, 94 F.T.C. 701, 1010 (1979), *enforced*, 638 F.2d 443 (2d Cir. 1980), *aff'd mem. by equally divided Court*, 102 S.Ct. 1744 (1982). The complaint allegation of unfair practices is discussed separately below.

[5] *FTC v. Cement Institute*, 333 U.S. 683 (1948).

[6] *Id.* at 721, n. 19.

[7] 257 U.S. 441 (1922).

[8] *Id.* at 455.

[9] *Triangle Conduit & Cable Co. v. FTC*, 168 F.2d 175 (7th Cir. 1948), *aff'd by equally divided court sub nom. Clayton Mark & Co. v. FTC*, 336 U.S. 956 (1949).

[10] *Id.* at 181.

[11] Interim Report on Study of Federal Trade Commission Pricing Policies, S. Doc. No. 27, 81st Cong., 1st Sess. 62–63 (1949).

[12] *Id.* at 62.

[13] *Boise Cascade Corp.*, 91 F.T.C. 1 (1978), *rev'd, Boise Cascade Corp. v. FTC*, 637 F.2d 573 (9th Cir. 1980). The complaint in *Kellogg Co.*, FTC Docket No. 8883, (complaint dismissed without opinion, Jan. 15, 1982) [99 F.T.C. 8] alleged a shared monopoly theory under Section 5 of the FTC Act. At trial complaint counsel attempted to adduce evidence that respondents' conduct was exclusionary, resulting in higher barriers to entry to potential entrants. The alleged result was a market of a few dominant firms possessing monopoly power. Thus, while *Kellogg* was not a facilitating practice case, Commissioner Clanton, in a Separate Statement concurring in dismissal of the case, observed that Section 5 provided the Commission with authority to attack non-collusive behavior that "contributes to or enhances anticompetitive conduct, and which is without compelling business justification." (Clanton Statement at 1.) [99 F.T.C. 8 at 270] Commissioner Pertschuk also stated that the *Kellogg* complaint was not "an allegation of practices by individual companies which, under the circumstances of the industry, facilitate uniform pricing or other anticompetitive behavior." (Pertschuk Statement at 3.) [99 F.T.C. 8 at 281]

pricing behavior on the part of these firms. This pricing scheme, use of a West Coast freight factor for determining freight prices from southern shipping points, was alleged to have resulted in an "artificial" method of calculating freight prices, contributing to the manufacturers' pricing uniformity for Southern plywood, and thereby reducing price competition. The Commission concluded that conduct which did not constitute an agreement but which was anticompetitive could violate Section 5 even though it did not violate Section 1 of the Sherman Act:

> The Supreme Court has frequently acknowledged the Commission's authority to proscribe [8] anticompetitive conduct which may not fit within the confines of the Sherman Act, *e.g., FTC v. Brown Shoe Co.,* 384 U.S. 316 (1966); *FTC v. Motion Picture Advertising Serv. Co.,* 344 U.S. 392, 394–395 (1953); *FTC v. Cement Institute,* 333 U.S. 683, 689–93 (1948), and the Seventh Circuit has previously held that the concurrent although non-collusive adoption by competitors of an artificial method of pricing which restrains competition is unlawful [citing *Triangle Conduit*].[14]

The Commission's opinion in *Boise Cascade* was reversed by the Ninth Circuit Court of Appeals,[15] but not on the ground that an agreement was required to find a violation of Section 5 for parallel use of practices resulting in harm to competition. To be sure there is some language in the opinion which is ambiguous,[16] but the overall thrust of the opinion leaves little doubt that the court held merely that the Commission had not demonstrated adequate record proof that the challenged practices had actually harmed competition:

> As we concluded in part II, the weight of the caselaw, as well as the practices and statements of the Commission, establish the rule that the Commission must find *either collusion or actual effect* on competition to [9] make out a Section 5 violation for use of delivered pricing.[17] (emphasis added)

In addition to this statement, the court in *Boise* discussed at length the record evidence showing that the effect of the pricing practices was harmful to competition, contrasting their effect with other possible explanations of pricing practices. Finally, the *Boise* court pointed to a number of other factors in reversing the Commission, including the absence of expert testimony in support of the Commission's findings, the lack of buyer testimony objecting to the practices, and ambiguous profit data. This extensive discussion strongly suggests that

[14] *Boise Cascade Corp.,* 91 F.T.C. at 102–103.

[15] *Boise Cascade Corp. v. FTC,* 637 F.2d 573 (9th Cir. 1980).

[16] At one point, the opinion states, "It is important to stress that the weight of the case law and the Commission's own policy statement make clear that we are looking for at least tacit agreement to use a formula which has the effect of fixing prices." *Id.* at 576. However, the use of the word "tacit" and the rest of the opinion indicate that the Court did not have in mind an "agreement" in the sense required by Section 1 of the Sherman Act.

[17] *Id.* at 582.

the conclusion that an agreement had not been proved was not dispositive. As we stated in our opinion in *Boise,* agreements to fix a portion of the price of products, as in the case of delivered pricing agreements, are *per se* unlawful,[18] while, in assessing individual use of delivered pricing we examined the record for anticompetive effects.[19] Although the court of appeals reversed the Commission's decision in *Boise,* because of an inadequate showing of adverse competitive effects, it did not undercut the essential holding that "individual actor" delivered pricing cases must be decided on the basis of a rule of reason analysis. In short, respondents' argument that the court of appeals in *Boise* found that an agreement was required under [10] Section 5 is incorrect, and this case is easily distinguishable from *Boise* on the basis of a stronger factual record.

This line of delivered pricing cases gives strong support to the proposition that the Commission need not find an agreement in order to find unlawful practices which have the same general *effect* as horizontal agreements. These cases stand for the proposition that practices that result in the same anticompetitive effects that the Sherman Act was intended to prevent, and that violate the basic legislative goals of the Act, violate Section 5.

As the Supreme Court stated in *Atlantic Refining Co. v. FTC,*[20]:

> When conduct does bear the characteristics of recognized antitrust violations it becomes suspect, and the Commission may properly look to cases applying those laws for guidance.[21]

In *Atlantic Refining* the Commission had found unlawful an arrangement between a large oil company and a tire manufacturer in which the tire manufacturer paid commissions to the oil company for sales of its tires and other automobile accessories by the oil company's dealers. No overt tie was made by the oil company, requiring the dealer to buy particular tires as a condition for continued supplies of gasoline. Thus, the case did not come within the Sherman or Clayton Act. The reviewing courts upheld the Commission's finding of a violation of Section 5, [11] however, on the grounds that the practices violated the goals of the Sherman Act. The Supreme Court noted that "the effect of the plan was *as though* Atlantic had [entered into a conventional tying arrangement]."[22]

[18] 91 F.T.C. at 100 (citing *U.S. v. Socony-Vacuum Oil,* 310 U.S. 150, 224 n.59 (1940)). *See also Plymouth Dealers Assoc. of Northern California v. U.S.,* 279 F.2d 1281 (9th Cir. 1960).

[19] *Id.* at 103.

[20] 381 U.S. 357 (1965).

[21] *Id.* at 369–70.

[22] *Id.* at 370. (emphasis in original) Other Commission findings based on similar factual situations and reasoning were also affirmed by the courts. *See FTC v. Texaco, Inc.,* 393 U.S. 223 (1968); *Shell Oil Co. v. FTC,* 360 F.2d 470 (5th Cir. 1966), *cert. denied,* 385 U.S. 1002 (1967). Similarly, in *Grand Union v. FTC,* 300 F.2d (2d Cir. 1962), the Commission had found a retail food chain had violated Section 5 by inducing discriminatory promotional allow-

(footnote cont'd)

Section 5 has, of course, been applied to prohibit individual practices which constitute monopolization or attempts [12] to monopolize under the Sherman Act.[23] In addition, however, the FTC has proceeded against single-actor conduct which is unfair competitive behavior but which falls short of an attempt to monopolize under Section 2 of the Sherman Act.[24]

These cases illustrate that Section 5 was not intended to be subject to the same limitations as the Sherman Act and the Clayton Act when there is good evidence that the challenged practices have anticompetitive effects very similar to those prohibited by those two Acts and when prohibiting such practices is not inconsistent with any other legislative goal of the antitrust laws. This interpretation of Section 5 is quite consistent with the legislative history at the time of enactment [13] and subsequent historical scholarly analysis.[25] It is also endorsed by most current antitrust scholars.[26]

Professors Areeda and Turner agree that most authority supports the proposition that Section 5 extends beyond the Sherman and Clay-

ances from a seller. Since Section 2(d) of the Clayton Act prohibits only the *granting* of such allowances, and Section 2(f) applies only to inducing discriminatory prices, the practice fell outside the letter of the statute. Nevertheless, the Commission was upheld because it had applied Section 5 to advance the basic policy of the Clayton Act.

> Nor can we accept the notion the Commission is here legislating a 'new antitrust prohibition.' The practice itself is clearly proscribed by §2(d) . . . The Commission is not upsetting specific Congressional policies; the proceedings did not 'circumvent the essential criteria of illegality prescribed by the express prohibitions of the Clayton Act.' No economic activity, once lawful, had been suddenly brought within the prohibition of the antitrust laws. Jurisdiction, perhaps, has been expanded from the technical confines of §2(d), but only fully to realize the basic policy of the Robinson-Patman Act, which was to prevent abuse of *buying* power. *Id.* at 98 (emphasis in original; citations omitted).

Commission findings based on similar fact situations and reasoning have also been upheld. *See, e.g., Alterman Foods, Inc. v. FTC,* 497 F.2d 993 (5th Cir. 1974); *FTC v. J. Weingarten, Inc.,* 336 F.2d 687 (5th Cir. 1964), *cert. denied,* 380 U.S. 908 (1965); *R.H. Macy & Co. v. FTC,* 326 F.2d 445 (2d Cir. 1964); *Giant Food, Inc. v. FTC,* 307 F.2d 184 (D.C. Cir. 1962), *cert. denied,* 372 U.S. 910 (1963).

[23] *Borden, Inc. v. FTC,* 1982–1 Trade Cas. ¶64,558 (6th Cir. 1982) [674 F.2d 498 (1982)]; *DuPont de Nemours & Co.,* 96 F.T.C. 653 (1980) (complaint dismissed).

[24] These include early unfair methods of competition cases which amount to challenges of deceptive advertising and which also could be brought under the Section 5 authority to prohibit "unfair or deceptive acts or practices." *FTC v. R.F. Keppel & Bro.,* 291 U.S. 304 (1934); *FTC v. Balme,* 23 F.2d 615 (2nd Cir. 1928). However, other Commission cases are aimed at other unfair competitive behavior, *e.g., S & S Pharmaceutical Co.,* 72 F.T.C. 765 (1967) (forcing products upon retailers); as well as conduct which "may warrant the hyperbolic description of 'predatory and vicious.'" M. Handler and R. Steven, "Attempts to Monopolize and No-Fault Monopolization," 129 U. Penn.L.Rev. 1, 177 (Nov. 1980) citing, *e.g., Washington Crab Ass'n,* 66 F.T.C. 45 (1964) (threats of physical violence).

[25] *See* G. Henderson, *The Federal Trade Commission* 27 (1924); Rublee, "The Original Plan and Early History of the Federal Trade Commission," 11 Acad. Pol. Sci. Proc. 666 (1926); Baker & Baum, "Section 5 of the Federal Trade Commission Act: A Continuing Process of Redefinition," 7 Villanova L.Rev. 517 (1962).

[26] *See, e.g.,* Sullivan, *Antitrust* 364 (1977). "[T]he FTC can condemn under Section 5 practices which violate the Sherman Act or the Clayton Act . . . and beyond this, may condemn under that section conduct which has purposes or effects similar to practices which violate either of those acts, or practices which have incipient tendencies to violate either of those acts." [citations omitted] *See also* J. Von Kalinowski, *Antitrust Laws and Trade Regulation* Section 6.02[2] (1982). "The Federal Trade Commission Act from its inception has been viewed as 'supplemental' to the antitrust laws. Although the Section 5 ban on unfair methods of competition extends beyond activities prohibited by the antitrust laws, the Supreme Court has stated that 'minimally that section registers violations of the Clayton and Sherman Acts.' *Times-Picayune Publishing Co. v. United States,* 345 U.S. 594, 609, 73 S.Ct. 872, 97 L. Ed. 1277 (1953). . . . One basic purpose of Section 5 is to strike at the same evils addressed by the antitrust laws."

ton Acts.[27] However, they argue that "the spirit and letter of the antitrust laws are identical, and that insofar as sound policy condemns or permits given conduct under the Sherman or Clayton Acts, then sound policy requires the same results under the Federal Trade Commission Act."[28] While their analytical approach may be different, they believe that [14] Section 5, even if it is interpreted consistently with the Sherman Act, can reach the type of practices challenged here:

> . . . [T]he "conspiracy" prohibitions of Sections 1 and 2 can be extended to many forms of parallel restrictive or exclusionary conduct, obviating the need to rely on a charge that each actor has individually "monopolized" in violation of Section 2. No serious practical or logical problems are encountered in *enjoining individual oligopolists from quoting delivered prices only,* from purchasing "distress" output from competitors, or from purchasing unneeded supplies. To be sure, such injunctions run beyond a simple prohibition against "agreeing" on such matters, because more specific direction is necessary to assure termination of the illegal action, but they are as readily enforceable. (emphasis added)[29]

It is clear, however, that an application of Section 5 based upon the basic objectives of the Sherman or Clayton Act should be based upon a careful review of the factual circumstances, including if necessary an examination of the structure and performance of the market involved, to insure there is persuasive evidence showing that the effects of the challenged practices are closely analogous to the anticompetitive effects that these Acts were intended to prevent.

Our reaffirmation that Section 5 extends to prohibit conduct which is not reached by the Sherman or Clayton Act is not to say that Section 5 prohibits any conduct which leads to such an undesired result (*e.g.,* sustained supracompetitive prices), but only conduct that leads to such a result *and* violates the basic legislative goals of the Sherman Act. For example, Section 5 would not prohibit monopoly pricing alone, but it does prohibit [15] conduct which excludes competitors unfairly, which in turn is likely to lead to monopoly pricing. To prohibit monopoly pricing, however, would inevitably lead to unworkable price regulation rather than specific proscriptions regarding anticompetitive practices.

Similarly, Section 5 should not prohibit oligopolistic pricing *alone,* even supracompetitive parallel prices, in the absence of specific conduct which promotes such a result. To do so would conflict with basic legislative goals of the antitrust laws by forcing an examination of the reasonableness of prices and by deterring firms from setting profit-

[27] "It is now commonly said that Federal Trade Commission Act is not confined by the prohibitions of the Sherman Act or the Clayton Act." P. Areeda and P. Turner, II Antitrust Law 20 (1978).

[28] *Id.*

[29] *Id.,* Vol. III at 362.

maximizing prices because of the fear of antitrust liability. On the other hand, no legislative goal of the antitrust laws is advanced by allowing facilitating practices which promote uniform, supracompetitive prices in a tight oligopoly and which offer no countervailing procompetitive justifications.

Here we are faced with allegations that specific conduct followed by individual respondents, regularly and over a prolonged time period, had the effect of substantially reducing competition by facilitating uniform, supracompetitive pricing. While it may be true that such individual conduct could not be reached under Section 1 of the Sherman Act because of the express terms of the statute, we reject respondents' arguments that Congress intended that an agreement be an essential element of a Section 5 violation. It is quite clear that Congress rejected the specific limitations of the Sherman Act in establishing the **[16]** standard for a Section 5 violation.[30] Respondents have not argued, and could not persuasively, that anticompetitive consequences of uniform, supracompetitive pricing are impossible or are inevitably insignificant unless there is agreement among competitors. We understand respondents to say rather that, even if certain practices harm competition and there is no procompetitive justification for them, the Commission is flatly prohibited from prohibiting them because of a Congressional determination that an agreement is an indispensable element of a violation of Section 5. We reject this contention. The scope of Section 5 is limited, not by the necessity of showing a combination, but rather by the policy of the Sherman Act to preserve competition. Consequently, the legislative history of Section 5 as well as the Sherman and Clayton Acts and subsequent interpretations confirm that Section 5 should be applied to promote the fundamental legislative goals of the Sherman Act, but is not bound by its strict limitations.

In particular, the allegations in this case involve practices which are claimed to have the same results as those condemned in *U.S. v. Container Corp.*[31] In *Container Corp.*, the appellees, controlling 90% of the market, were charged with agreeing to exchange current price information in a market with **[17]** relatively inelastic demand and a fungible product. While no agreement to fix prices was shown (though there was an agreement to exchange price information), the Court found that "[t]he inferences are irresistible that the exchange of price information has had an anticompetitive effect in the industry, chill-

[30] The "broad power of the Commission is particularly well established with regard to trade practices which conflict with the basic policies of the Sherman and Clayton Acts even though such practices may not actually violate these laws." *FTC v. Brown Shoe Co.*, 384 U.S. 316, 321 (1966). *See also Atlantic Ref. Co. v. FTC*, 381 U.S. 357, 369–70 (1965).

[31] 393 U.S. 533 (1969).

ing the vigor of price competition."[32] The dissenting Justices did not believe there was sufficient evidence in the record to show anticompetitive effects and, consequently, disagreed with what they felt was, in effect, a *per se* condemnation of the price exchange agreement by the majority. Whatever the analysis applied by the majority in *Container Corp.*, we understand the case, at least, to hold that agreements to exchange prices which have the likely effect of stabilizing prices, and which offer no offsetting procompetitive justifications, violate the Sherman Act.

Here we must examine practices closely analogous to those reviewed in *Container Corp.*, and which are alleged to have closely analogous effects on the behavior of the market. Thus, the theory as to how competition may be harmed and the consistency with the legislative goals of the Sherman Act bring the theory of this complaint within the policy of the Act, even though no agreement is alleged.

Similarly, this complaint alleges conducts and anticompetitive effects which are closely analogous to pricing [18] practices which have been found to violate Section 5 and Section 1 of the Sherman Act.[33] In these cases, (with the exceptions noted above) agreements among competitors to employ base point pricing schemes were found to have violated Section 5 by tending to increase uniformity in pricing, though there were not agreements to fix prices themselves. The competitive evil prohibited by these cases was the tendency for base point pricing schemes to result in uniform prices. Here we are faced with allegations that the uniform delivered pricing, together with the other challenged practices, followed by each respondent resulted in precisely the same anticompetitive effects of agreements to enter into base point pricing schemes with a closely analogous process of price-matching.

Antitrust scholars have advocated prohibition of conduct by competitors which result in anticompetitive pricing even though proof of "conventional" agreements might be absent. For example, Professor Posner advocates extensive use of economic evidence in price-fixing cases and would find collusion based upon tacit understandings of the mutual gain from coordinated behavior.[34] He concludes, "Economic theory suggests that basing-point systems should be enjoined under Section 1 of the Sherman Act regardless of whether there is proof of actual [19] agreement, because the plain purpose of such systems is

[32] *Id.* at 337.

[33] *See, e.g., FTC v. Cement Institute, supra; Triangle Conduit & Cable Co., Inc. v. FTC, supra; Sugar Institute, Inc. v. U.S.*, 297 U.S. 553 (1936).

[34] R. Posner, *Antitrust: Cases, Economic Notes and Other Materials*, 128–137 (1974).

to foster monopoly pricing."[35] Elsewhere he states:

> The purpose of basing-point pricing is to facilitate collusion by simplifying the pricing of colluding firms. . . . It is plainly inconsistent with competition, which would quickly eliminate any phantom freight charges. With one exception, [citing *Triangle Conduit, supra* ] in all of the cases in which basing-point pricing schemes have been challenged as a violation of the Sherman Act, there has been evidence that the sellers had agreed to set up a basing-point system. . . . I regard such evidence as unnecessary to establish a violation of the Sherman Act.[36]

Professor Sullivan also believes that caselaw supports the conclusion that "interdependent though non-collusive decisions to follow a basing point system (which facilitates price leadership) violate Section 5 of the FTC Act [citations omitted] and, implicitly, Section 1 of the Sherman Act."[37] As discussed above, Professors Areeda and Turner believe that the definition of "conspiracy" reaches the individual oligopolists' use of delivered prices, a proposition which would result in prohibiting these practices under the Sherman Act as well as Section 5.

We refer to these analyses by antitrust scholars because they illustrate the close relationship between viewing interdependent pricing practices as conspiracies under the Sherman Act and as practices which facilitate uniform pricing but which are not characterized as a conspiracy. Under either view **[20]** the competitive harm is conduct which is substantially different from the competitive model because prices are established by non-market forces at supracompetitive levels.

In short, the legal theory of the complaint is supported by the prior case law dealing with Commission challenges to base point pricing schemes, the legislative history of Section 5, and the Supreme Court's repeated determinations that Section 5 extends to conduct which results in the same anticompetitive effects that the Sherman Act was designed to prevent and violates a basic legislative goal of the Act—preventing competitors from reducing competition by pursuing price uniformity at supracompetitive levels. Each of these lines of authority supports the proposition that Section 5 prohibits conduct by individual firms which is shown to result in substantial harm to competition by promoting price uniformity at supracompetitive levels, restrictions in output below those which would be achieved in an efficiently performing industry, or similar anticompetitive results.

Respondents argue that the Commission would be changing "long-standing" legal standards for assessing the practices challenged here

[35] *Id.* at 135.

[36] R. Posner, *Antitrust Law: An Economic Perspective* 70–71 (1976).

[37] L. Sullivan, *Antitrust Law* 357 (1977); *See also id.* at 364.

if we found them to be unlawful. In fact, as we have discussed, the legal standards for Section 5 encompass the theory of the complaint and no Commission case has upheld the practices challenged here. As for the statements of various Commissioners in response to the Senate inquiry of 1949, the Commission must be free to modify over time its assessment of the unlawfulness of certain practices under Section 5. Otherwise, [21] the Commission would be precluded from considering relevant legal, economic, and other developments which add to the body of knowledge and reasoning upon which the Commission must rely.[38] In any event, the Commission has previously departed from the conclusions of the Senate study in its findings in *Boise Cascade, supra.* Moreover, respondents are subject in this proceeding only to an order to stop practices found unlawful, not to punitive sanctions. Consequently, an interpretation of the law which they feel departs from prior Commission precedent is not unfairly prejudicial.

1.2 *Identifying Anticompetitive Facilitating Practices*

A more difficult legal question is identifying which practices, engaged in by firms acting individually, adversely affect competition so as to violate Section 5. Certainly such practices should be assessed under a rule of reason, that is, the Commission should examine the particular market conditions in which the practices occurred, the ways in which the practices reduced or distorted the competitive behavior of the market, the purposes of the firms in following the practices, and any procompetitive effects of the practices.

In general, practices such as those at issue here—which are alleged to promote price uniformity by providing a vehicle for communicating current price information, providing a relatively high degree of certainty about competitors' pricing [22] behavior, and facilitating pricing coordination—are likely to have a substantial effect only under certain structural conditions. Although commentators vary in the way they characterize certain structural factors and in including less significant factors, economic literature is generally consistent as to the principal structural factors which make collusion or interdependent behavior more likely.[39] Professor Posner lists the following factors as indicating an industry is collusion prone: market concentrated on the selling side, no fringe of small sellers, inelastic demand, entry takes a long time, many customers, standard product, principal firms sell at the same level of distribution, price competition is more impor-

[38] *See NLRB v. J. Weingarten, Inc.,* 420 U.S. 251, 264–267 (1975); K. Davis, *Administrative Law of the Seventies* Sections 17.07–3, 17.07–4 (1976).

[39] Both complaint counsel and respondents cite economic literature discussing the structural conditions necessary for "facilitating practices" to have a significant effect on market behavior. *See, e.g.,* F. Scherer, *Industrial Market Structure and Economic Performance* 171–72 (2d. ed. 1980); G. Stigler, *The Organization of Industry* 39–45 (1968); J. Bain, *Industrial Organization* (2d. ed. 1968); D. O'Brien and D. Swann, *Information Agreements, Competition and Efficiency* 123–24 (1969).

tant than other forms of competition, high ratio of fixed to variable costs, demand static or declining, sealed bidding, and record of price-fixing or related violations.[40] Professor Areeda lists similar factors and includes direct and indirect verbal communication,[41] nonverbal communication through known, repeated, and standardized transactions, absence of frequent [23] secret transactions, customary pricing patterns, similar cost structures, small number of firms, and the absence of close product substitutes.[42]

Expert testimony from both sides was generally consistent as to views about structural factors which tend to result in less competitive firm behavior. Dr. Hay mentioned high concentration, homogeneous products, and inelastic demand, in addition to more specific testimony absent the effect of information exchange and other challenged practices in this case. Dr. Mann listed four principal structural characteristics as indicative of poor competitive performance, including a small number of firms, homogeneous products, barriers to entry and inelastic demand. He also gave some less specific testimony about "environmental" factors in addition to these four. Dr. Carlton listed structural factors which he believed led to the performance in this industry, including a small number of producers; the two large producers with similar production processes, demand and cost structures; a homogeneous product; a rapid flow of information; inelastic demand; additional entry is unlikely; and large, sophisticated buyers.[43]

In addition to economic literature and expert testimony, we also can look to recent statements by the Commission and the [24] Department of Justice concerning merger analysis but which rely in part upon identifying markets where collusion or interdependent pricing is more likely.[44] While these statements are directed specifically to merger analysis, they are useful for our purposes as well. The Justice Guidelines list a number of key factors including high market concentration,[45] barriers to entry, homogeneous products, absence of close product substitutes, similarities in products and location where competition occurs, and extensive flow of information about transac-

[40] R. Posner, *Antitrust Law: An Economic Perspective* 55–61 (1976).

[41] Including public statements by firm spokesmen.

[42] P. Areeda, *Antitrust Analysis* ¶262 (1981).

[43] Dr. Carlton and respondents generally argue that any poor performance in this industry is the result of structure alone and is unaffected by the challenged practices. We discuss this point below. Here, our concern is to identify structural factors which make coordinated or collusive pricing more likely.

[44] U.S. Department of Justice Merger Guidelines ("Justice Guidelines") (June 14, 1982); FTC Statement Concerning Horizontal Mergers ("Commission Statement") (June 14, 1982), both reprinted in CCH Report No. 546 (June 16, 1982); subsequent citations are to CCH Report.

