Roundtable Interview with Joseph Farrell and Carl Shapiro

Editor’s Note: In this interview with The Antitrust Source, Joseph Farrell and Carl Shapiro discuss their views on revisions to the horizontal merger guidelines, pay for delay settlements, and behavioral economics.

Dr. Farrell is the Director of the Bureau of Economics at the Federal Trade Commission. He is at the FTC on leave from the University of California at Berkeley where he is a Professor of Economics and an Affiliated Professor in the Haas School of Business. He served as Deputy Assistant Attorney General and Chief Economist for the Antitrust Division of the U.S. Department of Justice from July 2000 to June 2001. Dr. Farrell’s academic research focuses on competition policy, standard-setting, and patents.

Dr. Shapiro is the Deputy Assistant Attorney General for Economic Analysis at the U.S. Department of Justice Antitrust Division. He is on leave from the University of California at Berkeley where he is the Transamerica Professor of Business Strategy in the Haas School of Business and a Professor of Economics. From August 1995 to June 1996, he served as Deputy Assistant Attorney General for Economics for the Antitrust Division. Dr. Shapiro’s academic research focuses on innovation, patents, intellectual property, network economics, and competition.

The interview was conducted on January 22, 2010, by Editor Elizabeth M. Bailey for The Antitrust Source.

ANTITRUST SOURCE: You both have been doing antitrust and competition policy work for a long time. And you both have served as a Deputy Assistant Attorney General in the Antitrust Division, Carl in the mid-1990s and Joe in the early 2000s. What interested you about serving a second time at one of the agencies?

JOE FARRELL: For me, it was a variety of things. One thing that I am very keen on is to combine consumer protection thinking with antitrust thinking. Another thing I am very interested in is the possible use of the FTC’s ability to help with competition policy in areas that might or might not be narrowly antitrust.

CARL SHAPIRO: In my case, I served for one year from 1995 to 1996. I found the job very interesting and learned a lot. This time around, I have a lot more experience within academia and as a practitioner. I felt that by serving for another stint I could do a lot to help out the team that Christine Varney, the Assistant Attorney General for Antitrust, was forming. It also seemed interesting to me to come at the beginning of an administration, with the setting of new directions that happens at that time.

ANTITRUST SOURCE: How have you seen antitrust evolve over the last ten to twenty years?

SHAPIRO: Well, quite generally we have seen the Supreme Court move to what I would call a more cautious approach to antitrust. The Court has issued a series of decisions in favor of defendants so there has been some shift in the whole of antitrust law. We’ve all observed that. At the same time, looking more narrowly in the area of mergers, I would say there has been more and more emphasis on competitive effects and the underlying economics of mergers, as the strength of the structural presumption has declined. Both of these trends have placed more emphasis on the economic analysis of competitive effects. That happens to be my thing, so there’s a lot of work to be done.
FARRELL: I agree with all of that but I also wrestle with some things that push a little in the other direction. I am a big believer in competition as a means to have a well-functioning economy. I think that means that one should favor and promote competition even where it is not possible, given our present state of economic science, to prove how and how much or even whether it will benefit consumers and efficiency. I think this is what the antitrust laws and competition policy try to say: there really is a place for a presumption in favor of competition as opposed to just upholding it when you can see how it is going to benefit consumers.

As more economics has been put into antitrust analysis—and in most ways that is a long overdue and very beneficial thing—I also think that there is a risk of misperceiving that one will always be able to prove that competition is beneficial, and therefore forgetting about a procompetition presumption.

At the same time, as we try to put more and more sophisticated and better economic analysis into our decision making, I also think we want to remember that there are areas where competition as a presumption is a good idea, as opposed to just trying to figure out what is a good idea in these circumstances. It’s a deep issue that I continue to wrestle with.

ANTITRUST SOURCE: There is an on-going discussing among practitioners in private practice and at the antitrust agencies as to whether the Horizontal Merger Guidelines are due for a revision. As we are having this interview, the agencies have held four of the five workshops scheduled on the subject. What are you hoping to learn from these workshops?

FARRELL: I think that was pretty well expressed in the questions we put out for public comment. One of the things we’ve learned already is that the general consensus of people who have made comments and spoken at the workshops is that the Guidelines could benefit from updating. There have been some dissenting voices but I think that is the general consensus.

SHAPIRO: We have learned a lot already. And there are a number of items where consensus is forming. Assistant Attorney General Christine Varney is going to give a speech at the final workshop, on January 26. At a high level, I would say we have learned that many of our perceptions about gaps between the Guidelines and actual practice are shared outside the agencies. In addition, in a number of areas there seems to be room for significant improvement in updated Guidelines.

FARRELL: As you mentioned earlier, there is a general view that the structural presumption has become less strong and less central. As a matter of law enforcement logic, if that is true, then something has to take its place because otherwise we really are retreating from merger enforcement. I think it is pretty clear, both from being a practicing competition economist and from looking at the merger retrospective literature, that retreating from merger enforcement would not be a good idea.

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1 Additional information on the five workshops associated with the Horizontal Merger Guidelines Review Project is available at http://www.ftc.gov/bc/workshops/hmg/index.shtml.
**ANTITRUST SOURCE**: If the structural presumption is in decline, do you have any thoughts on what should take its place?

**FARRELL**: Some of the things that we look at were raised in the questions for public comment under direct evidence. And as far as unilateral effects are concerned, I think economic science has made a lot of progress since 1992 and we understand a lot better the indicators of likely unilateral effects. I don’t know how much detail one would want to put into Guidelines. That is something that needs to be worked out. But I think we know that diversion ratios, gross margins, and plausible incremental cost efficiencies matter centrally. So I encourage my staff to look at these when the data are available for unilateral effects concerns. And I would like personally to see something in revised Guidelines that reflect that.

**SHAPIRO**: Let me give a little additional context for that. As part of this review process, we have been receiving public comments, we have been holding workshops, we have been internally reviewing our practice and how it compares with the Guidelines. I personally have gone back to read all the different versions of the Guidelines going back to 1968 to see how they have evolved and how the evolution of the Guidelines has been intertwined with changes in merger case law and agency practice.

The eighteen years that have passed since the last revision, other than the 1997 adjustments to the efficiencies section, is the longest spell during which the Guidelines were basically not changed since they were introduced in 1968. You really see a pretty clear evolution. I doubt many people have read the 1968 Guidelines any time recently. They are rather striking by today’s standards. Then 1982 was a big change. You see the ongoing movement towards a more nuanced analysis that gives more and more weight to competitive effects, and then the introduction of unilateral effects in 1992, which generalized the “leading firm proviso” from the 1982 Guidelines. This evolution in practice has continued since 1992.

All of that leaves the 1992 Guidelines out of date in some respects in terms of accurately reflecting how evaluation of competitive effects is done, particularly unilateral effects and price discrimination markets. So those are big areas where it is clear to me that substantial clarification could be made, not changing practice, but articulating what the practice actually is.

**ANTITRUST SOURCE**: There has been speculation that your recent paper on upward pricing pressure will change the way the FTC and DOJ economic staff approach the merger screening process during the first 30 days. Should practitioners expect that the DOJ and FTC will be taking this type of approach as an early step in a merger investigation involving differentiated products?

**FARRELL**: Well, I will tell you that I personally find it helpful to look at gross margins and to look at diversion ratios where the data are available. And sometimes that comes out pretty quickly and sometimes not.

In many cases parties will come in with merger simulations. And the staff’s reaction to merger simulations is generally a little mixed because it is recognized that they capture something of import in thinking about unilateral effects. But it’s also recognized, as is pretty well understood in the published economic literature by now, that there is a fair amount that goes in to the computer program that is not readily visible on the surface and so the question is: What information do you really extract from a merger simulation?

One of the things that Carl and I were trying to do with our paper back in 2008—now recently
revised—was to address what is the robust core of these interesting, but somewhat mysterious, merger simulations.4

SHAPIRO: Let me give an answer that goes in a different direction. One of the things I have done in the ten months since I have been Economics Deputy is to catalog—and this is part of the merger review process—how the economists at the Antitrust Division evaluate unilateral effects. A lot of that involves evaluating pricing effects but there are also cases that involve competitive effects associated with capacity or product selection.

Joe and I emphasized several factors in the research we did on the evaluation of unilateral pricing effects in horizontal mergers before we came to the DOJ and the FTC: diversion ratios, margins, and marginal cost efficiencies. In some fashion or another, these are the ingredients that the economists at the Antitrust Division have been using for this purpose for a long time. This is true whether they are looking at win/loss reports, performing some type of merger simulation, or talking with customers about their first and second choices in a bidding context. Those elements are there. And that is nothing new. This is an area where agency practice has advanced a great deal in eighteen years and could be explained much better in updated Guidelines.

So I would say, “yes,” lawyers and economists who have merger matters before the Antitrust Division that involve unilateral pricing effects with differentiated products should be looking at those elements. And I think they are. Practitioners already know that the Division looks closely at these elements. Of course, there is a great deal of variation from matter to matter in terms of the types of evidence is available and what type of analysis can be performed. But that just serves to emphasize why the Guidelines could helpfully explain the routes of inquiry we follow, the lines we pursue—not as a change of policy but as an articulation of what has been done for some time at the Division.

ANTITRUST SOURCE: How would someone at the agencies obtain the information necessary to calculate diversion ratios and margins in the first thirty days?

SHAPIRO: We often have really rather fragmentary information in the first thirty days. Now, more and more companies are using the pull and refile strategy which gives us more time, so we can do a little more in some cases. But again, the available evidence varies a great deal from case to case.

Information about diversion ratios may come from contacting customers and getting the sense of who they see as the direct competitors. Diversion ratios can also be estimated by using market shares or shares with some group of products as a proxy for diversion ratios. Margins are not that hard to get a first-cut estimate on in some cases. So the information available about diversion ratios and margins during the first thirty days is highly variable across cases and can be fragmentary. However, the same is true for HHIs. Remember, one cannot calculate an HHI until you determine the relevant market, since that defines the universe within which one is measuring. Technically, defining the relevant market requires estimating price increases for a hypothetical monopolist. Once the market is defined, how good are the data in the industry for calculating HHIs? That is the nature of any simple index: there can be difficulty constructing any simple index accurately in that first thirty-day waiting period.

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FARRELL: I would echo that. The question seems to presume that market shares are easy to calculate. Sometimes they are if you know what the market is, but very often there will be vehement disagreement as to what the market is, and the methods that the Guidelines lay out for resolving that disagreement require a fair amount of information. So the idea that it is very quick and easy to calculate market shares and rather challenging and difficult to calculate diversion ratios, I am sure we see cases where it is true, but I don’t think it is any kind of universal.

SHAPIRO: Let me again emphasize something Joe said that is very relevant here. Joe and I, as authors of the paper on upward pricing pressure that you’re asking about, and now as the chief economists of the two antitrust agencies, both believe that different tools apply in different cases. There are plenty of cases where the relevant market actually is pretty clear. Perhaps the merging companies sell a relative homogeneous product, and there may be good data on output.

In such cases, the agency might be able to measure the HHI up front, and the agency might very well give a lot of weight to the HHI, and that’s great. But in other cases, especially those with highly differentiated products, the market boundaries may be unclear and HHIs probably won’t be the best diagnostic in terms of unilateral pricing effects. In those cases, we may well look at other types of evidence and other metrics.

We are looking to use a variety of techniques, depending on which ones are most appropriate and informative regarding the effects we are interested in and which are practical given the information that is available. So I have had some concern to the extent people are saying that Joe or I want to replace one technique with another. That is just not where either of us wants to go. We are talking about using a variety of techniques that are practical and probative.

ANTITRUST SOURCE: I want to ask about merger retrospectives for a moment because that is related to potential revisions to the Horizontal Merger Guidelines. Why do you think there have been relatively few studies assessing how often current merger analysis gets it right?

FARRELL: In a way, your question is best directed at the academic community. When I was in Washington for the first time at the Federal Communications Commission in 1996 and 1997, I was privileged and burdened to also be editing the Journal of Industrial Economics. My co-editors and I made a real attempt to bring together the excess of fascinating and difficult and important problems that we see here in Washington for economists to work on with the large supply of smart economists looking around for things to work on. I remain a little surprised how little came out of that effort.

I am not sure why the academic community hasn’t done more on that, but certainly some work has been done. The Bureau of Economics at the FTC has been a leader starting with a 1984 article by Barton and Sherman, and I would like to see it continue to be a leader. And there was a project, I believe conceived by then Chairman Muris, to do merger retrospectives in the hospital sector that led to an improved understanding of competitive effects of mergers in hospitals. And

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I think that has contributed to what may be a more realistic enforcement environment in hospital mergers these days.

There is a lot of good to be done by merger retrospectives, and we have got a lot of work to do. To the extent that time and resources allow, I am keen to have the Bureau of Economics continue its leadership in that but others are already doing so as well and I hope they will continue to do so.

**SHAPIRO:** Dennis Carlton, my predecessor as Economics Deputy, called for merger retrospectives. Dennis published a paper about how such retrospectives might be done in the most informative way.\(^7\) I totally agree that merger retrospectives can be very valuable, especially if they allow us to test the accuracy of the methods we use to analyze mergers. As a professor on leave, I am happy to issue a call for academics to do these studies wherever they are feasible.

We at the Antitrust Division don’t have the authority to issue subpoenas just to study consummated mergers to improve our knowledge base. Furthermore, we have to be realistic about how many merger retrospectives can be done that really nail it in terms of what were the effects of the merger rather than other things that were changing in the market. You never really know for sure what the but-for world would have been like without the merger if the merger went through or what the but-for world would have been like if the merger did not. Unfortunately, we do not have controlled experiments like in the lab sciences, but we should do the best we can. It’s hard work.

**FARRELL:** I understand all that. One of the lessons of the statistical view of the world is that the best response to problems of randomness such as what Carl mentions is not to back off but to do more.

**ANTITRUST SOURCE:** Let’s shift gears and talk about intellectual property. You both have written on the intersection of intellectual property and antitrust. What are your views on how the antitrust laws should be used, if at all, to constrain the exercise of market power related to intellectual property rights?

**FARRELL:** My philosophy on this is that intellectual property rights are, by and large, a good system of rewarding and encouraging innovation where they provide a property right to someone who has produced an invention that might well not have been available otherwise.

But I get concerned when you have strategies, such as those we have seen in standard setting, where people find ways to cause their intellectual property to exert more power than the contribution they made or where you see flimsy patents used to exercise control of the market in ways that do not reflect the strength of the patent. A similar concern arises in pay for delay pharmaceutical patent settlements.

So, I think there are a number of areas where intellectual property rights cause antitrust trouble, but I stress that I am not against intellectual property and I am very far from being against innovation.

**SHAPIRO:** The problem of patent quality is one of the really interesting and difficult areas at the intersection of antitrust and intellectual property. Patent quality issues have been addressed by the FTC and the Patent Trademark Office, and Congress is trying to address them as well. These

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\(^7\) Dennis Carlton, *Why We Need to Measure the Effect of Merger Policy and How to Do It*, *Competition Policy Int’l*, Spring 2009.
issues are central to the ongoing debate involving pharmaceutical patent settlements, obviously an FTC area much more than a DOJ area. At its core, this debate focuses on how to treat uncertain or iffy intellectual property rights. More generally, antitrust has a role to play to indicate the boundaries associated with probabilistic patents.9

Then there are a range of topics that have been kicked around for quite a while in antitrust circles, many of which are addressed in the report issued in April 2007 by the DOJ and the FTC titled Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition.8

Given how our economy has evolved, with intellectual property playing an ever-increasing role in our more dynamic industries, it is inevitable that those issues will continue be central to antitrust. There are many tricky issues in this area; I don’t think one can pin down one issue as paramount.

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—Carl Shapiro

ANTITRUST SOURCE: The FTC released a study about two weeks ago on “pay for delay” agreements.10 Would you tell us about the efforts that are ongoing at the FTC related to pay for delay?

FARRELL: We have estimated that this large and growing problem costs consumers on the order of $3.5 billion a year in the United States, and, if people perceive the law as moving towards perceived legality of these deals, we have reason to believe that number is going to go up. We have some cases in litigation and we have been working to try to get Congress to take another look at it.

ANTITRUST SOURCE: Is the implication of that that the antitrust laws have not been effective in deter ring potentially anticompetitive pay for delay settlements?

FARRELL: My understanding is that cases have been mixed. Some courts have gravitated towards the view that because there is a patent involved and because, if you read the patent, it appears to allow the patent holder to foreclose competition in this area, then that is okay. And as both Carl and I mentioned, you really need to think of a patent as involving not only a nominal coverage but also strengths and weaknesses. And we think the right test of those strengths and weaknesses is either actual testing in court or, much more frequently, legitimate licensing and settlements—without these reverse payments that mess up the incentives of the licensee to bargain for quicker entry, lower royalties, and so on.

ANTITRUST SOURCE: The recent financial crisis brought behavioral economics into the mainstream. While behavioral economics has been a hot topic in finance for some time, there has only been scattered interest in it as a research agenda in Industrial Organization. What role, if any, do you see for applying behavioral economics to issues that arise in antitrust and competition policy?

SHAPIRO: Any time we are trying to understand and predict consumer responses we need to be attentive to the evidence regarding consumer behavior. That may well involve various behavioral issues.

For example, consumers react to surcharges and discounts differently, and in some cases that can be part of the analysis. We also have to look at things like advertising competition, which

8 Available at http://www.ftc.gov/reports/innovation/P040101PromotingInnovationandCompetitionrpt0704.pdf.
9 Mark Lemley & Carl Shapiro, Probabilistic Patents, J. ECON PERSP., Spring 2005, at 75.
relates to consumer behavior. We often have issues of reputation or branding that relate to consumers and their response to those images and those brands. So we are regularly dealing with consumer responses to a firm’s strategies, which get us into behavioral economics.

**FARRELL:** I think that’s right. Realistic ways of understanding consumer behavior are of course particularly important in consumer protection policy. For example, if you think about policies involving disclosure and consent, you need to understand what it is that is effectively disclosed to consumers rather than just having a lawyer read the wording and say that was or was not disclosed. In antitrust more narrowly, it might bear on the profitability of aftermarket manipulation strategies. That would be an area where, as a matter of being reality based, you would want to pay attention to lessons of consumer economics in some form.

A much broader and philosophical point is that firms do not always do what is optimal. What should policy do about that? I’m not aware of any model that is anywhere near ripe for replacing profit maximization as the way we predict how firms will behave. But it is not a bad idea to keep in mind that firms, like other organizations, can blunder. And that seems to me to be one of the imponderable reasons to want to have alternatives in the market—reasons that are hard to pin down from a narrowly economic point of view, but that are probably important.

**ANTITRUST SOURCE:** You mentioned that we usually assume a firm’s incentive is to maximize profits. Do you ever question that assumption when evaluating a firm’s incentives post-merger or with respect to single-firm conduct?

**FARRELL:** I think the question is what to do with it. I think we basically know firms are imperfect organizations of imperfect human beings. They are not going to literally maximize profits. So, at that level of questioning, sure, all the time. The question is: Where does one go with that?

And, as I said, when we need to predict what a firm is going to do, we should look at its profit incentives, but we also need to remember that even though that is our best predictor, it is not a perfect predictor. Firms sometimes self-destruct or do irrationally harmful things.

And again, let me stress, I am not saying we should base our predictions on that assumption, but we should keep it in the back of our minds as an added reason to seek and try to preserve some kind of biodiversity in the marketplace. That is a difficult issue, and I wrestle with it.

**SHAPIRO:** I take somewhat of an evolutionary view as an industrial organization economist. Of course each firm does not perfectly profit maximize. Rather, firms and markets evolve in an evolutionary way, guided by incentives and by the profits firms are able to earn. And all of this takes place with whatever irregularities come about due to agency issues and behavioral issues.

When it comes to predicting the effects of a merger, I think we are on solid ground and best served by making predictions based on how the incentives of the firms will change as a result of the merger, be that procompetitive or anticompetitive. That is not to say every firm perfectly profit maximizes, but profit maximization remains our best guide to the competitive effects of mergers.

**FARRELL:** I agree with that.

**ANTITRUST SOURCE:** Thank you very much for talking with us today. It has been a pleasure talking with you both.
Merger Screens: Market Share-Based Approaches Versus “Upward Pricing Pressure”

Elizabeth M. Bailey, Gregory K. Leonard, G. Steven Olley, and Lawrence Wu

The U.S. Department of Justice and Federal Trade Commission (collectively, the Agencies) receive notification regarding thousands of mergers per year. Given their limited resources, the Agencies must identify, from the entire set of mergers, those that require further investigation. Traditionally, the Agencies have used, among other things, market shares and concentration measures to perform this screening function. Counsel for potential merging parties often calculate market shares and the Herfindahl-Hirschman Index (HHI) when providing advice to their clients regarding the likelihood of receiving a Second Request. However, market share-based screens have significant limitations, particularly for mergers of firms in differentiated products industries. Calculating and relying on market shares or a market concentration statistic like the HHI requires first defining a relevant market, an exercise well known to be difficult with differentiated products.1 Moreover, the connection between unilateral effects (the primary concern with differentiated products mergers) and market shares and concentration measures is tenuous at best.2

Joseph Farrell and Carl Shapiro (referred to as FS in our discussion here) have proposed an alternative approach to assessing the likelihood of unilateral effects for differentiated products based on the concept of “upward pricing pressure,” or UPP. UPP is a measure of the strength of the merged firm’s incentive to increase price above pre-merger levels. Because UPP is seemingly easy to calculate, the question arises as to whether it would provide a useful screening device that the Agencies could use during the initial HSR waiting period to decide whether a Second Request should be issued.3 In this article, we address this question.

