Spring 2005

Evaluating the Risks of Increased Price Transparency

Maurice Stucke

Evaluating the Risks of Increased Price Transparency

BY MAURICE E. STUCKE

COURTS AND ANTITRUST ENFORCERS continue to grapple with the issue of when increased price transparency is good or bad for consumers.[1] On the one hand, the model of perfect competition assumes that buyers will have full information on prices and product characteristics, and the model equilibrium predicts uniform and competitive prices for comparable goods. With the Internet, greater price transparency may reduce the buyers' search costs in finding the best deal, whether it be on airline tickets, bunk beds or rock climbing gear. It may reduce the sellers' ability to price discriminate. Consequently, courts may be reluctant to restrict this free flow of information in the marketplace. Its dissemination, observed the Supreme Court, "is normally an aid to commerce"[2] and "can in certain circumstances increase economic efficiency and render markets more, rather than less, competitive."[3] Indeed, concerted action to reduce price transparency may itself be an antitrust violation.[4]

On the other hand, in more concentrated markets, information exchanges and increased price transparency can have anticompetitive effects. Competitors may announce their intentions with respect to future prices (such as signaling a price increase or announcing that they will discontinue discounts, and charge only the publicly posted list price). Customers would thus know what they and others will pay for that product. But competitors through these communications may accomplish two things: first, reduce the uncertainty in negotiating a supracompetitive price and second, secure effective means to police and punish any cheating.

To confuse matters, the state of the law on this issue, as the Second Circuit recognized in *Todd v. Exxon Corp.*,[5] was not always so clear. Nor is it clearer today, given several difficult issues. The first issue for the courts is distinguishing between unilateral conduct and collusion. Courts generally recognize that in an oligopoly, each firm may set its price based partly on strategic considerations regarding its competitors' behavior.[6] As a result, noted the Court in *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*,[7] these firms might set their prices at "a profit-maximizing, supracompetitive level by recognizing their shared economic interests and their interdependence with respect to price and output decisions." For example, with the advent of the Internet, competitors may respond quicker than customers to price discounts and adjust prices downward to prevent any loss of customers. Such rapid dissemination of pricing information to the marketplace may chill future discounting and foster supracompetitive pricing.[8] But even if prices are significantly above the competitors' marginal costs, then what? This supracompetitive pricing, as some courts expressed, may be undesirable.[9] Perhaps, in some circumstances, it may be prevented through effective enforcement under Section 7 of the Clayton Act.[10] But supracompetitive pricing, absent an agreement, does not violate Section 1 of the Sherman Act.

A second difficulty is the question of the appropriate remedy. If the competitors unilaterally determine their own prices and have not taken any additional steps among themselves to foster this supracompetitive pricing then, even if the court could find a violation, there is little it can do, other than regulate pricing. And courts, as the Ninth Circuit warned in *Petroleum Products*, "generally are unsuited to act as rate-setting commissions."[11] The courts simply are ill-equipped to serve as traffic cops directing competitors' unilateral behavior. Ultimately, neither the courts nor antitrust enforcers can eliminate such coordinated interaction.

But if the competitors take additional observable steps to facilitate this supracompetitive price (such as exchanging competitively sensitive information), and if these steps lack a legitimate procompetitive justification, then the court may have a workable remedy.[12] By targeting these facilitating practices, such as the exchange of competitively sensitive information, courts may make such tacit coordination more difficult to achieve. The courts can deem the information exchange a "plus" factor if plaintiff alleges a per se illegal agreement to fix prices; alternatively, the plaintiff can allege, and the court may consequently find, that any agreement among competitors to exchange information, by itself, is anticompetitive under Section 1's rule of reason standard.[13]

Given the pro- and anticompetitive aspects of increased price transparency, however, a third difficult issue for the courts is determining when, and under what circumstances,

Maurice E. Stucke is an attorney at the Antitrust Division of the U.S. Department of Justice. The views expressed in this article are the author's own and do not purport to reflect those of the U.S. Department of Justice.

the exchange of pricing or other competitively sensitive information should raise antitrust concerns. Under either a "plus" factor or rule of reason analysis, courts generally appear more sensitive to:

- The exchange of information among competitors pursuant to an agreement, rather than unilateral activity,
- Private communications among competitors of nonpublic pricing information, rather than the public dissemination of general pricing information,
- The exchange of detailed information regarding current or future prices or output, rather than of older, aggregated price and supply data, and
- The exchange of information among oligopolists rather than in unconcentrated industries.[14]

But these distinctions do not always hold true. Some courts, as the dissent noted in *Blomkest Fertilizer, Inc. v. Potash Corp. of Saskatchewan, Inc.*, would appear to permit private communications between competitors regarding the verification of prices, which may have no redeeming value in informing customers and little purpose other than facilitating price coordination.[15] Other courts, as in *United States v. Container Corp. of America*,[16] would not. The announcement of future prices in a concentrated industry was legal in *E.I. du Pont de Nemours & Co. v. FTC*,[17] but challenged in *United States v. Airline Tariff Publishing Co.*[18] Some courts focus on whether the competitors' employees who discussed the commercially sensitive information were lower- or upper-level officials.[19] Others question or ignore such distinctions.[20] Consequently, how does counsel advise a client of the antitrust risks, both generally and specifically, relating to these practices?