[45] We have relied in the past upon a four firm concentration of approximately 50% as indicative of a moderately concentrated market. *See, e.g., Hueblein, Inc.*, 96 F.T.C. 385, 577 (1980). Another useful measure of market concentration is the Herfindahl-Hirschman Index. Using this index, the Department of Justice views a market as moderately concentrated if the Index exceeds 1000 and highly concentrated if it exceeds 1800. Justice Guidelines, 26–30.

tions.[46] The Commission's statement pointed to similar factors which included, in addition to high concentration and entry barriers, homogeneity of products, small number of sellers, and similarity of producers' costs.[47]

On the basis of these analyses, about which there is some consensus, we can identify major factors indicating a likelihood **[25]** of interdependent pricing along with a series of secondary factors. We would expect an effect only in markets dominated by relatively few sellers and, hence, markets in which concentration is high. Only under these conditions could a high degree of pricing coordination by competitors, absent an agreement, be achieved. In addition, we would not expect such practices to have a significant effect unless barriers to entry deterred potential entrants from "competing away" excess profits earned by firms with supracompetitive prices. It is much more likely that pricing coordination could be achieved in markets with homogeneous products. Competition among producers of non-homogeneous products, with special brand features or characteristics, would tend to undercut price coordination by complicating the process of "price matching" by competitors.

Additional factors which make it more likely that facilitating practices would have anticompetitive effect include a relatively inelastic demand for the product and declining or flat sales trends. Inelastic demand makes supracompetive pricing possible and profitable since a restriction in output will result in prices above marginal cost and excess profits. Declining or flat trends in sales may be significant by leading to excess capacity and the threat of declining prices and profits. In such circumstances, sellers have a stronger incentive to maintain prices above marginal cost and to avoid price reductions. In addition, flat sales trends **[26]** suggest new entry is unlikely. An additional structural consideration is similarity of cost structures, particularly for the dominant firms.

Evidence of actual market performance may corroborate these structural factors or may suggest that the market is behaving competitively. Indicators of a poorly performing market would include sustained profits above levels obtained in other comparable industries, excess capacity or other indications of output reduced below optimum levels, stability of market shares, the absence of significant entry in the face of excess prices or rising demand, prior examples of collusion among industry members, and stable or increasing prices in

[46] Justice Guidelines, 33–36.

[47] Commission Statement at 80. Other factors mentioned by the Commission, *id.*, including a history of price-fixing and stability of market shares, are also associated with an inference of some likelihood of future collusive or interdependent conduct based on past conduct.

the face of falling demand.[48]

An examination of these factors may shed much light on whether the market structure is a reliable indicator of the degree to which pricing coordination could be affected by certain facilitating practices. If, after an examination of market structure factors and the actual performance of the market, the [27] available evidence indicates that the market is unlikely to be affected by such practices, then the inquiry can be ended. If, however, evidence of market structure and performance indicates the practices could promote price uniformity, we must examine evidence of the actual effect of these practices on market performance.[49] This examination should include evaluating any reliable evidence of how the practices promoted price uniformity and whether price changes could be explained on the basis of other considerations. Any evidence of market behavior without such practices would be relevant, as well as the history of the practices. In addition, evidence of the purpose for adopting such practices would be relevant, primarily because evidence of purpose can be helpful in explaining likely effects.

Finally, in addition to examining the effect of the challenged practices on price uniformity or other indicators of market performance, the Commission should examine any possible procompetitive effects of the practices. As is argued in this matter, the practices may be justified on the grounds that they lead to more competitive market performance, *e.g.*, by promoting [28] price comparisons or by greatly reducing the complexity of calculating prices. In this regard, the Commission should examine the history of the practices, the reasons for their adoption, and buyer testimony about the value of the practices.

### 1.3 *Summary of the Legal Standard for Facilitating Practices which are Unfair Methods of Competition*

Section 5 prohibits practices by individual firms which can be shown to have a significant adverse effect on competition by promoting price uniformity at supracompetitive levels, although this result

[48] We do not discuss at length the basis for identifying these factors as associated with poor market performance because they are more generally recognized in Commission and court cases. The Justice Guidelines also discuss indicators of poor market performance, including stable market shares, declining combined market shares of the leading firms in recent years, and profits of the leading firms exceeding comparable firms. Justice Guidelines at 38–39. Both the Commission statement, at 80, and the Justice Guidelines, at 37, mention prior collusion as suggesting future collusion is more likely. *See also* J. Bain, "Workable Competition in Oligopoly: Theoretical Considerations and Some Empirical Evidence," 40 Am. Econ. Rev. 35, 37–38 (1950), citing high profits, scale of firms outside the optimum range, considerable excess capacity, excessive selling costs, and lags in technical change.

[49] It can be argued, as respondents do in this case, that a market can be so poorly structured, from a competitive standpoint, that the likely effect of practices which might promote price coordination is negligible. Such an argument depends upon the assumption that firms in extremely concentrated markets, *e.g.*, a duopoly dominated by a single firm, are likely to engage in pricing behavior that, though certainly not competitive in the traditional sense, is a result of structure alone. We are as reluctant to assume that this scenario represents the norm as we are to assume without further inquiry that practices such as those examined here usually contribute to or facilitate anticompetitive behavior. Rather, this issue should be explored in the context of examining evidence of actual effects of the challenged practices.

is accomplished without evidence of an explicit agreement. However, unilateral practices which affect price uniformity are suspect only when they occur in a market which is conducive to price coordination, where the effects on competition are clearly discernible and where no mitigating circumstances exist sufficient to offset the harmful effects of the practices. Therefore, evidence of such practices will necessarily be analyzed using a rule of reason approach.

Structural factors which suggest a market conducive to price coordination include high concentration, a small number of dominant firms, inelastic demand, homogeneous products and significant barriers to entry. (*See* discussion *supra* at pp. 22–26.) However, actual market performance must also be examined to determine whether historical evidence will corroborate or undercut tentative conclusions reached by examination of the market's structural factors. (*See* discussion *supra* at pp. 27–28.) Finally, evidence of the actual effect of the facilitating practices is a necessary element prior to any finding of liability. It is in this context that any **[29]** procompetitive business factors, offered in the way of a defense or justification of the challenge practices, are particularly relevant. (*See* discussion *supra* at 28–29.) Therefore, facilitating practices by individual firms will be found to violate Section 5 as unfair methods of competition only if the weight of the evidence shows that competition has been substantially lessened.

The Commission recognizes that application of Section 5 to practices that are not conspiratorial or monopolistic in nature will necessarily involve close questions of fact. This situation requires that we exercise our authority judiciously and find liability only where the conduct in question is clearly harmful to competition, so we do not chill or unnecessarily intrude into routine decisionmaking by business. It is for this reason that we must carefully articulate the market conditions conducive to anticompetitive conduct, examine actual market performance and establish a clear nexus between the challenged conduct and adverse competitive effects before invoking our authority in this regard.

### 1.4 *Unfair Practices*

As noted above, the complaint alleges that the practices of respondents were "unfair acts or practices" within the meaning of Section 5 as well as unfair methods of competition. The Commission has recently articulated its interpretation of its unfairness authority and the way in which the authority has been **[30]** exercised by the Commission and interpreted by the Courts.[50] In its December 1980 Statement the Commission indicated the criteria which had been applied in prior

[50] *See* Commission Statement of Policy on the Scope of the Consumer Unfairness Jurisdiction, December 1980.

cases and the standards it would follow in subsequent analyses of practices alleged to be unfair.

In brief, the Statement indicated that consumer injury that was substantial, not reasonably avoidable, and not outweighed by offsetting benefits to competition or consumers would constitute the primary criterion for a finding of unfairness. In addition to an analysis of consumer injury, we stated that the Commission would also rely where possible upon established public policy in determining which practices were unfair and in helping to establish the presence of criteria necessary to establish consumer injury.

It is also clear that practices may be both unfair methods of competition as well as unfair practices within the meaning of Section 5. In *American Medical Association,* we found that restrictions on price advertising by a professional group were unfair by impeding the flow of information about the availability and price of medical services to consumers.[51] The restraints examined there were shown to harm competition substantially as [31] well as to harm consumers and to violate established public policy.[52]

In determining whether a practice, which is an unfair method of competition, is also an unfair act or practice, we are concerned primarily with its impact on consumers, principally individuals purchasing a product or service for their own consumption or investment. In *AMA,* for example, the challenged practices not only limited competition among physicians and thereby tended to undercut market incentives to lower prices and to increase the availability and quality of services, but also to deprive individuals of information essential to an informed choice. Here the record contains no analysis of its impact on individual consumers. In the absence of this analysis, we decline to accept the finding by the law judge that the practices were unfair.

### 2. *Market Structure and Performance*

The record evidence in this matter shows a market structure which is striking in its susceptibility to practices by individual firms which could promote price coordination. In addition, the historical performance of the market supports, rather than undercuts, this hypothesis.

#### 2.1 *Market Structure*

There is no real dispute about the product or geographic market relevant for our analysis. The complaint's allegations [32] are confined to sales by domestic manufacturers of lead based antiknock compounds. These products are defined in the complaint as "additives

[51] *American Medical Association, supra,* 94 F.T.C. at 1010.

[52] *See, e.g., Bates v. State Bar of Arizona,* 433 U.S. 350, 364 (1977); *Virginia State Bd. of Pharmacy v. Virginia Citizens Council,* 425 U.S. 748 (1976).

to gasoline which increase its octane rating and which contain tetraethyl or tetramethyl lead." (Complaint, ¶1) Because of the absence of any dispute about relevant markets and because there is ample evidence in the record to support a finding that manufacturing of these products constitutes a relevant product market, and that the nation as a whole constitutes a relevant geographic market, we accept the assumption of the complaint that these markets are relevant for our analysis.

Since the early 1960's there have been only four sellers in this market. DuPont began selling lead-based antiknock compounds in 1948 and, until 1961, DuPont and Ethyl were the only firms in the market. PPG (then Houston Chemical Company) entered the market in 1961 and Nalco entered as a TML manufacturer in 1964. No foreign firm has ever sold these products in the U.S. (IDF 17–18)[53] **[33]**

The market is, of course, highly concentrated since four firms constitute 100% of the market. In addition, the market is dominated by the two largest firms—Ethyl and DuPont. During the period 1974 to 1979, Ethyl's share of the lead antiknock market averaged 34% and DuPont's share averaged 36%. PPG's average share during this period was 17.5% and Nalco's was 12.5%. (IDF 46) Based on these average shares, the HHI Index exceeds 2900.

Barriers to entry are high in this market. In particular, government regulation of lead-based additives—limiting their use for environmental reasons—makes it unlikely that there will be future entrants. (IDF 50) The developments in government regulation have reduced demand and contributed to excess capacity in the industry. (IDF 43) Consistent with these developments, there have been no new entrants into this industry since 1964. The striking absence of non-entry for more than 15 years and the developments in government regulation establish that barriers to entry have been high during the relevant time period, even if capital costs of entry or technological barriers may have been insignificant. There was no significant evidence offered by respondents, in expert testimony or otherwise, that entry is likely, and there was expert testimony to the contrary. (*See* IDF 50, 143)

In general, the products which constitute this market are homogeneous. There are two basic lead antiknock compounds—tetraethyl

[53] The following abbreviations are used in this opinion: ID, Initial Decision; IDF, Initial Decision Finding; EAB, Ethyl Appeal Brief; DAB, DuPont Appeal Brief; CX, Complaint Counsel Exhibit; REX, Ethyl Exhibit; Tr., Transcript page. In our view, no evidence released in this opinion constitutes trade secrets or confidential commercial information within the meaning of Section 6 of the FTC Act. However, the ALJ placed a number of documents and portions of testimony in the *in camera* portion of the record without an extensive review of the need for confidential treatment. Such treatment is within the discretion of the ALJ, particularly in the case of a lengthy record, because of the need to expedite trial procedures. Continued *in camera* treatment of any portion of this record, however, will require a particularized showing of the need for confidentiality to be submitted to the Commission within 30 days of the issuance of this opinion.

lead ("TEL") and tetramethyl lead ("TML"). TEL was originally produced in the 1920's and TML was first made in [34] 1960. TEL and TML are usually sold as mixtures although some refiners use pure TEL. (IDF 7) In 1976 Ethyl estimated that TML constituted about 20% of antiknock production. (REX 127P) The prices at which TML and TEL have been sold have historically differed, but the differential has narrowed to a few cents. For example, on May 25, 1978, TEL was priced at 73.62¢/lb. and TML was priced at 76.14¢/lb. By July 5 of that year the differential had disappeared. The different compounds sold by each of the four respondents are homogeneous. (IDF 12) Almost all mixtures are standard among all the respondents. (IDF 9) There is testimony that less than 1% of the sales were non-standard mixes. (IDF 10; Tr. 820) On some occasions, special additives were included in the basic compounds, but these were limited and not significant enough to complicate the process of easily equating the product of one respondent with that of another for price comparison purposes.

An additional structural consideration is the elasticity of demand. Supracompetitive prices are more likely in markets where demand is relatively inelastic, so that producers can benefit from raising prices above competitive market levels. The expert testimony is consistent in supporting the view that the demand for antiknock compounds is inelastic. (Hay, Tr. 3921, 3998; Mann, Tr. 5429; Glassman, Tr. 6257; Markham, Tr. 6782–84, 6832; Carlton, Tr. 6960) A study by Ethyl in the mid-1970's corroborates this view. (IDF 42)

A final consideration is that the two dominant firms have similar cost structures. (Carlton, Tr. 6959, 7067–71) Large [35] sophisticated buyers may also be able to disrupt collusive or coordinated pricing by pressing for discounts or other disruptions in pricing practices. This industry is marked by the presence of many large buyers, many of whom did press for discounts. Thus this factor weighs against others pointing in the direction of a poorly competitive market structure, though inadequate to change the overall conclusion.

As discussed above, standardized transactions and the free flow of information about terms of transactions are viewed by some commentators as structural factors which contribute to coordinated pricing and resulting in poor market performance. The essential allegations in the complaint charge that the challenged practices reduced competition by improving the information flow regarding transactions and by facilitating easy and coordinated price-matching. Thus, we do not assume these factors contributed to poor market performance, but we examine in more detail below evidence of their actual effects.

### 2.2 *Market Performance*

In assessing the degree to which this market performs competitively, we look to several key factors, including profit levels, vigor of price competition, the degree to which prices exceed marginal cost, prolonged excess capacity in the face of supracompetitive prices, and the degree to which market shares shift depending upon price competition by one or more companies. In general all these factors point toward a poorly performing market. Respondents make two arguments in opposition **[36]** to this view: 1) despite other indicators of poor performance, there is significant price discounting; and 2) poor performance in this market is a result of market structure, not the challenged practices. We deal with these arguments below.

2.2.1 *Profit Levels*

Profit levels in this market are high compared to suitable benchmarks. Appendix J in the Initial Decision shows each respondent's profits for the relevant products for the years 1974 through 1979. As the Initial Decision describes (IDF 163), a comparison of these benchmarks with average return on net assets for all manufacturing and for chemicals shows a dramatically higher rate of return. For example, Ethyl's and DuPont's return exceeded 150% of any benchmark comparison in every year during the period. PPG's return exceeded 150% of the benchmarks for four of five years and substantially exceeded the average benchmark for the period. Nalco's return similarly exceeded 150% of the benchmarks except for one year when it was slightly less than 150% of one of the benchmarks used for comparison.

Corroborating these figures were characterizations by company executives of the high profitability of this industry. An Ethyl executive characterized the business in early 1975 as a "golden goose." (CX 212Q) PPG recognized that in 1978 and 1979 the antiknock business had "historically high returns." (IDF 161) In addition, respondents' internal documents prepared before the proceeding reflected relatively high profit levels. DuPont and Ethyl submitted profitability studies prepared for this proceeding which showed profit levels substantially below **[37]** those discussed above. However, a number of deficiencies in these studies were found by the ALJ. (IDF 166) We believe the weight of the evidence on the record on this point clearly supports a finding of relatively high profits, consistent with a conclusion of poor market performance.

2.2.2 *Prices in Excess of Marginal Cost*

All the expert economists testifying in this matter agreed that prices for these compounds exceed marginal cost. (IDF 144) While there was disagreement over the implications of this finding—in particular, respondents' experts attributed it to the poorly competitive market structure—we can rely on the finding that price exceeds marginal cost as additional evidence that the market is not performing competitively.[54]

2.2.3 *Excess Capacity*

All the respondents had significant excess capacity during the late 1970's. (IDF 38–41). While excess capacity alone may not indicate poor market performance, and in fact may suggest that an exercise of market power by one or more firms is less likely, sustained excess capacity in the face of supracompetitive profits and prices indicates an absence of competitive pricing behavior. In a competitively performing market where prices were above marginal cost, one or more firms would be expected to expand market share by engaging in price reductions, eventually eliminating excess capacity. [**38**]

2.2.4 *Shifting of Market Shares*

Stability of market shares provides an indication of the degree of price competition in the market. As both respondents' and complaint counsel's experts testified, violatility of market shares is evidence of aggressive competition by firms wishing to increase market share.[55] This view is consistent with conventional economic analysis of oligopolistic markets. Since a firm which engages in aggressive pricing will gain market share from higher priced rivals, the absence of market share changes is more consistent with parallel pricing and cartel-like behavior. Shifting of business among customers is not inconsistent with a market stabilized at supracompetitive prices. Shifts may occur because consumers have immediate needs that cannot be satisfied by traditional suppliers or they may shift some purchases in order to maintain multiple sources of supply, as the record indicates occurred here. (IDF 26) Also, in a market with an emphasis on service rather than price competition, such as that here, individual buyers will respond to changes in services offered. On the whole, however, the shifting of business by particular buyers is less significant than expanding market share by aggressive pricing by one or more firms.

While there was shifting among respondents of the shares of purchases of individual customers (IDF 49), the shares of the market held by the respondents since Nalco and PPG have entered [**39**] and established their presence have been relatively stable. (*See* Appendix C of the Initial Decision) Respondents point to changes in market shares over a longer time period than the relevant period which was the focus at trial—1974 to 1979. Consequently, respondents analysis includes the entry and growth of Nalco and PPG. In fact, however, PPG and Nalco's position since the early 1970's has been relatively stable.

[54] *See* Hay, Tr. 3793–94, 3967–71.

[55] *See, e.g.,* Markham, Tr. 6874; Glassman, Tr. 6078–82.

The shares of all four firms have remained relatively stable despite significant excess capacity during the relevant period on the part of all four firms. These relatively stable shares tend to support, rather than contradict, a finding of poor competitive performance.[56]

2.2.5 *The Extent of Discounting*

The heart of this case is the need to properly analyze pricing behavior in the market for these products. Complaint counsel argue strongly that the pricing patterns observed during the relevant period, 1974 to 1979, show a highly "artificial" market, avoiding price competition by competitors' rapidly matching prices. Respondents contend that, although there is a high degree of uniformity and price leadership in list prices, there is extensive competition taking other forms. In [40] particular, respondents point to a substantial percentage of sales at prices discounted below list, non-price competition in the form of services provided by respondents, and competition in other contract terms, such as credit.

Before discussing respondents' contentions, it is useful to review the overall pricing patterns in the years 1974 to 1979. All the respondents published list prices for the products they sold.[57] After price controls were lifted in 1974, the first industry-wide price increase was announced in early February, 1974. (IDF 51) Appendix D of the Initial Decision shows the list price changes in antiknock compounds between February, 1974 and April 18, 1979, the last list price increase prior to issuance of the complaint. During this period, there were twenty-four price increases. In twenty of these cases, the new prices for each respondent were identical after the change and became effective the same day. In the other four cases, the new price lists were identical but the effective date varied by a day or two. (IDF 53–57)

We discuss further below the relationship between the price changes and the challenged practices, but, at this point, we are concerned with whether pricing patterns corroborate or conflict with the evidence showing the market did not perform competitively. While it is true that in a "perfect" market, prices for identical products tend to equality, the adjustment to new price levels typically requires some time period. In [41] addition, in a "perfect" market, price is set equal to marginal cost. Here it is clear that prices were above marginal cost; and the movement of list prices was based upon a high degree of price leadership. Consequently, price uniformity observed in this case is

[56] Moreover, we would not expect perfectly stable market shares even in a highly anticompetitive market environment. Dr. Markham, Ethyl's economic expert, conceded that the change in market shares during the relevant period was less than the cigarette industry's during the period 1928 to 1933. (Markham Tr., 6876–77). During this period industry members were convicted of criminal antitrust violations. *See American Tobacco Co. v. U.S.*, 328 U.S. 781 (1946).

[57] Nalco did not sell TEL and PPG did not sell TML.

consistent with interdependent pricing in an oligopoly, rather than with uniform pricing predicted in a competitive market. In particular, supracompetitive pricing in an oligopoly is based principally on price leadership with eventual price stability at supracompetitive levels, often resulting in supracompetitive profits while competitive pricing results in price equilibrium which results in reasonable returns to sellers and prices and output at competitive levels.[58] Respondents in fact do not contend that the lead antiknock industry follows the competitive model, but that poor competitive performance stems from market structure alone, rather than the challenged practices.[59]

Other evidence is consistent with the proposition that persons familiar with the industry did not believe there was extensive price competition. An oil company executive wrote, "There has never been any price competition in the lead alkyl market." (IDF 149) He also testified, "we perhaps would have saved more money in the end if there had been price competition [42] of the type that exists in other chemical purchasing areas." (McCormick, Tr. 2646–47) An internal Ethyl memorandum quoted a buyer as saying:

> There is and never has been price competition in antiknocks. This business of either you or DuPont raising the price; the other coming up with a different price which the first company then meets is all a smoke screen. (IDF 149; CX 577B)

The firmness with which the industry resisted destabilizing the price structure is illustrated by Exxon's failure to obtain significant discounts despite its solicitation of bids during the relevant period and its promise of substantial additional volume. Exxon suggested various innovative pricing proposals to obtain discounts in 1975, 1976, 1977, and 1978. Examples suggest a fairly consistent pattern of respondents' replying with list prices, despite the possibility of substantial gains in business. (IDF 152) Texaco solicited discounts based on volume purchases. (Wilson, Tr. 3204; IDF 153) For example, in 1975 Texaco requested bids from each respondent, stating:

> Antiknock compounds have historically been priced identically by all of Texaco's suppliers. We are most concerned that there has been in effect, a fixed price which we assume is paid by all customers, without the normal volume discounts which exist in most markets. With these fixed prices, the only difference we see in our suppliers is the various services rendered by each. We would like to see these purchases handled on a more business-like competitive market basis, and plan, therefore, to place our future antiknock compound business basis [sic] the best volume discount and 'service value' offered by suppliers. (IDF 153)

[58] For a discussion of pricing behavior associated with tight oligopolies, *see, e.g.*, Sullivan, *Antitrust* 333–34 (1977); Scherer, *Industrial Market Structure and Economic Performance* 151–168 (2d. ed. 1980); A. Phillips, *Market Structure, Organization, and Performance* 32–41 (1962).

[59] *See, e.g.*, DAB at 25; EAB at 33.

Despite the offer of substantial additional business and Ethyl's internal analysis showed the profitability of offering a [43] discount, it responded with a list price quotation. Each of the other companies responded with list prices as well. (IDF 153) Other examples of buyers' inability to obtain discounts from list price, even without services, were found by the ALJ. (See IDF 154–156) While PPG and Nalco did offer some discounts (discussed further below) Ethyl and DuPont were extremely reluctant to discount from list prices under any circumstances. This pattern is consistent with the hesitancy of price leaders in tight oligopolies to destabilize a supracompetitive structure by selective discounting.

Other comments by company officials reflect a perception on the part of respondents that the industry price structure was supracompetitive. A DuPont executive testified that by the mid-70's there was a fear that [the price structure] would tumble and that it "certainly had a potential for declining." (Tunis, Tr. 112) An internal Ethyl document showed concern about "maintaining a stable market for antiknocks." (CX 207D) These comments, in the context of a high profit industry with prices acknowledged by respondents' experts to be above marginal cost are consistent with a finding of poor competitive performance and supracompetitive pricing.

Respondents' contentions that non-price competition showed a vigorously competitive market are undercut by the widely accepted proposition that limitations on price competition spur non-price competition.[60] It is familiar economic theory that the more [44] complex and more hidden the form of competition, the more difficult is the achievement of coordinated, parallel behavior in an oligopoly.[61] As Mr. Hay, complaint counsel's expert testified, the furnishing of services was not inconsistent with diminished price competition. (Hay, Tr. 4143–4158, 4162–63) Similarly, competition in credit terms, shown only in a few instances in any event, is consistent with the hypothesis that elimination or severe reductions in price competition will tend to encourage competition to "spill over" into non-price terms of the transaction.[62]

As to sales at prices which were discounted from list, some 15–19% of industry sales were made at such a discount. (IDF 79) However, discount sales were rarely made by Ethyl and not at all by DuPont

[60] *See* Stigler, *supra*, at 23–26. He agrees with the "common belief among economists that price competition is much more effective in increasing output and reducing profits than non-price competition . . ." *Id.* at 26. *See also*, Areeda, *supra*, at 272–273.

[61] *See* Stigler, *supra*, at 42; Scherer *supra*, at 191.

[62] The fact that non-price competition, or even discounting off list, occurs is not inconsistent with a finding that price competition has been unlawfully restrained. *U.S. v. Container Corp., supra*, 393 U.S. at 337; *In Re Yarn Processing Patent Validity Litigation*, 541 F.2d 1127, 1137 (1976).

during the 1974–1979 period.[63] (IDF 58–60) PPG made about one-third of its sales between 1974 and 1979 at a discount. (IDF 64) These consisted entirely of sales to only three customers—[***] and PPG's competitors—Nalco and DuPont. Beginning in April 1980, PPG gave a small [45] discount off list to [***] (IDF 65) In 1979, about 58% of its sales were at a discount including co-producer sales. (IDF 66)

Despite the large share of PPG's sales made at a discount, these sales were limited to a very small number of customers out of the approximately 150 buyers in the market. In addition, PPG's market share remained relatively stable during the relevant period (*See* App. C of the initial decision). Since PPG's profits in lead antiknock compounds remained high during the relevant period, it is clear there was ample room for further discounting if PPG were intent on an aggressive attempt to expand its market share. PPG did have significant excess capacity in 1977 and 1978. (IDF 40) In contrast to any aggressive marketing strategy, PPG planners expressed concern that competition would increase "with possible pressure on the present stable prices." (CX 1928G) These factors indicate a careful, selective discounting policy, adequately restrained to avoid upsetting the supracompetive price level equilibrium prevailing in the market.