We start our analysis by providing an alternative derivation of UPP and show that UPP flows from the familiar logic of unilateral effects. From our perspective as economists, this is part of UPP’s appeal. We then discuss why reliable estimates of the three key inputs to UPP—diversion ratios, gross profit margins, and efficiencies—are unlikely to be available during the initial HSR waiting period. Because UPP, like any method, is only as reliable as its inputs, a lack of reliable estimates of the three key inputs would limit the extent to which UPP can be a useful screen in the first thirty days.4 Finally, we demonstrate how a UPP screen based on unreliable “short-cut” esti-

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2 Farrell & Shapiro, supra note 1, at 5.

3 Based on a conversation with Carl Shapiro, we understand that Farrell and Shapiro are not advocating that UPP be used as a Second Request screen; instead, they focus on its use after a Second Request has been issued to assess the likelihood of unilateral effects. However, if UPP were included in a revision of the Merger Guidelines, we believe that there will be a tendency for both the Agencies and counsel for the merging parties to calculate UPP early in (or even prior to) the merger review process.

4 At a later stage in the investigation, when more information is available, one may want to consider using UPP, given its connection to the logic of unilateral effects, or, alternatively, consider using merger simulation. The advantage of merger simulation is that it provides a quantitative prediction of the unilateral effect while UPP does not. The advantage of UPP is that it requires less information (e.g., about the curvature of demand functions) to implement than merger simulation.
mates of the three key inputs could lead to different outcomes from the traditional market share-based approaches of the Merger Guidelines.

**UPP Follows Directly from the Basic Logic of Unilateral Effects**

Suppose there is a proposed transaction that would combine under single ownership two single-product firms, Firms A and B, which make products A and B, respectively. Inequality (1) in FS’s article lays out the UPP test for this situation. There will be positive net UPP (and thus a presumption of anticompetitive effects) for Product A if

\[
UPP_A = (p_B - c_B)D_{A+B} - \theta c_A > 0
\]

where \( p_B \) is the pre-merger price charged by Firm B for its product, \( c_A \) and \( c_B \) are the pre-merger marginal costs of Firm A and Firm B respectively, \( D_{A+B} \) is the pre-merger diversion ratio from Firm A to Firm B, and \( \theta \) is the percentage marginal cost-savings for Product A that is expected to result from the merger. There could be upward pricing pressure for product B as well, and the applicable calculation is similar to that shown in inequality (1) above.

The first term on the left-hand-side of inequality (1) represents the upward pressure on the price of Product A that results from bringing the two products under the same ownership and the subsequent elimination of competition between them. The second term on the left-hand-side of inequality (1) represents the downward pressure on the price of Product A that derives from a merger-specific reduction in the marginal cost of producing Product A. If the former exceeds the latter, the left-hand side of inequality (1) is greater than zero, resulting in positive UPP.

As we demonstrate below, the UPP inequality is a direct implication of the basic logic of unilateral effects that has long been familiar to antitrust practitioners. This is somewhat obscured by the particular approach that FS took to deriving inequality (1). In the tradition of public finance, a branch of economics that focuses on how taxes change incentives, FS characterize the elimination of competition due to the merger as the internalization of an externality and then determine the size of the tax on Firm A that would be necessary to have the same effect. Their UPP measure is equivalent to this tax.

Because non-economists may find the tax-based approach that FS used to be unfamiliar, we now show that inequality (1) can be derived in a fashion that is more intuitive and familiar to antitrust practitioners and that underscores the relationship between UPP and the logic of unilateral effects.

Suppose that, prior to the merger, there are N single-product firms. Each firm chooses its price so as to maximize its own profit given the prices chosen by the other firms. For example, Firm A chooses its price to maximize its profit function

\[
\pi_A(p_A) = (p_A - c_A)Q_A(p_A, p_B, p_C, \ldots)
\]

5 Farrell & Shapiro, supra note 1, at 12.

6 The diversion ratio is defined as follows. The denominator is the decrease in quantity of Product A that would result from an increase in the price of Product A. This is related to the own-price elasticity of demand for Product A. The numerator of the diversion ratio is the increase in quantity of Product B that would result from the increase in the price of Product A. This is related to the cross-price elasticity of demand for Product B with respect to the price of Product A. If there is zero cross elasticity between the products, the diversion ratio will also be zero.


8 For the purposes of this derivation, we assume, as do FS, a “one-shot” (static) game with firms choosing prices.
Firm A’s profit is maximized at the price that sets the derivative of its profit function equal to zero, or
\[ \frac{\partial \pi_A(p_A)}{\partial p_A} = (p_A - c_A) \frac{\partial Q_A(p_A, p_B, p_C, \ldots)}{\partial p_A} + Q_A(p_A, p_B, p_C, \ldots) = 0 \]

All other firms in the industry also choose price to maximize their respective profits, and, in a Nash equilibrium, each firm’s equilibrium price maximizes its own profits, given the equilibrium prices of the other firms. Let \((p^*_A, p^*_B, p^*_C, \ldots)\) be the vector of pre-merger equilibrium prices.

Now suppose that Firms A and B propose to merge. After the merger, the merged firm will jointly set the prices of Products A and B so as to maximize its \textit{overall} profit, which is the sum of the profit from Product A and the profit from Product B:
\[ \pi_M(p_A, p_B) = (p_A - c_A) Q_A(p_A, p_B, p_C, \ldots) + (p_B - c_B) Q_B(p_A, p_B, p_C, \ldots) \]

The merged firm will have the incentive to increase the price of Product A above pre-merger levels if doing so will increase profit. In mathematical terms, profit will increase if the derivative of the profit function with respect to \(p_A\), when evaluated at pre-merger equilibrium prices, is positive, or
\[ \frac{\partial \pi_M(p_A^*, p_B^*)}{\partial p_A} > 0. \]

We start by taking the derivative of (3) and evaluating it at pre-merger equilibrium prices:
\[ \frac{\partial \pi_M(p_A^*, p_B^*)}{\partial p_A} = (p_A^* - c_A) \frac{\partial Q_A(p_A^*, p_B^*, p_C^*, \ldots)}{\partial p_A} + Q_A(p_A^*, p_B^*, p_C^*, \ldots) + (p_B^* - c_B) \frac{\partial Q_B(p_A^*, p_B^*, p_C^*, \ldots)}{\partial p_A} \]

Equation (2) tells us that the first two terms (combined) of the above equation are zero, allowing us to rewrite the derivative as
\[ \frac{\partial \pi_M(p_A^*, p_B^*)}{\partial p_A} = (p_B^* - c_B) \frac{\partial Q_B(p_A^*, p_B^*, p_C^*, \ldots)}{\partial p_A} \]

The merged firm has an incentive to increase the price of Product A above the pre-merger level to the extent that this derivative is positive. This will be the case if at pre-merger prices the “per unit” gross profit margin for Product B, \(p_B - c_B\), is positive and the “cross” price effect \(\frac{\partial Q_B}{\partial p_A}\) is positive (i.e., Products A and B are substitutes so that an increase in the price of Product A increases the quantity demanded of Product B). Thus, equation (4) reflects the basic logic of unilateral effects. If Products A and B are substitutes, and Product B has a positive gross margin, the merged firm has an incentive to increase the price of Product A whereas the independent Firm A did not. This is because some of the loss in sales of Product A that would result after an increase in the price of A would be recaptured by the merged firm in the form of an increase in the sales of Product B. From the perspective of the merged firm, this is a diversion of sales “out of one pocket and into the other,” whereas for Firm A before the merger, it was just a loss of sales “out of its pocket.” This loss constrained Firm A from increasing its price pre-merger.

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9 A Nash equilibrium is defined to be a set of prices for the firms such that each firm maximizes its profit, taking as given the prices of the other firms. Thus, a Nash equilibrium is a “stable point” where no firm wants to change the price that it is charging.
The closer that Products A and B are as substitutes, i.e., the larger is $\frac{\partial Q_B}{\partial p_A}$, the stronger is the incentive for the merged firm to increase the price of Product A. This is familiar territory for antitrust practitioners because the term $\frac{\partial Q_B}{\partial p_A}$ is the key determinant of the cross price elasticity of demand.

To the extent that the merger produces efficiencies that result in a lower marginal cost of producing Product A, this will provide an incentive that works in the opposite direction, i.e., the merged firm will have the incentive to lower the price of Product A. To see this, again consider the derivative of the merged firm’s profit function with respect to $p_A$. We will evaluate the derivative at pre-merger prices and also assume that the marginal cost of Product A has been reduced by a percentage $\theta$. To focus on the incentives created by the efficiencies, we assume for the moment that $\frac{\partial Q_B}{\partial p_A} = 0$, i.e., Products A and B are not substitutes so there are no unilateral effects associated with the merger. Under these conditions, the derivative is

$$\frac{\partial \pi_M(p^*_A, p^*_B)}{\partial p_A} = (p^*_A - (1 - \theta)c_A) \frac{\partial Q_A(p^*_A, p^*_B, p^*_C, \ldots)}{\partial p_A} + Q_A(p^*_A, p^*_B, p^*_C, \ldots)$$

The first two terms (combined) are again equal to zero by equation (2), so we obtain

$$\frac{\partial \pi_M(p^*_A, p^*_B)}{\partial p_A} = \theta c_A \frac{\partial Q_A(p^*_A, p^*_B, p^*_C, \ldots)}{\partial p_A}$$

This expression is less than or equal to zero because $\theta$ is greater than or equal to zero, $c_A$ is positive, and $\frac{\partial Q_B}{\partial p_A}$, which is the “own” price effect, is negative (demand curves slope downward).

Since the derivative is negative, the merged firm’s profit could be increased by decreasing the price of Product A. Given the merged firm’s lower marginal cost, it would gain from lowering the price of Product A (through the additional gross profit margin earned on the increased sales), whereas the independent Firm A would not (because it had higher marginal cost). Accordingly, the merged firm has the incentive to lower price whereas Firm A did not have such an incentive. Thus, a merger-induced reduction in marginal cost would be a source of downward pricing pressure resulting from the merger. The strength of the downward pressure depends on the size of the marginal cost reduction and the slope of the demand curve at pre-merger prices. Note, for example, that if there are no efficiencies, i.e., $\theta = 0$, there is no downward pricing pressure.

Under the scenario where there are unilateral effects and efficiencies, the “net” pricing pressure is the sum of the upward pricing pressure resulting from combining the two formerly competing products and the downward pricing pressure resulting from the efficiencies, or

$$NPP_A = (p^*_B - c_B) \frac{\partial Q_B}{\partial p_A} + \theta c_A \frac{\partial Q_A}{\partial p_A}$$

If this is positive, the merged firm has the incentive to increase price after the merger. FS’s inequality (1) can therefore be obtained by noting that
where the last step follows from the definition of the diversion ratio and the fact that the own price effect is negative. The last inequality above is FS’s inequality (1).

Would UPP Be Suitable as a Second Request Screen?
UPP has the potential to provide a useful and informative assessment of the potential for a lessening of competition associated with a transaction involving differentiated products. The UPP approach focuses the analysis on the variables that matter the most according to the basic logic of unilateral effects—diversion ratios, gross profit margins, and the potential for efficiencies. By doing so, UPP obviates the need to define a market and thus avoids the problems that arise when trying to define markets in differentiated products industries. In contrast, a market share-based approach does not take into account diversion ratios, gross profit margins, or efficiencies. Instead, it assumes that market shares are reliable indicia of the extent of competition between products in the industry. Like a market share-based approach, UPP also avoids the analytical complexity of quantifying price effects (as merger simulation would require) because it seeks only to assess the strength of the merged firm’s incentive to increase price above pre-merger levels. While this simplicity is a benefit, it comes at the cost of not being able to predict the actual magnitude of the competitive effect.

One question related to the overall utility of the UPP test is the stage(s) of the investigation at which UPP may be useful. One stage at which UPP potentially could be used is as a screen to determine whether a Second Request should be issued. If the UPP framework is to be used as a screen early in the merger review process, it must be based on data and information easily available at that point in the process. In practice, gross profit margins, diversion ratios, and estimates of the merger-induced efficiencies may not be readily available to the Agencies during the initial HSR waiting period, which would frustrate the effective implementation of a UPP screen in that time frame. For example, the relevant financial data may not be readily available from publicly available sources, such as annual reports or Securities Exchange Commission filings. Even if the Agencies are able to obtain such data from the merging parties through an Access Letter, calculating the economically correct profit margins using accounting data can be difficult and time-consuming.

10 When dealing with a differentiated products industry, it is often difficult to identify the contours of the relevant market for a given product, particularly when attempting to implement the Merger Guidelines’ “smallest market” principle. For example, does the relevant market for Kellogg’s Raisin Bran include (1) only Post Raisin Bran, (2) all raisin bran cold cereals (including private label), (3) all cold cereals containing bran, (4) all “adult” cold cereals, (5) all cold cereals, (6) all cold and hot cereals, or something even larger?


12 On the differences between economic costs and profits and accounting costs and profits, see, for example, Franklin M. Fisher & John J. McGowan, On the Misuse of Accounting Rates of Return to Infer Monopoly Profits, 73 Am. Econ. Rev. 82 (1983).
Similarly, the most reliable ways of estimating diversion ratios—based on empirical analysis of consumer demand—are data and time-intensive. It can easily take more than thirty days for the merging parties to gather the required data and for the Agencies to perform the econometric analysis. The Agencies may not even have the data until a Second Request is fulfilled.

As an alternative to these methods, diversion ratios can be estimated from survey data or win/loss reports that are kept by firms in the ordinary course of business. However, these data are not typically publicly available. The Agency would not have access to them without requesting them through an Access Letter issued early in the initial HSR waiting period. Moreover, such data are often messy and require extensive discussions with the business people such that even if the Agency were to obtain them, it may take a substantial amount of effort and time, potentially beyond the initial HSR waiting period time frame, in order to coax a diversion ratio out of the data.

In addition to requiring data that are readily available during the initial HSR waiting period, for UPP to be an effective screen, it must be able to distinguish those mergers that have the potential for an anticompetitive effect from those that do not. It is well known that under the model of competition for differentiated products that underlies the FS analysis, a merger involving two sellers of differentiated products will create some incentive, however small, for the merged firm to raise prices post-transaction, as long as there is any positive diversion between the merging parties’ products. FS recognize that there will always be positive gross UPP if the diversion ratio is greater than zero (and the gross profit margin is positive). Since a merger screen cannot be useful if it presumes that every merger with a positive diversion ratio is anticompetitive, FS suggest using the net UPP (rather than the gross UPP), which incorporates a standard marginal cost efficiency credit.

FS suggest, for discussion purposes, that a 10 percent efficiencies credit could be applied for the purpose of distinguishing transactions with the potential for an anticompetitive effect from those that do not. However, if UPP were to be used by the Agencies as a screen, we suggest that the size of any “standard” efficiencies credit should be chosen only after substantial analysis. For example, the appropriate standard efficiencies credit would seem reasonably to be based on factors such as (1) the levels of net UPP that historically have been associated with actual post-

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13 See Carl Shapiro, Mergers with Differentiated Products, ANTITRUST, Spring 1996, at 23.
15 See Hausman & Leonard, supra note 1.
16 Farrell & Shapiro, supra note 1, at 17.
merger unilateral effects, (2) the threshold level of net UPP that would lead to a manageable num-
ber of investigations for the Agencies, and (3) the magnitude of marginal cost efficiencies typically
generated in transactions involving differentiated products.

The effectiveness of the UPP framework as a merger screen also depends on the applicability
of the underlying theoretical model of competition embodied in the UPP analysis to the specific
industry at issue. The net UPP formulation rests on several key assumptions. First, it is based on
the assumption that the merging parties are engaged in Bertrand competition, which means the
firms compete on price (as opposed to quantity). Second, it is based on a static model of com-
petition, which means that it does not account for dynamic strategic behavior, entry, expansion,
or repositioning. To the extent that dynamic considerations are competitively important, a UPP
screen may fail to identify correctly the mergers that deserve further review.

In practice, for the Agency to use UPP as a screen during the initial HSR waiting period, it is likely to have to
take short-cuts to obtain values for the three inputs.

Finally, because a UPP screen only assesses the strength of the merged firm’s incentive to
increase price above pre-merger levels rather than the actual amount by which prices are likely
to increase above pre-merger levels, it is possible for a merger to have a large UPP value (and
therefore one which exceeds a screening threshold), but only a small actual price increase. This
can occur, for example, if the UPP indicates a strong incentive to increase price starting at
pre-merger prices with the incentive dissipating rapidly after only a small price increase. For this
reason, a UPP screen only suggests the direction of the likely post-merger price change, not its
magnitude.

Practical Implications of Using UPP as a Second Request Screen Using
“Short-Cut” Estimates of the Key Inputs

Given the considerations discussed above, think about how a UPP screen might be implement-
ed in practice by the Agencies. (Again, we distinguish between using UPP as a screening
device during the first thirty days and using it later in the investigation after a Second Request has
been issued.) Consider, for example, a proposed merger between two firms (Firms A and B) that
sell differentiated products (Products A and B). Applying a UPP screen in practice requires the
Agencies to have the three inputs necessary to calculate the UPP for Product A: the diversion ratio
from Product A to Product B, the gross profit margin for Product B, and the efficiencies the merg-
er is expected to generate. As discussed above, it would be unlikely for the Agencies to have
access to the information needed to derive estimates of these quantities during the initial HSR
waiting period. Even if the information were available, substantial effort and time would be required
to estimate these inputs reliably.

In practice, for the Agency to use UPP as a screen during the initial HSR waiting period, it is
likely to have to take short-cuts to obtain values for the three inputs. For example, to estimate a
diversion ratio from Product A to Product B, the Agency may use market shares. Suppose the
Agency identifies Product A and Product B competing in a market in which there are 10 sellers,

17 In general, the more concave with respect to the origin is the demand curve for Product A, the smaller will be the actual price change for a
given level of UPP. This is because, with greater concavity, the own elasticity of demand for Product A increases more sharply as price
increases, providing a greater constraint on the merged firm’s ability to increase price post-merger.

18 Quantifying price effects typically requires implementing a merger simulation, which is analytically complex and requires various assump-
tions including the shape of the demand curve (e.g., linear demand, logit demand, or AIDS demand).

19 For a different approach to this question, see Gopal Das Varma, Will the Use of the Upward Pricing Pressure Test Lead to an Increase in the
Level of Merger Enforcement?, ANTITRUST, Fall 2009, at 27, available at http://www.abanet.org/antitrust/at-source/10/02/Fall09-
DasVarmaC.pdf.
each with a 10 percent market share. In other words, the hypothetical transaction would give the merged parties a combined post-merger market share of 20 percent. The Agency might assume in this situation that the diversion ratio from Product A to Product B was 10%\times90\% = 11\%.\textsuperscript{20} Similarly, to estimate a margin for Product B, the Agency may rely on a rule of thumb or previous industry experience, and thus, for example, assume a gross profit margin of 50 percent.

Notice that in this hypothetical market, the pre-merger HHI would be 1000, the change in HHI due to the merger would be 200, and the market would be classified as "moderately concentrated" (according to the 1992 Horizontal Merger Guidelines), in which case the transaction could be viewed as potentially raising competitive concerns.\textsuperscript{21} While "moderately concentrated," in practice—absent additional information about the industry, number of competitors in the market, entry conditions, customer complaints, and potential efficiencies—the transaction described above would be unlikely to receive much scrutiny from the Agencies. First, the transaction would fall below the 35 percent market share threshold that is discussed in the unilateral effects section of the 1992 Horizontal Merger Guidelines.\textsuperscript{22} Second, only a relatively small proportion of the FTC’s merger investigations have been in markets in which the post-merger HHI was less than 1800.\textsuperscript{23}

This hypothetical merger, however, is an example of a transaction that would be flagged by a formulaic application of the UPP screen. Application of a UPP screen with a 10 percent efficiencies credit and the short-cuts to estimating diversion ratios and margins described above would result in a positive UPP, indicating that the merger may require further investigation.\textsuperscript{24}

Figure 1 shows that this result is more general—a strictly applied UPP screen using short-cut approaches to estimate the key inputs is likely to identify a different set of transactions for further review as compared to current Agency practice. The UPP screen threshold (i.e., the combinations of market share and gross profit margin that yield the threshold value of zero UPP) is shown visually by the downward sloping blue line.\textsuperscript{25} Transactions in regions A and B, which are character-

\textsuperscript{20} The assumption would be that the diversion ratio is equal to Product B’s sales divided by the sales of all products except Product A. This is equal to Product B’s market share divided by \((1 – Product\ A’s\ market\ share)\). This calculation implicitly assumes that the market elasticity of demand is zero. In the event that this is incorrect—i.e., that the actual market elasticity is greater than zero in absolute value—the diversion ratio would be smaller. This is yet another way in which the short-cut method of using shares to calculate diversion ratios can be unreliable.

\textsuperscript{21} See U.S. Dep’t of Justice & Fed. Trade Comm’n, Horizontal Merger Guidelines § 1.51 (1992, rev. 1997), available at http://www.ftc.gov/bc/docs/horizmer.shtm (transactions that produce “an increase in the HHI of more than 100 points in moderately concentrated markets post-merger potentially raise significant competitive concerns . . . .”).