Which Risk Category Applies

In assessing the antitrust risks of information exchanges, it is helpful to focus on two points: first, what is the information's value in promoting efficiency in the marketplace and, in particular, what are the benefits to the firm's and its competitor's consumers; and second, what is the likelihood that disseminating the information would facilitate tacit collusion. Using these two points, three categories of antitrust risks emerge from the case law: green light (low risk); red light (high risk); and yellow light (medium risk).

1. Green Light: If the information will likely promote efficiency in the marketplace, is valuable to customers, and is unlikely to facilitate tacit collusion with the company's competitors, then its public dissemination is unlikely to be anticompetitive.

This green-light scenario occurs when the affected marketplace is not susceptible to tacit collusion because of any of the following factors: many competitors, low entry barriers, or other factors (such as the affected products' or services' heterogeneous grades, quality, features, or designs) that make agreeing to and policing any supracompetitive price very difficult.[21] If any of these factors are present, there is less risk that increasing price transparency would facilitate collusion. In short, the competitors may have the commercially sensitive information, but so what? If one competitor unilaterally signals a supracompetitive price increase, it is unlikely, for various market dynamics, that others would follow. Even if they did follow, easy entry—aided by the increased price transparency—may reinvigorate competition and defeat any supracompetitive price increase.

Another reason for the low antitrust risk is that, without transparency, where there are many sellers, buyers may have high search costs to identify the lowest-priced seller. Increased price transparency thus may make it easier for buyers to compare prices and bargain shop, reducing their search costs. It may reduce price dispersion, without necessarily increasing the product's average retail price.[22] Increased transparency may also promote efficiency in the sellers' market, for example, by informing sellers on decisions to increase capacity.[23]

It is important to note, however, that low or moderately concentrated industries, as measured under Section 1.51 of the Horizontal Merger Guidelines,[24] do not automatically immunize all information exchanges. As discussed below, if competitors exchange information directly among themselves or pursuant to some agreement, then the courts have not ruled out antitrust liability.[25] Moreover, even in this green-light category, plaintiff retains its trump card of establishing anticompetitive effects from specific forms of information exchanges.

2. Red Light: If the information is not provided or valuable to the company's and its competitors' customers, or is not likely to promote overall efficiency and is likely to (or in fact did) promote tacit collusion, then its dissemination, while not per se illegal, carries a high risk of being deemed anticompetitive.

One such example is where the information sharing is asymmetric—tilting largely or entirely toward the competitors. Why would competitors share a future price increase among themselves exclusively (or before announcing it publicly)? One possibility is to avoid the risk of losing customers as they negotiate through successive communications about how much to increase prices (or to decrease them, to threaten discounters). Moreover, by voluntarily sharing detailed transactional information with each other, the competitors can effectively police the price increase and detect any cheating.

The customers, on the other hand, stand little, if anything, to gain by this increased price transparency among competitors. They are still largely in the dark about the future price increase (and thus cannot effectively adjust their purchases) or the prices that others have paid (and thus cannot leverage a better price with this information). It is questionable then how the marketplace is rendered more efficient and competitive by such asymmetric exchanges.[26]

Todd v. Exxon illustrates the risks of such asymmetric exchanges. There, according to the plaintiff's complaint, the fourteen major companies in the integrated oil and petrochemical industry regularly met and shared detailed information regarding the compensation paid to their nonunion managerial, professional, and technical employees.[27] The defendants allegedly used this information in setting these employees' salaries at artificially low levels. The district court granted the motion to dismiss, and the Second Circuit reversed.

The Second Circuit began its analysis by examining whether the defendants' market was conducive to collusion.[28] After concluding that it was, the court observed that the price transparency was biased almost entirely to the defendants, with no discernible benefit to the affected managers.[29] This was not a case, as is discussed below in the yellow-light section, where the salary and bonus information was sufficiently aggregated and then posted on the Internet for all prospective and current managers to peruse. Publicly disseminating such aggregated information, noted the Second Circuit, could have mitigated the anticompetitive effects (if any), enhanced market efficiency, and lessened the antitrust risks to the defendant companies.

A second red light scenario involves commercially sensitive information that, although publicly available, is of little or no value to customers but is very helpful in enabling the competitors to arrive at a supracompetitive price. As an example, in *Petroleum Products*, the defendant oil companies publicly announced, at times in advance of the effective date, the discounts (or decisions to withdraw discounts) to their franchisee gasoline stations.[30] The public dissemination of the discount information was of little value to the defendants' franchisees or the end consumer. The franchisees could not shop around for the best oil prices: they could only purchase from their franchisor. Nor did the consumers care what the gas station paid for the gasoline. They cared only about the retail price. The purpose and effect then of publicly announcing changes in discounts to the franchisees were, as several defendants' executives admitted, to quickly inform their competitors of the price change, in the express hope that these competitors would follow the move and restore their prices. Without such transparency, the other defendants might not have readily detected one defendant's withdrawal of its discount and followed accordingly, because the individual branded gas stations' retail prices varied considerably.[31]

A third red light scenario is where the actions generally make little economic sense apart from facilitating collusion. For example, the competitors may announce to the public their intentions to abide strictly by their published list prices and refrain from discounting. Of course, they can continue to cheat. But if the competitors mutually agree to impose on themselves some mechanism through which this policy is verifiable (such as disclosing on their Internet sites detailed transactional information so that each competitor can readily detect any cheating by the others), then how do the consumers benefit? They may have a psychic benefit knowing that no one else is getting a better deal. But they, in turn, may be deprived of a better deal.