Nalco's discounting was more extensive than PPG's. During the relevant period, over 80% of its sales were made at a discount. (IDF 78) The ALJ found Nalco made discount sales throughout the relevant period to [***] Despite the fact that Nalco was the high cost producer, its profits remained higher than comparable industry benchmarks during the relevant period. (IDF 163) Nalco also had excess capacity during the [46] relevant period. (IDF 41) Nevertheless, Nalco's share did not change significantly during the relevant period.

In addition, most of Nalco's major customers receiving discounts had been favored since they assisted Nalco in entering the market in 1963. (IDF 139) We also note that Nalco and PPG were in a commercial relationship with at least one of the market leaders. DuPont purchased TML from Nalco, and PPG purchased TML from DuPont. (IDF 20) A partial dependence on DuPont or Ethyl by the two smaller companies would create an additional disincentive for aggressive discounting.

Ethyl and DuPont were generally aware of Nalco and PPG's pricing policies. Generally, the two market leaders believed they would act similarly and be less likely to discount while Nalco and PPG were more likely to do so. (IDF 139) DuPont's business assessment reports stated:

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[63] The only sales below list made by Ethyl were to [***] viewed this discount as payment for [***] investment in a [***] (IDF 58)

DuPont and Ethyl have always competed in the domestic market primarily on the basis of service to the customer. Nalco has consistently priced their principal product, tetramethyl lead, below list to 5 major companies [***] whose purchase commitments enabled Nalco to enter the market in 1963 and whose purchases comprise more than 80% of Nalco's business. Nalco's service effort is minimal. Houston [PPG] also competes on the basis of services as well as below list sales to [***] and meeting of the Nalco discount to [***] (CX 923 H–I; RDX 135H)

PPG was aware of Nalco's discounting to a small number of major customers. (J.M. Robinson, Tr. 1142) Nalco was also aware of some of PPG's discount transactions. While efforts were made by PPG and Nalco to keep discount transactions confidential, customers assisted in revealing them to respondents. [47]

These findings show a clear pattern. The leading firms, DuPont and Ethyl, avoided discounting while the smaller firms engaged in it; and Nalco, the smallest of the four competitors, adopted a fairly consistent policy of selling below list. The available evidence indicates that Nalco's costs were higher, rather than lower, than its non-discounting major competitors. (IDF 32–37) Moreover, PPG and Nalco's discounts were generally known to Ethyl and DuPont but not to customers who did not buy at discount. We conclude that the overwhelming portion (approximately 80%, IDF 79) of sales in the industry were not sold at a discount, and that the two leading firms did not engage in any active price competition with each other. While the two smaller firms, particularly Nalco, engaged in discounting, off-list pricing was sufficiently restrained to preclude significant shifts in market shares or to force the two major firms to discount, even though they were charging above marginal costs and consistently earning supracompetitive profits.

### 3. *Evidence of the Effect of the Practices*

The review of market structure and performance provides a solid basis for concluding that the market was susceptible to the promotion of price uniformity at supracompetitive levels by the challenged practices. However, it is necessary to assess the evidence showing the actual effect of these practices on pricing patterns.

#### 3.1 *Advance Notice of Price Increases*

All four respondents followed the practice of giving 30 days' advance notice of price changes. Typically, this practice [48] was promised to customers as a contract obligation. (IDF 107–111) Also, typically, either DuPont or Ethyl would initiate the price change. (*See* the summary of price changes in Appendix D to the Initial Decision). Since each company was generally obligated to give 30 days' notice of price changes to customers, uniformity with other competitors on the same effective day required that the initiator of the price change give *more* than 30 days' notice. This "extra" notice—beyond that required by the contract—is precisely what occurred in the great majority of cases. By providing several days extra notice, the initiator of the price change allowed the other companies to make identical price changes effective on the same day in 20 of the 24 price increases during the relevant period. The companies stated that the extra notice was precisely for the purpose of allowing competitors time to respond. (McNally, Tr. 2129; CX 93A) Moreover, if the competition did not respond, Ethyl's internal documents show that its standard plan was to roll back the initial change. (CX 1953Z298) PPG executives acknowledged that its price changes were determined by the actions of Ethyl and DuPont in initiating price changes. (J.M. Robinson, Tr. 1033, Fremd, Tr. 1592–93; CX 1285A, 1286; IDF 182)

The effectiveness of this pattern of advance announcements of price increases is shown not only by the vast majority of times in which uniformity in price and effective date was achieved, but also by the few instances when the pattern was broken. On one occasion, in August 1977, Ethyl undercut DuPont's price increase by announcing a lower price (that is, a smaller [**49**] increase) and a different effective date. In that case, however, DuPont did not announce the price change sufficiently in advance of the 30 day waiting period to give competitors an opportunity to respond with the same price and effective date. On the four occasions when there were price increases and the effective date was not the same, the prices became uniform with effective dates that varied by only a day or two. On no occasion were there list price differences which were not quickly eliminated. Consequently, except for occasional short periods when respondents had to maintain their old price one or two days beyond the change made by others because of the waiting period, there was no competition in list prices.

The experts who testified in this matter disagreed about the effect that advance notice price information had on competition. Dr. Hay testified that advance announcements "make it possible for all those list price changes to go into effect on the same day—at the same time. That is to say, no one producer is out there in the marketplace with a higher price than his rivals." (Hay, Tr. 3812) Dr. Mann agreed that advance announcements conveyed information and that the advance nature of such information, the speed of the conveyance, and reduced uncertainty could inhibit price differences based on different views about what price sellers should charge. (Mann, Tr. 5644–46) He felt prohibiting such practices would have little effect, however, since producers would find another way to accomplish the same result. (Mann, Tr. 5648, 5639–41) Dr. Glassman testified that advance notice does not reduce price [50] competition, that advance notice was common in other industries with no apparent correlation with industry concentration, and that advance notice may actually increase uncertainty. Dr. Carlton did not believe the challenged practices had any anticompetitive effect in this industry but did agree that improved flow of information could reduce price competition. He testified that anything that makes it more difficult to learn a rival's price makes it more difficult to have parallel behavior.

We conclude from reviewing the expert testimony in this matter that there is *general* agreement as to certain principles. Greater knowledge of competitor's prices may aid in price-matching, while, conversely, secrecy in discounting makes price-matching more difficult. Advance notice of price increases is one device for conveying price information to competitors but is not anticompetitive in all situations. It would be difficult to dispute these propositions. They are supported by accepted scholarly analysis.[64] There is disagreement among the experts, however, as to whether advance announcements had a significant effect in this industry, and indeed where this industry was not workably competitive.

As discussed above, we believe the evidence in the record clearly supports a conclusion that this industry did not engage in vigorous price competition, but instead was characterized by [51] highly uniform, supracompetitive prices with limited discounting in particular circumstances, and a pattern of lock-step price changes. As we discuss further below, we conclude the advance notice practices used by respondents in this industry facilitated price uniformity.

It is *not* the case that tight oligopolies with dominant firms inevitably result in the pricing pattern observed in this industry. An initiator of a price increase in such an industry does not guarantee himself a "grace period" to retract a price movement that others do not follow. The initiator must take some risk in announcing price increases and must calculate whether his temporarily higher prices may result in a loss of sales. Conversely, the initiator of a price decrease typically has no interest in others following. In a market with vigorous price competition, the initiator of a price decrease wants to prevent his rivals from learning immediately of his price movement, if possible, at least until he is able to gain additional volume. The likelihood of both these situations—the loss of sales by an initiator of a price increase who is not followed by his rivals or the gain in volume by a initiator of a price decrease who will not be immediately matched by

[64] *See, e.g.,* Areeda, *Antitrust Analysis* 274 (1981); Posner, *Antitrust Law: An Economic Perspective* 61 (1976); Stigler, *The Organization of Industry* 42–43 (1976); F.M. Scherer, *Industrial Market Structure and Economic Performance* 222–25 (2d ed. 1981); J. Bain, *Price Theory* 273–283 (1952).

his rivals—is greatly reduced by the advance notice pattern followed by the respondents.

By following a consistent practice over the relevant period adhered to by every industry member, the respondents have developed an effective way of signalling pricing intentions. The practice of conveying to a competitor what is, in effect, a price [52] "offer," then waiting for a response—while avoiding different list prices at any time—actually goes beyond the competitive effect in exchanging current price information condemned in *Container Corp.* In that case, the practices which reduced competition consisted of agreements to exchange current price information by firms representing almost all the market. Here firms representing *all* the market have not only developed a system for exchanging current price information but for communicating future information with the opportunity to announce future prices on a contingent basis. The result has been to make it as easy as possible—short of an agreement—to rapidly equalize prices at a particular level without the destabilizing influence of even limited periods where list prices differ.

The view of the companies' executives about the nature of pricing in their industry is instructive. A DuPont executive testified "the price structure certainly had a potential for declining." (Tunis, Tr. 112) Ethyl's internal documents reflect a concern about "maintaining a stable market for antiknocks."

> To restate earlier thinking, our concerns about market shrinkage relate to overcapacity and maintaining a stable market for antiknocks. It is our impression that in industry after industry, maintenance of selling prices and profits becomes more and more difficult—and finally impossible—as overcapacity grows. This is particularly true in an industry where the overcapacity is not temporary, but is increasing with time. We observe in other industries that, at some percent of overcapacity, a supplier finds the temptation overwhelming to shave price for an increased market share or increased pounds, because the effect on his profits are so positive. Anything that speeds antiknocks toward that critical point has to be viewed with concern. (CX 207D) [53]

These perceptions, in this context, suggest a concern that price levels could fall if the practices facilitating coordination were abandoned. Price changes which are predicated principally on cost changes are unlikely to precipitate a fear that prices will "tumble." On the other hand, prices well above marginal cost could be subject to dramatic price reductions if aggressive price competition breaks out. In fact, the record shows a noticeable lack of aggressive price competition at any time during the relevant time period on any significant scale.

A propensity to compete for additional service also reflects a decision by company officials to avoid price competition. The record contains numerous examples where respondents offered various services to particular customers but were consistent in their refusal to reduce prices from list. Complaint counsel's expert analyzed this tendency as indicative of a lack of price competition.[65]

### 3.1.3 *Respondent's Arguments and Justifications*

There is no real dispute about the high degree of uniformity among prices in this industry.[66] Respondents' principal argument, however, is that the underlying pricing dynamic in this industry is unaffected in a significant way by advance announcements of price increases. Moreover, they say that [54] advance notice has certain procompetitive benefits and that customers—the parties who would theoretically be harmed by anticompetitive practices—do not object.

Respondents say that price uniformity is the norm in a market with few sellers and homogeneous products. This contention is supported by expert testimony and by observations of company executives that different prices cannot be maintained for any sustained period because sellers rapidly learn of the differential and shift to lower-cost sellers.[67] Even in the absence of advance announcements, respondents argue that price increases initiated by one company would be learned by the other companies, who would decide whether or not to go along. If they did not follow the price increase, the initiator would presumably retreat from the proposed increase or risk losing substantial sales. For example, if Ethyl instituted immediately an increase, DuPont would learn about it quickly and determine whether to follow it. If DuPont did not respond in kind, Ethyl would retreat. Consequently, advance announcements do not significantly affect this pattern.

In addition, respondents say that advance notice promotes competition by encouraging competition in "forward ordering," that is, providing customers the opportunity to order in advance of a price increase scheduled to go into effect at a later date. Also, they say, advance notice is a spur to undercutting the initiator's price increase during the 30 day advance notice [55] period. (*See, e.g.,* DAB at 32) So, for example, if DuPont announces a 2.0¢/lb increase to be effective in 30 days, this gives Ethyl an opportunity to offer a 1.0¢/lb increase as an alternative. (By "undercutting" the respondents apparently mean a lower increase, not an actual price cut.)

Finally, they say, customers who testified at trial consistently did not object to the practice of providing advance notice and, in fact,

[65] *See* Hay, Tr. 3825–28, 4374–75. This view is consistent with conventional economic theory. *See* fn. 60, *supra.*

[66] Respondents do make a spirited argument that the level of discounting, for a market with these structural characteristics was substantial. As we discuss elsewhere, the degree of discounting was limited to particular situations and it does not offset the principal pattern of non-competitive pricing.

[67] (*See, e.g.,* Wilson, Tr. 3291–92, 3295–56)

testified that it provided advantages to them. The principal advantage is the opportunity to "forward order" at the old price. (*See, e.g.,* McCormick, Tr. 2663–64, 2704–06; Stern, Tr. 3455–56; IDF 112) Respondents also point to the fact that the practice of advance notice has been followed for many years, including during the time Ethyl had 100% of the market. Thus, they contend, the practice could not have evolved with the purpose of stabilizing prices since it was initiated before price competition could occur.

### 3.1.4 *Discussion*

Under a rule of reason analysis, it is appropriate to consider the evidence of harm to competition as well as any procompetitive effects of the challenged practices. In addition, *Boise Cascade* makes clear that the Commission should carefully weigh the evidence of actual effects of the practices on the competitive performance of the market. We consider respondents' arguments in the context of these requirements.

As respondents point out, it is true that there are risks in proposing price increases even with advance notice, because uncertainty as to competitors' reactions is not eliminated. For **[56]** example, the response to an announcement of a price increase, effective in the future, might be an announcement of a planned smaller increase by the other competitors. This situation did in fact occur twice in 1977. Alternatively, the response to an announced future increase might be the *status quo, i.e.,* competitors leave their price unchanged, or, in theory at least, competitors could respond with an announced decrease. Strikingly, neither of these latter two scenarios ever occurred during the relevant period. The only response by the "second" company was to follow the first company's lead completely or, in a small minority of cases, to announce a smaller increase.

While there is a degree of uncertainty in determining pricing responses even with advance notice, the theory of the complaint was not that *all* uncertainty was removed, only that the environment was changed enough to have a substantial effect in promoting anticompetitive price coordination. While prices would likely have tended toward uniformity (except for special hidden discounts) without advance notice, the process of reaching uniformity without advance notice would have been fraught with a much higher degree of risk for the initiator of a price increase. An immediate price change would have created a time lag until other competitors learned of the increase and decided how to respond. During this period competitors would have been rewarded by increased sales for maintaining their prices. A decision by a responding competitor to effect immediately a smaller increase would also have presented substantially greater risks without advance notice. The remaining competitors, if they [57] chose not to respond, would then gain sales from both the first and second initiators of price increases.

The actual pricing behavior in this market strikingly demonstrates how the risks were reduced—both to the initiator of a price increase and, in the few cases where it occurred, to the initiator of a lower increase in response to a previously announced increase. For example, in March 1977, Ethyl and DuPont simultaneously announced price increases of differing amounts. In the absence of advance notice, PPG and Nalco would have stood to gain sales immediately and, to the extent they could not meet additional orders, Ethyl, which proposed a smaller increase than DuPont, could have gained sales.

In fact, both DuPont and Ethyl not only gave the 30 days' required notice but each gave a few days extra notice, in the words of an Ethyl internal memo, so that "competition must reply by Friday [March 4, 1977]." (CX 114) DuPont, with the convenient opportunity to roll back its proposed price increase without ever having an effective higher price than its competitors, did just that by announcing an increase equivalent to Ethyl's on March 4.[68] This episode reveals how advance notice gave the opportunity for each company to change its price level without any company having a different effective price at any time. [58] Moreover, the initiators of the price increase, Ethyl and DuPont, were able to avoid any significant risk that they would be alone in their higher prices by providing an extra period for competition to "reply." Also, Ethyl was in an excellent position to assess DuPont's likely response to an additional increase, since DuPont had signalled its wish to raise prices already. In April 1977 Ethyl announced a price increase, again providing additional days' notice beyond the required advance notice period. An internal Ethyl document noted that "[c]ompetition must reply by 4–26–77." (IDF 176; CX 91, 1953Z82–83) The other three respondents did reply by April 26 and announced identical new list prices, effective on the same date as Ethyl's. Consequently, in two months, there were two price changes, with all four companies' list prices identical at all times and an overall increase of about 4% in list prices.

The companies themselves were well aware of the dynamics of advance announcements, a grace period for others to respond, and the opportunity for contingent rollbacks if competitors did not respond with identical price increases. The record contains numerous examples of Ethyl and DuPont executives considering the opportunity for the major competitor to respond during the grace period that proceed-

[68] PPG and Nalco apparently did not learn of the DuPont announcement until Monday, March 7, when it was carried in the press. Consequently, they made the new price effective on April 7, 30 days later. (IDF 175) Ethyl, responding to the fact that it would have had a higher price effective for 3 days before PPG and Nalco raised theirs, then changed its effective date to April 7, at which point the circle was complete.

ed the contractual thirty day notice period. (*See, e.g.,* McNally, Tr. 2129; CX 93A; CX 1953Z298) PPG executives also acknowledged that timing and amount of price changes were determined by the actions of Ethyl and DuPont. (J.M. Robinson, Tr. 1033, Fremd, Tr. 1592–93, CX 1285; CX 1286) **[59]**

The importance of giving advance notice is further illustrated by the pricing moves in August 1977. On August 15, 1977 DuPont announced a price increase effective only 31 days from the date of the announcement, on advice of counsel concerned about antitrust liability. (IDF 180) A few days later DuPont was informed by a caller from *The Wall Street Journal,* as well as a customer, that Ethyl had announced a smaller increase. On August 2 DuPont rescinded its original increase to match the timing and amount of Ethyl's increase. This was the first time a price increase had been intentionally undercut since other increases which were lower than an increase announced by the other major rival occurred simultaneously. (*See* IDF 54–55) In testifying about this incident, DuPont's Marketing Manager stated that this absence of an effective "grace period" before the advance notice made price-matching difficult. "By the time [Ethyl] learned of what we were doing they could not match the same effective date and give 30 days' notice." (Diggs, Tr. 2413) Because of the complexity caused by this absence of grace period, he testified, DuPont returned to providing more notice. "Well, my recollection is that in subsequent price changes after this date we lengthened the period somewhat by several days so as to provide time to test what the competitive reaction would be." (Diggs, Tr. *id.*)

The former DuPont Marketing Director testified about the reasons for giving more than 30 days' notice. He stated:

> [One reason was] to make sure we got it out to everybody in 30 days . . . And secondly, that is a very, very nerve-wracking, tense period, and we felt that our customers in many cases were **[60]** accusing us of being cavalier, that we really didn't give a damn what others were doing; we were on roads that said we were ignoring them.
>
> So what we tried to do was give them enough notice and *also an interval which gave our competitors a chance to respond, without having to change the effective date.* (emphasis added) (McNally, Tr. 2129).

These examples (and there are others in the record) show that it is highly likely that the pricing behavior in this market was significantly different than would have occurred without advance notice. It is reasonable to conclude that such precise uniformity of effective dates and price changes could not have occurred without the use of a grace period for competition to respond combined with contractual obligations for 30 days' advance notice of price changes. In making this conclusion, we rely upon the evidence showing how company executives themselves perceived the advance notice practice, the consistent pattern of price announcements and changes, the potential for price cutting to occur absent coordinated pricing, as well as our analysis of overall market structure and performance. On the basis of these findings, we believe it is reasonable to infer that the advance notice practices helped contribute to coordinated pricing, thus, supracompetitive uniform prices. While respondents, in theory at least, may have found ways to match prices without advance notice, it is reasonable to infer that such price-matching would have been more difficult and, consequently, that the likelihood of such pricing patterns without these practices was substantially lower. **[61]**

As to respondents' contention that advance notice was actually procompetitive because it encouraged "forward ordering" during the period before the new price became effective, we must consider this effect in the context of the effect of the advance notice practice on price competition. Forward ordering gave an opportunity to purchase at less than the new price announced, but it was limited by transportation, storage, and inventory constraints.[69] (IDF 80, 112) Consequently, forward ordering was a limited way to escape the effect of regular and uniform price changes, but not a device for escaping a price in effect at the time of ordering that was supracompetitive. Thus, forward ordering was of some benefit to customers, but was unlikely to be of sufficient benefit to offset the long term result of advance announcements in assuring lock-step price increases by all respondents.

As for the fact that customers who testified generally favored the practice of providing advance notice, we do not believe this is highly probative of the net competitive effect of the practice in this industry. The testimony by customers was essentially that they wished to have an opportunity to buy at the old lower price in advance of a new, higher price. Customer testimony was not specific about the degree of savings but **[62]** supported the general proposition that purchasing at the existing price before a price increase results in some savings. (*See, e.g.,* IDF 112) This is an understandable perspective, but does not contradict our fundamental conclusion. If asked, no doubt customers would testify that they favored price competition, too. Consequently, the question is whether the buyers' perception that advance notice enabled them to save on the purchase price is more than offset by our finding that advance announcements contributed greatly to uniform, supracompetitive pricing. In view of the limited extent of forward ordering and the extensive evidence of the contribution of advance announcements to price uniformity, we believe that buyer testimony

[69] As the ALJ notes, the record is not clear as to the amount of forward ordering involved. The benefit to customers from advance notice would consist of the amount ordered above the expected purchase in the absence of an advance notice of price change. The degree of forward ordering involved is suggested by DuPont's "in-house guidelines" to limit forward ordering to between four and six weeks' normal supply. (IDF 81)

does not justify a finding that the advance notice practices were, on balance, procompetitive.[70]

Finally, we do not believe the fact that advance price announcements were practiced before competitors entered the market means that their effects in the type of market presented here are not adverse to competition. It is true that the history of a practice may be relevant by showing the purpose of the practice, and purpose may be useful in assessing effects.[71] Here, however, there is no need to rely upon the proposition that the initial purpose of advance announcements was to facilitate **[63]** price uniformity in order to determine that the effect during the relevant time period has been to do so. As discussed further below, it is not surprising that a practice which was initiated for a benign purpose may become anticompetitive as the industry evolves, as other competitors adopt the practice, or as other practices are developed which, together with the earlier practices, produce an anticompetitive effect. Here we are confronted with a series of practices which interact to affect pricing behavior. While the initial purpose may be relevant in assessing current effect, as well as the use of the practice in other industries, our focus must be on the current effect of the practices in a particular industry.[72]

Respondents argue that the conclusion of the ALJ that advance notice had a substantial effect on pricing behavior is the kind of unfounded inference that the court in *Boise Cascade* found objectionable. We disagree. *Boise Cascade* does not require that the record evidence conclusively establish that all pricing behavior was a direct result of the challenged practices, nor does it hold that inferences cannot be drawn from applying conventional economic theory to the observed facts. Rather, the **[64]** court found that "the Commission has provided us with little more than a theory of the likely effect of the challenged practices." 637 F.2d at 578. In that case, we challenged parallel use of a freight factor, which was only one aspect of price. Here, we examine a series of practices which inter-relate to affect total price. There the market was less concentrated and other structural considerations were less compelling. In *Boise*, the record showed prices were in weekly flux without exact price-matching. Here, prices are much more uniform over time and move with lock-step rigidity.

[70] Although the procompetitive advantages of forward ordering are not sufficient to offset the competitive harm caused by the combined advance notice practices, our finding of liability is limited to the use of the extra "grace period" and we do not prohibit advance notice and forward ordering under our order.

[71] *See, e.g., White Motor Co. v. U.S.*, 372 U.S. 253, 261 (1963).

[72] In this connection, we note that advance notice is used in other chemical industries (IDF 107) and that there was some testimony that advance notice was of no benefit to the sellers, only to the buyers. (*See, e.g.*, Robinson, Tr. 1046) Respondents' argument concerning the historical use of advance notice appears to be limited to the use of 30 days' notice, not the extra "grace period." (*See, e.g.*, EAB at 12) While the record is unclear on this point, Ethyl apparently gave only 30 days' notice when it was the only company in the industry. (*See* Koehnle, Tr. 4613–4614) The use of grace periods evolved later but the record is not clear when this development occurred.

practices. We view this factual record as stronger than that presented in *Boise.*

Anticompetitive effects are not always capable of being specifically identified or quantified at the time a determination is made as to the probable competitive consequence of a particular type of activity. Therefore, the courts apply appropriate economic theory to the available factual record in an effort to reach a reasoned conclusion as to the likely effects anticipated. Thus, the Supreme Court in *Container Corp.* utilized conventional economic theory about oligopolistic price competition to make an inference about the anticompetitive effects of an illegal price vertification arrangement. 393 U.S. at 337. The instant case presents a similar situation. However, here the advance price announcement practices facilitated price coordination, reduced the risks of increasing prices and impaired the free functioning of the competitive process thereby violating Section 5. This record, if anything, provides a stronger evidentiary basis than *Container Corp.* for inferring that advance **[65]** price announcements facilitated price coordination, reduced the risks of increasing prices, and distorted the competitive process.

### 3.2 *Press Announcements*

Up until 1977, all four respondents issued press releases announcing their intention to institute a new price after the advance notice period. The ALJ found that, in conjunction with the advance notice practices of respondents, press notices increased certainty about rivals' pricing moves and facilitated price matching. Respondents contend that competitors learned quickly of pricing moves from other sources of information, principally customers, and, therefore, press announcements were insignificant in increasing certainty about competitors' intentions. In addition, respondents say that press announcements are useful to customers in learning about developments in the market (*see, e.g.,* Tunis, Tr. 361–362) and that press announcements of price changes were a form of free advertising that kept the companies' names before the public and helped assure actual and potential investors that cost increases were being passed on in price increases.

The principal issue in this dispute is whether press announcements significantly improved the flow of information about pricing moves beyond that available through the customer-supplier network. Several factors point to a conclusion that press announcements did significantly improve the flow of information of future prices. First, it is clear from the record that all four companies paid close attention to price **[66]** announcements in the business press, and internal documents show a number of instances when company officials noted that they learned of price changes from the press. (*E.g.,* CX 292A; CX 936A;

CX 950A.) Second, press releases were generally issued on the same day as customer notification, though there were a few instances in which the press release was delayed for one to four days.[73] Publication typically followed within one day, though in a few cases it took as much as 3 days. (IDF 173)

In addition, there are at least two instances in which press announcements played a significant role in pricing actions. In the first example, discussed above, Ethyl and DuPont announced planned price increases simultaneously, though DuPont's proposed increase was higher. A report in *The Oil Daily* on March 3 noted that spokesmen for both companies said they were studying the situation and included a quote from the Ethyl spokesmen to the effect that it had "no immediate plans for further adjustment" of its prices. (CX 121, 831) One day later DuPont announced that it would retreat to the Ethyl price. It is hard to imagine that this incident would not constitute an unlawful exchange of information about current and future prices under well established caselaw if made directly from Ethyl to DuPont.

In a second example, the *Wall Street Journal* carried an incorrect story about the effective date of a proposed DuPont price increase, stating it would be effective on March 1, rather than February 24 as DuPont customers were told. (CX 149) PPG **[67]** then moved to meet the date published in the story, rather than the date told DuPont's customers.