\textsuperscript{22} See id. § 2.211 (“Where market concentration data fall outside the safe harbor regions of Section 1.5, the merging firms have a combined market share of at least thirty five percent, and where data on product attributes and relative product appeal show that a significant share of purchasers of one merging firm’s product regard the other as their second choice, then market share data may be relied upon to demonstrate that there is a significant share of sales in the market accounted for by consumers who would be adversely affected by the merger.”).

\textsuperscript{23} In fiscal years 1996 through 2003, the FTC conducted merger investigations in 784 markets. Of the 780 markets for which market structure data were available, only 104 were markets in which the post-merger HHI was less than 1800. See Malcolm B. Coate & Shawn W. Ulrick, Transparency at the Federal Trade Commission: The Horizontal Merger Review Process, 1996–2003, 73 ANTITRUST L.J. 531 (2006).

\textsuperscript{24} If the diversion ratio $$D_{A\times B}$$ is estimated using market share data and the approximation that $$D_{A\times B} \approx \frac{s}{1-s}$$, then a transaction will have a positive UPP if \(\frac{s}{1-s} > \Theta \left(1-\frac{m}{m}\right)\), where \(\Theta\) is the efficiency credit, \(m\) is the gross profit margin (i.e., price less marginal cost as a percentage of price), and \(s\) is the pre-merger share held by each pre-merger party (which is the same for each merging party under the assumption of symmetry). This is similar to the formula that appears as inequality (2) in Farrell & Shapiro, supra note 1, where the efficiency credit, \(\Theta\), appears as the parameter \(E\).

\textsuperscript{25} As discussed supra note 20, for the purposes of Figure 1, the market elasticity is assumed to be zero. If the market elasticity were instead assumed to be greater than zero in absolute value, the blue line would be shifted to the right, increasing the size of regions C and D and decreasing the size of regions A and B.
ized by combinations of gross profit margin and market share that yield a positive UPP, would be identified by a UPP screen. Conversely, transactions in regions C and D, which are characterized by combinations of gross profit margin and market share that yield a negative UPP, would not be identified as requiring a Second Request. In general, these results make economic sense under the logic of unilateral effects—transactions involving firms that have higher cross-price elasticities of demand or higher pre-merger gross profit margins are those that are more likely to generate unilateral competitive effects.

Figure 1. Comparing the Implications of a UPP Screen and a 35% Post-Merger Share Screen

Note: The comparison assumes (a) the transaction would reduce costs by 10%, (b) Bertrand competition among competitors, (c) the merging parties are symmetric, and (d) the use of market shares to approximate the diversion ratio.

To put these results into context, Figure 1 also shows the transactions that would be identified by a merger screen that focuses on transactions in which the merging parties would have a combined share of 35 percent or more post-merger, which is the market share threshold that appears in the Merger Guidelines. This screen is shown visually by the flat purple line. Transactions for which the pre-merger share of each merging party (assuming symmetry) is 17.5 percent or more would be identified by such a screen as requiring further review (i.e., transactions in regions A and D), while transactions involving firms with less than a 17.5 percent pre-merger share would not be identified (i.e., transactions in regions B and C).

As shown in Figure 1, both the UPP screen and a 35 percent market share screen would identify the transactions in region A as those that warrant additional investigation and a Second Request. These are, as expected, transactions with higher pre-merger gross profit margins and higher pre-merger shares. Strict application of a UPP screen and a 35 percent market share screen also would imply that a Second Request may not be necessary for transactions in region C. These are transactions with lower pre-merger gross profit margins and lower pre-merger shares.

The transactions that fall in regions B and D are more interesting because they reveal the differences in the results produced by the two types of screens. As noted above, one advantage of the UPP screen is to shift the competitive effects analysis away from market share and toward the economic factors that matter, such as pre-merger gross profit margins, which in turn may reflect
entry conditions, demand conditions, and the presence of substitute products or competitors. Thus, a 35 percent market share screen would flag transactions in region D, while a UPP screen would not, even though the pre-merger shares of the merging parties (and therefore the post-merger market share) would be relatively high for these mergers. For example, in region D, the merging parties may have low gross profit margins because consumers are quite willing to switch to competing products and competitors face no barriers to expansion, in which case the transaction may not raise competitive concerns.

On the other hand, it is likely that a UPP screen could flag many transactions that would give the merged entity a post-merger market share of less than 35 percent. Indeed, the hypothetical transaction discussed above—a merger of two firms with 10 percent pre-merger market shares and 50 percent gross profit margins—would fall in region B and would be an example of a transaction that would be caught by a UPP screen but not by a 35 percent market share screen. More generally, the UPP screen would identify for further scrutiny transactions between firms with low market shares if the firms have sufficiently high gross profit margins. To the extent that the gross profit margins are high as a result of entry barriers or the lack of substitutes, then the UPP screen is a useful tool that goes deeper economically than the market-share based screens.

As discussed above, we are distinguishing between using UPP as a screen during the first thirty days versus using UPP after a Second Request has been issued, when more information is available. Despite being easy to calculate, the likely absence of good information about the three key inputs during the first thirty days limits the usefulness of UPP as a screen. If the Agencies nevertheless start relying on UPP as a screen based on short-cut approaches to estimating the inputs, parties to the proposed transaction may be the ones who are forced to implement a more substantive version of UPP as a defensive measure. Shifting the burden to the merging parties comes with its own set of practical problems. Estimating diversion ratios and gross profit margins in a reliable manner often requires substantial lead time and access to internal data, something not always available to parties hammering out a deal, particularly when only a limited number of the parties’ business people are allowed to be privy to the negotiations. Moreover, the inputs to UPP require highly confidential business information from both parties to the potential transaction. While estimating a diversion ratio from Product A to Product B requires data from Firm A, estimating a gross profit margin for Product B requires data from Firm B. In our experience, firms are often reluctant to exchange this type of sensitive business information, even with outside counsel or outside experts, when negotiations over a deal are still underway.

**Conclusion**

Merger screens are critical to efficient and effective merger enforcement policy. Using market share-based screens can be misleading when applied to differentiated products industries because (1) defining the relevant market can be difficult; (2) market shares may not provide an accurate measure of competition between products; and (3) such screens do not consider other economic factors that are important determinants of unilateral effects. This provides a motivation for the Agencies to consider UPP as a Second Request screen. When good estimates of the three key inputs are available, UPP may represent an improvement over market share-based approaches because it does not require market definition and it focuses the analysis on those economic factors that matter according to the logic of unilateral effects. However, using UPP as a screen during the initial thirty days may be problematic. In many cases, good estimates of the three key inputs will not be available during the initial HSR waiting period. In such cases, the Agencies should resist the temptation to base a screen on UPP with unreliable short-cut estimates of the inputs.
The Use of Upward Price Pressure Indices in Merger Analysis

Serge Moresi

Before Professors Joseph Farrell and Carl Shapiro became chief economists at the FTC and DOJ, respectively, they wrote a paper proposing a new measure for evaluating potential unilateral effects in merger cases involving differentiated products.¹ This new measure—called Upward Pricing Pressure, or UPP—has been discussed in the Merger Guidelines review process that is now underway at the two Agencies.² If the Agencies decide to revise the Guidelines, it is possible that the new Guidelines might prescribe the use of the UPP (or some other price pressure index) for gauging the unilateral effects of horizontal mergers.³

Some commentators have suggested that the UPP methodology has limited practical use because it assumes a particular type of industry structure and because it is not closely related to the traditional market definition-market power analysis. This article explains why the UPP approach, and a variant termed GUPPI, are both useful and defensible.⁴

One can conceptualize the potential unilateral effects of a merger on consumer prices as a conflict between two opposing forces of upward and downward pricing pressure. The elimination of competition between the merging firms generates upward pricing pressure.⁵ The efficiency benefits from the merger generate downward pricing pressure.⁶ This approach to unilateral effects

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⁴ Farrell and Shapiro recently released a revised version of their UPP paper, in which they briefly describe the GUPPI test proposed by Salop and Moresi as being “one sensible way to proceed.” Farrell & Shapiro, Economic Alternative to Market Definition, supra note 1, at 20. For the GUPPI test proposed by Salop and Moresi, see Steven C. Salop & Serge Moresi, Updating the Merger Guidelines: Comments (Public Comment to Horizontal Merger Guidelines Review Project Nov. 2009), available at http://www.ftc.gov/os/comments/horizontalmergerguides/545095-00032.pdf.
⁵ The upward pricing pressure depends on the closeness of substitution between the products of the merging firms relative to other products, as reflected by the magnitude of the diversion ratio between the merging firms’ products. (The diversion ratio from Product 1 to Product 2 is the sales volume gained by Product 2 following a unilateral increase in the price of Product 1, divided by the sales volume lost by Product 1 as a result of that price increase.) The upward pricing pressure also depends on the intensity of competition that the merging firms face in the marketplace (including competition between them), as reflected by the firms’ price-cost margins.
⁶ For cost-savings, the downward pricing pressure involves the nominal price. For quality improvements, it involves the quality-adjusted price.
analysis—based on upward and downward pricing pressure—is particularly well-suited to situations where firms engage in Bertrand competition, i.e., they sell differentiated products and compete mainly by setting the prices of their products.\(^7\)

In this article, I extend the Farrell-Shapiro UPP methodology in two ways. First, I explain how the UPP test can be applied usefully in situations where firms engage in either Cournot competition or bidding competition, as well as Bertrand competition (which served as the analytic underpinning of the Farrell-Shapiro UPP test). I then explain how the GUPPI (a modified version of the UPP measure) can be related directly to recent market definition tests, and thus could be used to create presumptions in the same way that the current Guidelines describe presumptions using market share statistics. The Appendix describes the derivations of all the formulas presented in this paper.

I. Applying the UPP Methodology to Different Industry Structures

A. Bertrand Competition. The UPP methodology proposed by Farrell and Shapiro is based on the Bertrand model of price competition among suppliers of differentiated products.\(^8\) This methodology, therefore, is most useful when it is applied to merger cases where firms compete mainly by posting prices and then supply the quantities that customers demand at those prices. The Bertrand model assumes that firms have sufficient excess capacity (or face relatively low barriers to capacity expansion), so that prices drive quantities.

The UPP test evaluates the net effect of two forces that work in opposite directions—namely, the upward pricing pressure from the elimination of competition between the merging firms, and the downward pricing pressure from the efficiencies generated by the merger. Under Bertrand competition, a merger of Firm 1 and Firm 2 creates (net) upward pricing pressure on Product 1 (i.e., the product sold by Firm 1) if the following inequality is satisfied:

\[ DR_{12} \times M_2 > E_1 \]

where \( DR_{12} \) denotes the diversion ratio from Product 1 to Product 2, \( M_2 \) denotes the price-cost margin of Product 2 (in \$/unit), and \( E_1 \) denotes the merger-induced variable cost savings for Product 1 (in \$/unit).

For example, suppose that the variable cost of producing Product 2 is $6 per unit and Firm 2 charges a price of $10 per unit for Product 2. Thus, the price-cost margin of Product 2 is $4 per unit, i.e., \( M_2 = 4 \). Suppose that the variable cost of producing Product 1 is $7 per unit, and assume 10% variable cost savings post-merger. The cost savings for Product 1 thus will equal $0.70 per unit, i.e., \( E_1 = 0.7 \). Finally, suppose that the diversion ratio from Product 1 to Product 2 is 20%, i.e., \( DR_{12} = 0.2 \). In this example, the merger creates upward pricing pressure on Product 1 (since \( 0.2 \times 4 = 0.8 > 0.7 \)).

Note that the UPP test must be performed twice, once for each product. The UPP formula evaluates whether the merged firm would have an incentive to raise the price of Product 1 all else

\(^7\) There can be significant unilateral concerns for products that are not each other’s closest substitutes. For example, suppose that Gerber (with approximately 70 percent of baby food sales) was a closer substitute for both Beech-Nut and Heinz than the two smaller brands were to each other. That fact obviously would not obviate unilateral effects concerns in a Heinz/Beech-Nut merger. Similarly, if Office Max was a closer substitute for both Staples and Office Depot than the two brands were for each other, that would not have eliminated unilateral concerns from a Staples/Office Depot merger.

\(^8\) For a formal treatment of Bertrand competition, see, for example, Michael R. Baye & Dan Kovenock, Bertrand Competition, in The New Palgrave Dictionary of Economics (2d ed. 2008), available at http://www.nash-equilibrium.com/baye/Bertrand_Palgrave2e.pdf.
equal. The same formula (but with the roles of Product 1 and Product 2 reversed) can be used also to evaluate the merger effect on pricing incentives for Product 2.9

A higher diversion ratio or a higher margin (or both) tend to create greater upward pricing pressure post-merger for the following reason. When one of the two merging firms raises price unilaterally, a fraction of the sales that the firm loses are actually not lost because they are diverted to and thus recaptured by the merging partner. The higher the diversion ratio or the higher the margin of the merging partner, the greater the profits that are recaptured by the merging partner and thus the greater the incentive to raise price.

Merger-induced efficiencies in the form of variable cost savings tend to create downward pricing pressure, and thus the above formula essentially compares the incentive to raise price due to the “diversion effect” and the incentive to reduce price due to cost savings. The UPP test thus evaluates the net effect on pricing incentives.

**B. Cournot Competition.** Under Cournot competition, quantities drive prices—that is, each supplier first decides how much output to produce (or how much production capacity to install) and then prices adjust to ensure that demand equals supply.10 This is different from Bertrand competition where prices drive quantities. However, the UPP methodology also can be applied usefully under Cournot competition.11 This is true for firms selling homogeneous products, such as newsprint and iron ore, as well as firms selling differentiated products, such as large passenger aircraft and collectible wine.

In cases where firms engage in Cournot competition, the UPP test can be implemented using the above formula provided that one uses a definition of “diversion ratio” that is different from that used in the case of Bertrand competition. Specifically, the same UPP formula still applies if one uses the “price diversion ratio” instead of the “quantity diversion ratio.”

To illustrate the difference between the price diversion ratio and the quantity diversion ratio, consider a hypothetical example using British Airways and Virgin Atlantic, and assume that these two airlines have exclusive rights to fly the London-Washington route.

When the demand for international travel is low, British Airways and Virgin Atlantic are likely to have many empty seats (excess capacity) and charge relatively low airfares. In this environment, one might assume that the two airlines behave according to the Bertrand model. Suppose that British Airways unilaterally were to increase its airfares and lose 100 passengers on its London–Washington flights. Suppose also that 60 out of those 100 passengers would switch to Virgin Atlantic (while the remaining 40 passengers might decide to switch to connecting flights, or to fly to other cities using different airlines, or not travel at all). In this example, the quantity diversion ratio is 60 percent (i.e., 60 divided by 100).12 This is the relevant diversion ratio to use in the Bertrand model, because the Bertrand model assumes that Virgin Atlantic would use its excess capacity (which might involve increasing the number of flights on that route) to accommodate the additional demand from those 60 passengers. Note that, if the two airlines were perfect substitutes

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9 It is thus possible that one merging product might pass the UPP test but the other would not.

10 For a formal treatment of Cournot competition, see, for example, Jean Tirole, The Theory of Industrial Organization § 5.7 (1988); Joseph Farrell & Carl Shapiro, Horizontal Mergers: An Equilibrium Analysis, Am. Econ. Rev. 80, 107–26 (1990).


12 If the two airlines were completely differentiated, no British Airways passenger would be willing to switch to Virgin Atlantic, and thus the increase in British Airways airfares would not lead to any increase in Virgin Atlantic’s traffic. In this case, the quantity diversion ratio would be zero.
for one another (i.e., if they offered homogeneous services), then all the passengers lost by British Airways would switch to Virgin Atlantic, in which case the diversion ratio would be 100 percent.

When the demand for international travel is strong, and the number of passengers that British Airlines and Virgin Atlantic can carry is constrained by the airlines’ production capacity (including the number of landing slots available at the two airports), airfares are likely to be relatively high. In this environment, one might assume that the two airlines behave according to the Cournot model. Suppose that British Airways were to eliminate one of its London–Washington flights (and use the two landing slots for other routes). The passengers of that flight would ask British Airways and Virgin Atlantic for seats on the other flights on that route. Since these other flights are most likely to be sold out, the increased demand for those flights would lead British Airways and Virgin Atlantic to raise airfares on those flights (while keeping them sold out). If passengers view British Airways and Virgin Atlantic as differentiated airlines, then the passengers of the eliminated flight would have a preference for staying with British Airways. This implies that Virgin Atlantic would raise airfares by a smaller amount than British Airways. ¹３

Suppose that Virgin Atlantic would raise airfares by $60 per ticket. If instead the eliminated flight had been a Virgin Atlantic flight (not a British Airways flight), then Virgin Atlantic would have been able to raise airfares (on its remaining flights on that route) by more than $60—say, by $100 per ticket. In this example, the price diversion ratio is 60 percent (i.e., $60 divided by $100). ¹⁴

Note that, if the two airlines were perfect substitutes for one another (i.e., if they offered homogeneous services), then Virgin Atlantic would raise airfares by the same amount regardless of whether the eliminated flight would be a British Airways flight or a Virgin Atlantic flight. If so, the diversion ratio would be 100 percent.

This hypothetical example suggests that the UPP test can in principle be applied under Cournot competition as well as under Bertrand competition. The formula described in section I.A above can be used directly, provided that the diversion ratio is defined in terms of prices rather than quantities.

In either case, the relevant diversion ratio in principle can be estimated using econometric techniques or other evidence. In the early stages of a merger investigation, the relevant diversion ratio might be estimated using customer surveys or natural experiments. ¹⁵

C. Bidding Competition. As explained above, the basic UPP methodology is based on the standard Bertrand model where suppliers post prices and customers choose which supplier(s) to buy from based on the posted prices. The UPP methodology also can be applied usefully in situations where suppliers set prices through bidding competition. ¹⁶ For example, in wholesale and intermediate goods industries, large buyers often select their suppliers using procurement auctions, and suppliers compete for each customer account separately. In these situations, an auction

¹³ If the two airlines were completely differentiated, no British Airways passenger would be willing to switch to Virgin Atlantic, and thus the elimination of a British Airways flight would not lead to any increase in Virgin Atlantic’s airfares. In this case, the price diversion ratio would be zero.

¹⁴ In this example, it happens that the price diversion ratio (when demand for traveling is high) is equal to the quantity diversion ratio (when demand for traveling is low). In general, the two different diversion measures might not be equal, and either one could be larger.

¹⁵ It might also be possible to estimate the relevant diversion ratio by using shares within some group of products and by adjusting the estimate downward based on some assumed value of the loss to products outside the group.

model might be used instead of a Bertrand or Cournot model.

Customers generally seek competitive bids from several suppliers. In some cases, customers use a single round of bidding—i.e., they ask suppliers to submit “sealed bids” containing their contract offers—and select a supplier based on the best contract offered. This type of bidding mechanism is referred to as the (first-price) sealed-bid auction. In other cases, customers use two or more rounds of bidding to “negotiate” price, and inform bidders about the current best offer to reduce the prices that are bid in the next round. This type of bidding mechanism is referred to as the open-bid auction.

When bidding competition resembles a sealed-bid auction, the UPP test can be implemented using the above formula, provided that one uses a definition of “diversion ratio” that is different from that used in the context of standard Bertrand competition. Specifically, the above formula still applies if one uses the “winning probability diversion ratio” instead of the “quantity diversion ratio.”

For example, consider a hypothetical sealed-bid competition for a large customer. When a supplier contemplates whether it should increase its (sealed) bid, it assumes that all the rival bids submitted by the other suppliers would not change. Therefore, the bidder takes into account that its higher bid would reduce the probability that it would win the customer’s account, and thus increase the winning probability of each of the other firms. Following a unilateral increase in Firm 1’s bid, the winning probability diversion ratio from Firm 1 to Firm 2 is equal to the increase in Firm 2’s winning probability divided by the decrease in Firm 1’s winning probability. Intuitively, it is the fraction of the reduction in Firm 1’s winning probability that is captured by Firm 2. (For example, if Firm 2’s winning probability increases from 20 percent to 24 percent, and Firm 1’s winning probability decreases from 30% to 14%, then the diversion ratio equals 25 percent (i.e., 4% divided by 16%).) Having defined the diversion ratio in these terms, the UPP test in section I.A above can be implemented directly.

While the quantity and winning probability diversion ratios differ, the estimation of their magnitude might not require significantly different analyses. In many cases, the winning probability diversion ratio is estimated across a number of bidding competitions by comparing total gains and losses in terms of customers or accounts, not in terms of the bidders’ probabilities of winning a given single account.

When bidding competition resembles an open-bid auction, the UPP test can be approximated using the above formula and a “diversion ratio” based on market shares. Specifically, the diversion ratio to be used in the UPP formula is the market share of the merging partner divided by the total market share of the non-merging firms. For example, if the market shares of Product 1 and Product 2 are 25 percent and 15 percent, respectively, then the above UPP formula should be implemented using a diversion ratio from Product 1 to Product 2 equal to 25 percent (i.e., 15% divided by (100%-25%-15%)).