Confessing price cutting when one need not do so makes economic sense in the context of a cartel policing against price cutting, as two cases illustrate. In *Sugar Institute*, the competitors, through the Institute, agreed to sell their refined sugar only on the prices, terms, and conditions that they announced in advance of the sale.[32] The key feature that troubled the Court was not the announcements of future prices, but the competitors' voluntary imposition of adherence, without deviation, to these publicly announced future terms, conditions, and prices. The purpose of this increased price transparency was to facilitate coordination in the face of excess capacity—namely, as defendants admitted, the abolition of "vicious and discriminatory system of secret concessions."[33]

Similarly, in *United States v. General Electric Co.,*[34] the competitors' attempt to facilitate coordination and reduce incentives to cheat, without any offsetting consumer benefits, resulted in more antitrust trouble. In 1962, GE along with two other companies pleaded guilty to fixing the prices of turbine generators. Pursuant to the United States's parallel civil action, they entered into a decree, which in part enjoined them from communicating pricing information to one another until after this information has been released generally to the trade. Prices declined for several years as defendants discounted off the list prices.[35]

To halt this decline, GE, the market leader, published its pricing books, formulas, and multipliers for these complex and customized products, provided examples of how it would calculate its bid price, and published its outstanding orders and its price quotations. GE also announced its intention not to discount, and its price protection clause—if it lowered its price for a particular customer, then it would also give the identical discount to any buyer within the past six months upon request. This assured GE's competitor that it would not give its customers secret discounts without incurring a substantial penalty. Westinghouse quickly matched GE's new pricing policies, and thereafter GE's and Westinghouse's pricing in the sale of turbine-generators for fossil fuel power plants was the same, with little or no discounting or negotiations.[36]

Unlike *Sugar Institute*, the Antitrust Division had no direct evidence of an agreement between the defendants to abide by the published prices, or any evidence of covert or direct communications between the defendants. What distinguished this case from conscious parallelism, noted the Division, was that these proactive steps made little economic sense apart from facilitating collusion, which, as the defendants' internal documents revealed, was their aim.[37]

3. Yellow Light: If the commercially sensitive information is valuable to the customers and may promote efficiencies in the marketplace but may also facilitate tacit collusion, then its dissemination entails both pro- and anticompetitive elements.

This by far is the most difficult line to draw. Ultimately, the antitrust risk will depend on whether the information exchange and price transparency tilt more to the customers' or competitors' advantage. The more the price transparency is supported by valid (procompetitive) business justifications, the lower the risk. In balancing these benefits and risks and determining the potential antitrust liability, counsel should consider the following five questions.

Why Is the Client/Competitor Providing this Information? The antitrust risks are lessened to the extent the client's customers request or rely upon this commercially sensitive information, the information is narrowly tailored for that purpose, and no comparable and less harmful alternatives exist. Conversely, the antitrust risks increase to the extent the communications are intended more for the client's competitors to assist them in tacitly colluding.

One example of potentially risky behavior is what economists label "cheap talk," namely, communications that do not commit competitors "to a course of action—for example, announcing a future price increase, but leaving open the option to rescind or revise it before it takes effect."[38] A price leader risks losing customers by initiating a price increase without its competitors following. By making a future price increase non-binding, the price leader can test whether its rivals will follow. If they do, the price increase can go into effect. If not, the price leader can rescind the price increase, generally with little risk of lost business. If the new price is dependent on multiple factors (such as a competitor's raising its price in another market), then each competitor must be able to signal to the others its intentions with respect to each parameter. This cheap talk—through successive communications—can facilitate the competitors' reaching a supracompetitive price, generally with little risk of lost sales to one another.

But announcements of future nonbinding price increases are not inherently anticompetitive, particularly where they are sufficiently valuable to buyers in their financial and purchase planning. In *Ethyl*, the price leader at times rescinded or modified the announced price increase if its competitors did not follow.[39] Moreover, the Commission concluded that the industry was noncompetitive, with highly uniform pricing (and price changes), limited discounting, stable market shares, and rising prices (in excess of marginal cost), despite excess capacity and sluggish demand. The Second Circuit, however, in vacating the FTC's order limiting these announcements, found that this practice of announcing price increases in advance of their effective date was valuable to the defendants' buyers in their financial and purchase planning. Moreover, it did not appear pretextual: one of the defendants initiated this practice when it was the sole producer, well before the other competitors entered the industry. If the defendants had been unable to come forward with an independent business justification for their adoption of these practices, the court would have been more receptive to the Commission's argument.[40]

Similarly in *Reserve Supply Corp. v. Owens-Corning Fiberglas Corp.*, the court did not condemn the defendants' practice of announcing price increases for their insulation thirty to sixty days before the price's effective date.[41] Many of the defendants' customers (including the plaintiff) required advance notice of any price increase. They either would resell the insulation to other customers, or bid on building contracts well in advance of construction. Thus, this lead time served an important purpose in the industry. Moreover, the widespread use of discounts in this industry, noted the court, would make this an awkward facilitator of tacit collusion.