On the other hand, respondents continued to learn about price changes from their customers after press releases were essentially abandoned. The record contains some examples in which competitors learned of price change notices on the same day they occurred. Of the 24 list price increases between January 1974 and June 1979, one or more of the competitors first learned of the increases from customers on 18 occasions, typically within one day. (*See* EAB at 43–44, fn. 102, and the exhibits cited there.) Finally, the pricing patterns established before 1977 continued to be essentially the same after press releases were abandoned.

A further consideration is respondent's argument for the procompetitive effects of press announcements. It is certainly true that press announcements have some value generally to customers wishing to follow industry developments. However, in this industry, there are few customers (only about 150) and they are traditionally informed by direct notice. (IDF 108–111) Consequently, press announcements provided little additional information. As to respondent's arguments that these announcements were a form of "advertising," useful in getting respondents' names before the public, and that they were helpful in

[73] *See* App. D of the Initial Decision.

comforting investors that costs would be passed along, there is little in the record to support these propositions except self-serving testimony. **[68]**

In summary, while respondents' justifications for press announcements are not convincing, it is impossible to conclude on the basis of this record that press announcements contributed significantly to the other factors promoting price coordination, particularly, the advance notice practices. This conclusion is not to say that press announcements cannot be anticompetitive and serve as a device for stabilizing prices, either intentionally or unintentionally. In this case, however, the customer-supplier network is quite effective in conveying price information, so that the additional contribution of press announcements was of marginal effect.

### 3.3 *Most Favored Nations Clause*

The third practice challenged in the complaint is the use of "most favored nations clause"—contract provisions which require offering the benefits of a lower price to all customers if it is offered to any. The theory of the complaint adopted by the ALJ is that these clauses reduce price competition by reducing the incentive for the seller to provide any discounts, since it has contractually obligated itself to do so only if its overall pricing level is reduced. Further, the ALJ concluded that the use of these clauses by at least the two major competitors was known by both DuPont and Ethyl and increased the certainty on the part of both that neither would discount.

All four companies have used these clauses, but PPG and Nalco's use has been more limited. In particular, PPG does not include the clause in its standard contract and the complaint does not charge it with this practice. (Complaint, ¶12(b)) **[69]** Ethyl abandoned use of the clause in January 1981, but well after the complaint was issued.

Complaint counsel's expert witness testified that the most favored nation clause reduced price competition in several ways. First, it reduced the incentive of a supplier to discount since any discount would have had to be extended to all customers. Second, extending the discount, as required by the clause, would make the granting of a discount more noticeable to competitors. Third, to the extent that other competitors were aware of the clause, it increased confidence the other firm would not discount. Finally, the clauses were used to "suppress customer reaction to high prices" by serving as a justification for failure to consider discounting. (Hay, Tr. 3813–14) Dr. Markham testified that the clauses were simply a restatement of the policy that would be followed without them. (Markham, Tr. 6819, 6896) Dr. Mann testified that the clauses had no effect because he saw no evidence in the record that they did have an effect and that the clauses restated the Robinson-Patman Act. He also stated, however, that evidence that such clauses did have an effect would include recognition by a respondent that the clauses helped maintain a systematic viewpoint among competitors as to reliance upon the clauses in rejecting requests for discounts. Mr. Glassman testified that overall the challenged practices did not have an anticompetitive effect. However, in regard to the most favored nations clauses, he stated that, had he recalled any evidence of adverse competitive impact he "would have perhaps said that to a very limited extent, the existence of a [70] most-favored nations clause could have added just a tiny bit to the possibility that there would be no price discounts." (Glassman, Tr. 6508) He also testified the clauses were used by Ethyl and DuPont as "an excuse for not discriminating among customers and giving discounts." (Glassman, Tr. 6511). At trial, he did not concede that the absence of the most favored nations clause had any relationship to PPG's ability to compete. (Glassman, Tr. 6514) However, in his deposition, he testified, "The absence of a most favored nations clause in PPG's business helps them compete because they don't feel at all constrained in terms of giving special deals and discounts." (Glassman, Tr. 6514–15)

Dr. Carlton said that the use of these clauses by Ethyl and DuPont could not have had an adverse effect on competition since Ethyl was not constrained from granting a discount and since neither Ethyl nor DuPont was influenced by the fact that the other had this clause in contracts.

While the experts disagree on the actual effect of the clause in this industry, respondents' experts appear to reach the conclusion that the clauses had no effect, because: 1) the non-discounting pricing policies would be followed in any event; 2) Ethyl and DuPont were similarly constrained by the Robinson-Patman Act; or 3) Ethyl and DuPont had no real confidence that the other would actually follow the obligations of the clause.

At the outset, it is useful to distinguish the requirements of the clause as interpreted by respondents from those of the [71] Robinson Patman Act.[74] In general, Ethyl and DuPont interpreted the clause to customers to mean that a discount provided to one customer would have to be provided to all. (*See, e.g.,* Lockerbie, Tr. 764–67; IDF 117–118) One internal Ethyl analysis, however, interpreted the clause to mean that an equal discount would only have to be offered to customers purchasing the same or greater quantities. (IDF 192) In contrast, the Robinson-Patman Act prohibits discrimination in prices which substantially lessens competition, unless the seller can prove that a difference in price was justified by cost differences or was a good faith

[74] 15 U.S.C. 13.

effort to meet a competitor's price. For our purposes, the "meeting competition" and "cost justification" defenses under the Act highlight the most significant differences between the Act's effect and the operation of respondents' most favored nations clauses.

There is little doubt that a company using the clause has an additional incentive not to give selective discounts. Doing so triggers a contractual obligation to lower its pricing level to all customers, thereby perhaps reducing profits generally, or to risk legal liability by violating its contractual obligation. The companies in fact frequently relied upon the clause in telling customers why they refused to provide discounts. (IDF 194) DuPont recognized that offering a discount to Exxon, or other companies, could result in a general price decline. (CX 1081A; IDF 197) Ethyl also recognized that the clause restricted **[72]** its pricing flexibility. (IDF 197) These companies' internal documents indicate that executives viewed the clauses as having a significant effect on their pricing policies. (See IDF 197–199) All the economic experts who testified were of the opinion that these clauses —if adhered to—could reduce the incentive to discount to selective customers. PPG's expert testified that the absence of the clause helped PPG discount. (IDF 200) Thus, it is difficult to accept respondents' contentions that the clauses played no role in pricing behavior. Frequent reliance on the clauses, both within the company and to customers, indicates otherwise. Moreover, the record shows that Ethyl and DuPont's knowledge that each used the clause affected each company's perceptions about the other's likely pricing behavior. Ethyl's management discussed the impact of the most favored nations clause in internal reviews. An Ethyl management review in November 1975 referred to the fact that both DuPont and Ethyl had most favored nations contracts and that PPG and Nalco were "less encumbered." (CX 394Z5; IDF 197) In 1977, Ethyl's Chairman asked about a possible "free-for-all" if "DuPont abandoned their most favored nations provision with the next set of contracts." (CX 222B) Ethyl's Director of planning testified about the question posed in the 1975 memorandum:

> Petroleum Chemicals made a point . . . that the favored nations restricted their ability to take actions. So [the President of Ethyl] said, "Okay, suppose DuPont [removed the most favored nations clause] and you didn't do it? Now what would you do? Here you may have to take an action." (Day, Tr. 615) **[73]**

An Ethyl Management planning document in March 1977 observed that removal of the clause could precipitate significant marketing changes:

> . . . we would have to extend the same reduced price to any . . . customer who buys more

from us . . . With a new contract that eliminated the favored nations clause, we could meet competition at a selection discount without having to extend the discount . . . The only advantage of a new contract is that it allows us to meet competition selectively. However, the fact that [Ethyl] was cancelling old contracts and eliminating the favored nations clause would be known to competition almost immediately. *It would signal to them a basic change in sales strategy.* (emphasis added) (CX 220 P-Q)

DuPont also believed that it could not eliminate the most favored nations clause without creating a substantial change in the perception of its marketing strategy. DuPont's Director of Marketing testified:

Q: Could you have eliminated [the clause] in your judgment, if you wanted to?
A: No. Even if I had done nothing more than walked out to the marketplace and said, "We are going to take the [clause] out of contracts," the reaction that would have produced would have been one of wild speculation as to why. I mean this thing was in practice for an extended period of time—I don't know how long; I guess since we were in business—and if we had pulled the thing out, my judgment says that I would have reacted in the same way. I would have said, "What are you doing? Who's got the deal? How much of the deal can I get? What's going on?" And even if there was no deal, it was just one of those things that by default would have been impossible. (Tunis, Tr. 392–393)

The record contains an example of how the most favored nations clause affected the pricing considerations of DuPont. In [74] responding to a request by Exxon for a price quotation on an F.O.B. plant site basis, the DuPont sales representative assessed the likelihood that competitors could accept Exxon's offer. He concluded Ethyl was unlikely to do so and testified that the most favored nations clause was probably a factor in his assessment. (Miller, Tr. at 2000).

Both Ethyl and DuPont contend that, on the one hand, they could have discounted without the clause and, on the other, that there was no incentive to discount because rivals would have learned of the price cuts and matched them. In fact, neither Ethyl nor DuPont ever discounted with one possible exception.[75] Admittedly, as in the case of evaluating the effect of advance notice of price changes, there is no convenient laboratory experiment available to confirm how Ethyl and DuPont would have behaved in the absence of the clauses. As discussed above, however, the record provides a solid basis for an inference that these clauses made a significant contribution to reduced price competition when used in conjunction with the other practices we find anticompetitive. In reaching this conclusion, we rely also upon the particular circumstances of this industry, including its structure and performance, as well as evidence about the effect of these clauses. In an industry with periodic discounting by the leading

[75] Ethyl gave a small discount to [***] in return for [***] (IDF 58) The significance of this discount is unclear except in the conspicuousness of its isolation.

firms, despite the contractual use of such clauses, or in an industry with a structure less likely to [75] result in interdependent behavior, a different conclusion might be appropriate.

Against the indications that the most favored nations clause discouraged selective discounting, we must weigh respondents' arguments justifying the use of such clause. Respondents' principal proffered business justification for the use of these clauses is that they are desired by customers who wish to insure they are not disadvantaged.[76] Refiner testimony was generally to the effect that the clause provides some assurance that they are not receiving discriminatory prices and that they were on an equal footing with major companies. We are mindful of the need to consider carefully stated customer preferences, particularly when the theory of the complaint is that unlawful anticompetitive pricing has its most direct effect on them. However, this is a particularly good example of a practice which may be desired by individual customers, viewed from their limited perspective, while proving harmful to customers as a class. As in the cases of advance notice of price changes and uniform delivered pricing, a complex inquiry is required to determine effects on an industrywide basis. Thus, an individual customer's perspective, though deserving careful consideration, is inevitably limited in shedding light on the overall effect on competition. The preference of customers expressed in testimony was that they did not wish to be at a price disadvantage in relation to other [76] companies. However, this preference for market performance directly conflicts to some degree with a market performing competitively since more frequent discounting, particularly by the dominant firms, would no doubt have improved overall market performance. Consequently, we do not view customer testimony favoring these clauses as sufficient to offset other evidence in the record demonstrating their anticompetitive effect.

To the extent respondent attempts to justify the practice on the grounds of "fairness" or "ethical" business behavior as some of the testimony suggests, we reject that notion. Expert testimony in this matter and conventional economic theory support the principle that selective discounting is procompetitive rather than anticompetitive in the context of this market structure and absent competitive injury of the type prohibited by the Robinson-Patman Act.

### 3.4 *Uniform Delivered Pricing*

The fourth type of practice challenged in the complaint is uniform delivered pricing, that is, offering products for sale, including freight,

[76] We have already discussed the argument that the clauses carry out the purposes of the Robinson-Patman Act. To the extent the clauses go beyond the requirements of the Act, as they clearly do, this justification obviously fails.

at the same unit price to any customer in the U.S. Under this system, for example, Nalco would sell products from its Texas plant to a California customer at the same price as DuPont would sell to the same customer from its California plant. The theory of the complaint is that this practice of quoting uniform delivered rates makes interdependent price coordination much easier by removing the complexity of attempting to match a competitor's total price—base price plus freight **[77]** calculated for a particular customer—and instead matching a standard list price to all customers which includes freight.

The practice of quoting prices on a delivered basis was initiated by Ethyl in the 1930's when it was the only firm in the industry. (IDF 124) Respondents use leased facilities, primarily rail tank cars, to ship their products. In cases where buyers have asked to be quoted an F.O.B. manufacturing plant price (that is, price if the buyer assumed responsibility for transportation), the respondents have refused. Sun, Exxon, and Shell, for example, requested price quotes on this basis. (IDF 189)

Expert testimony in this case disagreed as to whether uniform delivered pricing helped to reduce price competition in this industry. Complaint counsel's expert, Dr. Hay, testified that consistently quoting prices on this basis makes it clear whether a competitor is discounting and simplifies the price to be communicated for purposes of price-matching. He believed the practice did reduce competition in this industry. (*See* Hay, Tr. 3812–14) Dr. Markham testified that delivered pricing does not reduce uncertainty because freight costs are too small to be significant (Markham, Tr. 6813) and that price-matching could occur, even if prices were quoted on a non-delivered basis, because rival's freight costs could be easily calculated. (Markham, Tr. 6814–15; 6894) Dr. Mann testified that if all the manufacturers adhered to a uniform delivered pricing system, uncertainty would be reduced, but that he had "not seen any evidence that [persuaded him] that that's the case." (Mann, Tr. **[78]** 5671–72) Mr. Glassman's testimony appears to be that uniform delivered pricing could facilitate price-matching but that freight costs were a small proportion of costs in this industry and, therefore, that uniform delivered pricing had not led to resource misallocation. (Glassman, Tr. 6521–25)

Thus, as in the case of advance price announcements, there is general agreement among the expert witnesses that uniform delivered pricing can facilitate price-matching but disagreement over whether it had an effect in this industry. Also, as in the case of advance price announcements, it would be difficult to dispute the proposition that uniform delivered pricing may reduce price competition, since it is generally recognized as capable of **[79]** doing so in economic literature.[77] The Commission, upheld by the courts, has challenged base point pricing systems on several occasions.[78]

The courts and the Commission have applied different legal standards in assessing base point pricing schemes under the Sherman Act and the FTC Act depending upon whether agreements to use delivered pricing were found. The Commission indicated in *Boise Cascade Corp., supra,* that an agreement by competitors to fix one element of price would be *per se* unlawful.[79] On the other hand, in *Triangle Conduit, supra,* the court of appeals found a violation based upon individual use of base point pricing in an industry with particular characteristics which made price [80] coordination likely.[80] Thus the court appeared to engage in a limited rule of reason analysis to determine whether the pricing practices followed by individual companies were likely to have a anticompetitive effect.[81]

A national uniform delivered pricing scheme is essentially a variation of a base point pricing scheme since all competitors are absorbing different freight costs for different customers in order to arrived at a single, uniform delivered rate. Here, we apply a rule of reason analysis to determine whether, based on the structure of the market, the observed performance of the market, and the evidence connecting the use of uniform delivered pricing with observed pricing behavior shows it is likely that respondents' individual use of delivered pricing, together with the contemporaneous use of the other challenged practices, substantially reduced competition.

The pricing patterns in this industry, as discussed above, are striking in the degree to which uniformity has been maintained and prices for all respondents have moved upward or downward (mostly upward) in lockstep fashion. As discussed at length above, the price movement dynamics in this industry have [81] depended upon the price leadership of Ethyl or DuPont periodically "testing the waters" with a price

[77] *See, e.g.,* Scherer, *Industrial Market Structure and Economic Policy* 325–334 (2d ed. 1980); P. Areeda, *Antitrust Analysis* 273–75 (3rd ed. 1981) "A delivered price system permits each seller to quote the same price to every buyer regardless of location. Thus, the most troublesome effect of an industrywide, rigid, delivered pricing system may be to facilitate noncompetitive pricing." *Id.* at 383 (citations omitted); R. Posner, *Antitrust Law: An Economic Perspective* (1976). "The purpose of basing point pricing is to facilitate collusion by simplifying the pricing of colluding firms. . . . It is plainly inconsistent with competition, which would quickly eliminate any phantom freight charges." Id. at 70–71. *See also, e.g.,* C. Kaysen, "Basing Point Pricing and Public Policy," 63 Q.J. Econ. 289 (1949). *See also* Justice Department Guidelines. "Although not objectionable under all circumstances [mandatory delivered pricing practices] tend to make collusion easier, and their widespread adoption by firms in the market raises some concern that collusion may already exist." *Id.* at 37.

[78] *See, e.g., FTC v. National Lead Co.,* 352 U.S. 419 (1957); *FTC v. Cement Institute,* 333 U.S. 683, 713 (1948); *Triangle Conduit & Cable Co. v. FTC,* 168 F.2d 175 (7th Cir. 1948), *aff'd by equally divided court sub nom. Clayton Mark & Co. v. FTC,* 336 U.S. 956 (1949). Delivered pricing schemes have also been challenged under the Sherman Act. *See, e.g., Maple Flooring Manufacturers Assoc. v. U.S.,* 268 U.S. 563 (1925).

[79] 91 F.T.C. at 100.

[80] For example, the court of appeals noted that the sellers were geographically dispersed, sellers refrained from offering F.O.B. mill prices, and there was regular price-matching. 168 F.2d at 177–179.

[81] "We cannot say that the Commission was wrong in concluding that the individual use of the basing point method *as used here* does constitute an unfair method of competition." *Triangle Conduit,* 168 F.2d at 181. (emphasis added) The Commission also had found a likelihood of anticompetitive effects. 38 F.T.C. 534, 593 (1944).

change and retreating if necessary. In the great majority of cases, retreating has not been necessary, because the other competitors have demonstrated their willingness to adopt the initiator's proposed price increase. In the few cases where retreating was necessary, this was achieved by responding to the second pricing move. In the only cases where such a retreat was necessary, the second pricing move was to propose a smaller increase and all the other companies went along.

Essential to this pricing pattern was a standard price list for the two principal products, facilitating swift and coordinated price movements. The respondents were aware that the general pattern was for all to use uniform delivered pricing. (IDF 184; Tunis, Tr. 138) In addition, there was testimony that delivered pricing contributed to competitors' knowledge about others' price levels. (*See* Fremd, Tr. 1704).

The record provides an example of DuPont's resisting granting Exxon a price quote on an F.O.B. basis because of the likely competitive reaction of Ethyl. DuPont's Director of Marketing testified:

> Q: What disadvantage did you see in extending this innovative special price to Exxon?
>
> A: Well, I saw all kinds of problems that we have talked about relative to this price being placed in the competitive realm, the information to my competition, reaction to that kind of price at other accounts, and a general deterioration in the overall pricing of antiknock compounds. (Tunis, Tr. 441) [82]

Further, he was asked why he assumed Ethyl would not grant such a discount either. He answered:

> Well, again you have to look at DuPont and you have to look at Ethyl and [PPG] and Nalco as entities in the marketplace. And Ethyl is about evenly positioned with DuPont, both in terms of the market share, in terms of cost, in terms of their capabilities to service accounts, sidetracks, delivery fleet—equal product.
>
> Q: What did that have to do with what you believed, even shakily, that Ethyl might do?
>
> A: An extension of rational logic. If it was not good for us, it was my perception it would not have been good for Ethyl Corporation at that point in time. (Tunis, Tr. 442)

We would expect major rivals to assess the other's likely pricing behavior in a highly concentrated market. Here, DuPont and Ethyl were able to rely on the convenient standard of a delivered price to avoid uncertainty in interpreting each other's pricing posture. Granting Exxon F.O.B. price might not have been a real "discount" in the sense lower price might only have reflected the omission of transportation costs. Yet it is clear that F.O.B. pricing would have been viewed as aggressive pricing which both Ethyl and DuPont wished to avoid.

In general, discounts were made known to other competitors by customers.[82] Consequently, Ethyl and DuPont were deterred in part from granting discounts because there was a substantial risk the other would learn about it. F.O.B. pricing would have introduced the complexity of "masking" discounts because it would have introduced price variations among customers. [83]

Complaint counsel's expert witness testified that uniform delivered pricing had the effect of simplifying the communication of prices for 150 different customers, and increased the confidence of a competitor that its rival's price was at list price rather than at a discount. The thrust of respondents' experts' testimony on delivered pricing was that delivered pricing could contribute to price-matching, but it was unlikely to have a significant effect because prices could be easily matched without this practice. (*See, e.g.*, Glassman, Tr. 6521–6524; Markham, Tr. 6814–6815)

We conclude there is no real dispute as to the general proposition that pricing complexity in itself interferes with price-matching.[83] The argument between the parties thus appears to be whether delivered pricing in this industry contributed significantly to price matching or whether it was equally likely to occur without it. Respondents' principal argument on this point is that the companies could easily match total delivered prices by observing quoted base prices—[84]excluding freight charges—and calculating freight rates by use of standard freight tables, use of freight cost experts, or the like.

The only freight rate expert who testified in this matter was Mr. Kripphane. The thrust of his testimony was that calculating freight rates in order to match competitors' prices would be relatively easy:

> I don't see any uncertainties in calculating what the freight charges might be. They're there, you know. We have all the rate information that we need available to do that job . . . We are doing it now [with respect to sulphuric acid]. (Kripphane Tr. at 5063)

On the other hand, there is testimony from company executives that determining competitors' freight costs and rates would be difficult. PPG's Vice-President and General manager testified:

> Q: If both PPG and DuPont were to sell on a manufacturing-point basis plus freight, would you consider it mind-boggling to match the price of DuPont at Getty?

[82] *See, e.g.*, EAB at 38–39; IDF 129; IDF 142; DAB 29.

[83] Professor Areeda describes a general proposition about behavior in an oligopoly: "[U]ncertainty about rivals' behavior may force each oligopolist to act more like a perfect competitor. He will price nearer his costs in order to win each sale when he lacks confidence that a higher price will not be undercut by a rival. Such uncertainty, with its attendant impairment of oligopolistic coordination, grows as the number of transactions declines, as public knowledge lags or fails, and *as transactions became less comparable.*"(emphasis added) Areeda, *supra*, at 274–275. Avoiding different product brands or configurations, states Professor Areeda, "accounts for some industry attempts to adopt delivered pricing so as to standardize transportation costs, to reduce product variety, or to adopt some common denominator for disparate goods." *Id.*, fn. 7.

A: Getty and possibly 70 other customers. Yes, it would be a difficult, complex structure to develop to remain competitive under that situation . . . So the whole problem would be quite complex, in my thinking. (Robinson, Tr. at 1050–51)

Other testimony and internal documents support the proposition that matching freight costs would be difficult because of the large number of variables involved. (*See, e.g.,* IDF 185–187) Thus, while it is true that freight tables during the relevant period were fixed and published by federal and state agencies, there are actually a number of complexities in matching [85] competitors' prices based on these tables. Freights vary based on the particular point of origin, the size of the tank car used, and the carrier route chosen. If two or more types of vehicles are used in transit, for example, shifting from jumbos to smaller cars, a new variable is introduced. Shippers may also qualify for reduced rates based on volume shipments over time and such savings would not be known until the end of the period. If refiners were permitted to take delivery at respondents' plants, or at transloading terminals, they could qualify for such discounts. (Krippahne, Tr. 5141–43)[84]

The nature of the industry confirms that price matching would be considerably more difficult if list prices were quoted on a manufacturing plant basis. Respondent's plants are scattered over the United States. Ethyl's plants are in Louisiana and Texas. DuPont's plants are in New Jersey, California, and Beaumont, Texas. PPG's plant is in Beaumont, Texas. Nalco's plant is in Freeport, Texas. (IDF 1–4) The more than 150 customers are similarly scattered through the U.S. In order to determine the total price charged a competitor, any respondent would have to estimate freight costs from each of the other plants to each of the other customers and, if it were to be matched, adjust its own base price, freight charge or both to do so. This in turn would produce inequality among respondents' [86] prices to its own customers and require further adjusting. Moreover, estimating prices based on costs would be hazardous, since, even if the cost estimates were correct, the competitor might not charge freight rates reflecting costs. That, in fact, is the predominant pattern now since prices do not even attempt to reflect varying transportation rates.[85]

Respondents argue that they could rely on information from cus-

[84] DuPont apparently made a number of errors in one ambitious attempt to calculate minimum freight costs to every domestic refinery from the closest antiknock compound plant. (Kripphane, Tr. 5108–12) This complex process would necessarily be taken on a periodic basis under respondents' scenario.

[85] To the extent respondent argues that freight cost estimates can be easily made based upon freight rates fixed and published by government agencies, we note that Congress has enacted legislation giving more flexibility to carriers in setting freight rates. Staggers Rail Act of 1980, Pub. Law No. 96–448, 94 Stat. 1895 (1980). We do not rely on this statutory development to conclude that uniform delivered pricing has facilitated anticompetitive price uniformity in the past and we consider it only for the purpose of determining the need for and effectiveness of a cease and desist order. Even with published rates for common carriers, sellers have been free to deviate from these rates in quoting total prices to customers.

tomers to match rivals' delivered prices without having to estimate freight rates based upon information about customers. As Ethyl's counsel puts it, "[E]ven in the absence of uniform delivered pricing respondents could immediately learn of and match one another's effective prices, either by talking to customers or by studying published freight rates." (EAB at 47) In contrast, however, DuPont's Director of Marketing testified that F.O.B. plant pricing to a large customer could lead to "a general deterioration in the overall pricing of antiknock compounds." (Tunis, Tr. 441) This statement strongly suggests uniform delivered pricing is necessary to avoid introducing [87] uncertainty and complexity into the process of price-matching, resulting eventually in price competition.[86]

The scenario proposed by respondents—facile price-matching by calculations of rivals' freight costs—is extremely difficult to accept. At the very least, it posits that respondents would begin to match prices on a customer by customer basis since competitors would not be quoting all customers the same delivered price. In short, notwithstanding Mr. Krippahne's testimony, we believe the preponderance of the evidence shows that it would have been considerably more difficult for respondents to achieve the high degree of price matching that occurred during the 1974 to 1979 period without the convenient common benchmark of uniform delivered prices.

Respondents offer a number of justifications for the use of uniform delivered prices, pointing to consistent customer testimony favoring the practice, the hazardous nature of the [88] materials and the desire by customers to avoid responsibility for delivery, and the efficiencies in avoiding the cost of calculating freight rates on an individual basis. We discuss each of these in turn.