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17 Each procurement may involve competition that is entirely distinct from that in other procurements, and thus each procurement may be considered a separate and distinct relevant market under certain conditions. These conditions include situations where products are customized according to the specifications of the particular buyer, and where such customization makes arbitrage infeasible. See, e.g., Competitive Impact Statement § II(B)2, United States v. Ingersoll-Dresser Pump Co., No. 1:00CV001818 (D.D.C. filed July 28, 2000).
D. Caveats. Failing the UPP test is relevant “circumstantial” evidence of adverse unilateral effects. It is not a proof that the proposed merger likely would lead to a substantial lessening of competition. It is only one factor among others. In particular, the UPP test does not account for several other factors that are potentially important for evaluating the likely competitive effects of a merger, including potential supply-side responses (i.e., entry and repositioning), the multi-product nature of many firms (i.e., the impact on pricing incentives of the merging firms’ sales of other substitutable or complementary products), potential pricing interdependencies (i.e., how the merging firms’ pricing initiatives might trigger particular responses by other firms), and dynamic factors such as network effects and learning by doing.19 The UPP test, therefore, is a useful screen and might be used as supporting evidence, but it is not a complete analysis of all the relevant factors.

II. Relating the UPP Methodology to Market Definition

A. The Gross Upward Price Pressure Index (GUPPI). The UPP test measures net upward pricing pressure (i.e., the upward pricing pressure from the merger versus the downward pricing pressure from the merger-induced efficiencies). In contrast, the GUPPI measures only the upward pricing component before netting out the downward pricing pressure from efficiencies. To make the connection to market definition clear, the GUPPI imposes a bit more structure on the analysis and expresses this upward pricing pressure as a percentage of the pre-merger price.20

Formally, the GUPPI for Product 1 is calculated using the following formula:21

\[ \text{GUPPI}_1 = DR_{12} \times \frac{m_2}{P_2} \times \frac{P_1}{P_2} \]

where

\[ DR_{12} \] denotes the diversion ratio from Product 1 to Product 2,
\[ m_2 \] denotes the variable profit margin of Product 2 as a fraction of revenue, and
\[ \frac{P_2}{P_1} \] denotes the relative price of Product 2 (relative to Product 1).

For example, if \( DR_{12} = 20\% \), \( m_2 = 50\% \), and \( P_1 = P_2 \), then \( \text{GUPPI}_1 = 10\% \). The GUPPI for Product 2 is defined similarly as \( \text{GUPPI}_2 = DR_{21} \times \frac{m_1}{P_1} \times \frac{P_2}{P_1} \). Thus, \( \text{GUPPI} \) is higher when either the diversion ratio to the merging partner’s product is higher, or the profit margin of the merging partner’s product is higher, or the relative price of the merging partner’s product is higher (or all three).

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18 In the open-bid auction model, the winner is the firm with the lowest cost of supplying the customer, and the equilibrium price paid by the customer is equal to the second-lowest cost. When a firm becomes more efficient and can supply customers at lower costs, the existing customers of that firm do not benefit from the cost savings, because the price they pay is determined by the cost of a rival firm. Similarly, the customers of the merging partner will not benefit either, because the firm will no longer compete against its merging partner. Thus, efficiencies create downward pricing pressure only for the customers of the non-merging firms. This roughly explains why the diversion ratio should be approximated by the market share of the merging partner divided by the total market share of the non-merging firms. See Moresi, supra note 16.

19 The UPP test takes into account merger-specific efficiencies by crediting the merging firms with a reduction (of, say, 10 percent) in their variable costs of production. Efficiencies also can take the form of product quality increases and faster innovation. It is unclear whether these other types of efficiencies can be accounted for in the formal analysis with “equivalent” percentage cost reductions. An alternative might be to credit the merging firms with cost reductions equal to, say, 10 percent of the pre-merger price.

20 The upward pricing pressure component in the UPP test (i.e., the term \( DR_{12} \times M_2 \) in section I.A) is expressed in dollars per unit, while the SSNIP used in market definition tests is expressed as a percentage price increase. Expressing the GUPPI as a percentage of price makes the connection to market definition clear.

21 Salop and Moresi assumed equal prices for the two merging firms. Salop & Moresi, supra note 4.
Like the UPP test, the GUPPI in and of itself is a useful screen and might be used as supporting “circumstantial” evidence, but it also is not a complete analysis of all the relevant competitive factors.

**B. Relationship to Market Definition.** The main advantage of the GUPPI over the UPP is that the GUPPI can be directly related to market definition. As a result, the GUPPI approach might be more attractive to antitrust practitioners and the courts, where market definition is a key component of antitrust analysis.

In particular, the GUPPI is closely related to the market definition methodology developed by Katz & Shapiro and O’Brien & Wickelgren.22 Like the GUPPI, this methodology is based on the standard model of Bertrand competition with differentiated products. Specifically, the products of the two merging firms would comprise a relevant antitrust market if:

\[
\text{GUPPI}_1 \geq 2s \quad \text{or} \quad \text{GUPPI}_2 \geq 2s
\]

where \(s\) denotes the level of “small but significant non-transitory increase in price” (SSNIP) used for market definition.23 The two products would comprise a relevant market because, if the above condition is satisfied, then a hypothetical monopolist who would be the sole owner of the two products would find it profit-maximizing to raise the price of Product 1 alone (or Product 2 alone) by at least a SSNIP, even if one assumed that it did not also raise the price of the other product. According to the current Guidelines, this would be a sufficient condition for the two products to constitute a relevant market.

For example, if the relevant SSNIP is \(s = 5\%\), then the products of the two merging firms alone would comprise a relevant market if the GUPPI were at least 10% (i.e., \(2 \times 5\%\)) for one of the products of the merging firm.24 If so, the relevant market would include only the products of the merging firms. Absent production substitution or other uncommitted entry, the merger could be characterized as a “merger to monopoly.”

It is noteworthy that the GUPPI demonstrates that there can be a relevant market composed of a subset of products that are equally close substitutes. Consider a hypothetical broad market with six equal-size firms, each producing a single product that is an equally close substitute for each of the other five products. Assume for simplicity that these products have equal prices and equal margins, and that total demand is perfectly inelastic. In this case, the diversion ratio between any

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23 This formula assumes that market definition is based on a profit-maximizing SSNIP, not a just-profitable (break-even) SSNIP. In addition, like the UPP test, it assumes that each of the merging firms produces a single product, and that other firms would not change the prices of their products. Unlike the UPP test, the GUPPI test further assumes that the merging firms face linear demand and constant marginal cost. These last assumptions are not necessary for the UPP test, but are necessary to illustrate the link between GUPPI and market definition. (Katz & Shapiro assume linear demand, while O’Brien & Wickelgren assume constant elasticity demand. In contrast, the UPP test does not make any functional form assumptions about demand.)

24 The formula assumes a single-product SSNIP—that is, the hypothetical monopolist would raise the price of only one of the two merging products. Therefore, the test in the text offers a sufficient but not necessary condition. That is, the two merging products may constitute a relevant market even if the two GUPPIs are smaller than 10 percent. If instead one assumes a uniform SSNIP—that is, the hypothetical monopolist would raise the prices of the two merging products by identical SSNIPs—then a simple formula can be obtained only if one assumes symmetric merging products (i.e., equal shares, equal prices, equal margins, and equal diversion ratios). See Salop & Moresi, *supra* note 4, at 21 n.48. Note that the symmetry assumption is unlikely to be satisfied in most cases.
two firms would be 20 percent.\textsuperscript{25} If the margin were higher than 50 percent, then the GUPPI would exceed 10 percent and, therefore, any two firms in this industry would constitute a relevant antitrust market. If instead the industry is comprised of only three firms (instead of six), the diversion ratio between any two firms would be 50 percent. In this case, any two firms also would constitute a relevant market if the profit margin was greater than 20 percent because that would imply a GUPPI above 10 percent.

\textbf{C. Presumptions and Safe Harbors.} The GUPPI might be used for setting enforcement thresholds for unilateral effects concerns in differentiated products industries, based on its relationship to market definition (as well as other considerations, as discussed below). The GUPPI thus could be used to replace or supplement the current thresholds based on the HHI and the combined market share of the merging firms. For example, a relatively low GUPPI threshold could be used to establish a “safe harbor” for unilateral effects concerns, either as an initial screen or later on in the merger review process. The Agencies (or the courts) also could use the GUPPI to determine whether or not to “presume” harmful unilateral effects and shift the burden of rebuttal onto the merging parties. Most economists probably would agree that the GUPPI generally is a better gauge of unilateral effects concerns than the product of the shares (i.e., the HHI delta) or the combined market share of the merging firms.

If the GUPPI were given this role, the Agencies would need to set the thresholds and the strength of the safe harbor and anticompetitive presumptions.\textsuperscript{26} As suggested by the examples above, the Agencies might consider using a GUPPI threshold of 10 percent, since this characterizes what could be deemed to be a “merger to monopoly,” absent production substitution or other uncommitted entry. Of course, other thresholds could be used.

Alternatively, the Agencies could consider using the UPP test with a relatively high “efficiency credit” to identify presumptively anticompetitive deals, while using a lower credit to identify non-harmful deals that might fall in the safe harbor. However, with the UPP, it would be more difficult to relate these presumptions to market definition and thus justify the efficiency credit thresholds that the Agencies would be using.\textsuperscript{27} The GUPPI approach therefore might be seen as more practical.

\textbf{Conclusion}

The UPP test for unilateral effects is based on the assumption of Bertrand competition. This paper explains how the UPP test can be extended to other forms of competition. In particular, the UPP test can be applied to merger cases where firms engage in Cournot competition and also to cases with bidding competition. In each case, the paper explains how to define and calculate the rele-

\textsuperscript{25} If a firm raises price unilaterally and loses 100 customers, then those 100 customers all stay within the industry (since demand is perfectly inelastic) and thus each one of the 5 rivals of that firm gains 20 customers. It follows that the diversion ratio between any two firms is 20 percent. When demand is not perfectly inelastic, the diversion ratio should take into account the substitution to “outside goods” expressed in the demand elasticity.

\textsuperscript{26} This also likely would take into account deterrence concerns. See Salop & Moresi, supra note 4.

\textsuperscript{27} In addition, using the UPP test (instead of the GUPPI) for establishing presumptions would raise the issue of whether mergers in low-cost industries would be more likely to fail the test all else equal. This issue could be addressed by choosing industry-specific efficiency credits. A better approach could be to express the efficiency credit as a percentage of price (not cost).
vant “diversion ratio” to be used in the UPP test. This suggests that the UPP test can be used in most merger cases.28

The paper also points to several factors that are not accounted for by the UPP test, but are important for a complete evaluation of the potential unilateral effects. This suggests that the UPP test (and the GUPPI) should be used as an initial screen or in conjunction with other factors currently used in merger analysis, not as a complete analysis of competitive effects.

Unlike the UPP test, the GUPPI test does not attempt to account for efficiencies. But unlike the UPP test, the GUPPI test can be related directly to the hypothetical monopolist market definition test. This might make the GUPPI a more intuitive index for antitrust practitioners and the courts. The article explains how the Agencies could use this relationship between the GUPPI and market definition to set GUPPI thresholds and establish safe harbors or anticompetitive presumptions. Of course, the Agencies could decide to set the GUPPI thresholds based on several factors other than simply their relationship to market definition. In particular, the thresholds might be adjusted to account for “optimal deterrence” considerations or reflect a particular “enforcement philosophy.” Whatever the exact GUPPI thresholds that are chosen, this basic approach is both useful and defensible.

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28 In some industries, firms sometime compete through “tournaments” or “beauty contests” by investing in the quality of the product offered to the customer (e.g., architects competing for a $100 million construction contract). In other industries, firms sometime compete in “bargaining markets” (e.g., each major hospital signs a contract with each major HMO). It is unclear whether the UPP test can be extended and applied to these types of industry structures.
Appendix

This appendix describes the derivations of the formulas presented in this article. Section A.1 presents a unified framework and derives a general result that includes the UPP and GUPPI tests as special cases. Specifically, it develops a general test of the profitability of a single-product SSNIP post-merger in the presence of cost savings. Section A.2 then explains how this general test can be used to derive the UPP and GUPPI tests. In addition, the general test also can be used to derive the post-merger profit-maximizing single-product SSNIP.

A.1 Unification Framework for Single-Product Price Pressure Indices

Consider a hypothetical merger of Firm 1 and Firm 2. Firm 1 sells Product 1, Firm 2 sells Product 2, and the pre-merger prices of Product 1 and Product 2 are denoted by \( P_1 \) and \( P_2 \), respectively. Following Farrell & Shapiro, I analyze the merged firm's incentive to raise \( P_1 \), assuming for simplicity that (i) all the other prices (including \( P_2 \)) will remain constant at their pre-merger level, and (ii) the merger will not generate any variable cost savings for Product 2.\(^{29}\)

If the merged firm does not change the prices of Product 1 and Product 2, then its total profits are equal to:

\[
(P_1 - C_1 + E_1)Q_1 + (P_2 - C_2)Q_2
\]

where \( C_1 \) and \( C_2 \) are the marginal costs of production of Product 1 and Product 2, \( Q_1 \) and \( Q_2 \) are the sales volumes of Product 1 and Product 2, and \( E_1 \) is the reduction in the marginal cost of Product 1 generated by the merger.

If instead the merged firm unilaterally raises the price of Product 1 from \( P_1 \) to \((1 + S)P_1\), then its total profits are equal to:

\[
((1 + S)P_1 - C_1 + E_1)(1 - L)Q_1 + (P_2 - C_2)(Q_2 + DR_{12}LQ_1)
\]

Thus, the increase in the price of Product 1 leads to a reduction in the sales volume of Product 1 from \( Q_1 \) to \((1 - L)Q_1\), where \( L \) is the “loss” of volume expressed as a fraction of the initial (pre-merger) volume of Product 1. At the same time, the increase in the price of Product 1 leads to an increase in the sales volume of Product 2 from \( Q_2 \) to \( Q_2 + DR_{12}LQ_1 \), where \( DR_{12} \) is the diversion ratio from Product 1 to Product 2.\(^{30}\)

By comparing (1) and (2), one can analyze the merged firm's incentive to change the price of Product 1 from \( P_1 \) to \((1 + S)P_1\).\(^{31}\) Let \( m_1 \) and \( m_2 \) denote the profit margins of Product 1 and Product 2, i.e., \( m_1 = (P_1 - C_1)/P_1 \) and \( m_2 = (P_2 - C_2)/P_2 \).

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\(^{29}\) As explained in Farrell & Shapiro, these assumptions tend to understate the merged firm's incentive to raise the price of Product 1. See Farrell & Shapiro, Economic Alternative to Market Definition, supra note 1, §§ 2.C and 2.D; see also Farrell & Shapiro, UPP and Critical Loss Analysis, supra note 1, §§ III and IV.

\(^{30}\) \( LQ_1 \) is the volume lost by Product 1 as a result of the unilateral increase in the price of Product 1, \( DR_{12} \) is the fraction of that lost volume that is recaptured by Product 2, and hence \( DR_{12}LQ_1 \) is the amount of volume gained by Product 2 as a result of that price increase.

\(^{31}\) The analysis also applies to a price reduction from \( P_1 \) to \((1 + S)P_1\), where \( S \) is negative.
Proposition. Assume that pre-merger prices are Bertrand equilibrium prices. If either demand is linear or the price change is very small (i.e., infinitesimal), then (2) is greater than (1) if and only if

$$DR_{12} m_2 P_2 > E_1 + SP_1$$

(3)

Proof. Subtracting (1) from (2), one finds that (2) > (1) if and only if

$$SPQ_1 - (P_1 - C_1 + SP_1 + E_1)LQ_1 + DR_{12}(P_2 - C_2)LQ_2 > 0$$

(4)

Using $$m_k P_k = P_k - C_k$$ to substitute for $$P_k - C_k$$ (where $$k = 1, 2$$), and dividing throughout by $$SQ_1$$, one finds that (4) is equivalent to:

$$P_1 - (m_1 P_1 + SP_1 + E_1)(L/S) + DR_{12} m_2 P_2 (L/S) > 0$$

(5)

Note that $$L/S$$ is the own-price elasticity of the demand for Product 1 (evaluated at the pre-merger equilibrium prices) if either $$S$$ is infinitesimally small or if demand is linear. Thus, pre-merger Bertrand equilibrium implies $$m_1 = S/L$$. (This is called the “Lerner condition.”) Thus, multiplying (5) by $$m_1$$, one obtains:

$$m_1 P_1 - (m_1 P_1 + SP_1 + E_1) + DR_{12} m_2 P_2 > 0$$

(6)

Then, (3) is obtained by collecting and rearranging terms.

The next section shows how the above Proposition can be used to derive the UPP test, the GUPPI test, and the post-merger profit-maximizing single-product SSNIP.

A.2 Applications

The UPP test. The UPP test assumes that there are significant efficiencies, i.e., $$E_1 > 0$$, and asks whether the merged firm would have an incentive to raise $$P_1$$ by even an infinitesimally small amount, i.e., $$S = 0$$. From (3), the answer is affirmative if $$DR_{12} m_2 P_2 > E_1$$. Since $$m_2 P_2 = M_2$$, the UPP test can be rewritten as in section I.A, i.e., $$DR_{12} M_2 > E_1$$.

The GUPPI test. The single-product SSNIP test assumes that there are no efficiencies, i.e., $$E_1 = 0$$, and asks whether a hypothetical monopolist (who would be the sole owner of Product 1 and Product 2) would have an incentive to raise $$P_1$$ by at least a SSNIP, i.e., $$S > 0$$. As I will explain in the next paragraph, one should use $$S = 2s$$, where $$s$$ is the level of the SSNIP used for market definition. From (3), the answer is affirmative (and thus the two products would constitute a relevant antitrust market) if $$DR_{12} m_2 P_2 / P_1 > 2s$$. This can be rewritten as in section II.B, i.e., $$GUPPI_i \geq 2s$$.

Suppose it were true that $$S = 2s$$ implies (2) = (1), and thus (3) would hold with equality. In this case, the hypothetical monopolist would be indifferent between not raising the price of Product 1 (i.e., $$S = 0$$) and raising it from $$P_1$$ to $$(1 + 2s)P_1$$ (i.e., $$S = 2s$$). Thus, if the hypothetical monopolist were to raise price by $$S = 2s$$, it would “break even” relative to no price increase. Since demand is assumed to be linear, if the break-even price increase is equal to $$2s$$, then the profit-maximizing price increase is equal to $$s$$. Therefore, since the current Guidelines instruct us to use a profit-maximizing SSNIP (as opposed to a just profitable SSNIP) and since condition (3) is a break-even test, we should use $$S = 2s$$ when implementing the GUPPI test.

The post-merger profit-maximizing single-product SSNIP. Assuming that (3) holds with equality and solving for $$S$$ yields:
$$S^* = (DR_{12} m_2 P_2 - E_1)/P_1$$  \hspace{1cm} (7)$$

This is the “break-even” or “just profitable” single-product SSNIP for the merged firm. Thus, the “profit-maximizing” single-product SSNIP that the merged firm would impose on Product 1 is given by:

$$s^* = (GUPPI_1 - e_1)/2$$  \hspace{1cm} (8)$$

where $e_1 = E_1/P_1$ is the cost savings “efficiency credit” expressed as a percentage of price (not cost). It follows that the GUPPI test and the UPP test are equivalent if the efficiency credit used in the UPP test is expressed as a percentage of price (as was suggested supra note 27). ●
**United States v. Malone:**
Lessons for HSR Practitioners on Premerger Notification Office Informal Interpretations

Gregory L. Kinzelman

John C. Malone, CEO and Chairman of Discovery Holding Company, recently agreed to pay a $1.4 million civil penalty to settle Federal Trade Commission charges that he violated the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (HSR Act), in connection with acquisitions of shares in 2005 and 2008. The FTC alleged that Malone failed to file the required HSR notification in 2005 after buying Discovery voting securities, and then in 2008 purchased additional Discovery shares of stock before the expiration of a waiting period required by the HSR Act.

The Malone case is interesting because it is the first HSR Act enforcement action in which a party claimed its failure to file was based on its reliance on advice contained in an informal interpretation by the FTC’s Premerger Notification Office (PNO) staff. According to the FTC Complaint, Malone’s counsel relied on a 2001 PNO informal interpretation of the HSR Act and rules in concluding that a particular 2005 acquisition did not require filing a report under the HSR Act. However, his counsel was apparently not aware that the particular informal interpretation relied upon had been disavowed by the PNO six months earlier in another informal interpretation also published on the FTC’s Web site.

Malone illustrates the key role that the PNO’s informal interpretations play in the functioning of the HSR program. Like many other regulatory regimes, the pre-merger reporting system is authorized by federal statute and governed by lengthier and more detailed implementing regulations. However, the regulations, extensive as they are, sometimes do not provide clear guidance as to whether a particular transaction is reportable. The complexity of the HSR rules, their interaction with each other, and the almost infinite manner of transactions to which they might apply, can confuse even seasoned practitioners. The HSR program has come to rely heavily on PNO staff “informal interpretations” to guide parties in applying the HSR Act’s requirements to specific situations.

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4 The PNO is the office at the FTC that is responsible for administering the HSR premerger notification program for both the FTC and the Antitrust Division of the United States Department of Justice.

5 FTC Complaint, supra note 2, ¶¶ 28–29, at 8–9.
As such, while counsel are encouraged to use these interpretations in analyzing transactions and advising clients, the *Malone* decision also cautions counsel not to rely solely on the interpretations without additional confirmation.