On the other hand, if cheap talk is combined with activities that are geared primarily toward facilitating tacit collusion and that provide information that is unreliable, misleading, or not useful for the customers, then it carries greater antitrust risks. For example, in the *Airline Tariff Publishing* case, the United States alleged that the defendant airlines used their computerized fare dissemination services to freely negotiate among themselves supracompetitive fares in multiple markets.[42] No one questioned that the defendants' computerized fare dissemination system had a procompetitive purpose in supplying travel agents with basic information about the airline fares for specific routes. But the antitrust risks arose when the defendant airlines also used this system as a forum to exchange information that was of limited or no use to consumers but was important to the other airlines in communicating and agreeing upon supracompetitive fares.

One example of potentially risky behavior is what economists label "cheap talk," namely, communications that do not commit competitors "to a course of action . . . "

The Division asserted that the defendant airlines essentially signaled their concurrence or disagreement to entreaties to raise fares and/or eliminate discounted fares through the First and Last Ticket Dates.[43] Essentially, the defendant airlines communicated among themselves relatively costless proposals to change fares through these footnote designators with First and Last Ticket Dates. They employed sophisticated computer programs to process all this fare information, which enabled them to monitor and analyze their competitors' responses to current and future fares on certain routes. These negotiations at times would link fare changes among different routes, and continue for several weeks until all the airlines had indicated their commitment to the fare increases by filing the same fares in the same markets with the same First Ticket Date. Likewise, the airlines used the Last Ticket Dates in connection with the footnote designators to communicate proposals to eliminate discounted fares currently being offered to consumers. Not only did this computerized fare dissemination system enable the defendants to negotiate supracompetitive fares, it importantly enabled them to verify that such fares would stick, and signal retaliatory measures against any airline that did not go along with specific fares for specific routes.[44]

But while this information exchange greatly facilitated tacit collusion, the Division noted, it was of little benefit to consumers.[45] Some defendants disputed this claim, submitting numerous affidavits from travel agents praising the airlines' policy of advanced notice, and arguing that such signaling was employed, as in *Ethyl*, in geographic markets where only one airline had market power.[46] But the travel agents did not have access to some of this information (such as the footnote designators), and thus could not readily determine all of the airlines' contemplated changes to fares. Nor could the agents (unlike the airlines) readily determine the relationships between proposed fare increases for certain routes and the with elimination of discounted fares on other routes.[47] Moreover, the pricing information, asserted the Division, was unreliable and misleading, in particular because the airlines changed the ticket dates often.[48]

The Division's consent decrees attempted to shift the lever toward promoting information of use to the consumers. The decrees did not prohibit the posting of air fare pricing; rather, the defendants were prohibited from posting fare information of little significance to the consumer, namely Last Ticket Dates, with the exception of those used in advertised promotions, and First Ticket Dates.[49] Thus, the airline's posted fares would have some significance for the consumer, as the travel agents could immediately purchase the ticket that day for that fare. Likewise, by restricting the airlines from using Last Ticket Dates except under advertised commitments, the decrees ended the "costless communication" among the defendants about which discounts should be removed.[50] The decrees did not eliminate the possibility of tacit coordination.[51] Rather, they made such negotiations costlier for the airlines by imposing some risk on the price leader.[52] Moreover, when one airline recently violated this decree by signaling a price increase through a prohibited mechanism, it resulted in a $3 million civil penalty.[53]

What Type of Information Is Being Exchanged? It is often stated that exchanging older price information is less likely to be anticompetitive than exchanging information on current or future prices.[54] But this distinction should not be relied on too heavily. Information of completed transactions, for example, may be of little or no benefit to customers, but may assist competitors in monitoring, and retaliating against, any price concessions. The more specific the pricing information, the more likely the competitors can detect cheating. Thus, as the dissent noted in *Blomkest*, the fact that the shared information among competitors involved completed sales and not future sales does not legitimize it.[55]

On the other hand, future pricing information may be quite important to customers in their financial planning. The fact that it is prospective should not increase its antitrust risks over completed transactional data that is of little use to customers. In essence, the line should not be simply drawn between future and past pricing data. Counsel will instead want to inquire how this information: (1) benefits customers and market efficiency and (2) facilitates tacit collusion.

Sharing historical price, supply, or cost data may enhance efficiency by enabling each competitor to benchmark its performance to an industry standard.[56] For such exchanges, counsel can steer clients to the green safety zone by applying, to the extent possible, Section 6.A of the Health Care Guidelines,[57] by having:

- A third party (e.g., a purchaser, government agency, consultant, academic institution, or trade association) collect the data,
- The information provided by the participants be based on data more than three months old,
- At least five providers report data upon which each disseminated statistic is based, with no individual provider's data representing more than 25 percent on a weighted basis of that statistic, and
- Any information disseminated be sufficiently aggregated such that it would not allow recipients to identify the prices charged or compensation paid by any particular provider.[58]

Competitors should also refrain from discussing the exchanged information with each other, or from assuring each other that they will derive their prices from the exchanged data.