As to the argument that customers desired delivered pricing, it is clear from the record that customers periodically requested that respondents quote prices on a F.O.B. manufacturing plant basis. In addition, the appropriate remedy in this case, as proposed by the ALJ, is not to require all prices be quoted on an F.O.B. basis but to give customers this option. Thus, customers who prefer not to negotiate on an F.O.B. plant price will continue to purchase on a delivered price basis. Finally, we note that customers view the challenged practices

[86] It has been asserted by a number of commentators that delivered pricing in a tight oligopoly is necessary to maintain stable pricing and avoid a breakout of price competition. "If the discrimination [in freight absorption] is unsystematic both mills will be uncertain how low a price they must quote to win an order in their home territories. . . . such uncertainty can precipitate a breakdown in oligopoly discipline, culminating in a general erosion of the price structure, cuts in the announced F.O.B. mill price, and perhaps even outright price warfare." Scherer, *supra*, at 327. *See also, e.g.*, Stigler, *The Organization of Industry* 161–162 (1976). Respondents also suggest that freight rates are insignificant because they are a small portion of the price. (*See* IDF 190). However, small changes in price inevitably introduce complexities into price-matching which complicate the overall pattern and thus have more impact on competition than suggested by the portion of total costs. The importance of even small changes is indicated by respondents' concern about precise matching of prices and effective dates before the price change "rounds" of announcements and adjustments were completed.

from a particular perspective—the effect on their individual firms if the practice is changed as to them. It is difficult for any customer to view the desirability of the challenged practice as turning on its effect on overall price competition—a conclusion which requires a complex analysis of the structure of the industry and assessments by economic experts. No doubt, if asked, every customer would testify it desires price competition which could lead to lower prices.

We also reject the argument that the toxicity of the materials justifies a practice with such an effect on price competition. First, customers, under our order, are free to continue to purchase products on a delivered basis. Second, customers are free to negotiate when the risk of loss passes from the seller to the buyer. The carrier is ultimately responsible **[89]** for safe intra-transit delivery in the absence of a contractual agreement to the contrary. U.C.C. Section 2–509.

Finally, we consider the argument that delivered pricing reduces costs by avoiding the need to estimate freight charges on an individual transaction basis. While we do not necessarily disagree with this argument as a general proposition, we note that this argument is inconsistent with respondents' contentions that the process of estimating freight costs is easily accomplished. There was testimony that respondents could use published freight information to determine rates between different points. (IDF 187) However, it is a much stronger proposition that a single seller can calculate its own freight rates to various parts of the country on a predictable basis, given its knowledge of its own modes of transportation, shipping volumes, etc., than that respondents could easily regularly calculate competitors' freight costs for purposes of facile price-matching. Evidence was offered at trial that some respondents already calculate freight costs to insure they are using low-cost shipping methods and the carrier has not made errors in calculating costs. (CPF 10–12) To the extent, as respondent argues, that most customers want to purchase on a delivered price basis, the costs of calculating freight rates will occur only for a minority of transactions. Given this evidence, we conclude that the advantages of optional F.O.B. pricing are not outweighed by the limited costs of each respondents' own freight calculations. **[90]**

There is also a failure of proof on the novel proposition that smaller refiners tend to be advantaged over large refiners by delivered pricing. (*See* IDF 19)

### 4. *Findings of Liability*

#### 4.1 *Liability of Ethyl and DuPont*

Based on our review of the market and the effect of the challenged practices, we conclude that the combined use by Ethyl and DuPont of "grace periods" in advance of contractual requirements for advance notice, most favored nations clauses, and uniform delivered prices, under the particular circumstances presented here, were unfair methods of competition. The regular use of these "grace periods," in conjunction with the other enumerated practices, contributed substantially to uniform, supracompetitive prices by facilitating systematic price-matching by all members of the industry. There is little doubt that pricing behavior would have been much different had there been no opportunity for the dominant firms to test the waters, then adjust prices according to subsequent pricing moves by the other three competitors.

We emphasize that we have reached this conclusion only after a thorough review of market structure and performance and an examination of the actual effects of these practices on pricing behavior. Thus, we reject the argument that the Courts have upheld advance price announcements as lawful under all circumstances. (*See, e.g.,* DAB 7) The references to the lawfulness of advance price announcements in *Catalano, Inc. v.* **[91]** *Target Sales, Inc.*[87] and *U.S. v. General Motors Corp.*[88] stand only for the proposition that, *standing alone,* without evidence of anticompetitive effects, advance price announcements are not unlawful. However, because of the absence of persuasive evidence that press announcements contributed significantly to the anticompetitive market behavior presented here, we decline to find that press announcements, as used by the parties, were unfair methods of competition. Consequently, we do not need to resolve the issue of when and under what circumstances press announcements may be enjoined because of anticompetitive effects, consistent with the First Amendment.[89]

The use of most favored nations clauses and uniform delivered pricing by Ethyl and DuPont in conjunction with the advance notice practices, under the circumstances of this case, contributed significantly to price-matching and non-competitive market performance. We reject the argument that most-favored nations clauses are inherently lawful because they further the purposes of the Robinson-Patman Act. It is clear that the clauses go farther than contractually binding the company to comply with the Act. In view of their regular use by the dominant firms and the adverse competitive effects demonstrated by the record, we find their use to have been an unfair method of **[92]** competition. We also reject the argument that use by the General Services Administration of the clauses compels a finding that they are lawful under all circumstances. Use of a practice by a govern-

[87] 446 U.S. 643, 647, 649 (1980).

[88] 1974-2 Trade Cas. (CCH) ¶75,253 (E.D. Mich 1974).

[89] *See Central Hudson Gas & Electric Corp. v. Public Service Commission,* 447 U.S. 557, 566 (1978) for the general test for constitutional limitations on non-deceptive commercial speech.

ment agency cannot be dispositive as to whether its use by private parties may constitute an unfair method of competition under all circumstances. Our decision today does not find use of the clauses *per se* unlawful, only prohibited under particular circumstances such as those presented here.

We also reject arguments that uniform delivered pricing has been upheld as *per se* lawful by the courts or the Commission. A Commission Advisory Opinion cited by respondents[90] dealt with the requirements of the Robinson-Patman Act and was limited to the facts presented there. Nor do we read *Boise Cascade* [91] to affirm the lawfulness of uniform delivered pricing. The *Boise* court holding was limited to the proposition that there was insufficient evidence of actual adverse effects on competition to sustain a finding that the base point pricing scheme reviewed there was an unfair method of competition.

Here we are not dealing with the requirements of the Robinson-Patman Act's prohibition of price discrimination which substantially lessens competition. Instead we are faced with a systematic use by all industry members of uniform delivered prices in a competitive environment highly susceptible to uniform, supracompetitive pricing and which, in fact, displayed **[93]** highly coordinated price changes over a prolonged period. Respondents' plants are scattered across the country and more than 150 industry customers are similarly distributed nationwide. The industry's structure is strikingly non-competitive as is the industry's pricing performance. The record shows that, in the absence of uniform delivered pricing, it is highly likely that variations in price would occur, based on distance and mode of transportation. Moreover, some customers would desire to purchase products on an F.O.B. manufacturing site basis. Further the record shows that the feasibility of price-matching based estimating rivals' freight rates is quite limited. Expert testimony is divided as to the effect of uniform delivered pricing in this industry, though there is general agreement that delivered pricing can contribute to non-competitive pricing under some circumstances. Finally, conventional economic scholarly analysis of this practice is that it may serve as a device for reducing price competition, whether it is a result of express agreement or conscious parallel behavior. Under these circumstances we believe it is reasonable to infer that the individual use of uniform delivered pricing by respondents reduced price competition.

We believe the record shows that use of these three practices by Ethyl and DuPont substantially lessened price competition. Nevertheless, it is, as a practical matter, impossible to assess the precise contribution each of these **[94]** practices made to reducing competi-

[90] *See* Advisory Opinion Digest No. 194, 73 F.T.C. 1309 (1968).

[91] *Boise Cascade Corp. v. FTC*, 637 F.2d 573 (9th Cir. 1980).

tion. It is possible that, in the absence of uniform delivered pricing, the system of advance price announcements with a grace period for competitors' responses would not have functioned as such an effective device for coordinating pricing moves. Similarly, most favored nations clauses might have been ignored if advance announcements had not been utilized in a way which facilitated pricing coordination. Nevertheless, we feel confident in concluding that each of these practices reinforced the effect of the other and made a significant contribution to reducing contribution.

Admittedly, it is not possible to make precise estimates as to how the market would have functioned without these practices. Inevitably, we must draw certain inferences about the likelihood that price competition will improve in this industry in the absence of these practices. Section 5, and much of antitrust analysis generally, does deal in probabilities. In our view the performance of this industry over the relevant period and the strong factual record linking the challenged practices with poor pricing performance provide an ample basis for concluding that it is more likely than not that the challenged practices reduced competition.

As described further below, we believe there is a strong likelihood that price competition may be restored to this industry by prohibiting Ethyl and DuPont from use of most favored nations clauses, the exclusive use of uniform delivered pricing and the use of "grace periods" prior to advance announcements of price increases. The ban on most favored nations clauses by **[95]** Ethyl and DuPont is warranted because the record shows they inhibited discounting by both companies and they increased the confidence of each that the other would not discount. In addition, the procompetitive justifications for these practices proffered by respondents are not persuasive. They essentially amount to a claim that individual customers prefer them because no single customer wants to be at a price disadvantage. As we state elsewhere, this is an understandable perspective from the point of view of an individual customer that is not necessarily consistent with the long run interests of all customers in price competition.

We prohibit uniform delivered pricing because its consistent use has been shown to greatly aid in coordinating pricing in this poorly performing industry and, consequently, in reducing price competition. The introduction of variations in the terms upon which individual customers may purchase antiknock compounds should go far in disrupting the well-developed system of price-matching followed in this industry. Consequently, we do not believe it is essential to ban flatly advance price announcements, particularly in light of the advantages of forward ordering to customers. A ban on the "grace period" prior to the advance notice required by contract will eliminate the device used by respondents to "test the waters" of a possible price increase. As described above, the pattern followed by the respondents quite consistently was the announcement of price increase by either Ethyl or DuPont sufficiently in advance of the 30 day notice period to allow the other major rival to **[96]** communicate whether it would go along with the increase and declare an identical price effective on the same day. All of the 24 price increases examined by the ALJ (*see* App. D to the Initial Decision) were initiated by Ethyl or DuPont. In each case a few days extra notice, in addition to the 30 days required by contract, was provided by the initiator. In each case, the other major rival responded to the initiator within the grace period and in almost every case, the two small respondents were able to respond within the grace period. In the great majority of cases, the response by the major rival was to match the initiator's increase. In the few cases where the response was to announce a different price, the initiator (or the company making the second move)[92] was able, within the grace period to readjust. Industry testimony, discussed above, confirms the key role of the "grace period." Because of the important role played by this "grace period" we limit our advance announcement ban to this **[97]** practice. This decision is within the discretion of the Commission to fashion remedies which are reasonably related to the unlawful practices.[93]

It is true that respondents may be able to avoid the impact of this restriction by developing a pattern of readjusting during the advance notice period. (*See, e.g.,* the argument in EAB at 41) For example, if Ethyl announced a price increase on January 1, effective in 30 days, and DuPont announced an identical change on January 3, effective in 30 days, Ethyl could readjust its effective date. At the very least, however, such a scenario complicates price-matching considerably because Ethyl may not learn of DuPont's new effective date immediately upon DuPont's announcement, thereby making it impossible to match it identically. Similarly, PPG and Nalco may delay somewhat in making a change, necessitating Ethyl's waiting an additional period before deciding to announce a new effective date. Presumably, DuPont could itself respond by revising its effective date, but the process is a good deal more complex. Combined with a ban on the exclusive use of uniform delivered pricing and the variations in prices introduced by periodic F.O.B. manufacturing **[98]** plant prices, we

[92] For example, in the case where both Ethyl and DuPont made simultaneous announcements, the one announcing the higher price typically adjusted.

[93] The general principles concerning the discretion of the Commission in fashioning relief were recently stated in *Sears Roebuck and Co. v. FTC,* 676 F.2d 385 (9th Cir. 1982). The Commission "has wide latitude for judgment [as to the proper remedy] and the courts will not interfere except where the remedy selected has no reasonable relation to the unlawful practices found to exist." *Jacob Siegel Co. v. FTC,* 327 U.S. 608, 612–13 (1946). Here we use our discretion to select the most narrow remedy consistent with the need to assure a likely return to price competition in this market.

believe the prospect of highly uniform prices moving in lock-step fashion is substantially reduced.

### 4.2 *Liability of PPG and Nalco*

The record shows that the dominant firms in this industry during the relevant period were Ethyl and DuPont, with an average combined share of about 70%. PPG, the third largest firm had an average share of 17.5% and Nalco's was 12.5%. (IDF 48) PPG and Nalco did not use certain of the challenged practices as consistently as Ethyl and DuPont, and both engaged in more extensive off-list pricing than the two larger firms. A substantial portion of PPG's sales—58% of all sales, including co-producer sales—were made at a discount off list. (IDF 66) Over 80% of Nalco's sales were made at a discount. (IDF 78) Together these two companies made virtually all the discounted sales in the industry during the relevant period. Consequently, in this section, we discuss considerations of liability with regard to PPG and Nalco, including any relevant differences between the two smaller firms and their larger rivals.

As to advance list price announcements, both PPG and Nalco regularly followed this practice. PPG's standard sales agreement included a commitment to give 30 days' advance notice as did Nalco's. (IDF 110–111) While some of Nalco's contracts did not contain the provision, its standard practice was to provide notice. While it is true Nalco did not provide over 30 days' notice, it did not do so because it never functioned to initiate a change in industry list prices and consistently waited until **[99]** after the first and second pricing move (if any) before following the price leaders. As to press announcements, PPG and Nalco followed the same practice of releasing their new list prices to the business press. There was no significant difference among respondents in this regard.

Both PPG and Nalco quoted list prices on a uniform delivered basis. Nalco argues that, because of its extensive discounting off list, and because list prices were quoted on a uniform delivered basis, most sales were not made on this basis. On the other hand, all Nalco sales at list were on a delivered basis, and all discount sales were made on a delivered basis. The record discloses no instance in which Nalco quoted a price on an F.O.B. seller's plant basis or explicitly reduced prices because of lower freight costs. Thus, a more accurate characterization is that Nalco typically discounted, but all list prices and the basis for all discounts were uniformed delivered prices.

Not all respondents used a most favored nations clause consistently. PPG's standard contract did not have the clause and it used it infrequently. Nalco used it in a minority of cases.

In determining the significance of PPG and Nalco's deviation from the more rigid patterns of their larger competitors, we are concerned with whether the practices followed by them contributed in a significant way to the anticompetitive pricing performance of the industry and whether an order against them is in the public interest. In assessing these considerations we are mindful of both the practical future effect of any order as well [**100**] as equity among respondents. For example, it is possible that either Ethyl or DuPont could be allowed to engage in any of the challenged practices in the future with no harmful effect as long as all other industry members are banned. This anomalous result, if followed in issuing an order, would lead to an arbitrary and inappropriate application of the Commission's authority, however, and must be avoided. Consequently, the core question is whether any of the practices engaged in by PPG and Nalco contributed to competitive harm set out in the record and whether there is a meaningful possibility of recurrence in the absence of an order. For the reasons discussed below, we believe liability should be found for both Nalco and PPG, but we also conclude no order provisions are warranted as to either company.

As for use of most favored nations clauses, the ALJ did not find Nalco liable for use of these clauses, and the complaint did not allege PPG used them. Nalco did not use the clauses as consistently as did Ethyl and DuPont and the record does not support a finding that the use of these clauses by Nalco had a significant effect on the overall pricing pattern.

We understand the ALJ to have issued an order prohibiting most favored nations clauses for PPG and Nalco on the theory that they may have difficulty competing unless they are able to remove them unilaterally from their contracts despite his finding that their use was not significant. (IDF 166, 152) Although there may be circumstances under which an order provision based on this rationale is appropriate, we decline to do so here, in large part [**101**] because there is no indication in the appeal briefs of either Nalco or PPG that they believe such an order provision is in their interest.

The participation by PPG and Nalco in the rigid pricing patterns followed by the entire industry, however, justifies a finding of liability for the use of uniform delivered pricing. Neither company broke the pattern of quoting identical delivered list prices during the relevant time period. Neither attempted to restrain a list price increase by failing to follow the pricing leaders or by quoting list prices on other than a delivered basis. Moreover, it is clear that Ethyl and DuPont paid attention to the price moves of the two smaller companies and, particularly in the case of PPG, were not certain that a coordinated pricing move had been successful until PPG had responded. On the other hand, neither initiated a price increase and, consequently, their use of "grace periods" in advance of contractually required notice was of marginal significance.

As in the case of PPG, we conclude Nalco's discounting was sufficiently restrained so as not to upset the prevailing market equilibrium. It is true that Nalco and PPG have introduced some competitive element into the market. However, for purposes of determining liability, the question is not whether these respondents should be punished or rewarded for pricing restraint but whether their practices contributed to anticompetitive price uniformity. This record demonstrates that they did.

We do not conclude, however, that the public interest requires placing Nalco or PPG under the requirements of a cease [102] and desist order. As discussed further below, PPG plans to withdraw from the industry within a few months of the beginning of 1983. The new industry structure—likely to remain stable for the foreseeable future—will consist of two dominant firms and one smaller firm. Nalco never initiated a price increase during the relevant period and has consistently followed a strategy of matching the industry leader's list prices while making the great majority of its actual sales at a discount from list. It is unlikely that Nalco will adopt a strategy of initiating price increases in the future, and, consequently, an order provision barring use of pre-contract announcements, such as we include in our order applying to Ethyl and DuPont, is unnecessary.

As for uniform delivered pricing, it is true that Nalco has not deviated from setting list prices on this basis but, if Nalco's pattern of discounting is continued, most of its sales will actually not be made at list price. By far the primary influences in stabilizing and coordinating prices at supracompetitive levels have been the two dominant firms. An order which requires these two firms to offer products on an F.O.B. plant basis will likely eliminate the influence of delivered pricing in stabilizing prices at supracompetitive levels, making such an order provision against Nalco less necessary. A further consideration is that, for the reasons discussed below, we do not enter an order provision against PPG and, therefore, we are less inclined to issue an order against the single remaining non-dominant firm in this industry. [103]

### 4.3 *PPG's Motion to Dismiss*

Subsequent to oral argument, PPG filed a motion to dismiss the complaint as to it on the grounds that it planned to discontinue production of antiknock compounds on December 31, 1982 and to withdraw completely from the industry a few months thereafter. PPG attached affidavits to its motion from responsible corporate officials attesting to these and related facts. PPG argued that the imminent withdrawal from this industry made the proceeding moot as to PPG and precluded a determination that an order against it would be in the public interest. Complaint counsel oppose the motion on the grounds that: 1) it is premature to consider a claim of mootness until PPG has actually withdrawn from the industry; 2) PPG has failed to show wrongful behavior cannot reasonably be expected to reoccur; and 3) there is a "compelling public interest" in resolving the legality of PPG's conduct.

Complaint counsel do not question the factual premises of PPG's motion—that it will completely withdraw from the industry within a few months of the beginning of 1983. Consequently, for purposes of our consideration of PPG's motion, we accept this premise as correct. However, a stated intention to withdraw from an industry, or even an actual withdrawal, does not necessarily require a dismissal of a complaint or preclude entry of an order because, *standing alone,* these developments do not insure that there is no "cognizable danger of recurrent **[104]** violation . . ."[94] Order provisions may be appropriate even if the respondent has ceased production in the industry which was the focus of the complaint.[95] An order may be appropriate if the practices which are the subject of the order may be employed in other industries or where re-entry is a reasonable possibility.

The fact that a particular respondent is clearly abandoning an industry is more significant, however, when there is no real likelihood of it re-entering the industry and when the order provisions under consideration apply only to practices in that industry. In this case, the statements of company officials, the decline in demand for antiknock compound, resulting from developments in government regulation, and the existing capacity of the remaining industry members show re-entry is highly unlikely.

A further consideration in concluding that an order against PPG is unwarranted is that, like Nalco, PPG's conduct has not been nearly as central to the overall industry pricing pattern as that of the dominant firms. PPG never initiated a pricing increase during the relevant period and most of its sales, including co-producer sales, were at a discount. PPG's withdrawal from the industry and the less compelling need for an order, compared to the considerations applicable to Ethyl and **[105]** DuPont, lead us to conclude an order against PPG is not required by the public interest.

### 4.4 *Mootness*

In their appeal briefs respondents argue that the case is moot because the limited life expectancy of the industry makes relief un-

[94] *United States v. W.T. Grant Co.,* 345 U.S. 629, 633 (1953).
[95] *See National Lead Co. v. FTC,* 227 F.2d 825, 839–840 (7th Cir. 1955), *rev'd on other grounds,* 352 U.S. 419 (1956).

necessary. Further, they say that price competition has improved during the relevant time period.[96] The ALJ found that a significant market for these products would continue at least through 1990. (IDF 43) He also found that the market may stabilize at an annual level of about 300 million pounds if heavy-duty trucks are exempt from EPA restrictions. (IDF 43, 45)

Subsequent to oral argument, DuPont filed a motion to dismiss, alleging developments since the record closed provided additional evidence that the public interest would not be served by continuing this proceeding. These new developments consist of an action by the Environmental Protection Agency to further reduce the permissible use of antiknock compound for environmental reasons. DuPont makes the allegation, unrefuted by complaint counsel, that in October 1, 1982, EPA promulgated new regulations which will reduce demand for antiknock compounds from 260 million pounds in 1985 to 90 million pounds in 1990. The **[106]** current price for antiknock is $1.07 according to DuPont (see memorandum supporting the motion at 6), and, consequently, total market sales will decline to something above $90 million by 1990.

DuPont's essential factual assertions are uncontested by complaint counsel and, for purposes of ruling on its motion, we take them as true. We note at the outset that DuPont does not contend that the market for antiknocks will soon disappear completely. Its principal contention appears to be that total industry production now and in the near future is so insignificant in size that the public interest could not be served by a Commission order. An industry with sales ranging from $260 million downward to $90 million for the coming 7 years is hardly insignificant, however. DuPont has pointed to no case where an industry of this size has been deemed too small to justify a Commission order.

DuPont also argues that the current "value" to buyers exceeds the price at which antiknocks are sold. This argument is based on the affidavit of a company official attesting to a purchase of an entitlement for a price suggesting the actual "value" to the buyer is worth more than twice the alleged market price. Even if certain buyers were willing to pay more for antiknocking compounds in certain quantities than prices at which they were offered, we could not conclude that the prices were equivalent to marginal cost or, more generally, that the market was performing competitively.

A more difficult question is whether declining demand may create

[96] An argument that market conditions have changed sufficiently to obviate the need for relief should be distinguished from the defense that the challenged practices were abandoned. We understand respondents to argue that a defense of abandonment could apply to press releases because these were generally halted before they were aware of the Commission's investigation leading to this proceeding. Because we do not find liability for issuance of press releases we do not address the possibility of an abandonment defense.

such excess capacity that price competition will be **[107]** stimulated. In this regard, we should recall the possible effects of excess capacity on industry behavior. First, excess capacity discourages new entry and in this sense contributes to the stability of uniform, supracompetitive pricing. Second, excess capacity may create additional incentives to collude or price interdependently in order to preserve profits in a period of declining demand. Finally, it may create incentives for discounting by encouraging one or more industry members to expand output and market share by aggressive pricing.

Respondents point to this last factor, and what they argue to be increased price competition, as evidence of a healthier competitive environment. The ALJ rejected this argument. After examining the level of discounting, profit levels and other factors, and how they may have changed in the recent past, he concluded that the evidence did not support a finding that the market had changed so substantially that relief was unnecessary. For example, market shares have remained relatively stable through the first half of 1980. (CX 2073; REX 324A–§17) Ethyl and DuPont's profits have remained relatively high through 1979. (IDF 163; IDF App. J)

As to changes in the level of discounting, complaint counsel's expert witness, Dr. Hay, agreed that there was some improvement in the level of competition during the relevant time period, primarily attributable to the decline in demand. (Hay, Tr. 3863) However, he also testified that prohibiting the **[108]** challenged practices in the future would be likely to "improve the vigor of competition or the speed with which that vigor is achieved." (Hay, Tr. 3837)

The fact that there were some price reductions during 1979 and 1980 during a period of falling demand illustrates that the industry was not totally immune to market forces of supply and demand. However, the fact that prices fell while costs were generally increasing (Robinson, Tr. 1230–31)—and profits still remained high—is a good indication of the degree to which prices were maintained at supracompetitive levels before the limited increases in price competition.

We do not conclude from these limited changes in market performance, however, that the industry conditions have so markedly changed that relief is not warranted. There has been no new entry and there is likely to be none.[97] PPG's stated intention to withdraw from this industry changes the industry structure to an even more concentrated oligopoly, dominated by the two larger rivals.[98] Market

[97] PPG, for example, relies upon the ALJ's finding of high barriers to entry in supporting its motion to dismiss. DuPont's motion to dismiss is predicated on an assumption of a declining entry, a condition consistent with our assumption of no significant new entry.

[98] PPG's production capacity will not be sold to an existing competitor or potential entrant, but will be sold for scrap. Reply of Respondent PPG Industries, Inc., to Complaint Counsel's Memorandum of Opposition to Motion for Dismissal of PPG, Dec. 21, 1982 at 2.

shares have remained relatively stable and profit levels remain relatively high. While there have been limited price decreases, a decrease in **[109]** price and profit levels does not preclude a finding of continued anticompetitive effects of the challenged practices. (Hay, Tr. 4385–86; Mann, Tr. 5583–84) In fact, the only substantial change in industry conditions—sharply declining demand—will be negated if demand stabilizes at a lower level. In that event, industry conditions could reach a new equilibrium at a reduced level of output with the same poor competitive environment as at the beginning of the relevant period.

In short, we do not believe the limited evidence of a healthier competitive performance during the recent past, primarily resulting from a decline in demand, or developments in government regulation which will further reduce demand warrant a finding that relief is unnecessary. This change does not represent the type of major structural change that negates the assumptions upon which the findings of anticompetitive effects are based.

### 4.4 *Vagueness of the Standard*

Respondents argue that Section 5 was not designed to address practices which are neither collusive nor monopolistic. In addition, they assert that there are compelling policy reasons why Section 5 should not be used to reach respondents' conduct. As discussed in Part 1 of the opinion, the Commission believes that both Congressional intent and subsequent court interpretations of Section 5 provide a clear legal basis for the condemnation of practices that are shown to harm competition, such as those challenged here. Moreover, we reject the assumption that anticompetitive practices that exist without the **[110]** benefit of an agreement, should not be subject to Section 5 because the legal standard is too vague.