**Malone Standards of Diligence with Respect to Reliance on Informal Interpretations**

*Malone* provides useful insight into how a party’s reliance on PNO informal interpretation advice is considered by the agencies in a subsequent enforcement action. According to the FTC’s Complaint, counsel for Malone should have exercised additional diligence in confirming that the 2001 PNO interpretation upon which it relied was “still the policy” of the PNO. The complaint alleged that during the time period of the transactions at issue, from August 2005 to April 2008, Malone’s counsel neither checked the PNO’s database of informal interpretations nor did it contact the PNO to determine whether the 2001 interpretation was still the policy of the PNO.† Had Malone’s counsel taken either of these steps, the FTC effectively argued, his counsel would have learned that the 2001 informal interpretation had been “disavowed” in February 2005 and, based on that information, presumably would have made a filing in 2005 prior to the acquisition of the shares at issue.†† *Malone* thus indicates that the FTC requires, at a minimum, that parties ensure that any informal interpretation upon which they intend to rely is current, either through checking the PNO’s database for subsequent interpretations or otherwise confirming its continuing validity with PNO staff.

While first in terms of an FTC Complaint’s reference to informal interpretations, *Malone* does not necessarily represent a departure from the way in which the HSR Act has been enforced over the past three decades. In particular, the FTC may continue to be willing to forgive a party’s first inadvertent violation where it exercised at least some minimum level of good faith and diligence in attempting to comply with the complex requirements of the HSR Act.

Malone’s repeated failures to file and observe the HSR waiting period over a period of decades clearly played a part in the FTC’s decision to seek sizeable civil penalties. Malone was not sanctioned until the third violation, which the FTC may have viewed as an affront to its authority, given that it occurred during the waiting period for a second corrective filing. Viewed in this context, there may still be room for FTC leniency for a mistaken reliance on prior advice contained in an outdated informal interpretation if this leads a party to fail to file for a reportable transaction. The PNO has stated that it will generally allow parties who inadvertently fail to file and observe the HSR waiting period “one bite of the apple” without imposing civil penalties. In fiscal year 2008, for example, the FTC noted it received forty-eight corrective filings made after the acquisitions being notified had already been consummated, but only took enforcement against one party for failure

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† Id. ¶ 31, at 9.
†† Id. ¶¶ 30–31, at 9.
See id. ¶ 29, at 9.
See id. ¶ 19–44, at 7–12.
See id. ¶ 19, at 7, ¶ 27, at 8, ¶ 34, at 10, ¶¶ 42-44, at 11–12 .
to file under the Act. While Malone lays out a standard of diligence that requires parties to ensure that any informal interpretation upon which they intend to rely is current by contemporaneous consultation with either the PNO’s database or staff, failure to meet that standard may not automatically result in a civil penalty if it results in a failure to file. The PNO notes that “[i]n determining whether . . . to pursue civil penalties” for failure to file, it will consider “various factors,” including the parties’ explanations, and whether the “violation was the result of understandable or simple negligence.” The agencies will likely continue to take into account all of the facts and circumstances when determining whether to seek civil penalties from parties who make corrective filings.

The HSR Act Reporting Requirements
The origins of informal interpretations may be traced to the complexities of the HSR Act reporting requirements themselves. The HSR Act was passed by Congress in 1976 to provide the FTC and the U.S. Department of Justice with the opportunity to review the potential competitive effects of certain mergers, acquisitions, and other transactions before they are completed. Prior to the Act, the agencies would often learn about anticompetitive mergers after they had been consummated, frustrating effective enforcement of Section 7 of the Clayton Act.

The framers of the HSR Act sought to use objective criteria for requiring pre-closing merger filings, specifically, the parties’ size of assets and revenues as shown on their financial statements, and the dollar amount of the transaction. Though an antitrust law, the HSR Act does not rely on competition-based criteria for determining whether a filing is required. The parties’ market shares, similarity of products and services, and geographic areas of domestic operation do not factor into reportability.

For many transactions, applying these size criteria is relatively straightforward. In some instances, though, applying these ostensibly objective thresholds is complicated. Numerous definitional rules and exemptions provided by the HSR Act and its implementing regulations add a layer of complexity. For example, the HSR Act itself lists eleven specific exemptions, and allows the FTC to further “exempt . . . classes of persons, acquisitions, transfers, or transactions which are not likely to violate the antitrust laws.” This delegation has resulted in an additional twenty-eight exemptions created by the FTC, as provided in Part 802 of the Rules, Regulations, Statements and Interpretations under the HSR Act.

Not surprisingly, applying the HSR Act’s reportability tests and dozens of exemptions to all types of business entities, forms of organization, varieties of acquisitions and business practices has proven complicated. The PNO has indicated that it annually responds to as many as “44,000

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14 See id.
16 See 15 U.S.C. § 18a(a)(2). Other jurisdictions, such as Brazil, Spain, and Turkey, have chosen to rely on less objective market share thresholds as a trigger for filing obligations.
telephone calls seeking information concerning the reportability of transactions under the HSR Act and the details involved in completing and filing premerger forms.\textsuperscript{19}

**The Authority to Issue Formal and Informal Interpretations**

Anticipating the future complexity of the program, the FTC included in the initial HSR regulations a process for the FTC staff to respond to questions from the public about the coverage of the HSR Act. The process chosen was to authorize the FTC staff in the PNO to provide direct guidance to parties who request either “formal” or “informal”\textsuperscript{20} interpretations of requirements of the HSR Act and the rules.\textsuperscript{21} The HSR Act is not unique in this regard. For example, similar provisions are made for reporting programs overseen by other agencies, such as the Federal Elections Commission\textsuperscript{22} and the Department of Justice Criminal Division.\textsuperscript{23}

Two significant limits with respect to HSR Act interpretations are not explicitly included in the rule that authorizes them. Instead, they were stated in the background section of the Federal Register notice for this rule. First, a party has no right to appeal a staff interpretation. If a party is unhappy with or disagrees with a staff interpretation, whether formal or informal, there is no process to “appeal” that interpretation to the Commission.\textsuperscript{24} In practice, however, it is not uncommon for a party who disagrees with a staff interpretation to bring the interpretation to the attention of the head of the PNO to seek reconsideration.


\textsuperscript{20} When the regulation was first proposed, it provided only for a more limited “formal interpretation” process upon application to the FTC. The original proposed version of 16 C.F.R. § 803.30 provided that, in response to questions, the FTC, “with the concurrence of the Assistant Attorney General, may inform the applicant of its views as to the questions raised and publish a summary thereof in the Federal Register.” Premeger Notification; Reporting and Waiting Period Requirements, 42 Fed. Reg. 39,040, 39,058 (proposed Aug. 1, 1977).

\textsuperscript{21} 16 C.F.R. § 803.30 “recognizes that persons who are or may be subject to the act may frequently require information and advice concerning their obligations, and that the staff should respond to their needs for the program to function. Requests for advice may be made orally by phone or in person, or they may be made in writing. The same variety of responses is available to the staff, so that straightforward problems can be handled expeditiously, while more difficult questions are given more deliberate consideration.” Premeger Notification; Reporting and Waiting Period Requirements, 43 Fed. Reg. 33,450, 33,516 (July 31, 1978).


\textsuperscript{23} The regulations implementing the Foreign Agents Registration Act of 1938, as amended (FARA), 22 U.S.C. §§ 611–621, provide that a party “may request . . . a statement of the present enforcement intentions of the [DOJ] with respect to any presently contemplated activity . . . and specifically with respect to whether the same requires registration and disclosure pursuant to [FARA], or is excluded from coverage or exempted from registration and disclosure.” 28 C.F.R. § 5.2(a) (2009). For “informal” advice, “FARA Unit personnel are available to answer reasonable inquiries about what FARA requires, how to register, how to fill out the forms, and what fees are required” via telephone. U.S. Dep’t of Justice, FARA Contact Information, http://www.justice.gov/criminal/fara/links/contact.html.

\textsuperscript{24} See Premeger Notification, 43 Fed. Reg. at 33,516.
Second, the interpretations are not binding on either the FTC or DOJ. The Federal Register notice makes clear that “[n]either the Commission nor the Assistant Attorney General [DOJ] is bound by either the formal or the informal interpretations,” but before taking a contrary position to a previously issued interpretation, they are expected to “first withdraw that opinion and give notice of that rescission to the party that originally requested the interpretation.”

Formal Interpretations. To date, the FTC has issued eighteen formal interpretations with the concurrence of the DOJ. Initially, as anticipated by the regulations, formal FTC opinions were issued with respect to requests from legal counsel as to the applicability of the rules to specific transactions. The first formal interpretation was issued ten days after it was requested. However, no formal interpretation as to the reportability of a specific transaction has been issued by the FTC since 1981.

Starting with Formal Interpretation No. 3 in 1978, and including all formal interpretations issued after 1981, formal interpretations have been issued by the FTC sua sponte, or in response to frequent questions received on the same issue that the FTC staff believe would benefit from formal clarification. Used in this manner, formal interpretations are an efficient way for the PNO to communicate to the private bar important information in a form that can address common situations more broadly than via a response to an individual party’s question.

Formal interpretations have also been used as a way to issue HSR rules outside of the Code of Federal Regulations process. For example, several versions of a formal interpretation were issued to provide rules with respect to the treatment of non-corporate entities prior to formal rule-making using the CFR process in 2005. Of course, CFR rules are binding on the FTC and DOJ, so from a practitioner’s standpoint CFR rules provide more certainty than non-binding formal interpretations.

The formal interpretation process quickly proved to be too cumbersome for parties needing timely answers to HSR filing questions.

Informal Interpretations. Given the limitations of the formal interpretation process, informal staff interpretations have developed as the principal method used by the PNO to advise the public both with regard to questions relating to HSR Act reportability and completing the notification form. Because informal interpretations are by their nature oral rather than written, much of the guidance for the reportability of complex or specialized transactions has developed from telephone calls between frequent HSR practitioners and PNO staff. Thus developed a large body of unwritten “lore” that formed the basis of much of the information needed to comply with the HSR Act.

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25 Id. at 33,517.

26 Formal Interpretation Nos. 1, 2, 4, 8, and 12 were requested by private parties.

To make the process more useful, a practice has developed between private counsel and PNO staff to allow for the creation of a written record of these “oral” interpretations.28 Typically, counsel will call a PNO staff member and describe a hypothetical set of parties and a hypothetical transaction. Because of confidentiality concerns, counsel often will withhold the identity of their client and refer to parties using descriptive names such as “Company A” or “Target T.”29 After presenting the hypothetical transaction, counsel ask staff how to apply a particular rule or perhaps potentially conflicting rules. The PNO staff member then provides a view as to how the rule would apply in the given situation, based on staff’s knowledge and experience with similar questions. If counsel presents a novel question that has not previously arisen or which may have implications for other situations, staff may request time to consult with other PNO staff members or management in order to provide a view.

Once staff has orally conveyed the informal interpretation, counsel will then draft a letter to the PNO staff member describing the fact pattern, presenting the question at issue, and summarizing the oral interpretation received from the staff. Often, the letter will conclude with language requesting that staff contact the author as soon as possible if staff does not agree that counsel has accurately and adequately summarized the interpretation received. The general practice is for counsel to keep these letters in their files incase of later questions from the agencies, particularly if the informal interpretation led to the conclusion that a HSR notice was not required for a particular transaction.

Traditionally, the PNO has not responded to these confirmation letters in writing, presumably to ensure that the advice remained “informal” (oral) rather than “formal” (written).30 In a nod to evolving technological capability, staff at the PNO have embraced email as a method for providing interpretations and answering questions. This has helped simplify the more cumbersome process of telephone calls followed by confirmatory letters. Staff will often respond directly to a question posed via email, and these email responses are often more helpful in that they allow staff to choose the wording of their response to requests for interpretation advice, as opposed to leaving the phrasing solely to the questioner.

It is somewhat unclear whether staff email responses to requests for interpretations and notices included with disclosed private party confirmation letters constitute “formal” interpretations because they are made in a written form, or whether they are still considered “informal” because they have evolved out of the oral telephone call context. FTC staff (as opposed to the Commission itself) are authorized by 16 C.F.R. § 803.30 to issue formal (i.e., written) interpretations. Staff formal interpretations are not required to be published in the Federal Register, but are required to

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28 The PNO’s Web page notes that:

If you call and receive advice from the PNO, you may confirm the staff member’s advice by sending a letter to the PNO. You should address the letter to the staff member and include the date you called, reiterate the facts presented, and state the conclusion reached. Note that letters received are subject to the Freedom of Information Act. Letters received can be reviewed in redacted form (confidential information such as names, etc. are removed) on the PNO’s informal interpretation database located at http://www.ftc.gov/bc/hsr/informal/index.shtml.


29 Because these letters are subject to public disclosure under the Freedom of Information Act (FOIA), it is advised that counsel avoid identifying parties by name and refrain from submitting underlying deal documents to the PNO to prevent disclosure. The PNO informal interpretation database contains examples of partially redacted deal documents. See, e.g., Lease and Transfer Agreement, http://www.ftc.gov/bc/hsr/informal/opinions/9903021.pdf, and Stock Purchase Agreement, http://www.ftc.gov/bc/hsr/informal/opinions/9112014.pdf.

be rendered with the concurrence of the Assistant Attorney General or his or her designee.”

Because it would seem unduly cumbersome for the PNO to obtain specific concurrence from the DOJ for each of the hundreds of email interpretations it provides annually, for efficiency sake PNO staff email responses are best viewed as “informal” interpretations. Accordingly, the FTC refers to the PNO’s answers to emails as “informal advice.”

**Publication of Informal Interpretation Confirmation Letters.** Because the PNO’s informal interpretations are primarily oral and generally not reduced to writing by PNO staff but (if at all) only by the parties who receive them, initially informal interpretations received by one party were not accessible to other parties evaluating similar HSR issues. This raised concern in some quarters because these interpretations “were an important body of learning not generally available to the legal and business communities.” Consequently, secondary sources, such as treatises and practice guides prepared by the private bar, soon appeared in order to collect and summarize a growing body of informal interpretations as understood by practitioners. These early guides relied heavily upon hundreds of confirmatory letters shared among the private bar. The FTC initially resisted making public the letters it received confirming informal interpretations. These letters were eventually released pursuant to a FOIA request made by the editors of the *Premerger Notification Practice Manual.*

The release of these informal interpretation confirmation letters revealed several areas of concern, primarily because they were authored by the parties seeking the interpretations, and not by the PNO staff. Thus, a later party that seeks to use the informal advice that these letters purport to summarize must rely on the original author’s clarity, word choice, and understanding of the staff member’s response. In addition, these letters may omit or change certain facts that were important in formulating the staff’s interpretation. The FTC noted these types of concerns in a letter that accompanied the FTC’s response to the original FOIA request. The FTC further noted that some of the letters were wrong in that “authors of some of the letters misconstrued the legal advice given by the [PNO] staff.”

**The PNO Informal Interpretation Database.** While letters confirming the PNO staff informal interpretations have long been cited in secondary sources, the letters themselves remained largely inaccessible in their entirety until the 1990s, when the Internet made their publication practical. In 1998, a private law firm made approximately 1,100 confirmation letters available to the public.

31 16 C.F.R. § 803.30(c), (e) (2009).
33 *ABA Section of Antitrust Law, Premerger Notification Practice Manual* v (1st ed. 1985) [hereinafter *Practice Manual* (1st ed.)].
35 See *Practice Manual* (1st ed.), supra note 33, at x–xii; *Practice Manual* (4th ed.), supra note 34, at xv. The letters first released in 1983 under FOIA were redacted as to the identity of the parties requesting the advice, as well as any staff notations. Many of these notations have since been disclosed, and indicate information such as staff’s agreement or disagreement with the letter, information conveyed orally by staff to the author, and the results of staff consultations with other PNO staff or management. It is the present practice of the PNO to make redacted copies of these letters public without the need for a FOIA request.
36 See *Practice Manual* (1st ed.), supra note 33, at x–xi.
37 *Id.* at x.
on its Web site via a searchable database.\(^{38}\) In 2003, the PNO created and indexed an Internet searchable database of informal interpretation letters on its own Web site. This database, which is still operational today, contains approximately 3,300 entries\(^{39}\) and is added to monthly. It is this PNO database to which the FTC referred in its \textit{Malone} complaint.\(^{40}\)

The PNO notes on the search page to the informal interpretation database set out a disclaimer noting four important limits to the material it contains.\(^{41}\) To paraphrase, these are:

1. The database does not contain all PNO letters and emails related to informal staff interpretations.\(^{42}\)
2. The letters and emails contained in the database may not be accurate and complete.
3. The letters and emails may not accurately state the advice given to the writer by the PNO staff.
4. The letters and emails may not represent the current views of the PNO staff.

Despite these limits, the PNO database is by all accounts a very useful resource for HSR practitioners. Nonetheless, its limits must be understood. Significantly, the database is not actively monitored for consistency, changes in the statute or regulations, or evolving PNO views.\(^{43}\) Thus one can find letters that relate to regulations that have since been repealed or modified and letters referring to positions taken by the PNO that have subsequently been disavowed.\(^{44}\) Indeed, the superseded letter upon which Malone’s counsel relied continues to be included in the database. There is no system in place for flagging such outdated letters similar to the Shepard’s system of cautions for overruled or questionable court decisions.\(^{45}\)

\textbf{Practical Consequences of the \textit{Malone} Enforcement Action}

The agencies have a thirty-plus year record of not seeking civil penalties from a party who relied on a staff interpretation that the party requested itself in order to assess the reportability of a specific transaction it planned to undertake. \textit{Malone}, which alleges that the respondent inappropriately claimed to rely on a disavowed informal interpretation given to a different party, in the con-


\(^{39}\) See generally HSR Informal Interpretations, supra note 32. The total number of entries is based on the number of entries listed on the PNO index of informal interpretations as of February 2010, http://www.ftc.gov/bc/hsr/informal/opinions/. Individual confirmation letters and emails from private parties are available on the FTC’s Web site in the format http://www.ftc.gov/opinions/YRMONUM.FMT, where YR = the last two digits of the year (e.g., “97” for 1997), MO = the two digit month (e.g., “01” for January), NUM = the sequential number of the letter (e.g., 001, 002, 003, etc.), and FMT = the format (either “htm” for the hypertext version (this is the version that is text-searchable) or “pdf” for the Adobe Acrobat version of the redacted original document image). Thus, the URL “http://www.ftc.gov/opinions/9801002.htm” indicates that this link is to the second letter from January 1998 posted in hypertext format.

\(^{40}\) FTC Complaint, supra note 2, ¶ 30, at 9.

\(^{41}\) See HSR Informal Interpretations, supra note 32 (Disclaimer).

\(^{42}\) Presumably some editorial decisions are therefore made as to what is included.

\(^{43}\) Because there appears to be some sort of editorial decision made as to which letters are included in the database, the more recent letters may be more reliable in the sense that mistaken, ambiguous, or confusing letters may not be posted to the database.


\(^{45}\) Although at least one letter has been later annotated to indicate that it was “[n]o longer the position of the PNO,” Premerger Notification Office, Federal Trade Comm’n, Informal Staff Opinion 9911006 (comment Nov. 6, 2006), http://www.ftc.gov/opinions/9911006.htm (interpreting Section 7A(c)(8) of the Clayton Act). Additional examples of this kind of notation have not been identified.
text of a different transaction, does not call into question a party’s ability to rely on an informal interpretation that it receives directly from the PNO staff regarding the party’s own transaction, assuming it makes accurate disclosure to the PNO.

It is perhaps ironic that an agency that initially resisted making its informal interpretations public until forced to do so under the FOIA now considers them to be required reading. The Malone case indicates that the PNO will hold parties to a minimum level of diligence in making sure that whatever decision is made with respect to filing under the HSR Act, it is based on the current rules, of which the views of the PNO, as expressed in informal interpretations are an integral component. The Malone case may lead parties facing reportability decisions that rely on prior informal interpretations of the PNO to contact the PNO more frequently to verify that the particular views expressed in those informal interpretations remain current.

The practical consequences are that parties reviewing informal interpretations on the PNO database should:

- View with caution any advice that is dated. As a general rule, the more recent the interpretation, the more likely it represents the PNO’s current view.
- Not always assume, however, that the most recent interpretation is correct. If you find material inconsistencies in two or more interpretations, seek PNO clarification.
- Be cautious about relying solely or too heavily on one or two interpretations. It is best to find additional support for the position in the ABA Practice Manual, FTC speeches, articles by PNO staff, and HSR treatises.
- Place less reliance on an interpretation the further removed it seems from the language of the regulations. An application of the rules to unusual fact patterns may also raise questions as to the interpretation’s broader applicability.
- Keep in mind that some PNO staff may be better than others at communicating advice, so some letters may be entitled to greater weight based on the staffer consulted. A notation that senior staff or the head of the PNO concurred in a view suggests greater reliability.
- Look carefully at the staff comments on each of the hypertext and pdf versions because an interpretation with lengthy staff comments may be more helpful than one that just says “agreed.” Some staff comments provide detailed analysis and thus are very informative.
- Be sure to check the database frequently. Just because you confirmed that the PNO took a certain position on an issue for a deal you worked on last year, do not necessarily assume it is still the current PNO view. Experienced HSR counsel who have become familiar with certain PNO positions may be more at risk of missing such a change than inexperienced counsel looking at an issue for the first time.