Could Any Lesser Anticompetitive Means Achieve Comparable Procompetitive Benefits? The antitrust risks increase if the competitors share more information than customers require or request, or than is required to promote market efficiency. Can the procompetitive benefits be achieved through less anticompetitive measures? For example, is the company

- Directing the communications to the extent feasible to the customers? If, as in *Petroleum Products*,[59] customers were individually notified concerning changes in prices or discount levels, courts may be more suspicious of a change (public posting of such information) that does not benefit consumers. Granted a competitor should not be penalized for employing new, cost-effective means to announce its prices (such as posting them on its Web site), if that benefits its customers. But in certain industries customers may easily receive information of future prices directly.
- Providing as much detail as customers require, and limiting the amount of extraneous chatter? Customers may benefit from information about future price increases, but not necessarily from the client's new "disciplined" approach to restoring "price integrity."
- Announcing future price increases only as far in advance as customers require? If customers generally require two-weeks advanced notice, announcing price increases three months in advance may do little for customers (except stockpile to the extent feasible) but

enable multiple attempts by competitors to signal to each other a mutually acceptable price increase.

What Discernible Anticompetitive Impact Does this Pricing Exchange Have on the Marketplace? Although this is the key question, it is often a hard one to answer. In an oligopoly, one is likely to see interdependent pricing. Moreover, parallel pricing is ambiguous, as both competitive and concentrated markets may evidence it.

More informative perhaps are natural experiments, such as pricing behavior during periods when such information was not exchanged. Justice Fortas, in his concurrence in *Container Corp.*,[60] noted that in some instances when various defendants ceased exchanging pricing information, exceptionally sharp and vigorous price reductions resulted.

Even if a natural experiment reveals that the competitors' prices shifted, that alone may be insufficient to find liability. When customers and competitors struggle in the darkness of limited price transparency, prices may be dispersed; after greater transparency, individual competitors' prices may shift either upward or downward. For example, some Internet retailers may reduce or increase their price for a particular table saw after determining their competitors' prices on Froogle. This may not necessarily harm competition, particularly if the average price level does not increase. As Justice Holmes noted in his dissent in *American Column & Lumber*,[61] a combination to distribute knowledge, notwithstanding its tendency to equalize, not necessarily raise prices, is not an unreasonable restraint of trade. On the other hand, if after the exchange of commercially sensitive information, the average retail price level increases significantly or stabilizes (despite an increase in capacity or decrease in the price of a significant cost input), this would invite closer antitrust scrutiny.

Are the Client and Its Competitors Undertaking Any Additional Overt Actions, from Which One May Infer a Per Se Illegal Price-Fixing Scheme? This article focuses on the antitrust risks of information exchanges. But the antitrust risk may depend on other "plus" factors. This final question avoids the trap, as Judge Posner warned in *In re High Fructose Corn Syrup Antitrust Litig.*,[62] of supposing that if no single item of evidence presented by the plaintiff points unequivocally to conspiracy, then the evidence as a whole cannot defeat summary judgment. Thus, in assessing the antitrust risks, counsel should not wipe the slate clean after examining the exchange of commercially sensitive information. Rather, counsel may wish to tally this risk in the context of the antitrust risks flowing from the client's other actions.

Conclusion

There is no bright-line rule for when increased price transparency would violate the antitrust laws. Nor can there be one, given the fact-intensive inquiry and the varying likelihood of pro- and anticompetitive effects. But in assessing the antitrust risk level arising from the dissemination of competitively sensitive information, the focus should be primarily on the information's value to the customers and in promoting overall market efficiency, and next, on the likelihood that sharing such information would promote tacit collusion. It is important to understand whether, and to what degree, consumers are likely to benefit from the information's disclosure. If not, there is a substantial risk that the information is being disclosed for anticompetitive reasons. ■

---

1 For a global perspective, see OECD's Directorate for Financial, Fiscal and Enterprise Affairs, Committee on Competition Law & Policy, *Competition Policy Roundtable: Price Transparency* (Sept. 11, 2001), *available at* http://www.oecd.org/dataoecd/52/63/2535975.pdf [hereinafter OECD DAFFE/CLP (2001) 22]. Price transparency refers to the costs in time and money to discover actual transaction prices: the lower the costs, the more transparent the market. *Id.* at 9.

2 Sugar Institute, Inc. v. United States, 297 U.S. 553, 598 (1936).

3 United States v. United States Gypsum Co., 438 U.S. 422, 441 n.16 (1978); *see also* RICHARD A. POSNER, ANTITRUST LAW 160 (2d ed. 2001) (generally, the more information sellers have about their competitors' prices and output, the more efficiently the market will operate).