Whenever conduct is examined for a potential antitrust problem other than limited *per se* violations, a detailed analysis of a number of factors is required. For example, conduct alleged to be monopolistic or an attempt to monopolize, in violation of Section 5 or Section 2 of the Sherman Act,[99] is analyzed in the context of an industry's structure and performance as well as the purpose and effect of the questioned conduct.[100] Likewise, in the areas of exclusive dealing and territorial restrictions, when agreements are scrutinized under a rule of reason for a violation of Section 5 or Section 1 of the Sherman Act, similar factors are considered.[101] Thus, the simple admonition to

[99] *See, e.g., Borden (Real Lemon),* 92 F.T.C. 669 (1978), *enforced, Borden, Inc. v. FTC,* 674 F.2d 498 (6th Cir. 1982).

[100] *See, e.g., E.I. DuPont De Nemours & Co.,* 96 F.T.C. 653, 745 (1980) (complaint dismissed).

[101] *See, e.g., Tampa Elec. Co. v. Nashville Coal Co.,* 365 U.S. 320 (1961) (requirement contracts); *Continental T.V., Inc. v. GTE Sylvania Inc.,* 433 U.S. 36 (1977) (territorial restrictions); *Beltone Electronics Corp.,* Docket No. 8928 (complaint dismissed, July 6, 1982) [100 F.T.C. 68] (territorial restrictions).

"avoid agreements" is often of little assistance to practical business decision-making in avoiding conduct which may be judged unlawful under a rule of reason.

Our objective in the analysis of this matter has been to articulate a clear and straightforward legal standard that will enable business and antitrust counsel to conduct a manageable evidentiary inquiry that will provide a degree of certainty and [111] guidance as to whether certain practices violate Section 5, by facilitating price uniformity or other anticompetitive coordinated conduct.

In summarizing the standard we have applied here, it is useful to restate the steps in our inquiry. First, we examined the structure of the industry to determine if it was susceptible to practices which might facilitate anticompetitive interdependent conduct—in this case uniform, supracompetitive pricing. We found extremely high concentration, high barriers to entry, a homogeneous product, inelastic demand, in addition to other factors indicating the industry is prone to interdependent pricing. Second, we assessed the performance of the industry to determine if it was consistent with the poor competitive performance that would be expected from this market structure. We found relatively high profits, prices in excess of marginal cost, relatively stable market shares, rising prices in the face of sluggish demand and excess capacity, limited discounting, highly uniform prices, lock-step changes in prices, along with additional factors indicating poor competitive performance. Finally, we examined evidence that the particular challenged practices actually had an effect on significantly reducing price competition. This evidence included testimony and other statements by industry officials and customers, an examination of the use and nature of the four practices, expert testimony and accepted economic theory and scholarly analysis. We found that there was a close relationship between three of the challenged practices and the pattern of pricing observed in this industry, [112] and we concluded that it was highly unlikely that pricing would have occurred in such a non-competitive fashion in the absence of these three practices. Finally, we examined the possible procompetitive justifications for these practices.

We disagree with the arguments put forward by respondents that a prohibition of particular facilitating practices which are shown to have made a substantial contribution to coordinated pricing creates an unduly vague standard of unlawful behavior. We emphasize that we have not found coordinated pricing itself to be unlawful, only specific practices which are shown to promote it. Professors Areeda and Turner have pointed to problems in identifying and prohibiting interdependent pricing by oligopolists:

. . . interdependent non-competitive pricing, devoid of any additional elements of collusion, does not lend itself to treatment as an unlawful conspiracy. Not only is an injunction against "agreement" insufficient, but it is impossible to formulate a more specific injunction that is both judicially [113] administratable and consistent with the rules governing monopolists.[102]

In contrast, however, Areeda and Turner conclude that particular practices which facilitate coordinated pricing may be prohibited:

No serious practical or logical problems are encountered in enjoining individual oligopolists from quoting delivered prices only . . . To be sure, such injunctions run beyond a simple prohibition against "agreeing" on such matters, because more specific direction is necessary to assure termination of the illegal action, but they are as readily enforceable.[103]

Here, we do not face the difficult issue of determining under what circumstances parallel use of practices which results in coordinated behavior may constitute an agreement for purposes of Section 1 of the Sherman Act. Instead, we believe a more [114] manageable task and one that presents less conceptual difficulties is proscribing such practices as unfair methods of competition. This approach also has the advantage of not extending liability to private causes of action, resulting in treble damage liability, or creating a prima facie case in a private treble damages action.[104] We do not take the view that Section 5 can be used to prohibit any practice if doing so could improve competition to any extent. Consequently, we do not view any practice that theoretically reduces uncertainty about competitors' likely reactions to pricing moves as unlawful. Here, however, we are faced with an industry exhibiting strikingly poor competitive structure and performance and where the evidence shows particular practices have contributed to consistent uniform, supracompetitive pricing. Not only has certainty as to competitors' prices been increased substantially but the industry exhibited a consistent pattern of price matching, including price leadership by the two industry leaders, a well-devel-

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[102] Areeda and Turner, *supra*, Vol. III at 362. On the other hand, Posner argues that economic evidence in price-fixing cases may allow a finding of violation based on tacit collusion without evidence of actual communication. Posner, *Antitrust Law: An Economic Perspective* 76 (1976). As to feasibility of banning specific individual practices, we note that a relatively recent Justice Department consent decree prohibits two producers of heavy electrical equipment from engaging in a number of practices which are related to price coordination. *U.S. v. General Electric*, 1977 Trade Cas. ¶61,660 (E.D. Pa.). *See also FTC v. National Lead Co.*, 352 U.S. 419 (1949), upholding a Commission order enjoining individual use of delivered pricing practices.

[103] Areeda and Turner, *supra*, Vol. III at 362. Posner also agrees that "basing-point systems should be enjoined under Section 1 of the Sherman Act regardless of whether there is proof of actual agreement, because the plain purpose of such systems is to foster monopoly pricing." *Antitrust: Cases, Economic Notes and Other Materials* 135 (1974). Thus, these divergent schools of thought as to the proper analysis of oligopoly pricing agree that certain practices which facilitate coordinated pricing should be enjoined, without traditional evidence of agreements, even though both views consider the prohibition can be based upon a finding of a Section 1 conspiracy.

[104] Congress has recently enacted the Export Trading Company Act which provides a limited private cause of action based upon the FTC Act. Pub. Law 97-290 (1982). While there have no judicial interpretations under this act, we believe the limitations of the action make it unlikely that private actions could engender substantial additional business uncertainty as to use of facilitating practices.

oped system for announcing price by "testing the waters," a response by the other major industry members, and subsequent falling into line by the two smaller competitors.

In such a case, practices which contribute significantly to reducing competition with no offsetting procompetitive [115] justifications and which are closely analogous to recognized violations of the Sherman Act are clearly within the scope of unfair methods of competition.

5. *Remedy*

The ALJ entered an order dealing with the four challenged practices. We modify this order in a number of respects for the reasons we have discussed as well as those cited below. Complaint counsel have also appealed the ALJ's order in some respects. Their appeal is dismissed to the extent inconsistent with the order we have entered.

As discussed above, we do not agree with the ALJ that the order should prohibit all respondents from announcing to actual or potential customers the price of antiknock compound in advance of its effective date. In addition, we reject the ALJ's inclusion of a provision prohibiting communication of price information to other respondents except in connection with a sale to or purchase from another respondent.[105] We believe that a ban on the announcement of a price change in advance of that required by contract with customers, combined with other order provisions, is likely to disrupt the coordinated pricing practiced in this industry. [116]

Our order prohibiting price change announcements in advance of the period required by contract does not violate the First Amendment. This restriction constitutes a narrow limitation on one type of commercial speech which has been shown to result in substantial harm to competition. We believe the restriction is as narrowly circumscribed as possible, consistent with remedying the practices found to harm competition. Consequently, this limitation meets the test for permissible limitations of speech stated in *Central Hudson Gas & Electric Corp. v. Public Service Commission*[106]:

At the outset, we must determine whether the expression is protected by the First Amendment. For commercial speech to come within that provision, it at least must concern lawful activity and not be misleading. Next, we ask whether the asserted governmental interest is substantial. If both inquiries yield positive answers, we must determine whether the regulation directly advances the governmental interest assert-

[105] In this connection, we deny complaint counsel's appeal of the ALJ's decision not to ban interproducer sales. Complaint counsel's theory is that interproducer sales convey price information which can facilitate anticompetitive price matching. We do not believe this limited exchange of price information will be significant in the context of other order provisions.

[106] 447 U.S. 557 (1980).

ed, and whether it is more extensive than is necessary to serve that interest.[107]

In *National Soc. of Prof. Engineers v. U.S.*,[108] the Court upheld a ban on a professional association's adopting certain opinions, policy statements, or guidelines. Despite a claim that the ban was constitutionally impermissible, the Court stated such prohibitions may be an "unavoidable consequence of the [117] violation."[109] The question is whether "the relief represents a reasonable method of eliminating the consequences of the illegal conduct."[110] We believe this narrow limitation on respondents' commercial speech is reasonable in view of the prior history of anticompetitive effects and the limited burden on respondents' commercial speech in complying.

As discussed earlier, we vacate that portion of the ALJ's order which barred communications to the press of price changes for 30 days following the effective date of the price change. As we noted above, the record is not persuasive in showing that announcements to the press significantly contributed to uniform, supracompetitive pricing beyond that accomplished by announcements to customers. However, we extend the proscription on price announcements in advance of the contractual period to include a prohibition of advance announcements to anyone not in respondent's employ or under contract in connection with selling antiknock products,[111] including press, to avoid respondents' simply using alternative ways of communicating price information in advance of contractual notice requirements. We do include [118] provisos for conveying price information in negotiations or to governmental bodies or by virtue of governmental process which might otherwise violate the order.

Our order also permanently prohibits the use of most favored nations clauses by DuPont and Ethyl but does not apply to PPG and Nalco contracts. The permanent ban is limited to Ethyl and DuPont because of their greater use of the clauses and the more significant effect their use of them was shown to have.

We have also included provisions prohibiting use of uniform delivered pricing unless respondents provide an option to purchasers to buy on an F.O.B. manufacturing plant basis. This was the approach taken in *Boise Cascade*[112] and *Martin Marietta Corp.*.[113] We decline to include the ALJ's additional provisions prohibiting the use of a formula which "systematically" matches the cost of any other produc-

[107] *Id.* at 566.
[108] 435 U.S. 679 (1978).
[109] *Id.* at 697.
[110] *Id.* at 698.
[111] This provision is included to allow respondents to communicate price information in advance of the contractual date to persons, not in respondents' employ, who are nevertheless under contract to assist in marketing or sales, *e.g.*, independent sales representatives, printing companies who must publish price lists, or the like.
[112] *Boise Cascade Corp., supra,* 91 F.T.C. at 109–10;
[113] *Martin Marietta Corp.*, 88 F.T.C. 989 (1976) (consent order).

er or equalizes the cost to customers quoting uniform charges to customers not similarly situated. Further, we decline to accept complaint counsel's proposal to ban any quotations on a delivered price basis. We believe it is enough to disrupt any pattern of price matching to allow any purchaser to buy on an F.O.B. mill basis. The variations introduced into the total prices charged to customers by a certain number of transactions on an F.O.B. mill basis, along with a prohibition on announcements in advance of the contractually required period and most favored nations [119] clauses, should effectively prevent price-matching. This more limited approach also avoids the ambiguities and enforcement difficulties which would follow from including the ALJ's or complaint counsel's approaches to delivered pricing.

## DISSENTING STATEMENT OF CHAIRMAN JAMES C. MILLER III

Today the Commission embarks on a bold new adventure to the frontiers of antitrust law, clearing no path for those who follow, and leaving no signposts to guide the inexperienced traveler. I fear that such a journey is fraught with peril for both the explorers and for those required by law to follow the trails we blaze. I therefore decline to join the majority, and hope that the future provides a compass to guide our way along the uncharted path the Commission pioneers.

The Commission's decision creates a new antitrust cause of action that, while construed by the majority to be limited to the Commission's enforcement of Section 5 of the FTC Act, may nonetheless alter radically the scope of permissible business practices available to firms in so-called oligopolistic industries. Because I fear the implications of today's decision are potentially both far-reaching and harmful to competition, I must respectfully dissent. And, because of the many troubling aspects of the majority's lengthy opinion, I feel further compelled to abandon the cardinal virtue of civilized dissenters—brevity.

### I. INTRODUCTION AND SUMMARY

In essence, the majority holds today that practices adopted unilaterally by individual firms in an oligopolistic industry may constitute "unfair methods of competition" in violation of Section 5 if such practices "facilitate" interdependent behavior among the oligopolists, even absent any collusive, monopolistic, or predatory [2] conduct. (Maj.Op. at 3, 28–29.)[1] In applying this new legal standard, the majority finds that all four U.S. producers of lead-based antiknock com-

[1] The following abbreviations are used in this opinion:

Maj.Op. - Majority Slip Opinion
ID - Initial Decision Page Number
IDF - Initial Decision Finding Number
Tr. - Transcript of Testimony Page Number
[illegible] Dupont's Exhibit Number

pounds ("antiknocks") have violated the antitrust laws by adopting—at different periods of time and for legitimate business reasons—differing combinations of three so-called "facilitating" practices. Specifically, the majority finds all four respondents—DuPont, Ethyl, PPG, and Nalco—liable under Section 5 for use of uniform delivered pricing. (*Id.* at 2–3, 91–92, 101–02.) In addition, DuPont and Ethyl are also found to have violated Section 5 by using advance notice of price increases and "most-favored-nation" contract clauses ("MFN clauses"), which require the seller to offer a lower price to all buyers if it is offered to any. (*Id.* at 3, 91–92).

Employing what it terms a "rule of reason" approach (*Id.* at 28.), the majority finds that the four respondents—which account for 100 percent of U.S. antiknock sales—have violated the "spirit" of Sherman Act Section 1's prohibition of conspiracies in restraint of trade, as enforced by the Commission through Section 5 of the FTC Act. They are held liable even though no agreement—explicit or implicit—was alleged or proven. Rather, the unilateral adoption by each respondent of one or more of the challenged practices is found to be an unfair method of competition under Section 5. The legal standard proposed as a basis for this finding of liability is that Section 5 empowers the Commission to find that practices, which otherwise may be lawful in and of themselves, may, when used at the same time by members of an oligopoly, facilitate a kind of interdependent behavior that leads to the anticompetitive result the framers of the Sherman and FTC Acts sought to prevent. **[3]**

In dissenting from the Commission's decision in this matter, I do not necessarily reject the general concept underlying the new cause of action created by the majority. At the outset of our review of this matter, I did not reject the idea that it may be both prudent antitrust policy and within the scope of this Commission's legal authority to establish an antitrust rule of law governing "facilitating practices" within an oligopoly. I envisioned such a rule as condemning "lock-step", long-term use by all members of an oligopoly of uniform practices that had no legitimate business reasons, and that could be proven to reduce the overall level of competition by facilitating reductions in industry output of a truly homogeneous product—reductions that could not be remedied either by an existing industry renegade, or by a destabilizing new entrant. While such a rule would face both formidable theoretical hurdles and practical problems of proof, the concept nevertheless seemed a plausible one.

The Commission's experience in deciding the instant matter has, however, served to heighten considerably my skepticism about the theoretical bases and practical utility of such a legal theory. Both the legal standard adopted by the majority and the manner of its application to the record evidence here cause me to question whether antitrust prosecutors and adjudicators are sufficiently sophisticated to surmount the obstacles presented by such a theory. Simply put, can the Commission generate more benefits by invoking the theory correctly than the mischief it can create by applying it erroneously?

I need not reach this difficult question today. Rather, laying my skepticism aside and accepting the theoretical possibility that, as the majority contends, the "collusive result" can occur in the absence of collusion, I would nevertheless reject a finding of liability for any of the respondents in this proceeding. I would do so because: (1) the particular legal standard established by the majority may itself be anticompetitive and contrary to the goals of the FTC and Sherman Acts; (2) that standard is too vague and unpredictable to serve as an understandable guide to business that must follow it; and (3) the majority has applied its own standard incorrectly to the facts in this record. [4]

Before explaining further the basis for my dissent, several preliminary points bear mentioning. First, I concur in the majority's conclusion that respondents' (now-discontinued) use of press releases announcing future price increases does not violate Section 5. (Maj.Op. at 3, 65–68.) Second, while the majority merely "declines to adopt" the ALJ's conclusion of law (at ID 167.) that the remaining three challenged practices are unlawful as "unfair acts or practices" within the meaning of Section 5 (Maj.Op. at 3, 31.), I see no reason to pause there. I would go further and reverse the ALJ's gratuitous conclusion on this point. Although this alternative "unfairness" cause of action was (regrettably) pleaded in the Commission's 1979 Complaint (¶14), this case seems to me clearly to be an antitrust challenge focusing upon alleged harm to competition, not a consumer protection matter concerned with injury to individual consumers.

## II. THE MAJORITY'S STANDARD MAY BE ANTICOMPETITIVE

The majority's standard may itself be anticompetitive because its focus is too narrow. It fails to capture the essence of a dynamic, competitive market. By focusing on price competition only—and almost exclusively on list-price competition—it ignores the most important elements of competitive rivalry in this and many other American industries. By finding successful entrants liable for using practices that buyers demand, the standard discourages entry into oligopolistic industries. By focusing on a period in which any incentive to expand and earn additional market share was severely constrained by government controls, the standard fails to allow a meaningful test of its inferences and ignores the historical bases for the challenged practices. By focusing solely on the motives and behavior of respondents, it ignores the important influences of their customers, themselves potential entrants via backward vertical integration.

### A. *The Standard Ignores Non-Price Competition*

A standard that focuses exclusively on price competition may be harmful because it ignores other forms of competition that buyers value and that can shape a competitive result. For many years now, many economists have rejected the narrow view that only [5] prices should matter in assessing competition. As Joseph Schumpeter said more than three decades ago:

> Economists are at long last emerging from the stage in which price competition was all they saw. As soon as quality competition and sales effort are admitted into the sacred precincts of theory, the price variable is ousted from its dominant position.[2]

The record here strongly indicates that in the antiknock industry the dominant form of competition is, in fact, along non-price dimensions. These include especially the provision of services related to the safe handling and the safe and efficient use of highly toxic and explosive liquid compounds in the production of high-octane leaded gasoline. Specifically, the ALJ found that safety services are provided because of the "explosive and toxic nature" of the product. (IDF 91.) In addition, complaint counsel's economist expert testified that some of those services are "almost an inevitable part of the [antiknock] product." (IDF 210.) One of the respondents attributed a 35 percent sales gain to ten important customers in 1975 to services it had rendered that year. (IDF 98.) Moreover, there is evidence that the leading firms "literally buried" their customers with services. (IDF 90; *see also* IDFs 91, 99, 102, and 151.) Further, the ALJ found that "the furnishing of services played a significant role in the competitive rivalry between the antiknock suppliers" (IDF 151.), and that "the record is clear that refiners valued the services furnished by respondents and much antiknock business was awarded based on services." (ID 140; *see also* Testimony of Complaint Counsel's Economist Expert, cited at IDF 210.) Remarkably, the majority concedes that this case involves "a market with an emphasis on service rather than price competition" (Maj. Op. at 38.), but ignores the implications of this fact throughout the remainder of its analysis. (*See, e.g., Id.* at 39: "The heart of this case is the need to properly analyze *pricing* behavior in the market for these products.") [6]

Economic theory makes clear that such non-price competition cannot be ignored in assessing competitive performance. As Adam Smith noted in his classic treatise:

[2] J. Schumpeter, *Capitalism, Socialism and Democracy* 84 (1950).

In a free trade an effectual combination cannot be established but by the unanimous consent of every single trader, and it cannot last longer than every single trader continues of the same mind.[3]

In this industry the product *cum* services—the antiknock product "package"—varies substantially among the four respondents. One respondent provides very few services internally, hiring outside consultants to provide free advice on matters of health and safety and efficient use of antiknock compounds. (IDF 96.) Another respondent furnishes most of its services through "inhouse expertise", such as direct assistance in designing and building customers' plants. (IDF 91.) Another provides computer programming assistance and training of refiners' employees. (IDF 92.) Others innovated a "tolling" arrangement in which waste products from customers' refineries are recycled and used as "scavengers" to improve the "blend." (IDFs 32, 83; and ID 155.) Yet another respondent, in conjunction with a refiner, developed a new product—tetramethyl lead (TML). When blended with the existing tetraethyl lead (TEL) product, TML created new product arrays of varying TML/TEL blends, with varying product performance characteristics.

In addition, all four respondents compete with varied and varying billing arrangements, which they strenuously try to keep secret from their competitors. (IDFs 138 and 183.) All deliver antiknocks at older, lower prices after a price increase has gone into effect. (IDF 81.) This practice is so complex that the ALJ found it would take "a major accounting project" to determine the equivalent amounts of price discounts. (ID 139.) One competitor keeps the arrangements secret from its own sales personnel, issuing the concessions in credit statements to its buyers. (IDF 138.)

The ALJ's findings on this record also show that respondents do learn of their competitors' practices, but not always instantaneously or accurately. For example, [7] sometime in 1977 Ethyl learned (apparently for the first time) that DuPont had been (1) picking up invoices for customers' outside consultants, (2) giving away weigh tanks, and (3) shipping antiknock beyond effective dates at old prices. (IDF 141.) Ethyl also discovered that PPG was giving rebates for customers' outside consulting services. (IDF 141.) Sometime within the period 1975 to 1977, one refiner customer revealed to DuPont a special discount arrangement it had begun with Nalco as early as 1974. (IDFs 68 and 140.) Prior to this proceeding, none of the other three respondents even knew of Nalco's use of MFN clauses, and PPG could not confirm that its rivals used such clauses until the Commission's complaint in this matter did them the courtesy of removing that bit of

[3] A. Smith, *Wealth of Nations* 129 (1937 ed.).

"uncertainty." (IDF 136.) Also, Ethyl erroneously thought Nalco was selling some of its antiknock at F.O.B. prices. (IDF 137.) Both Ethyl and DuPont had difficulty monitoring the "multileg" transactions between PPG and Nalco in which they exchanged or sold TML and TEL. (ID 142.)

If such pricing and quasi-pricing arrangements were difficult for competitors to monitor, it was obviously even more difficult for them to discover the exact value of the numerous varieties of internal service arrangements (such as computer programs, employee training, refinery inspections, and so on). In short, these non-list price competitive arrangements not only benefit refiner-customers, but also make any restriction of output below competitive levels a highly dubious prospect in the antiknock industry. As one commentor observes:

> *Under contemporary, multi-vectored, dynamic competition, the probability of tacit collusion among a few producers is negligible because the decision variables are so numerous that no producer is able to anticipate the precise actions of his competitors. . . .* Clearly, measurement of the effectiveness of competition in a market requires an assessment of *all* vectors, and a summation of their competitive effects. The strength of competition cannot be assessed by confining attention to *prices*.[4] [8]

Yet, the Commission's decision effectively dismisses the record evidence of non-price competition as undesirable, and ignores its potentially destabilizing influence on any supracompetitive industry equilibrium. The majority's principal citation for such an approach (Maj.Op. at 43 n.60.) is a work by Professor George Stigler, in which, according to the majority, he concludes that "price competition is much more effective in increasing output and reducing profits than non-price competition . . ."[5] In fact, the remainder of the very paragraph cited by the majority makes clear that Stigler was referring to what he characterized as an "empirical judgment."[6] Stigler did not say that a competitive result would not occur where non-price competition is possible. Empirical research subsequent to his cited publication has demonstrated that it can.[7] Moreover, Stigler's analysis assumes the existence of a closed market and a collusive agreement. No such conspiracy was alleged or proven in this case.

As Professor (now Judge) Posner observed:

> [I]f other forms of competition—inventory, product quality, *service*, or whatever—are very important, the only effect of eliminating price competition may be to channel

[4] N. Jacoby, *Corporate Power and Social Responsibility* 140 (1973).

[5] G. Stigler, *Organization of Industry* 23–28 (1968).

[6] *Ibid.*

[7] *See, e.g.*, J.C. Miller III and G.W. Douglas, "Quality Competition, Industry Equilibrium, and Efficiency in the Price-Constrained Airline Market," 64 *American Economic Review* 657 (1974).

competitive energies into other, and costly, forms of competition.[8] (Emphasis added)

Or, to quote Professor (now Judge) Bork:

There is no difficulty in explaining the prevalence of product rivalry. Those who see in it the peculiar machinations of oligopolists overlook the obvious fact that consumers are sensitive to much more than price. Most products present a bundle of satisfactions, both functional and aesthetic; product rivalry is essential, particularly in complex products, if the variety of consumer tastes is to be satisfied effectively. Intense product rivalry, therefore, signals not lack of competition but its presence.[9] **[9]**

To adopt a legal standard that disregards these significant non-price aspects of competition—aspects that customers value and that are an integral part of an industry's competitive process—would seem to run directly *counter* to the intent of the authors of the FTC and Sherman Acts that the majority wishes to further. It is indeed ironic that the standard adopted by the majority would tell firms in oligopolistic industries that in the future they should focus their competitive activities on forms of competition more readily detectable by competitors (*i.e.,* list-price competition), thereby making anticompetitive arrangements—whether collusive or interdependent—more readily achievable.

B. *The Standard Ignores Discounting Off List-Price*

Beyond neglecting the many important types of non-price competition just discussed, the majority's myopic fascination with list-price movements also ignores an equally important characteristic of the antiknock industry. Although the majority characterizes off list-price discounting in this industry as "limited" (Maj.Op. at 51, 111.), the record evidence clearly shows that substantial discounting occurred during the "relevant period." The majority concedes that during the 1974–79 period, PPG discounted in about one-third of its sales, and that *a full 58 percent of PPG's antiknock sales (including co-producer sales) were made at discounts off list-price in 1979.* (*Id.* at 44, 98.) Nalco's pricing behavior was even more remarkable. As the majority are again forced to admit, *over 80 percent of Nalco's sales were made at a discount off list-price.* (*Ibid.*) These undisputed figures demonstrate that sales at list price for these two competitors were the exception, not the rule. Indeed, as the majority notes in discussing whether Nalco need be made subject to the Commissioner's order, Nalco made the "great majority" of its sales at a discount from list (*Id.* at 102.), and "[I]f Nalco's pattern of discounting is continued, most of its sales will actually not be made at list price." (*Ibid.*) **[10]**

[8] R. Posner, *Antitrust Law* 60 (1976) (hereafter cited as "*Antitrust Law*").
[9] R. Bork, *The Antitrust Paradox* 190–91 (1978).