**Conclusion**

For the majority of transactions, the HSR Act and its regulations provide clear guidance as to whether a transaction is or is not reportable. However, for those transactions that require a more complex HSR reportability analysis, recourse to informal interpretations may be necessary in order to apply the HSR Act to a particular transaction. Parties may either rely on informal interpretations given to other parties and recorded in the PNO database or seek an interpretation themselves from the PNO directly.

46 See FTC Complaint, supra note 2, ¶¶ 28–33, at 8–10.

47 Indeed, one informal interpretation includes thirteen pages of staff notes: http://www.ftc.gov/bc/hsr/informal/opinions/8304010.pdf.
It is important for HSR practitioners not to draw an overbroad conclusion from *Malone* regarding the risk of relying on the advice contained in PNO staff informal interpretations. The specific circumstances in *Malone*, including the existence of past multiple HSR violations and a high-profile party with experienced counsel, likely compounded the issue of whether counsel properly relied on the informal interpretation when deciding not to file an HSR notification. As such, an apparent mistake concerning one complicated aspect of the HSR rules was only one aspect of the enforcement action. However, the *Malone* case does confirm that when relying on informal interpretations, parties should take reasonable measures to ensure that the advice they contain is current.
Agency Merger Enforcement in Non-Reportable Transactions

Mary K. Marks and Beverly J. Ang

The number of agency challenges to transactions not subject to the reporting requirements of the HSR Act, either because they were exempt or valued below the threshold, has notably increased in recent years. Significantly more non-reportable transactions were challenged over the past two fiscal years alone than over the preceding seven fiscal years—approximately sixteen challenges in 2008–2009 as compared with approximately twelve publicly announced challenges between 2001–2007. Whether this trend is attributable to agency resources freeing up during the economic downturn or other factors, the increased enforcement activity is continuing, with three non-reportable transactions being subject to agency challenges during just the first four months of fiscal year 2010. Moreover, the agencies have not hesitated to challenge long-completed transactions, bringing four recent merger challenges more than two years after the relevant deal was consummated.

Recent enforcement actions against non-reportable transactions show that the FTC is particularly interested in the pharmaceutical and healthcare industries. The Antitrust Division has stated that it plans to focus more on transactions involving agriculture markets and, in January, challenged a consummated, non-reportable merger involving dairy products. Post-merger price increases have been a leading factor in many recent challenges to non-reportable transactions, and almost every recent non-reportable merger enforcement action has alleged a post-merger market concentration of 2-to-1 or 3-to-2 (in other words, the transaction would result in a market with fewer than two significant remaining competitors).

Non-Reportable Transactions May Attract Antitrust Scrutiny

Agency challenges to transactions not subject to the HSR Act’s reporting requirements began to noticeably increase in frequency in fiscal year 2008. In fiscal year 2009 there were at least seven agency challenges to non-reportable transactions, and in fiscal year 2008 there were at least nine

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1 The numbers set forth here regarding challenged non-reportable transactions are based on agency reports and press releases and publicly available court and administrative pleadings. The FTC has not published the total number of non-HSR Act merger enforcement actions prior to fiscal year 2007, and the Antitrust Division has not historically disclosed how many of its non-HSR Act merger investigations led to enforcement actions. See infra Table 1 for a list of all enforcement actions (by case name and URL) initiated during fiscal years 2001–2010 and publicly identified as non-reportable under the HSR Act.


agency challenges to non-reportable transactions. In comparison, there were at least four challenges to non-reportable transactions in fiscal year 2007. The agencies issued press releases for seven apparently non-reportable merger challenges in fiscal years 2008-2009, compared to a total of approximately twelve in fiscal years 2001–2007. Already, in fiscal year 2010, the agencies have challenged at least three apparently non-reportable transactions.

Although the agencies do not often specify how they become aware of non-reportable, potentially anticompetitive transactions, the agencies closely monitor the press for transactions in industries within their respective jurisdictions. The FTC is stepping up its already heightened focus on mergers affecting healthcare and pharmaceutical industries, even in relatively small markets, with at least three out of the six FTC challenges to apparently non-reportable transactions in fiscal year 2009 involving those industries. By contrast, only 20 percent (64 out of 319) of total FTC merger enforcement actions between fiscal years 1996 and 2009 involved healthcare or pharmaceuticals.

Senior leadership at the Antitrust Division recently signaled an increased interest in the agricultural industry. In January, the Antitrust Division challenged a non-reportable transaction involving dairy processors that closed in 2009, and the Antitrust Division is jointly hosting a series of workshops in 2010 with the U.S. Department of Agriculture to “explore competition issues affect-

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5 The FTC initiated two non-HSR Act merger enforcement actions in fiscal year 2007, one of which the FTC publicly identified as relating to a non-reportable transaction. See Fed. Trade Comm’n, Performance and Accountability Report Fiscal Year 2007, available at http://www.ftc.gov/opp/gpra/2007parreport.pdf; American Renal Associates, infra Table 1. The Antitrust Division initiated twenty non-HSR Act merger investigations, but the DOJ Workload Statistics do not specify how many of these led to challenges (there were twelve total Antitrust Division merger challenges in fiscal year 2009). See DOJ Workload Statistics, supra note 4. However, at least two Antitrust Division challenges could be identified as relating to non-reportable transactions through press releases. See Daily Gazette; Amsted, infra Table 1.

6 The FTC challenged seven transactions publicly identified as non-reportable during fiscal years 2001–2007, and the Antitrust Division challenged five such transactions during the same period.

7 See Cameron; Dean Foods; SCI, infra Table 1.


9 See Carilion; Inverness; Ovation, infra Table 1; see also Press Release, Fed. Trade Comm’n, Bureau of Competition Director Issues Statement on FTC’s Closure of its Investigation of Consummated Hospital Merger in Temple, Texas (Dec. 23, 2009), available at http://www.ftc.gov/opa/2009/12/scottwhite.shtml (closed, non-reportable hospital merger was investigated but not formally challenged by the FTC prior to closure of the investigation on Dec. 23, 2009); Press Release, Fed. Trade Comm’n, Chairman, Commissioners Issue Statement on Endocare, Inc.’s Announcement that It Has Terminated its Merger Agreement with Galil Medical Ltd. (June 9, 2009), available at http://www2.ftc.gov/opa/2009/06/endocare.htm (noting that Endocare, Inc.’s healthcare-related proposed acquisition of Galil Medical Ltd. was abandoned in 2009).


11 See Christine A. Varney, Assistant Att’y Gen., Antitrust Division, U.S. Dep’t of Justice, Crisis on the Farm: The State of Cooperation and Prospects for Sustainability in the Northeast Dairy Industry, Statement Prepared for the Senate Judiciary Committee (Sept. 19, 2009), available at http://www.justice.gov/atr/public/testimony/250178.htm (“Competition issues affecting agriculture have been a priority for me since I was confirmed last spring”).

12 See Dean Foods, infra Table 1.
Third-party complaints are another way the antitrust agencies become aware of or learn more about potentially anticompetitive non-reportable transactions, and, in at least three recent challenges to non-reportable transactions, the agencies identified key customers that could have complained about significant price increases. The Antitrust Division may have initiated its investigation of the closed, non-reportable acquisition of Diebold, Incorporated’s U.S. election systems business by Election Systems & Software, Inc. due to a complaint letter from an industry organization. The agencies may also find out about non-reportable transactions through pre- or post-closing press releases put out by the parties, securities or bankruptcy-related filings, foreign antitrust filings or communications with foreign authorities, or HSR Act filings for subsequent transactions.

**Factors that Influence the Decision to Review and Challenge Non-reportable Transactions**

Post-consummation price increases appear to be the most likely reason the agencies will open an investigation of a non-reportable transaction that has already closed, and significant price increases that give rise to consumer complaints increase the likelihood of post-consummation challenges. In the *Carilion* complaint, the FTC alleged that certain prices would increase by nearly 900 percent. In *Ovation*, prices increased 1,300 percent. In *Microsemi*, the alleged price increase

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14. See Lubrizol, infra Table 1.

15. See Daily Gazette, infra Table 1.

16. See TALX; SCI, infra Table 1.

17. See Microsemi; Polypore; Cameron; Amsted, infra Table 1.

18. See Microsemi; Carilion; Ovation, infra Table 1.


20. See Carilion, infra Table 1; see also Complaint ¶ 4, FTC v. Ovation Pharm. Inc. (D. Minn. Dec. 16, 2008), [available at http://www2.ftc.gov/os/caselist/0810156/081216ovationcmpt.pdf](http://www2.ftc.gov/os/caselist/0810156/081216ovationcmpt.pdf). However, in the healthcare industry, the government (through Medicaid) and other public and private providers are the ones that ultimately bear the cost of a product or service, and they are motivated to bring antitrust issues to the agencies’ attention.


22. See Cameron, infra Table 1.

23. However, the agencies do not generally specify whether customer complaints (as opposed to the agency’s own research) precipitated the investigation of a transaction.
was smaller, but the agencies had evidence that only one month after the transaction closed the company advised its customers to expect price increases in the “lower teens.”

Nearly all agency challenges to transactions publicly identified as non-reportable during the past few years involved 2-to-1 or 3-to-2 mergers. This is consistent with the Horizontal Merger Data released by the FTC for all investigated mergers, which reveals that nearly all (234 of 239) 2-to-1 mergers, as well as the vast majority of 3-to-2 mergers (242 of 278), that were investigated by the FTC in fiscal years 1996–2007 were ultimately challenged. This pattern provides some indication that non-reportable mergers resulting in more than two competitors remaining in the market (that is, a 4-to-3 or beyond) have a greater possibility of surviving agency scrutiny. Furthermore, the post-merger market shares in the challenged transactions publicly identified as non-reportable since the beginning of fiscal year 2008 were almost uniformly above 70 percent.

Another pattern to note is that in recent years the FTC appears to have challenged more non-reportable transactions than the Antitrust Division. According to the FTC’s 2008 and 2009 Performance and Accountability Reports, the FTC challenged six and nine non-reportable transactions during fiscal years 2008 and 2009, respectively. The Antitrust Division publicly identified only one challenge as relating to a non-reportable transaction during that period. Approximately 38 percent (15 of 39) of all of the FTC’s merger enforcement actions in fiscal years 2008 and 2009 involved non-reportable transactions. Interestingly, so far in fiscal year 2010 the Antitrust Division has challenged at least two non-reportable transactions while the FTC has challenged at least one.

Finally, in addition to the foregoing factors, the enforcement actions taken by the agencies since the beginning of fiscal year 2008 against non-reportable transactions indicate the agencies’ usual sensitivity to other factors, such as reduced incentives for service and innovation, exclusionary conduct, and other barriers to entry. For example, in Microsemi, the Antitrust Division cited the

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24 See Microsemi Motion for TRO, supra note 19, ¶ 4.
25 See Performance and Accountability Report for Fiscal Year 2008, supra note 4; Performance and Accountability Report for Fiscal Year 2009, supra note 3; Lubrizol, Ovation, and Cameron involved 2-to-1 mergers, while Carillon, Inverness, and SCI involved 3-to-2 mergers, infra Table 1. Microsemi and Polypore involved more than one relevant market and were considered both 3-to-2 and 2-to-1 mergers. See infra Table 1. Likewise, Dean Foods involved more than one relevant market and was considered a 4-to-3, 3-to-2, and 2-to-1 merger, depending on the market. See infra Table 1.
26 4-to-3 mergers were also likely to be challenged (140 of 188), but the percentages decline significantly thereafter (88 of 220). See Fed. Trade Comm’n, Horizontal Merger Data 1996–2007, tbl. 4.1, available at http://www2.ftc.gov/os/2008/12/081201hsrmergerdata.pdf.
27 In SCI, Cameron, Microsemi, Lubrizol, Ovation, Inverness, and Polypore, the post-consummation market shares alleged by the agencies were 70 percent or more. See infra Table 1.
29 Two and four of which have been identified as non-reportable through FTC press releases, respectively. See infra Table 1.
30 See Microsemi, infra Table 1.
32 See Cameron; Dean Foods; SCI, infra Table 1.
34 See Lubrizol and TALX, infra Table 1.
35 See Microsemi; Ovation, infra Table 1.
lengthy periods required for government certification of the relevant products as a factor that illegally constrained competition in the market, and in Ovation, regulatory approval by the Food and Drug Administration was cited as a factor.

**Post-Consummation Challenges**

While it is usually easier to challenge transactions and impose remedies prior to closing, the agencies may challenge anticompetitive mergers after (sometimes, years after) they are consummated. Transactions reviewed under the HSR Act are rarely challenged post-closing, but during fiscal years 2008 and 2009, the agencies initiated at least seven of the approximately sixteen merger enforcement actions taken against non-reportable transactions post-closing, and they challenged four of those seven more than two years post-closing.

**Remedies for Non-Reportable Transactions**

The agencies’ tools for restoring or preserving competition are similar regardless of whether a transaction is reportable and whether it has closed. The agencies are able to use financial penalties, “fix-it-first” or consent decrees, including obligations to divest the assets of one of the entities. Consistent with the FTC and DOJ merger remedy guidelines, complete or near-complete divestiture was the typical remedy sought by the agencies in the recent enforcement actions involving non-reportable, consummated mergers. Conduct remedies were also sought in several situations, including restrictions on future dealings with other entities, licensing, monitoring, and the elimination of non-compets, non-solicits, and other exclusionary or long-term contracts.

In one recent challenge the FTC sought disgorgement of profits in addition to structural relief. Because investigations are generally non-public until challenged, it is difficult to quantify how many non-reportable transactions the agencies investigate that are either resolved without a consent decree, abandoned, or not ultimately challenged. The recently proposed merger between

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36 The agencies only challenged four closed transactions that had been reviewed pursuant to the HSR Act between fiscal years 2001 and 2007. See Robert B. Bell, Voluntary HSR Act Filings: A Modest Proposal, ANTI TRUST, Spring 2009, at 72.

37 See Lubrizol; Inverness; Carillon; Ovation; Microsemi; Polypore; TALX, infra Table 1. In addition, Cameron and Dean Foods involved consummated transactions, and the assets to be divested in Cameron had been acquired four years earlier. See Cameron; Dean Foods, infra Table 1.

38 See Inverness; Lubrizol; Ovation; TALX, infra Table 1.

39 The FTC does not often disclose details regarding abandoned transactions and those subject to “fix-it-first” and restructuring. See FTC Competition Enforcement Database, Merger Enforcement Actions, http://www.ftc.gov/bc/caselist/merger/index.shtml.


41 See Ovation; Microsemi; Inverness; Polypore; Cameron; Dean Foods, infra Table 1.

42 See TALX; Inverness, infra Table 1.

43 See Inverness; Lubrizol, infra Table 1.

44 See Inverness; TALX; Cameron; Dean Foods, infra Table 1.

45 See Lubrizol; TALX, infra Table 1.

46 See Ovation, infra Table 1.

47 While the FTC generally does not disclose information regarding specific transactions in the “Abandoned/Restructured/Fix-It-First” category, it does disclose the number of such transactions that were subject to enforcement actions in a given year. In fiscal year 2009, there were three such transactions; in fiscal year 2008, there were six. See FTC Competition Enforcement Database, Merger Enforcement Actions, http://www.ftc.gov/bc/caselist/merger/index.shtml.
Endocare and Galil Medical is an example of a non-reportable merger abandoned by the parties pre-closing while an FTC investigation was pending. The 2009 consummated merger between two Texas hospitals is an example of the FTC investigating a non-reportable transaction without seeking relief.

Conclusion
While there has been some debate over the appropriate level of merger enforcement, the upsurge in non-HSR Act merger challenges is likely to continue so long as the agencies have fewer HSR Act filings to review due to the decline in merger activity.

Recent enforcement actions show that transactions subject to customer complaints (especially due to post-consummation price increases), press reports, or identification in future HSR Act filings are likely to come to the attention of the antitrust agencies. Aggravating factors that appear materially to increase the risk of further investigation and potential challenge should come as no surprise. In addition to the obvious agency concerns generated by post-merger price increases and/or customer complaints, the agencies tend to focus on 2-to-1 and 3-to-2 transactions in markets with notable entry barriers, and on other transactions that result in less concentration, but involve industries subject to higher scrutiny. The agencies have not permitted the (lack of) reportability under the HSR Act to be a factor in identifying and investigating potentially anticompetitive transactions and, where appropriate, crafting remedies, most of which closely resemble the remedies they would seek and obtain in notified transactions.


49 See Texas Hospital Merger Press Release, supra note 9. The FTC closed its investigation of this consummated merger after finding that the target hospital’s financial condition was “precarious” and there was a lack of a viable alternative purchaser that would not pose a danger to competition.
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<th>Case Name</th>
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<td>In the Matter of Inverness Medical Innovations, Inc.³</td>
<td><a href="http://www2.ftc.gov/opa/2008/12/inverness.shtm">http://www2.ftc.gov/opa/2008/12/inverness.shtm</a>; <a href="http://www2.ftc.gov/os/caselist/0610123/index.shtm">http://www2.ftc.gov/os/caselist/0610123/index.shtm</a></td>
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<td>FTC v. Ovation Pharmaceuticals, Inc. (n/k/a Lundbeck)</td>
<td><a href="http://www2.ftc.gov/opa/2008/12/ovation.shtm">http://www2.ftc.gov/opa/2008/12/ovation.shtm</a>; <a href="http://www2.ftc.gov/os/caselist/0810156/index.shtm">http://www2.ftc.gov/os/caselist/0810156/index.shtm</a></td>
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<tr>
<td>In the Matter of The Lubrizol Corp. and The Lockhart Co.⁴</td>
<td><a href="http://www2.ftc.gov/opa/2009/02/lubrizol.shtm">http://www2.ftc.gov/opa/2009/02/lubrizol.shtm</a>; <a href="http://www2.ftc.gov/os/caselist/0710230/index.shtm">http://www2.ftc.gov/os/caselist/0710230/index.shtm</a></td>
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<td>In the Matter of Carilion Clinic⁴</td>
<td><a href="http://www2.ftc.gov/opa/2009/07/carilion.shtm">http://www2.ftc.gov/opa/2009/07/carilion.shtm</a>; <a href="http://www2.ftc.gov/os/adjpro/d9338/index.shtm">http://www2.ftc.gov/os/adjpro/d9338/index.shtm</a></td>
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<td>In the Matter of TALX Corporation⁶</td>
<td><a href="http://www2.ftc.gov/opa/2008/04/talx.shtm">http://www2.ftc.gov/opa/2008/04/talx.shtm</a>; <a href="http://www2.ftc.gov/os/caselist/0610209/index.shtm">http://www2.ftc.gov/os/caselist/0610209/index.shtm</a></td>
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<td><strong>FISCAL 2001–2007</strong></td>
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<td>FTC v. Meade Instruments Corp./Tasco Holdings, Inc.⁷</td>
<td><a href="http://www.ftc.gov/opa/2002/05/meadecelestron.shtm">http://www.ftc.gov/opa/2002/05/meadecelestron.shtm</a></td>
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Table 1: Agency Challenges to Non-Reportable Transactions, Fiscal Years 2001–2010 continued

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1 The assets to be divested prior to the consummation of the proposed transaction were acquired in a previous transaction reportedly valued below the minimum HSR Act reporting threshold.
2 It is unclear whether premerger notification was required for this transaction. The acquisition terms have not been publicly disclosed, but the target company was a privately owned business with approximately $30 million in annual revenues.
3 It is unclear whether premerger notification was required for this transaction. A company press release valued the acquisition at approximately $175 million (subject to adjustment) but the acquisition was not challenged until more than two years after the closing, and no violations of the HSR Act were alleged.
4 The challenging agency did not specifically indicate that this transaction was non-reportable, but the reported transaction value was below the minimum HSR Act reporting threshold.
5 It is unclear whether premerger notification was required for this transaction. The acquisition was reportedly valued at approximately $76 million but the acquisition was not challenged until more than six months after the closing, and no violations of the HSR Act were alleged.
6 The challenging agency did not specifically indicate that all of these transactions were non-reportable, but some of the reported transaction values were below the minimum HSR Act reporting threshold.
7 The FTC sought a preliminary injunction to block a potential acquisition of some or all of the assets of the target company, which “may or may not be reportable” under the HSR Act.

David L. Belt

Although twenty-eight states have enacted “Little FTC Acts” that, like the Federal Trade Commission Act itself, prohibit “unfair acts or practices,”¹ the great majority of states apply unfairness criteria different from those currently applied by the Federal Trade Commission under Section 5(a)(1) of the FTC Act.² On the one hand, the courts of only a few states have addressed that conflict, an argument that a state court should follow FTC precedent in determining whether an act or practice is “unfair” may be available to litigants in Little FTC Act states. On the other hand, there may be sound reasons for applying criteria under Little FTC Acts, where determinations are made by generalist judges and lay juries, different from those applied under the FTC Act, where determinations are made by an expert administrative agency with a staff of economists. Choice of criteria may impact the breadth and clarity of the prohibition, the level of enforcement activity, and the appropriateness of legislative action to resolve the choice of criteria for determining unfairness.

The FTC’s Criteria for Determining Unfairness

The Cigarette Rule. The FTC Act was amended by the Wheeler-Lea Act³ in 1938 to prohibit “unfair or deceptive acts or practices” to extend the protection of the Act to consumers without the necessity of proving injury to competition or competitors.⁴ It was not until 1964, however, that the FTC articulated systematic criteria for determining whether an act or practice is unfair in violation of the Act. These criteria, which became known as the “Cigarette Rule” or the “S&H Rule,” were developed in connection with the Commission’s rule governing the advertising and sale of cigarettes. It identified three factors that the Commission would consider.