4 *See, e.g.*, Press Release, Federal Trade Comm'n, Virginia Board of Funeral Directors & Embalmers, FTC 041-0014 (Aug. 16, 2004), *available at* http://www.ftc.gov/opa/2004/08/vafuneral.htm (board's prohibition on licensed funeral directors advertising discounts deprived consumers of truthful information); Press Release, Federal Trade Comm'n, Arizona Automobile Dealers Association, FTC C-3497 (Feb. 25, 1994), *available at* 1994 WL 184107 (trade association illegally agreed with members to restrict nondeceptive comparative and discount advertising and advertisements concerning the terms and availability of consumer credit); OECD DAFFE/CLP (2001) 22, *supra* note 1, at 183, 185–86 (citing examples of U.S. enforcement agencies seeking to increase price transparency); *but see* InterVest, Inc. v. Bloomberg, L.P., 340 F.3d 144 (3d Cir. 2003) (lack of price transparency in bond market not illegal if consistent with unilateral conduct).

5 275 F.3d 191, 198 (2d Cir. 2001), *transferred, upon remand*, by 206 F. Supp. 2d 1374 (J.P.M.L. 2002).

6 *See, e.g.*, Clamp-All Corp. v. Cast Iron Soil Pipe Inst., 851 F.2d 478, 483–84 (1st Cir. 1988); ROBERT S. PINDYCK & DANIEL L. RUBINFELD, MICROECONOMICS 431 (2d ed. 1992).

7 509 U.S. 209, 227 (1993).

8 If competitors react more quickly than a sufficient number of buyers, the discounter, as a result, will not increase its sales at its competitors' expense. Any incremental sales will be to the extent that market demand increases at the lower price point (which may be desirable to a lower-cost discounter with excess capacity). If demand, is relatively inelastic, however, then the discounter stands to gain little if anything. The discounter lowers its price, its competitors follow, all of them make less as a result, and no one (other than the consumer) wins.

9 *See In re* Coordinated Pretrial Proceedings in Petroleum Products Antitrust Litig., 906 F.2d 432, 448 (9th Cir. 1990); *Clamp-All*, 851 F.2d at 484; *but see* Williamson Oil Co., Inc. v. Philip Morris USA, 346 F.3d 1287, 1300 (11th Cir. 2003) (implying that mistaken inferences regarding conscious parallelism within oligopoly may chill procompetitive market forces).

10 One purpose of Section 7 is to prevent mergers, after which the industry is much more susceptible to tacit collusion. See Brown Shoe Co. v. U.S., 370 U.S. 294, 317–18 n.33 (1962) (noting that the Senate committee wished to make it clear that the Clayton Act was "not intended to revert to the Sherman Act test" but "to cope with monopolistic tendencies in their incipiency and well before they have attained such effects as would justify a

Sherman Act proceeding"); U.S. Dep't of Justice & Federal Trade Comm'n, Horizontal Merger Guidelines § 2.1 (1992, revised 1997), *reprinted in* 4 Trade Reg. Rep. (CCH) ¶ 13,104 [hereinafter Horizontal Merger Guidelines].

[11] 906 F.2d at 445.

[12] *See, e.g., id.* at 448; Jonathan B. Baker, *Identifying Horizontal Price Fixing in the Electronic Marketplace*, 65 Antitrust L.J. 41, 48 (1996) (characterizing these additional steps as "forbidden process" of negotiation and exchange of assurances).

[13] *Todd*, 275 F.3d at 198; *Petroleum Products*, 906 F.2d at 447 n.13.

[14] *United States Gypsum*, 438 U.S. at 441 n.16; *Todd*, 275 F.3d at 211; E. Thomas Sullivan & Jeffrey L. Harrison, Understanding Antitrust and its Economic Implications § 4.10, at 102 (2d ed. 1994).

[15] 203 F.3d 1028, 1047 (8th Cir. 2000).

[16] 393 U.S. 333 (1969).

[17] 729 F.2d 128, 134 (2d Cir. 1984) (*Ethyl*).

[18] Civ. Action No. 92-2854 (SSH) (D.D.C. 1992) (consent decree).

[19] *See In re* Baby Food Antitrust Litig., 166 F.3d 112, 125 (3d Cir. 1999) (evidence of what the court characterized as sporadic exchanges of shop talk among field sales representatives insufficient to survive summary judgment).

[20] *See Petroleum Products*, 906 F.2d at 453 (while defendants' contended that employee was too low level to be of significance, court saw no reason for concluding that such information gathering cannot be delegated to subordinates); 6 Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law ¶ 1435d, at 257 n.16 (2d ed. 2000) (commenting that evidence in *Baby Food* seemed highly suspicious, and with respect to "chit chat," that one would hardly expect a great deal of formality in such communications).

[21] *See, e.g., Brooke Group*, 509 U.S. at 238 (tacit coordination is facilitated by stable market environment, fungible products, and small number of variables upon which competitors need to focus); *United States Gypsum*, 438 U.S. at 441 n.16 (among factors courts consider is structure of industry involved); *Sugar Institute*, 297 U.S. at 600 (same); Horizontal Merger Guidelines § 2.1; OECD DAFFE/CLP (2001) 22, *supra* note 1, at 10.

[22] See Richard A. Posner, *Information and Antitrust: Reflections on the* Gypsum *and* Engineers *Decisions*, 67 Geo. L.J. 1187, 1194–95, 1197 (1978–79).