With respect to DuPont and Ethyl, the principal form of competition chosen by these two largest antiknock producers was the provision of services and other non-price aspects. However, while the majority finds otherwise, the ALJ correctly found that DuPont and Ethyl did engage in several practices that amounted to a price discount, such as allowing "forward ordering," late billing, and credit arrangements. (IDFs 80 and 88.) In addition, the record discloses at least one instance in which one of those firms in fact granted a discount to a refiner customer over most of the "relevant period". (*See* Maj.Op. at 74 n. 75.)

The ALJ found that the respondents took "extreme measures to ensure off-list pricing information is kept strictly confidential" (IDF 183.), and to keep the "transactions prices" of such arrangements confidential. (IDF 138.) Further, notwithstanding the record evidence of aggressive price competition by the two smallest firms, the majority condemns the "participation by PPG and Nalco in the rigid pricing patterns followed by the entire industry" and states (remarkably): "As in the case of PPG, we conclude Nalco's discounting was sufficiently restrained so as not to upset the prevailing market equilibrium." (Maj.Op. at 101.) Whatever one may conclude as to DuPont and Ethyl, I simply do not believe that the record supports this conclusion as to PPG and Nalco. Once again, I find it ironic that the majority—so anxious to increase "uncertainty" in this industry—finds PPG and Nalco liable because their price-cutting was done secretly, rather than by lowering the published list-price. It is difficult to understand how the majority can square its finding of liability as to PPG and Nalco with its own statement: "It is familiar economic theory that the more complex and more hidden the form of competition, the more difficult is the achievement of coordinated, parallel behavior in an oligopoly." (*Id.* at 43–44.) One result of today's decision may well be that future discounting will occur more often on a list-price basis, where all competitors can more readily detect it and react, according each respondent greater certainty in setting its list-prices. [11]

### C. *The Standard Is Too Broad Because It Ensnares PPG and Nalco, Who Were Procompetitive Factors in the Industry*

Perhaps the most disturbing implications of today's decision are raised by the majority's finding that PPG and Nalco are equally liable as this industry's two most successful firms, Ethyl and DuPont. Any lingering doubts about the inappropriateness of the legal standard adopted by the Commission today vanish when one examines the record evidence upon which this liability is imposed. Not only did these smaller firms engage in the challenged practices to a lesser extent than DuPont and Ethyl, but the record demonstrates that their influence on the antiknock industry was markedly procompetitive.

The majority finds both PPG and Nalco liable only for using uniform delivered pricing. (Maj.Op. at 2–3, 100–01.) PPG was not even alleged to have used MFN clauses. (*See* Complaint ¶12(b).) The majority finds that Nalco used MFN clauses "in a minority of cases", and concludes (correctly) that "the record does not support a finding that the use of these clauses by Nalco had a significant effect on the overall pricing pattern." (Maj.Op. at 100.)

Moreover, the ALJ found that both PPG and Nalco have been "procompetitive forces" in the antiknock industry since they entered in the early 1960's (ID 161 n.24.), which includes the "relevant period." Even the majority is forced to admit that "It is true that Nalco and PPG have introduced some competitive element into the market." (Maj.Op. at 101.) Even placing all other considerations aside, a legal standard that imposes liability on the smallest members of an "oligopoly" who have been found to be aggressive procompetitive forces in both price and non-price dimensions discussed above—apparently because in the majority's view PPG and Nalco were not able to bring their industry all the way to the perfectly competitive model —simply sweeps too broadly. Whatever the arguments for finding the two largest respondents liable, I think it clear that the complaint against PPG and Nalco should be dismissed. [12]

I suspect it will be cold comfort to PPG and Nalco to discover that, although liable under Section 5, they are not subject to the Commission's order in this case. While the majority's new cause of action is ostensibly confined to Commission enforcement under Section 5, there is no assurance that private litigants will not try their luck at extending it to the Sherman Act. (This might be attempted under either a tacit agreement theory under Sherman Section 1, or as a conspiracy to monopolize theory under Section 2. Such an attempt would find support in the majority's lengthy discussion of why existing Sherman Act precedent involving tacit collusion supports a finding of unlawful conscious parallelism among oligopolists. (*See* Maj.Op. at 16–20.))

More important, in a very real and very significant sense, today's finding of liability as to PPG and Nalco may well engender anticompetitive consequences by the message sent to even small actors in other oligopolistic industries (and to firms contemplating entry into them). That message is that even if those relatively small firms are procompetitive forces and unilaterally and for sound business reasons adopt practices that their (larger) customers desire, they had best keep one eye on the FTC (and perhaps uninhibited private litigants) for a potential lawsuit.

In particular, today's decision may have the unintended effect of deterring entry into oligopolistic industries. Potential entrants (such as those in the position of PPG in 1961 and Nalco in 1964) will no longer be certain they may safely adopt the prevailing trade practices within the target industry, even if the practices are desired by buyer and seller alike and are adopted unilaterally. Oligopolies—where they do not result from government regulation—are usually able to persist only by virtue of significant scale economies or other efficiencies. It would be most unfortunate—and the height of irony—if the majority's actions today deterred new entry into such industries.

D. *The Majority's "Relevant Period" Is Inappropriate*

A legal standard intended to promote the interests of consumers and the objectives of competition policy should focus upon a time period sufficiently long to [13] constitute a meaningful, representative test of the competitive effects of the challenged practices, and to allow an assessment of their historical bases—whether anticompetitive or efficiency-related. The time period chosen and focused upon by both the ALJ and the majority as "the relevant period" (Maj.Op. at 1.)[10]—January 1974 to May 1979—does neither. Instead, the majority carves out a single (albeit important) five-and-one-half-year "slice" of the antiknock industry's nearly 60-year history in which special factors may account for the effects the majority finds objectionable, and from which it is not possible to determine either the purposes or actual effects of the challenged practices. Because the majority opinion is virtually silent on developments prior to the "relevant period," a brief historical digression is necessary.

1. The Challenged Practices Were Adopted Before Interdependent Behavior Was Possible

In 1924, Ethyl's predecessor corporation was formed to market TEL compounds produced under a patent monopoly controlled (indirectly) by the DuPont Corporation. In 1938, Ethyl began producing TEL itself. But until 1948 Ethyl remained the sole U.S. marketer of antiknocks. (IDFs 16–17.) The majority concedes that Ethyl adopted uniform delivered pricing in the 1930's while it was the sole antiknock producer. (Maj.Op. at 77.) Most-favored-nation clauses were also adopted unilaterally by Ethyl while it was the only producer (IDF 156.), as were advance price notices. (Maj.Op. at 55, 62.) In short, none of the three challenged practices were adopted as a result of any decisions by competing firms—conscious or unconscious—to restrict

[10] The majority opinion asserts that the Commission complaint alleges the challenged practices were followed "over an extended period." (Maj.Op. at 1.) In fact, the complaint is completely silent with respect to the duration of the alleged practices.

output or promote stability. Rather, as I discuss below in Part IV(C), they were adopted for reasons of efficiency and in response to customer demand. [14]

2. The "Relevant Period" Is Atypical And Unrepresentative

In addition, the history of this industry shows that the time period chosen as "relevant"—1974 to 1979—is, in fact, too short to draw any inferences of anticompetitive effects. It is possible that the claimed high prices and profits and stable market penetration cited by the majority (Maj.Op. at 36–39, 40–41, 47.) may all be attributable to the influences of government regulations alone. No such effects prior to the 1974–79 period are demonstrated by the ALJ's or the majority's findings.

From August 1971 to January 1974, federal price controls froze the price of antiknocks (at least for TEL). (RDX 332G.) In the meantime, as the majority notes, in 1973 federal environmental controls were promulgated that would ultimately result in a 90 percent reduction in antiknock industry demand, but with both the exact amount and timing of the reduction unclear. (Maj.Op. at 105; ID, Appendix C.) Originally, respondents believed the controls were to be phased in over a four-year period from 1975 to 1979. But numerous delays resulted in postponing the start until 1978, after which demand fell sharply. (IDFs 43–44; and ID, Appendix C.) One respondent, PPG, is currently in the process of exiting the industry. (Maj.Op. at 102–03.)

Thus, any tendency for prices or profits to rise in the 1974–79 period may be attributable to the substantial risk introduced by government regulations. In addition, the threat of impending extermination or near-extermination substantially weakened any desire to expand and achieve any significant additional market penetration in that period. (IDF 40.)

Finally, in many industries the expiration of price controls was followed by rapid price hikes, as firms subject to controls sought to compensate for years in which output prices were frozen.[11] [15]

In the period preceeding the start of the majority's "relevant period" there was significant entry, substantial volatility of market penetrations, stable or falling product prices, and the development of innovative products and processes. From 1948 to 1974, Ethyl's share fell from 100 to 33 percent of the market. From 1961 to 1974, DuPont's share fell from 50 to 38 percent, while Nalco had grown from nothing to 12 percent and PPG from nothing to 16 percent by the start of the "relevant period." (ID, Appendix C.) Meanwhile, from 1960 to 1974 the price of TEL rose by only 17 percent, and the price of TML actual-

[11] M. H. Kosters, *Controls and Inflation: The Economic Stabilization Program in Retrospect* 40–41 (Washington: American Enterprise Institute for Public Policy Research, 1975); M. and R. Friedman, *Free to Choose* 279–80 (1980).

ly *declined* by 10 percent. (IDF 52.) In sharp contrast, during this same period the overall producer price index rose by 57 percent.[12] During this same time frame, Nalco developed TML, and both Nalco and PPG developed new production processes for recycling oil refiners' waste products. (IDFs 32 and 83.) All four of the so-called "facilitating" practices challenged in the complaint were in fact in use by two or more respondents during this 1960–74 period. (*See, e.g.,* IDF 124.) The majority fails to explain why these practices did not "facilitate" supracompetitive price increases during this period. Presumably, the majority feels this 14-year period is simply not "relevant."

In sum, the majority has focused exclusively on a time period during which the "aftershock" of price controls rippling through the economy, coupled with the market disruption created by the impending environmental restrictions on leaded gasoline, combined to exert a profound effect on the antiknock market. The majority attributes all of the pricing and profit performance during 1974–79 to respondents' facilitating practices, and none to government intervention. It is readily apparent what serious mischief a legal standard can create when it permits prosecutors to establish a performance-based antitrust law violation upon evidence from a short, unrepresentative, and unusual time period that is viewed in isolation from the remainder of the industry's [16] history. Such a legal standard hardly seems consonant with the goals of competition policy.[13]

### E. *The Standard Ignores Respondents' Customers*

The majority dismisses the actions and potential actions of respondents' customers—petroleum refiners—as irrelevant and "misguided." The basis for this approach is the majority's notion that refiners do not realize that the practices they have demanded of respondents help the refiners individually, but harm them as a group as industry output is allegedly restricted below competitive levels. (Maj.Op. at 75–76.)

The majority concedes—as it must—that respondents' customers are large, sophisticated, and aggressive firms, "many of whom did press for discounts", and that this fact cuts against their anticompetitive inferences. (*Id.* at 35.) However, it then proceeds to ignore the ramifications of this fact for its theory, saying only that it is "inadequate to change [our] overall conclusion." (*Ibid.*) Six antiknock buyers —Exxon, Mobil, Texaco, Gulf, Amoco, and Chevron—are among the ten largest U.S. industrial corporations. (IDF 19.) Many of these refin-

[12] *Economic Report of the President* 227 (1983). The Commission may take official notice of such regularly-prepared statistical compilations published by the federal government. FTC Rules of Practice Section 3.43(d), 16 C.F.R. 3.43(d) (1982). *See also* Fed. R. Evid. 201.

[13] It might be another matter if there were evidence that the industry had lobbied for the regulations in question. Such is not the case here.

ers are fully capable of integrating backward into the production of antiknocks if services were deficient, or if prices exceeded marginal cost—*i.e.,* if respondents' profits were excessive. This is more than a theoretical possibility. The ALJ found that five of the largest antiknock buyers jointly own the export market's largest producer, OCTEL. (IDF 37.) (Tariffs apparently preclude OCTEL from exporting into the U.S. in competition with respondents. (IDF 104.)) One such refiner provided technical and marketing assistance as well as financial help to facilitate Nalco's entry in 1964, and participated in Nalco's successful development of a new product, TML. Other refiners provided financing to both Nalco and PPG (then called Houston) in their inaugural years. (IDFs 50 and 139.) **[17]**

Thus, when the focus of the analysis is broadened to include the special nature of customers in the antiknock industry, a considerably different picture of the competitive process emerges. In spite of criticisms by some of complaint counsel's refiner witnesses concerning respondents' pricing policies, those refiners appear to be in large measure satisfied with and responsible for the practices they criticized. Many refiners demanded the challenged practices, and felt they saved them money. Much like advertising, refiners relied on the challenged practices to compare prices or to reconsider contracts. (IDFs 112 and 126.)

There were no barriers blocking refiners from entering themselves and taking away business from an unresponsive and uncompetitive antiknock industry. Even if such entry were less likely following the EPA's actions since 1973, the majority does not explain why entry was not feasible before the "relevant period." If prices were too high or services too low at any point in time, the refiners could not only play one seller off against another, but could threaten respondents' very existence in the antiknock market with backward vertical integration. That none of these potential entrants chose to do so at any point in time—especially today when a firm with 17 percent of 1980 sales is existing the industry and is destroying rather than selling its production facilities—is simply inconsistent with the cartel result. Perhaps the statement of one of complaint counsel's refiner witnesses, a purchasing agent for Exxon Corporation, explains best why refiners did not enter the antiknock market as producers:

> We think it's [respondents' antiknock fluid] a bargain. Even though we fuss at our vendors a lot, it really is a bargain for us as far as achieving higher quality at a lower price. (Steen, Tr. 3457.)

In sum, the record evidence in this case shows that the majority's legal standard disregards the role of respondents' customers, ignores the history of the challenged practices, fails to consider the effects of non-price dimensions of competition, and, I believe, runs counter to the goals of this nation's laws on competition. If a standard of harmful interdependent oligopoly behavior is to be adopted, it should not be so narrow [18] and static that it permits inferences of harm which a broader, dynamic perspective would show to be, in fact, procompetitive and beneficial to competition and consumers. For these reasons alone, I cannot join in the majority's decision.

### III. THE STANDARD IS TOO VAGUE AND UNPREDICTABLE TO SERVE AS A REASONABLE GUIDE TO BUSINESS BEHAVIOR

As the majority intimates, even if a particular legal standard is sound in theory, it may not be sufficiently simple and clear to serve as a guide for business behavior. No matter how conceptually elegant a theory, it is of no practical value if businesses cannot figure out what they are supposed to do and not do until after the fact. Yet this is precisely the result of the standard adopted in this case.

Under the cause of action created today, firms acting independently and adopting one or more practices for legitimate business reasons at the behest of their customers would become liable at some unknown time when some unknown combination of the practices used by an unknown number of the firms took place. Even firms not found to employ the practices in any objectionable way would be liable for, in effect, "hanging around the wrong crowd." The principal guidance provided by the majority would be a list of four objectionable structural and seven objectionable performance characteristics, with a proviso that "additional" features may be relevant as well. Most of those characteristics are as vaguely stated as the challenged practices, and many exist in both competitive and monopoly situations. (*See* Part IV(A), below.)

This is simply not an understandable rule of law. At best, it would add another dimension of regulatory risk and uncertainty to this and other industries' environments. At worst, it would actually deter beneficial, procompetitive behavior, for fear of triggering a Section 5 violation for unknown and unknowable reasons.

#### A. *The Standard Does Not Specify When the Challenged Practices Became Illegal*

The majority decision seems to imply that each of the challenged practices in and of itself may be legal—that it is a combination of the practices that is objectionable. [19] (Maj.Op. at 90–94.) Specifically, it allows that grace periods provided with advance price notification might be lawful if it were not for the practice of uniform delivered pricing. (*Id.* at 94.) It further concedes that MFN clauses might be legal if it were not for the practice of advance price notification. (*Ibid.*) Finally, it admits that even then the practices might be legal if a different set of structural and performance variables characterized an industry. (*Id.* at 22, 24–27, 110.)

It is, of course, well and good to have a standard that is sufficiently flexible to allow reasonable behavior. Given that a standard is to be set, it should by no means make interdependent oligopoly behavior a *per se* violation. But there should be sufficient clarity to allow firms a reasonable certainty of liability under a knowable set of circumstances.

A standard should allow further firms in similar circumstances to predict when a set of practices adopted for legitimate business reasons in response to customer demand becomes an antitrust violation. Was Ethyl guilty of a Section 5 violation when it adopted each of the practices unilaterally? Or did they become a violation when DuPont entered in 1948, and subsequently sought to take away sales from Ethyl by adopting the same business methods Ethyl had found successful? Or did the practices become unlawful when PPG's predecessor (Houston Chemical Company) entered in 1961 and sought to take away sales from Ethyl and DuPont? (PPG gained 16 percent of sales within 13 years as DuPont, the sales leader, lost 12 points in that period.) Or did the illegality arise when Nalco entered in 1964 and gained almost 12 points over the next 10 years—all at the expense of the two leading firms, DuPont and Ethyl? (*See* ID, Appendix C.) To each of these questions, the majority provides no answer.

At no point does the majority explain when the violation was triggered. The most likely inference appears to be that liability followed the imposition of government regulations in the 1970's which threatened extermination of the industry and which, according to the majority's decision, practically eliminated the possibility of further **[20]** entry. (Maj.Op. at 33.) This is because the decision elsewhere states that it "would not expect such [pricing coordination] practices to have a significant effect unless barriers to entry deterred potential entrants from 'competing away' excess profits earned by firms with supracompetitive prices." (*Id.* at 25.) Since there was significant entry in the 1960's with substantial shifts in sales penetration, I can only infer that the decision finds that the violation occurred sometime during the subsequent period of government controls.

If that is the case, it should be so stated so that in the future potential violators will have a better chance of knowing *when* otherwise lawful practices may become a law violation. If it is not the case that government regulation triggered the violations found here, then the "relevant period" should be extended backward in time to determine precisely when the violation occurred, and with what effect on competition and consumers.

### B. *The Standard Does Not Specify What Combination of the Practices Is Unlawful*

There are considerable uncertainties in the majority decision regarding potential liability for alternative combinations of the challenged practices. The clearest implication is that uniform delivered pricing is most objectionable to the majority. All four respondents are found liable for its use. (Maj.Op. at 2, 90, 93, 101.) The majority implies the other challenged practices could be lawful if it were not for uniform delivered pricing. (*Id.* at 94.) Further, the majority intimates that the truly objectionable aspect of advance price notification is the additional "grace period" over and above the notice period contractually required. (*See, e.g.,* Maj.Op. at 101.) Today's decision holds liable two firms—PPG and Nalco—whose only "hard core" challenged practice was uniform delivered pricing. (Nalco did not employ a grace period in conjunction with its advance notification contracts, and PPG did not utilize the grace period to initiate any price increases.) For the reasons discussed in Part IV(D), below, there is no basis in this record to infer anticompetitive effects from use of such delivered pricing by PPG and Nalco, or either of the remaining two respondents. [21]

DuPont and Ethyl are found to have engaged—unlawfully—in *three* of the challenged practices. Nalco is found to have used the same three practices, but to be liable for only *one* (uniform delivered pricing). PPG is found to have employed only *two* of the three practices, but to be liable for only *one* (again, uniform delivered pricing). I suspect it will be difficult indeed for firms operating in "oligopolistic" industries to sort all of this out into any meaningful antitrust compliance guidelines.

Moreover, a legal standard that implies that each of several challenged practices may be lawful by themselves, but then holds liable two firms on the basis of only one of the practices, is less than precise. At best, such a standard may make firms more cautious about entering oligopolistic industries in which one or more of the challenged practices are the prevailing terms of trade.

## IV. THE FACTS IN THE RECORD DO NOT MEET THE PROPOSED STANDARD

Even if the majority decision's proposed standard were broad enough and clear enough to serve as a basis for imposing liability, no violation could be found on the facts in the record. The record shows that neither the structure, performance, nor conduct criteria of the standard are satisfied by the facts in this case.

### A. *The List of "Objectionable" Structural and Performance Variables Do Not Support The Majority Conclusion*

The majority decision offers a list of objectionable structural and performance characteristics that are intended to resolve the vagueness problem, and to serve as the theory on the basis of which the inferences of anticompetitive effects may be drawn. The majority argues that the challenged practices can be inferred to be unacceptably anticompetitive (and hence unlawful) if they are associated with certain "structural" and "performance" characteristics. They identify five such structural characteristics: (1) high concentration, (2) high entry barriers, (3) a homogeneous product, (4) inelastic demand, and (5) "additional [structural] factors." They then designate eight performance characteristics: (1) "highly uniform" prices, (2) "lock-step" price changes, (3) "limited" discounting, (4) "stable" market shares, (5) "relatively high" profits, (6) price in excess of [22] marginal cost, (7) rising prices accompanied by both "sluggish demand" and "excess capacity," and (8) "additional [performance] factors." (Maj.Op. at 110–12.)

Each of the cited characteristics is subject to alternative interpretations in the context of almost any real-world industry situation. In addition, the categories labelled "additional factors" contain characteristics that are clearly procompetitive in the antiknock industry. I consider here certain of these structural and performance variables that the majority misinterprets in its analysis.

#### 1. Structural Factors

##### a. *High Concentration*

It is undisputed that the antiknock industry is highly concentrated. It is also true that such concentration lends itself to an awareness that each firm's actions will influence those of its competitors and, ultimately, affects the industry equilibrium levels of price, services, and output. But this is true of all oligopolistic industries, irrespective of whether the practices challenged in this case are utilized. As one commentator observes:

> [O]ligopoly competition may be as virile as competition in an industry with a large number of small- or medium-sized firms. . . . It is immaterial that each oligopolist firm acts with awareness of its competitors as long as it makes its independent decisions on price, quality of product and service, research and innovation, cost and profit factors. . . . Again I stress that the courts have not condemned a mere oligopoly market power as a Sherman Act violation. The Supreme Court has distinguished genuine collusive conduct of oligopolists from mere conscious uniformity of business behavior arising from mutual awareness of common economic or business justifications in harmony

with independent self-interest.[14]

Or, more recently, as others observe: [23]

When there are at least two noncolluding firms in an industry, there is no clear-cut relationship between the number of firms and the degree of competition.[15]

b. *High Entry Barriers*

I heartily concur in the majority's conclusion that the practices challenged in this case cannot lead to supracompetitive results in the absence of effective entry barriers. (Maj.Op. at 25.) However, the majority's definition of an entry barrier is subject to question. As Posner points out, properly viewed, an entry barrier is not a high cost of entry. Rather, it is a high (long-run) cost that entrants must bear in excess of those costs incurred by existing firms.[16] In this case government price controls and environmental regulations weighed equally on all firms, present or potential. Thus, they are not entry barriers in the true economic sense. But even assuming EPA regulations make it unlikely any new firms will enter the antiknock industry, this "structural factor" was not present until the early 1970's. Thus, we must presume the challenged practices were lawful until that time. It follows that, under the majority's theory, the imposition of environmental regulations gave rise to an antitrust violation on the part of all industry firms and—in addition to mandating the medium-term demise of the industry—presumably required all four respondents to restructure their traditional business practices. [24]

c. *Homogeneous Product*

The record evidence amply supports the majority's conclusion that antiknock compounds of a given proportion of TML and TEL are identical. (Maj.Op. at 33–34.) However, the record also demonstrates that alternative mixtures of the two compounds (*e.g.*, 75/25 TML/TEL vs 25/75 TML/TEL) have different characteristics and different prices. (*See, e.g.*, IDF 7.) More important, the antiknock product was sold with essential safety services—services that varied substantially among the four respondents. Moreover, the record shows respondents

[14] S.C. Oppenheim, "The Sherman Act and Internal Company Growth," NICB Conference on *Antitrust in an Expanding Economy* 11 (May 16, 1962); *see also* R. Bork, *The Antitrust Paradox* 103–04, 163–97 (1978).

[15] E. Fama and A. Laffer, "The Number of Firms and Competition," *American Economic Review*, Vol. LXII, No. 4 (September 1972), p. 674. *See also*, M. A. Adelman, "Effective Competition and the Antitrust Laws," *Harvard Law Review* 1297 (September 1948); G. C. Archibald, "'Large' and 'Small' Numbers in the Theory of the Firm," *Readings in the Economics of Industrial Organization*, edited by Douglas Needham (New York: Holt, Rinehart, and Winston, 1970), p. 168; H. Demsetz, *The Market Concentration Doctrine* (Washington, D.C.: American Enterprise Institute For Public Policy Research, 1973), p. 26; and J.M. Vernon, *Market Structure and Industrial Performance - A Review of Statistical Findings* (Boston: Allyn and Bacon, Inc., 1972), p. 117; J.S. McGee, *In Defense of Industrial Concentration* 129 (1971).

[16] *Antitrust Law* at 59, citing G. Stigler, "Barriers to Entry, Economies of Scale and Firm Size," *Organization of Industry* 67 (1968).

used varying credit terms and delivery dates.[17] (*See* Part II (A), above.) In short, the product—properly defined to include the associated services and delivery arrangements—is, upon close inspection, far from homogeneous. The majority's failure to recognize this explains its decision to ignore the numerous dimensions of price and non-price competition in this industry.

d. *Inelastic Demand*

The majority decision states that inelastic demand is necessary for the existence of supracompetitive prices and profits—to assure that any output restriction results in "price above marginal cost." (Maj.Op. at 25.) If this statement regards *industry* elasticity, it is simply wrong. As Posner observes, inelastic industry demand at the market price—which does prevail in the antiknock industry (IDF 42.)—is inconsistent with a monopoly result, and "is rather good evidence that the sellers are not colluding—at least, not effectively."[18] (This is because where industry demand is inelastic, joint marginal revenue would be negative.) If the majority means that *firm* demand curves are inelastic at the market price, it implies that they were acting irrationally, since marginal revenue would be negative. In addition, any inference of inelastic firm demand is inconsistent with the high degree of price sensitivity shown by buyers in the record. (IDF 27.) [25]

e. *Additional Structural Factors*

The most obvious "additional" structure factor is the undisputed presence of large, sophisticated, and aggressive buyers. As the majority admits, this cuts against any inference of anticompetitive conduct and effects. As previously indicated, this is a crucial factor in this industry, since buyers were the most obvious source of potential entry and could have integrated backwards into the antiknock industry if profits were really excessive.