These factors are as follows: (1) whether the practice, without necessarily having been previously considered unlawful, offends public policy as it has been established by statutes, the common law, or otherwise—whether, in other words, it is within at least the penumbra of some common law, statutory, or other established concept of unfairness; (2) whether it is immoral, unethical, oppressive, or unscrupulous; and (3) whether it causes substantial injury to consumers (or competitors or other businessmen).⁵


³ Ch. 49, § 3, 52 Stat. 111 (1938).


⁵ Statement of Basis and Purpose of Trade Regulation Rule 408, Unfair or Deceptive Advertising and Labeling of Cigarettes in Relation to the Health Hazards of Smoking, 29 Fed. Reg. 8325, 8355 (1964) [hereinafter Cigarette Rule Statement].
In 1978, in connection with the promulgation of a rule concerning franchising, the Commission stated that “[a] practice may be unfair because of the degree to which it meets one of the [Cigarette Rule] criteria or because to a lesser extent it meets all three.”6 The Supreme Court acknowledged the FTC’s Cigarette Rule standard in FTC v. Sperry & Hutchinson Co.,7 although it is unclear whether the Court actually approved the criteria.8

The Commission made aggressive use of its unfairness authority in the 1970s, both in seeking adjudications and in the exercise of its rulemaking authority, leading to scholarly criticism, a political backlash, and ultimately to limitations on the Commission’s use of its unfairness jurisdiction. The scholarly criticism tended to focus on the Commission’s failure to apply its unfairness criteria consistently and systematically rather than on inherent faults in the criteria. In connection with the Commission’s adjudicatory activities, it was criticized for following a “shifting course” that seemed “characterized by its efforts to test the outer limits of its [unfairness] jurisdiction in an essentially ad hoc manner,” and “utilizing multiple theories, sometimes in a single proceeding.”9 In its rulemaking, the Commission was criticized for failing to identify the sources of public policy that supported a proposed rule,10 for failing to explain how competing interests should be balanced in addressing both the public policy and consumer injury criteria,11 and for employing an unfairness theory that appeared to be undefined, with its content shifting “according to which undesirable trade conditions the FTC wish[ed] to regulate.”12

The political backlash against the FTC arose primarily from its rulemaking activities directed at powerful political constituencies, including the funeral and used car industries, as well as doctors and lawyers.13 There is a consensus that the Commission’s 1978 proposed rulemaking concerning advertising directed towards children was the event that led to the tremendous political outcry that resulted in limitations on the Commission’s use of its unfairness authority.14 The proposed ban on children’s advertising was based on the grounds that it was “immoral, unscrupulous, and unethical” and against generalized public policies to protect children.15

**The Unfairness Policy Statement.** In a June 13, 1980 letter, the Chairman and Ranking Member of the Senate subcommittee with oversight responsibility with respect to the FTC informed the

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7 405 U.S. 233, 244 n.5 (1972).
9 Rice, supra note 8, at 26.
11 Id. at 14, 18 (“A balancing test which does not include an explanation of the weight and interrelationship of the factors to be balanced permits excess latitude in defining unfair practices.”).
Commission that the subcommittee planned to hold hearings and solicited the Commission’s views as to “whether the Commission’s authority should be limited to regulating false or deceptive commercial advertising.” The Commission responded with its Unfairness Policy Statement. The Commission’s Unfairness Policy Statement was based on its Cigarette Rule articulation, but with three significant differences: (1) it limited the use of the public policy criterion to public policies that were “clear and well-established”; (2) it deleted the second criterion—whether an act or practice was “immoral, unethical, oppressive, or unscrupulous”; and (3) it elaborated on the substantial injury criterion.

The modifications of the first and second criteria were in some ways problematic. As to the first criterion, narrowing the public policy criterion not only removed the ability to rely on conduct “within at least the penumbra of some common law, statutory, or other established concept of unfairness,” but also required that the Commission rely only on “clear and well established public policies.” As to the second criterion, the Commission stated that it had never relied upon the “immoral, unethical, oppressive or unscrupulous” criterion as an independent basis for finding unfairness. However, the legislative history of the FTC Act indicates that the concept of unfairness extended to conduct violating generally recognized business ethics.

As to the final criterion, the Commission declared that the unjustified consumer injury criterion was the “primary focus of the FTC Act, and the most important of the S&H [Cigarette Rule] criteria” and stated that “[t]o justify a finding of unfairness the injury must meet three tests. It must be substantial; it must not be outweighed by any counterveiling benefits to consumers or competition that the practice produces; and it must be an injury that consumers themselves could not reasonably have avoided.”

The concepts central to the Commission’s Unfairness Policy Statement were the view that “[m]ost business practices entail a mixture of economic and other costs and benefits for purchasers” and that the Commission “will not find that a practice unfairly injures consumers unless it is injurious in its net effects.” Another central concept was the view that “[n]ormally, the mar-

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16 See Letter dated December 17, 1980 from the FTC Commissioners to Senators Ford and Danforth, Chairman and Ranking Minority Member of the Consumer Subcommittee of the Senate Committee on Commerce, Science and Transportation at 1071 [hereinafter Unfairness Policy Statement]. The FTC’s Unfairness Policy Statement is reprinted as an appendix to International Harvester Co., 104 F.T.C. 949, 1070–76 (1984); see also 4 Trade Reg. Rep. (CCH) ¶ 13,203. Citations to pages of the Unfairness Policy Statement are to pages of International Harvester. The developments leading up to the FTC’s 1980 letter are discussed in Milkis, supra note 14, at 924–27. See also Am. Fin. Servs. Ass’n v. FTC, 767 F.2d 957, 969–70 (D.C. Cir. 1985).

17 Milkis, supra note 14, at 924–27; American Financial Services, 767 F.2d at 969–70.

18 Id. To be “clear and well established,” the Commission stated that the policy “should be declared or embodied in formal sources such as statutory judicial decisions, or the Constitution as interpreted by the courts, rather than being ascertained from the general sense of the national values” and “should likewise be one that is widely shared, and not the isolated decision of a single state or a single court.” Id.


20 Id. at 1073.

21 Id. at 1076.

22 Id.


25 Id. at 1074.

26 Id. at 1073.
ketplace is expected to be self-correcting,” and that the Commission would “rely on consumer choice—the ability of individual consumers to make their own private purchasing decisions without regulatory intervention—to govern the market.”27 The Commission relied upon its Unfairness Policy Statement and attached a copy of it to its 1984 decision in International Harvester.28

In 1982, the Commission recommended that Congress codify the definition of unfairness set forth in its Unfairness Policy Statement.29 Congress did not act on that recommendation, however, until 1994, when it enacted 15 U.S.C. § 45(n), denying the Commission authority to declare an act or practice as unfair “unless the act or practice causes or is likely to cause substantial injury to consumers which is not reasonably avoidable by consumers themselves and not outweighed by counterveiling benefits to consumers or to competition.”30 The 1994 act also provided that “[i]n determining whether an act or practice is unfair, the Commission may consider established public policies as evidence to be considered with all other evidence,” but that “[s]uch public policy considerations may not serve as a primary basis for such determinations.”31 Thus, in enacting 15 U.S.C. § 45(n), Congress did not simply codify the criteria of the Commission’s Unfairness Policy Statement as the Commission had requested. Rather, it removed the Commission’s ability to rely on public policy as a primary basis for determining unfairness altogether.

The standard set forth in the substantial injury criterion of the Commission’s Unfairness Policy Statement and in 15 U.S.C. § 45(n) has been criticized for failing to give businesses charged with compliance adequate notice concerning what conduct will be proscribed as unfair. Professor David Rice observed that “the substantial-consumer-injury criterion . . . is vulnerable to a . . . fundamental objection: it provides no clue concerning the class or characteristics of the behavior it purports to proscribe.”32 Neil Averitt has concluded that “if cases are decided by a weighing of all relevant costs and benefits, companies seeking to comply with the law will not have discrete legal principles to follow” and “[t]he resulting uncertainty would impose significant burdens on honest businessmen . . . . [This] will often make cases impractical to adjudicate” because while “[a] case involving a simple bright line legal rule can be litigated with relative ease since the number of critical facts and issues are limited . . . . [i]n a general balancing test . . . . all facts relating to a practice are relevant, and so the number of issues that might be briefed and argued are greatly increased.”33 Averitt observed that “[t]his tends inexorably to make litigation more time-consuming and expensive,” which will be “particularly true of major trade regulation cases, in which the stakes can be so high that all parties are motivated to pursue every possible argument as fully as possible.”34 Averitt also argued that application of the balancing test will “make judicial review very difficult.” Professor Stephen Calkins has noted that the Commission itself has not been consistent in how the benefits of a practice and costs are to be calculated.35 It has also been argued

27 Id. at 1074.
31 Id.
32 Rice, supra note 8, at 51–52, 55–64.
33 Averitt, supra note 4, at 248–50.
34 Id. at 249.
35 Calkins, supra note 23, at 1983 (giving specific illustrations).
that the balancing test first set forth in the Unfairness Policy Statement and later codified in 15 U.S.C. § 45(n) is not intended to be a legal definition of unfairness which actually attempts to define an act that would violate the Act or specify the elements of a violation. Rather, it merely states the ultimate aims of the FTC Act and a guide for the Commission.36

Another problem with the balancing test is that the effects to be balanced were apparently not intended by the Commission to require quantification in all cases and the Commission intended that in some cases, a “far more subjective analysis could be used.”37 However, in its 1982 letter, the Commission did not specify the nature of the cases in which such an analysis would be appropriate or how it should be carried out.

**Federal Enforcement of the Balancing Test.** It has been argued that the balancing test itself “permits excessive latitude in defining unfair practices”38 and “does not subject the Commission to sufficient constraints.”39 The breadth and unpredictability of this standard can be seen from the decision in *Orkin Exterminating Co. v. FTC,*40 in which the court affirmed the Commission’s ruling41 that a company’s unilateral breach of over 200,000 termite control contracts by raising guaranteed annual renewal fees was an unfair practice. The Commission’s unfairness determination was based solely on the unjustified consumer injury criterion as elaborated in the Unfairness Policy Statement and now embodied in 15 U.S.C. § 45(n).42 The Commission concluded that the unilateral breaches caused substantial injury, which the customers could not reasonably have avoided.43 The Commission rejected Orkin’s argument that if it was forced to maintain the guaranteed rates to some customers, its remaining customers could carry the full burden of escalating cost of service.44 Orkin argued that courts interpreting identical language in state Little FTC Acts had determined that a mere breach of contract without more, did not constitute an unfair act or prac-

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37 See FTC March 5, 1982 Letter, supra note 29, at 33. (“As to the element pertaining to the weighing of benefits and costs, however, the Commission believes that there is an associated problem to consider, namely the risk that the analysis might unnecessarily complicate and delay an investigation or an ultimate litigation. For this reason, the Commission believes that a highly quantitative benefit/cost analysis may not be appropriate in each and every individual case, and that in some cases a far more subjective analysis would be the reasonable approach. We believe any legislative history of a refined definition of unfairness should reflect this view.”); see also S. Rep. 103–130, 1st Sess. 1993, 1993 WL 322671 (Leg. Hist.) at *10 (“In determining whether a substantial consumer injury is outweighed by the countervailing benefits of a practice, the Committee does not intend that the FTC quantify the detrimental and beneficial effects of the practice in every case. In many instances, such a numerical benefit-cost analysis would be unnecessary; in other cases, it may be impossible. This section would require, however, that the FTC carefully evaluate the benefits and costs of each exercise of unfairness authority, gathering and considering reasonably available evidence.”); Am. Fin. Servs Ass’n v. FTC, 767 F.2d 957, 986 (D.C. Cir. 1985) (rejecting argument that the Commission’s conclusions must be based on “rigorous, quantitative economic analysis”); Pennsylvania Funeral Dirs. Ass’n v. FTC, 41 F.3d 81, 87, 91 (3d Cir. 1994) (holding that the FTC’s cost-benefit analysis need not be tied to any quantitative data and noting that “much of a cost-benefit analysis requires predictions and speculation, in any context”).

38 Schwartz, supra note 10, at 14.

39 Averitt, supra note 4, at 248.

40 849 F.2d 1354 (11th Cir. 1988).


42 Id. at *70–*80; *Orkin Exterminating Co. v. FTC*, 849 F.2d at 1364–66.

43 *Orkin Exterminating*, 1986 WL 722153, at *69–*78; *Orkin Exterminating Co. v. FTC*, 849 F.2d at 1364–66.

tice. Both the Commission and the Eleventh Circuit rejected this argument, noting that there is “nothing which constrains it to follow judicial interpretations of state statutes in construing the agency’s section 5 authority.” As to public policy considerations, the Commission noted the “basic tenet of contract law . . . that private contracts should be enforced according to their terms” and that Orkin’s actions “threaten[ed] the integrity of contracts and their vital role in value exchanges,” with the result that “[m]arketplace confidence will be lost and competition will suffer.”

Other than Orkin, and a few cases like it, apparently in part because of concern about congressional reaction, the FTC used its unfairness jurisdiction sparingly after 1980. The Commission used unfairness as the basis of decision in fewer than thirty cases between 1980 and 2000, and the Commission’s Unfairness Policy Statement was addressed in only three appellate decisions. Beginning in 2001, the Commission revived use of its unfairness jurisdiction by bringing Internet-related enforcement actions directed at such abuses as misuse of pop-up windows to post advertisements and making it appear that bulk, unsolicited commercial emails came from a third party and by bringing enforcement actions concerning unauthorized billing of credit cards, delays in sending rebate checks, and breaches of the rules of the automated check-clearing system to enable fraudulent transactions.

Unfairness Criteria Applied Under State Little FTC Acts

While the FTC’s unfairness criteria have changed, states have, for the most part, continued to apply the unfairness standards of the 1960s and 1970s, the period during which the FTC applied the Cigarette Rule criteria and the Little FTC Acts were first enacted. Thus, of the 28 states having Little FTC Acts that prohibit “unfair acts or practices,” sixteen continue to apply some version of the Cigarette Rule criteria, while only four apply the balancing test set forth in 15 U.S.C. § 45(n) as the sole criterion. One state, Maryland, has adopted the criteria of the FTC’s 1980 Unfairness Policy Statement. The courts of six states have not articulated criteria for determining

46 Id. at 1363.
48 Id. at *76.
49 Beales, supra note 15, at 1066.
51 Orkin Exterminating Co. v. FTC, 849 F.2d 1354 (11th Cir. 1988); Am. Fin. Servs. Ass’n v. FTC, 767 F.2d 957 (D.C. Cir. 1985); Harry and Bryant Co. v. FTC, 726 F.2d 993 (4th Cir. 1984).
53 See supra at note 1.
unfairness and the lower appellate courts in California are divided concerning the criteria to be applied.

**The Great Majority of States Continue to Apply the Cigarette Rule Criteria.** Courts of eleven states have adopted the Cigarette Rule.\(^{56}\) Oklahoma has adopted the Cigarette Rule by statute.\(^{57}\) Missouri has adopted a variant of that standard by regulation.\(^{58}\) The Connecticut and Washington courts have developed a hybrid standard that adopts the Cigarette Rule standard but applies the FTC’s Unfairness Policy Statement to elaborate the third, or substantial injury, criterion.\(^{59}\) The South Carolina Supreme Court has articulated a standard including only the first two Cigarette Rule criteria, omitting the test set forth in 45 U.S.C. § 45(n).\(^{60}\)

These sixteen states continue to apply the Cigarette Rule criteria despite provisions in most Little FTC Acts directing courts to give some degree of deference to federal interpretations of Section 5(a)(1) of the FTC Act in interpreting the parallel language in the state act, although most states that have considered the issue have held that deference to federal precedent is not mandatory.\(^{61}\) The reason these states have not adopted the changed federal standard is unclear. Among the courts applying the Cigarette Rule criteria, only the recent decision by the Montana Supreme Court explicitly adopts the Cigarette Rule standard rather than that of 15 U.S.C. § 45(n) and in that case the court appears to have done so based on the fact that most other state courts have continued to do so.\(^{62}\)

The continued application of the Cigarette Rule criteria rather than those of 15 U.S.C. § 45(n) may be a result of the fact that state courts were not aware of the change in the FTC’s criteria when they first adopted the Cigarette Rule and the tendency of litigants and state courts to follow their own precedents once an appellate court in the jurisdiction decided the issue.\(^{63}\) Almost all of the state Little FTC Acts were enacted in the 1960s and early 1970s. The Cigarette Rule was articulated by the Commission in 1964 and quoted in the Supreme Court’s decision in FTC v. Sperry &

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55 Georgia, Mississippi, Nebraska, West Virginia, Wisconsin, and Wyoming.


58 MO. CODE STATE REGS. tit. 15 § 60-10 (2009).


61 See Belt, supra note 1, at 249–50, 252.


Although the FTC’s Unfairness Policy Statement was set forth in a December 1980 letter from the Commission to members of the Senate,\(^6\) it was not cited in an FTC decision until *International Harvester Co.* in December 1984 and was not cited in a judicial decision until July 1985.\(^6\) By this time, appellate courts in a number of states had already adopted the Cigarette Rule criteria.\(^6\) It has also been conjectured that the failure of state courts to adopt the current FTC unfairness criteria is a consequence of the discomfort state court judges may feel in engaging in the complex process of identifying the costs and benefits of a challenged practice.\(^6\)

The failure of state courts to rely solely on the unfairness criteria set forth in 15 U.S.C. § 45(n) may also be influenced by significant differences in the enforcement mechanisms and remedies between the state and federal acts. Unlike the FTC Act,\(^7\) most state Little FTC Acts provide for a private right of action,\(^7\) in some cases by private parties that are neither competitors nor consumers.\(^7\) Little FTC Act claims are adjudicated by generalist judges or lay juries\(^7\) rather than by an expert administrative agency supported by a staff of economists.\(^7\) The statutes of almost all states provide for the recovery of actual damages\(^7\) and many provide for the recovery of

\(^6\) 405 U.S. 233, 244 n.5 (1972).

\(^6\) Unfairness Policy Statement, supra note 16.


\(^6\) See Am. Fin. Servs. Ass’n v. FTC, 767 F.2d 957, 970 (D.C. Cir. 1985).


\(^6\) See Greenfield, supra note 50, at 1933; see also Belt, supra note 1, at 304.

\(^7\) See, e.g., Alfred Dunhill Ltd. v. Interstate Cigar Co., 499 F.2d 232, 237 (2d Cir. 1974).


\(^7\) See Greenfield, supra note 50, at 1933 (“The Federal Trade Commission, with its staff of economists, is much better able to conduct the necessary inquiry than is a consumer seeking a private remedy or a court determining whether the consumer is entitled to that remedy.”). The Supreme Court has noted that the FTC “was created with the avowed purpose of lodging the administrative functions committed to it in a body specially competent to deal with them by reason of information, experience, and careful study of the business and economic conditions of the industry affected . . . .” FTC v. Kappel & Bros., 291 U.S. 304, 314 (quoting S. REP. NO. 597, 63d Cong., 2d Sess. 9, 11 (1914)) (internal quotation marks omitted). It was intended that the meaning of and application of “unfair methods of competition,” was to be “arrived at by what . . . has . . . [been] called the gradual process of judicial inclusion and exclusion.” FTC v. Raladam Co., 283 U.S. 643, 648 (1931) (internal quotation marks omitted). This process has also been used to describe the interpretation of unfair and deceptive acts or practices in state unfair trade practices acts. See, e.g., Panag v. Farmers Ins. Co. of Washington, 204 P.2d 885, 894–95 (Wash. 2009); Associated Inv. Co. Ltd. Partnership v. Williams Associates IV, 645 A.2d 505, 509–10 (Conn. 1994).

\(^7\) See CONSUMER PROTECTION LAW DEVELOPMENTS, supra note 71, at 383–84.
enhanced damages and the award of attorneys' fees.\textsuperscript{76} In contrast, as the FTC itself has noted in response to concerns that its definition of “unfair” in its 1980 Unfairness Policy Statement was too imprecise to give adequate notice of what conduct will be considered improper, a finding by the Commission that an act or practice is unfair leads to the imposition of limited remedies.\textsuperscript{77}

As discussed in connection with the Unfairness Policy Statement and 15 U.S.C. § 45(n), significant uncertainty exists concerning how to apply the required cost-benefit balancing test.\textsuperscript{78} The problem posed by this uncertainty is exacerbated in private litigation allowed by most Little FTC Acts in that the interests to be balanced must be identified\textsuperscript{79} and, in a case tried to a jury, the jury must be instructed concerning how to apply the test. Applying the criteria of 15 U.S.C. § 45(n) in private litigation also appears to place upon the plaintiff the burden of proving that the injury could not reasonably have been avoided. Although consistent with the FTC’s approach of limiting enforcement to situations where the market is not self-correcting,\textsuperscript{80} in the context of private litigation, placing this burden on the plaintiff seems inconsistent with the general abandonment by the states of the contributory negligence defense in tort actions\textsuperscript{81} and may create a significant barrier to establishing a violation.\textsuperscript{82}

There are, of course, elements of ambiguity in the Cigarette Rule criteria. The first criteria permits a finding of unfairness based on conduct that “is within least the penumbra of some common law, statutory, or other established concept of unfairness. . . .”\textsuperscript{83} Although frequently recited, this

\textsuperscript{76} Id. at 388, 391–92, 397–98, 410, 414, 421–22, 425, 429, 439, 459, 463, 466, 474.