[23] Maple Flooring Mfrs. Ass'n v. United States, 268 U.S. 563, 582–83 (1925) (disseminating information that fosters rational business decisions is procompetitive); American Column & Lumber Co. v. United States, 257 U.S. 377, 418–19 (1921) (Brandeis, J., dissenting) (same); Int'l Healthcare Mgmt. v. Hawaii Coalition for Health, 332 F.3d 600, 608 (9th Cir. 2003) (same); Posner, Antitrust Law, *supra* note 3, at 86–87, 163–69.

[24] *Supra* note 10.

[25] *See, e.g., Container Corp.*, 393 U.S. at 334–38 (condemning informal agreement to exchange price information among 18 firms controlling market with low entry barriers); *Todd*, 275 F.3d at 208 (fact that industry not concentrated under Merger Guidelines does not preclude the possibility of collusive activity); *Petroleum Products*, 906 F.2d at 444 (same).

[26] *See In re* Flat Glass Antitrust Litig., 385 F.3d 350, 367, 369 (3d Cir. 2004) (evidence that one competitor faxed another competitor PPG copy of planned future increase that it had not announced publicly, and PPG announced an identical price increase before others followed with identical price increases); OECD DAFFE/CLP (2001) 22, *supra* note 1, at 185 (one factor FTC workshop identified on antitrust risks of B2B is the speed of the information sharing and whether competitors receive information before buyers); 6 Areeda & Hovenkamp, *supra* note 20, ¶ 1435g, at 265 (such information exchanges have no function other than facilitating coordination).

[27] *Todd*, 275 F.3d 191.

[28] 275 F.3d at 199–212. Given the stage of the proceedings—an appeal of a 12(b)(6) motion—the Second Circuit was unwilling to preclude the possibility of coordination in an industry with fourteen competitors, which accounted for 80 to 90 percent of the industry's revenues and workforce. Extremely telling for the court was defendants' coordinated effort to homogenize the affected market through sophisticated comparison techniques. Employee classifications can vary from firm to firm. But defendants, as plaintiff alleged, employed sophisticated formulas and benchmarks to enhance the comparability of different positions, and make them "fungible" for comparison purposes with their competitors. *Id.* at 210.

[29] Aside from conducting surveys every two years comparing past and current salary information for these managers, defendants updated this information in the off years with the grade average salaries since the last survey. Defendants also allegedly exchanged detailed salary information and future budget information, participated at least three times per year in meetings at which current and future salary budgets were discussed, and assured one another that they would primarily use this data in setting these employees' salaries. *Id.* at 211–13.

[30] 906 F.2d at 445.

[31] *Id.* at 446. The Ninth Circuit determined that the moderately concentrated industry structure did not preclude the likelihood of tacit collusion. While the interdependent pricing by itself was insufficient for an antitrust violation, held the Ninth Circuit, the defendants' overt actions to facilitate such pricing was sufficient for a violation. This would be different, noted the court, if the pricing information had real value to the consumer. *Id.* at 448 n.14; *see also* Jung v. Ass'n of American Med. Colleges, 300 F. Supp. 2d 119, 167–68 (D.D.C. 2004) (fact that information publicly disseminated does not immunize it, given prospective residents' inability to use information).

[32] 297 U.S. at 582.

[33] *Id.* at 576. Another factor contributing to the maintenance of pricing levels, found the Court, was the dissemination among the refiners of statistical information, which was withheld from the buyers. *Id.* at 596–97. Interestingly, the Court would have allowed the defendants to immediately disclose the prices and terms of closed transactions.

[34] Civ. Action No. 28228, 1977-2 Trade Cas. (CCH) ¶ 61,659 (E.D. Pa. Sept. 16, 1977) (consent decree).

[35] Pl.'s Mem. in Support of a Proposed Modification to the Final Judgment Entered on Oct. 1, 1962 Against Each Def., *filed in* United States v. General Electric Co., Civ. Action No. 28228 (E.D. Pa. Mar. 15, 1977), *available at* 42 Fed. Reg. 17,004, 17,005–06 (1977) [hereinafter Plaintiff's Memorandum].

[36] Plaintiff's Memorandum, 42 Fed. Reg. 17,006. After GE applied this pricing policy to the marketing of turbine generators for nuclear plants in October 1964, the same pattern, noted the Division, emerged in the pricing of those units.

[37] *Id.* at 17,006–07. The defendants settled and modified their earlier consent decree to prohibit, among other things, the public dissemination of any "price signaling" information, e.g., price books or price lists, except in response to a specific inquiry from an actual or potential customer.

[38] OECD DAFFE/CLP (2001) 22, *supra* note 1, at 191–92, citing Joseph Farrell & Matthew Rabin, *Cheap Talk*, 10 J. Econ. Persp., Summer 1996, at 103.

[39] 729 F.2d at 134, 139 n.9.

[40] *Id.* at 140.

[41] 971 F.2d 37, 53–54 (7th Cir. 1992).

[42] United States v. Airline Tariff Publ'g Co., 836 F. Supp. 9, 12 (D.D.C. 1993).