The additional crucial structural factor needed to support the majority's legal theory (which the majority decision also cites but ignores) is that "price competition [must be] more important than other forms of competition." (Maj.Op. at 22.) As discussed extensively above, the existence of substantial non-price competition—such as the service element in the antiknock industry—substantially reduces the likelihood of anticompetitive effects. The record in this case bears that out.

f. *Summary*

Thus, the majority defines and applies three of its four structural

17 For the proposition that differing delivery dates and credit terms can introduce "an element of heterogeneity", *see* J. Hirshleifer, *Price Theory and Applications* 337 (1976).

18 *Antitrust Law* at 57.

prerequisites in a manner inconsistent with the proper economic meaning of these concepts. Moreover, it omits discussion of two others that point to an absence of anticompetitive effects. When properly analyzed, five of six important structural conditions are not met by the facts in this case. The product—*cum* services and off-list price dimensions of competition—is *not* homogeneous. *Industry* demand at the transactions price is inelastic, while *firm* demand is elastic. Price does *not* appear to be the most important dimension of competition in this industry. Customers *are* large, sophisticated, and aggressive. Although there are important tariffs, entry barriers are *not* high, as evidenced by the entry and successful expansion of two respondents in the period preceding the "relevant period." (This conclusion is bolstered by the fact that respondents' customers could (as they have in other countries) integrate backward into the industry.) The majority's single remaining "structural" factor—industry concentration—is itself the subject of intense **[26]** debate in the economic literature as to cause and effect.

2. Performance Factors

a. *"Highly Uniform Price" and "Lock-Step" Prices Changes*

It is clear that the majority views the uniformity of respondents' list-prices and their tendency to rise in so-called "lock-step" fashion as the heart of this case. (Maj.Op. at 51, 64, 80.) It emphasizes that, of 24 list-price increases during the "relevant period," 20 were identical and occurred for all respondents on the same day. (*Id.* at 48.) The basic problem with this notion is that, as the majority itself recognizes, prices tend towards uniformity in competitive markets as well as non-competitive ones. The decision seeks to resolve this dilemma by saying that it is not so much the uniformity of prices but the rapid speed at which respondents' prices adjust that demonstrates the asserted fact that prices are above competitive levels and that "price leadership" is involved.

First, I note the circularity of the claim that price uniformity (however defined) is anticompetitive because prices are above competitive levels and that prices exceed competitive levels because of price uniformity. Second, the existence of substantial service competition among respondents shows that pricing cannot be discussed in a vacuum. In this industry, any tendency for pricing to rise above marginal cost would be checked by competition along service and other non-price dimensions.

Third, the notion that "price leadership" and simultaneous movements in price provide the key distinctions between competitive and supracompetitive markets is simply erroneous. To quote from a leading economics text:

*All* prices in all markets are administered in the sense that each person decides at what price he shall sell (in the light of market demand) . . . The prices and sales of firms are interdependent. They watch each other closely and, like dogs chasing a rabbit, move together, even in those cases where there is no leader, simply because they seek the same quarry.

* * * * * * * [27]

That the same firm is usually the first to make a price change which others almost always follow does not mean that the leader dictates prices to other firms, nor does it imply some tacit agreement not to compete with prices. It can attest to the lead firm's greater acuity and knowledge of market conditions.

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Simultaneity of price action or "dominance" by one firm is not evidence *for or against* the existence of *effective* collusive agreements. The number of sellers and the coordinated price-search process, whether it be simultaneous or lagging behind some apparent "price leader," are also irrelevant.[19] (Emphasis in original)

Or, as Posner observes:

To be sure, there are dangers in pressing the "meeting-of-the-minds" approach too far. Suppose that a group of competing firms simultaneously experience an increase in the cost of some raw material that each one uses. In deciding how to respond to the common cost increase, each firm will consider the probable response of its competitors to the increase, since its ability to pass on the cost increase in whole or part to its customers by raising price will depend on the pricing decisions of its competitors. The process by which the firms arrive at the new equilibrium at a higher price may thus have elements of "tacit agreement." The process is not an anticompetitive one; yet if the firms explicitly coordinated their pricing in reaction to the cost change, the law would treat their agreement as illegal collusion—and rightly so, since there would be justifiable suspicion that the agreement was both unnecessary to smooth adjustment to the cost increase and motivated, at least in part, by a desire to raise the market price by more than the cost increase actually requires.

This example shows that the law should not always equate tacit and explicit pricing agreements. Some degree of tacit coordination of pricing in reaction to external shocks, such as the increase in raw-material costs examined above, is inevitable and unobjectionable.[20]

[19] A. A. Alchian and W. R. Allen, *University Economics*, 345–46, 356 (1971).
[20] *Antitrust Law* at 72. *See also* D. Turner, "The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals to Deal," 75 Harvard L. Rev. 669 (1962).

In short, pricing uniformity is the inevitable result of open market processes and is consistent with either competitive or anticompetitive behavior and results. It is the expected condition in a so-called oligopoly such as the antiknock industry, with or without use of the challenged practices. [28]

b. *"Relatively High" Profits and Price Above Marginal Cost*

It appears there is simply a failure of proof on the claim that profits were excessive. First, the accounting method employed failed to use *current* costs (*see, e.g.*, IDF 166.), which are necessary for any inference that entry of equally efficient competitors is being deterred.[21] Second, as Posner notes, where costs vary among firms, the competitive optimum is where price equals cost for the *marginal* seller only.[22] And as Demsetz notes, differential profits among sellers are inconsistent with an anticompetitive situation.[23] PPG's 1978 reduction in capacity and its recent exit are scarcely consistent with price above marginal cost for the marginal firm. In addition, the accounting data cited by the ALJ show Ethyl's estimated rates of return before taxes are generally twice as high as those for PPG and Nalco for the "relevant period," with DuPont in between. (IDF, Appendix J.)

Moreover, as Posner also observes, "equality of price and (long-run) marginal cost is efficient only when the market is in an equilibrium, or stable, condition."[24] Such a description scarcely characterizes the antiknock industry during the "relevant period." Even as the market distortions caused by price controls were fading, those caused by environmental regulations were growing. Risk existed in the certain knowledge of near-extermination, with only the timing and pattern of the precipitous decline unclear. [29]

These facts—and the fact that at no time before, during or since the "relevant period" did any of the large oil company buyers attempt to integrate vertically into this industry—are inconsistent with the majority's finding of supracompetitive profits and performance in the antiknock industry.

c. *"Limited" Discounts and "Stable" Market Shares*

The majority's legal standard does not specify when, or in what order of magnitude, these measures are sufficient to rebut an anticompetitive inference. Moreover, the record indicates a non-trivial

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[21] G. Benston, "The FTC's Line of Business Program: A Benefit-Cost Analysis" (*Business Disclosure: Government's Need to Know;* ed. by Harvey J. Goldschmid, 1979), p. 92–94. *See also* F.M. Fisher and J.J. McGowan, "On the Misuse of Accounting Rates of Return to Infer Monopoly Profits", 73 *American Economic Review* 82–91 (March 1983).

[22] *Antitrust Law* at 136.

[23] H. Demsetz, "Two Systems of Belief About Monopoly" (*Industrial Concentration: The New Learning;* ed. by H. Goldschmid, J.M. Mann, and J.F. Weston, 1974), p. 177–79.

[24] *Antitrust Law* at 136.

amount of each, especially when the time horizon is broadened at either end. (*See* Parts II(B) and (D)(2), and III(A), above.)

d. *Rising Prices Accompanied by "Sluggish" Demand and "Excess" Capacity*

As indicated, examining price rises without reference to the effect of government controls can lead to erroneous inferences as to their cause. In this case, the rising prices cited by the majority followed over two years of price controls, and occurred during a period of extreme uncertainty and risk and of frequent raw material shortages. (*See* Part II(D)(2), above.)

Government controls also had a major effect on respondents' decisions on output and capacity. (*See* Part II(D)(2), above.) These included not only product regulations that, starting in 1974, threatened imminent drastic sales declines, but also EPA plant emissions controls that even made it necessary to invest in maintaining some existing equipment and plant. (IDF 38.) Thus, it is not surprising that two respondents, Ethyl and PPG, reduced plant capacity during the relevant period.

Yet, by 1979, a year plagued by supply problems with lead and sodium inputs (IDF 40.), Ethyl was operating at 95 percent capacity, and in 1980—for which no capacity data are available—it replaced DuPont as the industry leader. (IDF 38; ID, Appendix C.) DuPont, which operated at between 84 and 94 percent of capacity in the recession years of 1974 and 1975, achieved 100 percent capacity in 1976. (IDF 39.) While the record is somewhat unclear following that time, the ALJ states that DuPont operated at **[30]** "excess capacity" through 1979. (IDF 39.)

Nalco operated at from 77 to 89 percent capacity during the 1974 to 1979 period and had supply problems in three of those years. (IDF 41.) The ALJ found that "PPG did not have any significant excess capacity" from 1974–1976, and operated at 86, 100, and 88 percent capacity during the next three years. (IDF 40.) In addition, Nalco was the high-cost producer in the industry, so that any excess capacity on its part is perfectly consistent with price equal to marginal cost for it, the marginal firm—the competitive optimum for an industry with varying firm costs. (*See* Part IV(A)(2)(b), above.)

Similarly, PPG's current exit and creation of excess facilities that no one wants to buy is itself inconsistent with any idea that profits in this industry *were* during the "relevant period" or are today excessive. This is an important point because economic profit—the kind that is relevant to any assessment of competition—is a forward-looking concept that must take expected future events (such as eventual near-extermination) and uncertainty (such as the timing of the process) into account. (*See* references cited at Part IV(A)(2)(b), above.)

e. *"Additional Factors"*

The most important "additional factors" in this case are the various beneficial services and innovations in products and production processes. (*See* Part II(A), above.) Once again, as in the case of the structural factors, these are ignored by the majority opinion.

f. *Summary*

The decision's (mis)application of performance criteria to the record evidence does not provide support for an oligopoly theory under which anticompetitive effects can be inferred from the challenged practices. The majority's facile treatment of these criteria only adds to the confusion caused by the conduct criteria, which fail to explain when the challenged practices become a violation, in what combination, or when adopted by what number of firms. **[31]**

B. *Evidence on Conduct*

What seems to trouble the majority most in this case is its perception that there is some sort of intent on the part of each of the four respondents to "maintain" a "stable market" in this industry by unilaterally maintaining the challenged practices. In support of this perception, the majority cites an Ethyl document expressing concern about "maintaining a stable market for antiknocks" in a period of "market shrinkage" and "overcapacity." (Maj.Op. at 52.) It also cites testimony by DuPont's Director of Marketing that selling at F.O.B. to a large customer in this time period could lead to a decline in general prices (*Id.* at. 81.), and statements by him and an Ethyl document about the possible impact of eliminating MFN clauses on industry "marketing practices." (*Id.* at 72–73.) Finally, the majority cites evidence that both DuPont and Ethyl view the practice of advance price notification with grace periods as a way to "test" competitors' reactions before making pricing actions final. (*Id.* at 58–60.)

While the cited statements are subject to varying interpretations, they may reflect little more than expressions of great concern about the inevitable destabilization and monetary losses that would occur once the environmental controls were put into place and phased into completion. Recall that the phasing down was to have begun on January 1, 1974—the beginning of the "relevant period," but after a series of uncertain delays (*ex ante*), the start of the process began on January 1, 1978. (IDF 44.) It was followed by a precipitous drop in demand, over 50 percent in three years (IDF, Appendix C.), as the controls became binding.

Thus, the Ethyl statement about "maintaining" a "stable market," as well as the DuPont and Ethyl statements about the potential for destabilization from changing certain marketing practices, are consistent with fully justified fears about what might happen to them as a result of sudden changes in industry conditions—whether they be caused externally such as by government controls, or internally, such as those initiated unilaterally in the form of new or different marketing practices, products, or production **[32]** methods.

Moreover, concern expressed (internally) by some business executives from two respondents about the prospect of market destabilization does not necessarily imply that price or the price-service equilibrium was at supracompetitive levels. Any resulting destabilization could drive existing prices below cost or below the competitive level—the marginal cost of the marginal firm—even from a pre-existing competitive equilibrium, as PPG's recent exit makes clear. In that regard, the cited statements do not establish an intent to increase market stability. It is one thing to adopt actions that might raise prices above competitive levels. It is quite another simply to refrain from actions that might reduce prices below competitive levels.

Another aspect of the challenged practices on which the majority place great reliance in finding liability is the use by some respondents of a grace period that provides notice of price changes over and above that contractually required. Although the majority notes that only DuPont and Ethyl used it (Maj.Op. at 95–96, 98–99.), its opinion attacks the grace period by including all four firms:

> By following a consistent practice over the relevant period adhered to by every industry member, the respondents have developed an effective way of signalling pricing intentions. The practice of conveying to a competitor what is, in effect, a price "offer," then waiting for a response—while avoiding different list prices at any time—actually goes beyond the competitive effect in exchanging current price information condemned in *Container Corp.* In that case, the practices which reduced competition consisted of agreements to exchange current price information by firms representing almost all the market. Here firms representing *all* the market have not only developed a system for exchanging current price information but for communicating future information with the opportunity to announce future prices on a contingent basis. (Maj.Op. at 51–52, emphasis in original.)

In fact, the price movements associated with the "grace period" are no more a "signalling tool" in this industry than the actual movement of prices among competitors in any small numbers situation. Where there are few competitors *any* price change is a "signal" to competitors about a firm's intentions, whether that change be in spot or futures market contracts. **[33]**

Moreover, as long as what amounts to a "futures" market in this case (the practice of advance price notification) is allowed to exist, no change in the so-called "testing" behavior can be expected to occur. The very same "testing"—raising, then adjusting prices before they are implemented—can be achieved simply by adjusting the effective dates of the announced price increases after the announcement. In addition, the practice of forward-ordering at the old price can be extended in time to accommodate any disenchanted buyer, without any loss of sales, even after a price rise occurs. Thus, the majority's notion that respondents will be less likely to initiate price rises if the "grace period" is abolished is without support in the record.

### C. *The Challenged Practices Were Adopted For Legitimate, Procompetitive Business Reasons, And Were Desired by Respondents' Customers*

The majority asserts that in assessing the challenged practices under a rule of reason approach, it considers any procompetitive effects of the practices. (Maj. Op. at 22.) It then proceeds to reject all of respondents proffered justifications for the practices, feeling they are outweighed by the assertedly anticompetitive effect of the practices on (list) price. (Maj.Op. at 89–91.) I find respondents' arguments persuasive and more than ample to offset the tenuous inferences upon which the majority's finding of anticompetitive effects is grounded.

Ethyl adopted one of the challenged practices—uniform delivered pricing—just prior to 1938 as a means of encouraging its buyers to receive the highly explosive fluids in tankcars as opposed to drums. (IDF 124.) Today, although some large refiners with plants located close to respondents' plants object to the practice, other buyers find that the practice saves state transportation and inventory taxes, which they would have to pay if title passed prior to delivery. They also testified that it simplifies purchasing decisions by allowing quicker evaluation and comparison of respondents' prices. (IDF 126.) The ALJ found that the practice "possibly does eliminate some costs customers would incur under an F.O.B. system" (IDF 126.), and that it is based on "some legitimate business reasons." (IDF 156.) The record indicates that freight savings to buyers located [34] closest to respondents' plants from an F.O.B. system would only be roughly one percent of selling price. (*See* Part IV(D), below.)

Like uniform delivered pricing, the ALJ found that MFN clauses are also based on "some legitimate business reasons." (ID 156.) The record reflects that refiners desire the clauses (ID 154.), including the small refiners. (IDF 121.) Moreover, one respondent—Nalco—met customer objections when it generally dropped the practice. (IDF 120.) (PPG was not charged with utilizing the practice.)

The ALJ found that refiner witnesses (including those from small refiners) also generally favored respondents' practice of providing advance price notification. (IDF 112.) There is no evidence that it—or the accompanying grace period to which the majority particularly objects—was adopted as a result of any meeting of the minds of respondents. The grace period was not even utilized by Nalco. (Maj.Op. at 98.) PPG's officials testified that it would like to drop the practice. (IDF 110.) Refinery witnesses (including complaint counsel's) testified that they believed the practice saves them money by permitting "forward ordering" at the old price, and that it facilitates their firms' ability to reconsider respondents' contracts and to engage in financial and other planning. (IDF 112.)

### D. *The Majority's Key Practice—Uniform Delivered Pricing—Was Presumed But Not Proven To Be Anticompetitive*

Finally, I discuss what appears to be the lynchpin of the majority's finding of liability—the impact of uniform delivered pricing, a practice respondents' customers utilized to compare prices. Given the majority's extensive treatment of the case law involving uniform delivered pricing, its statement that absent such delivered pricing the practice of advance price notification with grace periods might be lawful, and the fact that liability for two of the four respondents rests solely upon the asserted anticompetitive effects from this one practice, it seems appropriate to analyze the benefits and costs of this practice in some detail. **[35]**

Curiously, after mentioning respondents' arguments that the practice did not have a substantial influence on antiknock selling prices, the majority's decision makes no attempt to look at the numbers in the record. Instead it chooses to emphasize—erroneously—that as in *Triangle Conduit,*[25] respondents' plants are "scattered over the United States," so that delivery costs are quite different among them to different refiners. (Maj. Op. at 85, 93.) The majority then invokes its uncertainty theory, and finds that replacing this practice with F.O.B. pricing "would have introduced the complexity of 'masking' discounts because it would have introduced price variations among customers." (*Id.* at 82.)

This claim is supported in the first instance by reference to Nalco's practice of selling its Texas-produced TML to a customer in Antioch, California for the same price as DuPont charges in that location. (*Id.* at 76.) But the record shows that Nalco shipped its TML to Antioch, where it purchased DuPont's TEL for mixing prior to customer purchase. (IDF 89.) Similarly, DuPont would at least sometimes purchase TML from Nalco's Texas plant for mixing prior to delivery (IDF 20.) or, alternatively, ship its TML and TEL products to its mixing plant

[25] *Triangle Conduit & Cable v. FTC,* 168 F.2d 175 (7th Cir. 1948), *aff'd by equally divided court sub nom., Clayton Mark & Co. v. FTC,* 336 U.S. 956 (1949).

in Texas. Although DuPont had manufacturing plants in California and New Jersey, it has a mixing plant in Texas. Contrary to the majority's erroneous and misleading assertion that respondents' plants are "scattered across the country" (Maj.Op. at 85, 93.), they are in fact remarkably concentrated. DuPont's mixing plant as well as *all* plants of each of the other three respondents are all located within a 300-mile radius in Texas and Louisiana. (IDFs 1–4; Rand McNally Atlas.)

Thus, for example, when Nalco sold a 50/50 TML/TEL mix to customers in Antioch, California (TML cannot be used without mixing), its price with delivery cost would be identical to its F.O.B. price in either California or Texas or at any point in between. Moreover, the same kind of tendancy toward inter-area price equalization—[**36**]with or without this challenged practice—occurs when (as is generally true here) the *buyers'* plants are scattered across much of the U.S.

In addition, the ALJ found that average freight costs in the antiknock industry "are small in relation to the total market price." (IDF 190.) The exhibit cited by the ALJ on delivery costs (IDF 127; and RDX 333.) supports this finding. It shows that in 1979, average actual delivered costs among respondents' customers amounted to 1.53¢ per pound [less than 2 percent of list price in that year (IDF, Appendix D)] and that the lowest potential F.O.B. price for the refiner located closest to respondents' plants was 0.3¢ per pound. Thus, the maximum possible effect on such refiners versus the industry average was on the order of 1.2¢ per pound, or little more than 1 percent of selling price.

At the other end, there were two small refiners with shipping costs of 8.1¢ per pound who were, in effect, receiving a discount of that amount—less the 1.5¢ average actual freight costs per pound incurred in delivery. But 59.5 percent of the refiners, and 84.5 percent of shipments, had actual average freight costs of under 2¢ per pound. And 76 percent of the refiners and 94.5 percent of shipments had actual average freight costs of less than 3¢ per pound. Of the ten largest buyers, the spread ranged from 0.5¢ per pound to 2.8¢ per pound. (RDX 333.) Given the list-price of antiknocks—which DuPont currently places at $1.07 per pound (Maj.Op. at 106.)—it can readily be seen that the ALJ was correct in finding that delivery charges are "small in relation to sales price." (IDF 127.) This fact, coupled with the relatively centralized locations of respondents' plants, demonstrates that use of uniform delivered pricing cannot have had the significant anticompetitive effect attributed to it by the majority.

Given the legitimate business reasons for this practice (including the desire by respondents and their customers that respondents maintain title and liability for the explosive compounds until delivery), given the savings on state taxes and on bookkeeping costs associated with determining where the products went, and given the small fraction of total sales price accounted for by transportation costs, I find insufficient support in [37] the record for the allegation that uniform delivered pricing had any substantial impact on competition in this industry. Elimination of uniform delivered pricing would not introduce substantial F.O.B. price variations among respondents, and its overall cost to customers as a group would likely exceed any conceivable benefits to particular refiners.

### V. CONCLUSION

In sum, taken together the challenged practices—uniform delivered prices, advance price notification with grace periods, and most-favored-nation clauses—arguably reduce buyers' search costs and facilitate their ability to find the best price/value among refiners. In light of the intense competition in services and other non-list-price dimensions, moreover, the record fails to prove that these practices are anticompetitive. Their prohibition could well impose costs on consumers without any corresponding benefits. For these reasons, and for a similar lack of any evidence of anticompetitive structure and performance; for the failure to articulate an understandable and predictable standard of liability; and for the use of a criterion whose focus is so narrow as to present a possibly erroneous and harmful view of competition, I dissent.

## FINAL ORDER

This matter, having been heard by the Commission upon the appeal of respondents and complaint counsel from the Initial Decision and upon briefs and oral argument, and the Commission for the reasons stated in the accompanying Opinion having determined to deny the appeal of respondents and complaint counsel,

*It is ordered,* That the Initial Decision of the administrative law judge be adopted as Findings of Fact and Conclusions of Law except to the extent inconsistent with the [2] accompanying Opinion. Other Findings of Fact and Conclusions of Law of the Commission are contained in the accompanying Opinion. Pending motions are dismissed or otherwise resolved as provided in the Opinion.

*It is further ordered,* That the following Order to Cease and Desist is hereby entered.

## Order

### I

### *Definitions*

For the purpose of this Order, the following definitions shall apply:

A. *Lead-based antiknock compound* means additives to gasoline which increase its octane rating and which contain tetraethyl or tetramethyl lead.

B. *Delivered price* means a single undivided price inclusive of product and transportation charges.

C. *Point of origin price* means a price set by a respondent for a purchase by a customer at a mill or distribution point from which a delivered price is quoted to that customer. The point of origin price shall be no greater than the delivered price offered to the customer less the actual transportation costs which would have been incurred by the seller if the sale were made on a delivered basis.

D. *Customer* means any actual or potential purchaser of a lead-based antiknock compound.

E. *Most favored nation agreement* means any contractual provision or understanding that requires, or potentially requires, a price paid by one purchaser of lead-based antiknock compound be offered to one or more other purchasers of the seller.

F. *Respondents* shall mean Ethyl Corporation and E.I. DuPont de Nemours and Company, their [3] successors and assigns, and their officers, agents, representatives and employees, acting directly or indirectly, through any corporation, subsidiary, division or other device, individually or in combination.

### II

*It is ordered,* That respondents, in connection with the sale or distribution of lead-based antiknock compound in the United States, shall forthwith cease and desist from:

A. Publishing, distributing or communicating in any manner notice to any person outside the company, other than persons under contract in connection with marketing or sales, concerning any change or modification in the list price of lead-based antiknock compound in advance of the period contractually required for advance notice to customers.

B. Entering into a contract for the sale or delivery of lead-based antiknock compound with any customer containing a most favored nation agreement; or maintaining or complying with a most favored nation agreement in any contract for the sale or delivery of lead-based antiknock compound.

*Provided,* That nothing in subpart A above, shall be construed to prohibit any respondent from (1) conveying to an actual or potential customer the information necessary to respond in good faith to a request to bid on or engage in negotiations regarding the purchase of any lead-based antiknock compound; (2) contracting to sell any lead-based antiknock compound at a price determined pursuant to such bid or negotiation which is effective on a specified future date subject to neither contingency nor condition; or (3) conveying information in compliance with any order, or in connection with participation in any proceeding, of a court, legislative body or administrative agency. [4]

III

*It is further ordered,* That whenever a respondent offers a delivered price to a customer for the purchase of lead-based antiknock compound, said respondent shall offer the customer the option of a point of origin price at the respondent's production facility from which shipment is to be made, and at the option of any actual or potential customer:

A. Allow any customer to arrange or furnish transportation for any purchased lead-based antiknock compound from the respondent's production facilities; or

B. Offer a separately-stated price for transportation furnished or arranged by the respondent.

IV

*It is further ordered,* That each respondent, individually, shall forthwith make its lead-based antiknock compound sales contracts and other agreements consistent with this Order.

V

*It is further ordered,* That nothing contained in this Order shall be interpreted as prohibiting a respondent when acting individually, (1) from establishing the price at which, and selecting the customers to which, it shall sell; or (2) from selling at a point of origin or delivered price established in good faith to meet the equally low price of a competitor. No [5] pricing practice engaged in by a respondent shall be deemed immune or exempt from the antitrust laws by reason of anything contained in this Order.

VI

*It is further ordered,* That each respondent shall forthwith deliver a copy of this Order to all present and (for a period of ten years from the entry of this Order) future personnel, agents and representatives of respondents having sales, distribution or policy responsibilities regarding lead-based antiknock compound, and each respondent shall forward a copy of this Order to each of its purchasers during the past twelve months of any lead-based antiknock compound in the United States.

VII

*It is further ordered,* That each respondent notify the Commission at least thirty (30) days prior to any proposed change in the corporate respondent such as dissolution, assignment or sale resulting in the emergence of a successor corporation, the creation or dissolution of subsidiaries, or any other change in the corporation which may affect compliance obligations arising out of this Order.

VIII

*It is further ordered,* That each respondent shall, within sixty (60) days after service upon it of this Order, file with **[6]** the Commission a report, in writing, setting forth in detail the manner and form in which it has complied with this Order and such additional reports thereafter as the Commission may require.

Chairman Miller dissented. Commissioner Douglas did not participate.