[43] The First Ticket Date was a future date when a fare would become available for purchase. Thus customers could not immediately purchase a ticket at that fare. They would have to wait until the First Ticket Date to buy a ticket at that fare. But the airline was not obligated to sell tickets at that fare on the posted First Ticket Date. Indeed the airlines often changed the First Ticket Date to an earlier or later date or withdrew the fare altogether. Nor was the airline committed to its posted Last Ticket Date, which was a future date when a current fare may no longer be available. Again the airline could change the Last Ticket Date or withdraw the fare altogether. United States v. Airline Tariff Publ'g Co., Civ. Action No. 92-2854 (SSH) (D.D.C. 1992), Competitive Impact Statement, filed Dec. 21, 1992, at 7–8, 16–18 [hereinafter 12/21/92 *ATP* CIS], *available at* http://www.usdoj.gov/atr/cases/f4700/4797.pdf; Competitive Impact Statement, filed March 17, 1994, at 7–8 [hereinafter 3/17/94 *ATP* CIS], *available at* http://www.usdoj.gov/atr/cases/f4800/4800.pdf.

[44] 12/21/92 *ATP* CIS, *supra* note 43, at 9, 12; 3/17/94 *ATP* CIS, *supra* note 43, at 11–13, 18–19.

[45] 12/21/92 *ATP* CIS, *supra* note 43, at 19–20; 3/17/94 *ATP* CIS, *supra* note 43, at 20–21; *see also Airline Tariff Publ'g*, 836 F. Supp. at 13.

46 For an interesting summary of the defendants' arguments and the Division's response, *see* Severin Borenstein, *Rapid Price Communication and Coordination: The Airline Tariff Publishing Case* (1994), *in* THE ANTITRUST REVOLUTION 233, 240–45 (John E. Kwoka, Jr. & Lawrence J. White eds., 2004). Moreover, in approving the first consent decree with the initial settling defendants, the district court found it instructive that during the nine months that the settling airlines were complying with the consent decree, there was little evidence of harm either to these airlines or to the travel agents (which one would expect if the settling airlines were competitively disadvantaged from posting supposedly procompetitive information). *Airline Tariff Publ'g*, 836 F. Supp. at 14.

47 12/21/92 *ATP* CIS, *supra* note 43, at 9.

48 3/17/94 *ATP* CIS, *supra* note 43, at 20; 12/21/92 *ATP* CIS, *supra* note 43, at 19–20. Customers could not even buy tickets at the fares before the posted First Ticket Date. Similarly, it was questionable whether consumers could rely on the Last Ticket Date information. Often the discounted fares were discontinued before the announced Last Ticket Date. In a random sample of the Last Ticket Dates associated with airline fares from approximately 400 large domestic markets, the Division found that more than half of all the Last Ticket Dates were incorrect—the airline discontinued the fare either before or after the posted ticket date. William Gillespie, *Cheap Talk, Price Announcements and Collusive Coordination* at 13–14 (U.S. Dep't of Justice, Economic Analysis Group Working Paper, dated Sept. 7, 1995); 3/17/94 *ATP* CIS, *supra* note 43, at 20.

49 *Airline Tariff Publ'g*, 836 F. Supp. at 12–13 n.7.

50 Gillespie, *supra* note 48, at 14–15.

51 Indeed, according to one account, after the consent decrees, the airlines on a Friday afternoon began announcing many rate increases, which became available for purchase on the agents' computer system Saturday morning. If the competitors did not match the fare increase by Sunday, the airline then would withdraw the rate hike by Sunday evening. Borenstein, *supra* note 46, at 249.

52 Gillespie, *supra* note 48, at 15.

53 Press Release, U.S. Dep't of Justice, Antitrust Div. (Aug. 6, 2004), *available at* http://www.usdoj.gov/atr/public/press_releases/2004/204933.htm.

54 *See, e.g., United States Gypsum*, 438 U.S. at 441 n.16; *Todd*, 275 F.3d at 211–12 (citing cases).

55 203 F.3d at 1047.

56 See Kai-Uwe Kühn, *Fighting Collusion, Regulation of Communication Between Firms*, *in* ECONOMIC POLICY: A EUROPEAN FORUM (April 2001); OECD DAFFE/CLP (2001) 22, *supra* note 1, at 183 (United States recognizing the facilitation of benchmarking as one benefit of increased price transparency).

57 U.S. Dep't of Justice & Federal Trade Comm'n, Statements of Antitrust Enforcement Policy in Health Care § 6.A (Aug. 1996), *available at* http://www.usdoj.gov/atr/public/guidelines/1791.htm [hereinafter Health Care Guidelines].

58 *See, e.g.*, Antitrust Division Bus. Review Letter re: Proposed Lactation Consultant Fee Survey, dated May 25, 2004, *available at* http://www.usdoj.gov/atr/public/busreview/203831.htm (Division would not challenge the collection of fee information for a survey among competitors, which would be collected following the principles outlined in the Health Care Guidelines).

59 906 F.2d at 448.

60 393 U.S. at 340.

61 257 U.S. at 412–13.

62 295 F.3d 651, 654 (7th Cir. 2002).