\textsuperscript{77} Companion Statement on the Commission’s Consumer Unfairness Jurisdiction (1980), reprinted in 4 Trade Reg. Rep. (CCH) ¶ 13,003 at 20,909-3 to 20,910 at 20,990-5. The remedies available to the FTC are reviewed in CONSUMER PROTECTION LAW DEVELOPMENTS, supra note 71 at 257–85.

\textsuperscript{78} See supra notes 36–38.

\textsuperscript{79} For example, is the cost-benefit analyses limited to the parties or does it extend to non-party consumers or competitors? See, e.g., McLaughlin Ford, Inc. v. Ford Motor Co., 473 A.2d 1885, 1192 (Conn. 1984) (holding that the trial court “could reasonably have concluded that [the plaintiff’s] . . . loss [as a result of a franchise being awarded to a nearby competitor] was outweighed by continuing benefits to consumers arising from competition.”). After McLaughlin Ford, but not in reaction to that decision, the Connecticut legislature amended the statute to provide that “[p]roof of public interest or public injury shall not be required . . . .” CONN. PUB. ACT 84-468, § 2 (1984).

\textsuperscript{80} See Am. Fin. Servs. Ass’n v. FTC, 767 F.2d 957, 976 (D.C. Cir. 1985).

\textsuperscript{81} See Ellen M. Bublick, Comparative Fault to the Limits, 56 VAND. L. REV. 977, 978 n.4 (2003) (noting that “only four states have retained contributory negligence rules”). In Williams Ford, Inc. v. Hartford Courant Co., 657 A.2d 212, 223 (Conn. 1995), the court held, as a matter of law, that a plaintiff which had been found 10 percent contributorily negligent could not recover for injury caused by an unfair act or practice.

\textsuperscript{82} See, e.g., Davis v. Ford Motor Credit Co., 101 Cal. Rptr. 3d 697, 710 (Cal. App. 2009) (holding that any injury suffered by borrower from lender’s practice of applying payments received to allegedly delinquent installments could have been avoided by making timely payments); Tietsworth v. Sears, Roebuck and Co., 2009 WL 3320486, at *7 (N.D. Cal. Oct. 13, 2009) (suggesting that plaintiffs could reasonably have avoided injury from defective product by purchasing an extended warranty); Legg v. Castruccio, 642 A.2d 906, 918 (Md. Ct. Spec. App. 1994) (holding that tenant who was charged for utilities used by another tenant could have avoided the injury because the tenant learned of the utility situation early in her tenancy and she could have moved to another location).

\textsuperscript{83} Cigarette Rule Statement, supra note 5, at 8355.
criteria has only seldom been relied upon by state courts to find unfairness. The difficulty of determining or explaining to a jury the boundaries of the “penumbra” of an “established concept of unfairness” are obvious. Aspects of the “immoral, unethical, oppressive or unscrupulous” criterion of the Cigarette Rule may be less than crystal clear. However, except for immorality, these are concepts that courts apply in other contexts and state courts have applied the prohibition of “unethical,” “oppressive,” and “unscrupulous” conduct in a number of cases.

Only Five States Apply Post-Cigarette Rule Unfairness Criteria. One state, Maryland, applies criteria of the FTC’s Unfairness Policy Statement and four apply the unfairness criteria set forth in 15 U.S.C. § 45(n). All of these states were influenced by the directive in the state statutes to give deference to federal interpretations of section 5 (a)(1) of the FTC Act. However, in two cases, the state courts appeared also to be influenced by a mistaken understanding of the unfairness criteria being applied in other states.

Some States Have Not Conclusively Articulated a Standard. The seven remaining states have not reached any final determination concerning the criteria for determining unfairness. As noted, six have not spoken to it; and the California lower appellate courts are divided concerning what criteria to apply to determine whether acts or practices, other than those that cause competitive injury, are unfair. Before 1999, the lower California appellate courts developed two different standards, one similar to the Cigarette Rule and one that balanced the utility of the defendant's con-

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85 No state court decision has been found in which conduct was determined to be unfair only on the basis that it was immoral.
86 For example, the corporation statutes of many states permit the dissolution of a closely held corporation based on oppression of minority shareholders. See James D. Cox & Thomas Lee Hazen, Cox & Hazen on Corporations §14.13, at 856 (2d ed. 2003).
87 See, e.g., Votto v. Am. Car Rental, Inc., 871 A.2d 985 (Conn. 2005) (holding that use of plaintiff's signature on blank credit card slip to charge more than twice the amount of the estimated cost of a repair was unscrupulous, immoral and oppressive); Johnson Elec. Co. v. Salce Contracting Assocs., 805 A.2d 735, 738, 744 (Conn. App. 2002) (holding that “bid shopping” was unethical in that it failed to conform to the established trade practice in the construction industry).
88 See, e.g., Bertassi v. Allstate Ins. Co., 522 N.E.2d 949, 952 (Mass. 1988) (holding that coercive insistence on plaintiff signing agreement capitulating to defendant's subrogation rights as a precondition to defendant's compliance with its contractual obligations was unfair); Dubey v. Pub. Storage, Inc., 918 N.E.2d 265, 278 (Ill. App. 2009); Centerline Equip. Corp. v. Banner Personnel Serv., Inc., 545 F. Supp. 2d 768, 780 (N.D. Ill. 2008) (holding that “[c]onduct is oppressive only if it imposes a lack of meaningful choice or an unreasonable burden on its target.”).
93 See Legg, 642 A.2d at 917–18 (stating that “our research has not uncovered any jurisdiction that continued to follow the superseded 1964 standards”); Tucker, 180 S.W.3d 109, 117 n.11 (recognizing that “[n]ot all states used the Commission's current unfairness criteria to guide their interpretation of their own Little FTC Act,” but misleadingly stating that Connecticut and Washington used the 15 U.S.C. § 45(n) criteria). As noted supra note 59, the courts of Connecticut and Washington use substantial consumer injury criteria in the Commission's Unfairness Policy Statement only to elaborate the third Cigarette Rule criteria and otherwise apply the other Cigarette Rule criteria.
94 See supra note 55.
duct against the gravity of the harm to the victim.\textsuperscript{96} In a 1999 case involving unfair competition, the California Supreme Court rejected both of those standards. The court expressly stated, however, that its decision did not apply to actions by consumers or competitors alleging other types of unfair practices.\textsuperscript{97} Subsequent California lower appellate courts have continued to apply different criteria. In \textit{Camacho v. Automobile Club of Southern California},\textsuperscript{98} the court adopted the criteria set forth in 15 U.S.C. § 45(n) despite the urging of the California Attorney General to apply the Cigarette Rule test. The court relied on the criticism of the Cigarette Rule test in \textit{Cel-Tech} and concluded that the 15 U.S.C. § 45(n) test “is more focused, less dependent on subjective notions of fairness and for these reasons, easier to administer.”\textsuperscript{99} The court rejected an argument that the 15 U.S.C. § 45(n) test did not establish a “normative” standard.\textsuperscript{100} Some other recent California appellate decisions have, however, declined to follow \textit{Camacho}.\textsuperscript{101}

**Effects of the Choice of Criteria**

The choice of criteria for determining unfairness will affect both the clarity and scope of the unfairness prohibition and may also affect the level of enforcement activity and the precedential value of cases decided using different criteria. By requiring public policy to be clear and well-established before it could provide an independent basis for a finding of unfairness and by deleting the “immoral, unethical, oppressive, or unscrupulous” criteria, the Commission’s 1980 Unfairness Policy Statement removed significant potential ambiguity from the criteria for determining unfairness. The elaboration of the substantial injury criteria in the Unfairness Policy Statement, now embodied in 15 U.S.C. § 45(n), also provided standards for making a determination based on that criteria.

However, when 15 U.S.C. § 45(n) eliminated the ability to rely on even a clear and well-established public policy as a primary basis for determining unfairness and allowed public policy to be considered only along with all other evidence, it significantly reduced the role of legal standards external to the FTC Act in determining unfairness, thereby requiring a balancing of cost and benefit to be made in every case before unfairness can be determined. Thus, 15 U.S.C. § 45(n) made the determination of unfairness both more clear and less clear: It made the standard more clear by eliminating potentially ambiguous elements of the Cigarette Rule standard; it made it less clear by requiring application of the balancing test in every case. Because of the relatively small body of law applying this standard, either in the states or in the Commission, the “gradual process of judicial inclusion and exclusion”\textsuperscript{102} does not give many concrete examples of the kind of conduct that will be considered unfair under these criteria. Moreover, the use of 15 U.S.C. § 45(n) as the

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\textsuperscript{96} See, e.g., Motors Inc. v. Times Mirror Co., 162 Cal. Rptr. 3d 543, 546 (1980) (holding that in determining whether a practice is unfair, “the utility of the defendant’s conduct [is weighed] against the gravity of the harm to the [alleged victim]”).

\textsuperscript{97} Cel-Tech Commc’ns., Inc. v. Los Angeles Cellular Tel. Co., 973 P.2d 527, 545–44 (Cal. 1999).

\textsuperscript{98} 48 Cal. Rptr. 3d 770 (Cal. App. 2006).

\textsuperscript{99} Id. at 777.

\textsuperscript{100} Id. at 777–78.

\textsuperscript{101} See, e.g., Buller v. Sutter Health, 74 Cal. Rptr. 3d 47, 55 (Cal. App. 2008) (applying a test requiring alleged unfair practice to be “tethered” to a legislatively declared policy or some actual or threatened impact on competition); Lorano v. AT&T Wireless Servs., Inc., 504 F.3d 718, 735–36 (9th Cir. 2007) (affirming a decision of the district court which applied a balancing test and discussing the conflicting California precedents); McKell v. Washington Mut., Inc., 49 Cal. Rptr. 3d 227, 240–41 (Cal. Ct. App. 2006) (applying a combination of the Cigarette Rule criteria and a balancing test).

\textsuperscript{102} See supra note 74.
sole criterion for determining unfairness casts into doubt the precedential value of numerous state court decisions (and many decisions applying the FTC Act before 1980) that did not apply this standard in predicting what kinds of specific conduct will be considered unfair. The wide range of facts potentially relevant under the 15 U.S.C. § 45(n) criteria are likely to increase the complexity and cost of establishing unfairness.\(^{103}\)

Were the majority of states to move away from the Cigarette Rule and instead apply the criteria set forth in the FTC’s Unfairness Policy Statement or those set forth in 15 U.S.C. § 45(n), it seems likely that there would be a significant reduction in enforcement activity, particularly private enforcement activity, with respect to unfair acts and practices. This conclusion is supported by: (1) one of the apparent purposes of adopting the 1980 Unfairness Policy Statement and enacting 15 U.S.C. § 45(n) was to restrict the FTC’s use of its power to regulate unfair practices;\(^{104}\) (2) the significant reduction in FTC enforcement activity concerning unfair acts and practices after it issued its 1980 Unfairness Policy Statement;\(^{105}\) and (3) the significantly higher number of cases brought based on claims of general unfairness in states that apply some form of the Cigarette Rule criteria in contrast to those that apply the criteria in the Unfairness Policy Statement or in 15 U.S.C. § 45(n).\(^{106}\) One consequence of this, and the limited use by the FTC of its unfairness authority since 1980, is that the body of case law interpreting the criteria of 15 U.S.C. § 45(n) is meager, although some California appellate courts have, since 2006, begun to develop case law applying those criteria. It also seems likely that the adoption of the criteria set forth in 15 U.S.C. § 45(n) would increase the difficulty of establishing a violation. The standard in 15 U.S.C. § 45(n) sets forth three criteria, all of which must be established in order to establish a violation.\(^{107}\) Thus, a change in the criteria employed from those of the Cigarette Rule to those of the Unfairness Policy Statement or 15 U.S.C. § 45(n) seems likely to reduce the amount of enforcement, particularly private enforcement, of statutes prohibiting “unfair acts and practices.”

\(^{103}\) See Averitt, supra note 4, at 248–50 (noting that use of the balancing cost would “tend[] inexorably to make litigation more time-consuming and expensive.”).

\(^{104}\) See, e.g., Braucher, supra note 8, at 409 (“The Policy Statement clearly had a political purpose—to keep Congress from stripping the FTC of part or all of its power to regulate unfair practices. The language of the Policy Statement shows the Commission striving to appease free-marketeers . . . .”).

\(^{105}\) See supra notes 49–52. Of course, it is possible that the decline in the FTC’s use of its unfairness jurisdiction after 1980 was also affected by the Commission’s concern about congressional reaction to its use rather than the modification of the criteria.

\(^{106}\) Based on the number of reported decisions (both officially and electronically), the largest number of decisions employing the Cigarette Rule test have been rendered in Connecticut, Massachusetts, North Carolina, California, Louisiana, Illinois, Washington, and Florida. The relatively small number of decisions based on general unfairness in other Cigarette Rule states might be explained by other provisions of the particular statutes, each as provisions limiting private remedies to consumers (e.g., Hawaii, Missouri, Rhode Island, and Vermont), or by the fact that a number of state statutes also specifically identify conduct deemed to be unfair (e.g., New Hampshire, North Carolina, Rhode Island, Vermont, Oklahoma, and Missouri), thereby creating less need to rely on the general prohibition of unfairness. There are relatively few decisions involving claims of unfair acts or practices in states applying the criteria of the Unfairness Policy Statement or 15 U.S.C. § 45(n), although, as with states applying the Cigarette Rule criteria, there are other possible explanations for the small number of decisions, such as the absence of any private remedy (Iowa did not provide for a private remedy until 2009), private remedies limited to consumers (e.g., Maryland and Ohio) or the inclusion in the act of provisions specifically identifying conduct deemed to be unfair (e.g., Maryland, Maine, Tennessee, and Iowa).

and Congress expressly disclaimed any such intention. State attorneys general have also opposed judicial adoption of the criteria in the FTC’s Unfairness Policy Statement or 15 U.S.C. § 45(n) and urged application of the Cigarette Rule criteria. The effect of reduced enforcement activity resulting from adoption of the 15 U.S.C. § 45(n) criteria would likely be felt most strongly in those states in which unfairness is now determined under the Cigarette Rule criteria and in California, where the state’s highest court has not yet established a standard.

A Legislative Solution?
Adoption of the criteria set forth in 15 U.S.C. § 45(n) rather than those of the Cigarette Rule may have significant policy implications, including the level of enforcement, particularly private enforcement, for the ease or difficulty in establishing a violation, and the clarity with which persons charged with compliance are informed concerning what conduct violates the act. Consequently, the articulation of a standard for determining “unfairness” under state unfair trade practices acts may appropriately be a subject for legislative rather than judicial determination. This was the approach taken by Congress at the urging of the FTC when it enacted 15 U.S.C. § 45(n) and is the approach taken by the legislatures of Iowa and Oklahoma.

A state legislature would not necessarily weigh relevant policy considerations in the same way as did Congress in 1994 or, indeed, as do other state legislatures. But, they may be in the best position to determine the appropriate degree of deference that should be given to precedents interpreting the FTC Act. When the Little FTC Acts were enacted in the 1960s and 1970s, there were sound reasons to direct that states could use FTC precedents, there being no body of state law interpreting unfair acts and practices. However, since that time, a number of states have developed substantial bodies of case law interpreting unfairness, and the need for reliance on federal precedent has diminished. Arguably, multistate businesses might benefit from the application of a uniform federal and state unfairness standard, but the differences among the substantive prohibitions, remedies, and enforcement mechanisms among the state acts would significantly erode any such benefit.

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108 The Senate Report on the amendment stated:

The Committee is aware that State attorneys general have expressed a concern that the limitation on unfairness in this section may be construed to affect provisions in State statutes or State case law. . . . Many of the statutes direct courts to be guided by interpretations of the FTC Act. In other States, the courts have interpreted these laws consistently with developments under Federal law. State courts have applied the unfairness standard in a variety of contexts, including unconscionable pricing practices, high pressure sales tactics, uninhabitable living conditions in leased premises, and abusive debt collection practices. The Committee intends no effect on those or other developments under State law. This section represents a consensus view of an appropriate codification of Federal standards, undertaken after careful assessment of the FTC’s past activities. The Committee’s action should not be understood as suggesting that the criteria in this section are necessarily suitable in the future development of State unfairness law or that the FTC’s future construction of these criteria delimits in any way the range of State decision-making. Sound principles of federalism limit the impact of this section to the FTC only.


110 As discussed infra in the text accompanying notes 95–101, the California lower appellate courts are divided concerning the standard that should be applied to determine unfairness.

111 As is illustrated by the statutes of Iowa (IOWA CODE ANN. § 714.16(1)(n) (West 2009)), adopting the criteria of 15 U.S.C. § 45(n), and Oklahoma (OKLA. STAT. ANN. § 15-752-14 (West 2009)), adopting the Cigarette Rule criteria, not all legislatures would reach the same conclusion concerning the appropriate criteria.

112 See Belt, infra note 1, at 318–19.
State legislatures may also be in the best position to strike the appropriate balance among the need for clarity; the complexity, and cost of enforcement; and the desired level of public and private enforcement activity, all of which may be affected by the choice of criteria. For example, a state legislature may choose, as did the Commission in its Unfairness Policy Statement, to limit the public policy criterion to clear and well-established public policies. It may choose to eliminate reference to immorality as a basis for unfairness, but allow unfairness to be based on unethical, oppressive, or unscrupulous conduct. It may retain the substantial injury criterion or not, determine whether the ability to avoid an injury would preclude the establishment of a violation, define the costs and benefits to be considered, and decide whether a finding of unfairness requires a consideration of all or some of the criteria or may be based on consideration of only one.

Legislative action would have the potential advantage of resolving more quickly whether a state should apply the current FTC standard for determining unfairness or whether it should modify the Cigarette Rule or other criteria formerly applied by the FTC. Decades have passed without the highest court of all but a few states resolving whether the FTC’s current unfairness standard or some other criteria should be applied. Unless and until the state legislature defines unfairness criteria, the issue of what criteria to apply in a state where the highest court has not yet rejected the current FTC standard is a potentially fruitful litigation option. A defendant whose business practice is claimed to violate a public policy or ethical standard may seek to have a court apply the current FTC criteria to avoid a finding of liability based on the expansive and in some respects vague Cigarette Rule criteria. A defendant may also seek to have the current FTC criteria applied so it can argue that its practice has counterveiling benefits, that the plaintiff’s injury was not substantial, or to shift the burden to the plaintiff to prove that it could not reasonably have avoided injury. A plaintiff who cannot point to a clear violation of a public policy or ethical standard (e.g., a plaintiff claiming injury as a result of a breach of contract) may seek to have the current FTC criteria applied so it can argue that the defendant’s business practice caused it substantial injury. The issue concerning what criteria to apply can be raised in all but a few of the states with a Little FTC Act prohibiting “unfair acts or practices.”

113 For example, the substantial injury criterion is not included among the criteria articulated by the South Carolina Court of Appeals. See, e.g., McInery v. Pinehursts Area Realty, Inc., 590 S.E.2d 313, 316 (N.C.Ct.App. 2004).

114 See, e.g., Mo. Code State Regs. § 60-8.020 (2006) (appearing to require the substantial injury criterion as well as one of the other criteria).

Book Review

An Innovation-Based Road Map for Legal Reform

Michael Carrier

Innovation for the 21st Century: Harnessing the Power of Intellectual Property and Antitrust Law
Oxford University Press • 2009

Reviewed by Sean Gates

In 2003, the Federal Trade Commission analyzed the patent system through the lens of competition. The resulting report developed a set of ten recommendations aimed at improving the patent system.1 The report generated considerable interest. In fact, the following year the National Research Council of the National Academies issued a report with similar recommendations.2

In Innovation for the 21st Century, Professor Michael Carrier3 uses the lens of innovation to develop his own ten recommendations. Like the FTC and NRC reports, Carrier recommends changes to the patent system. But unlike those reports, Carrier does not limit his recommendations to one area of law. Instead, he applies an innovation lens broadly to copyright and antitrust law as well as to patent law, recommending reforms to protect and promote innovation in all three areas.

Carrier believes that certain trends in the U.S. legal system threaten innovation. He aims to reverse those trends. As he puts it:

[The book] offers ten ambitious proposals to foster innovation. The proposals address generic drugs, BlackBerry devices, valid patents, peer-to-peer (P2P) software, and countless other cutting-edge challenges. They promise to improve our patent system. They show how copyright law can promote innovation and not quash fledgling technologies. And they illustrate how antitrust can incorporate innovation, particularly in the pharmaceutical industry.4

To lay the groundwork for his proposals, Carrier gives his readers primers on innovation, intellectual property, antitrust, and the interaction of intellectual property and antitrust. In the primer on interaction between intellectual property and antitrust, Carrier starts with the often-told historical account of how the interaction swung from virtually complete immunity for intellectual property owners through the nadir of antitrust law’s treatment of intellectual property—the Department of Justice’s “Nine No-Nos”—to the development of the 1995 IP Guidelines.5 He then touches on more

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3 Professor Carrier teaches at Rutgers University School of Law–Camden. His academic focus is the antitrust and intellectual property laws, and his works on the intersection of those laws are widely published.
5 Id. at 73–82.
recent issues, such as the U.S. and EU Microsoft cases, innovation markets, standard-setting activities, patent pools, and reverse-payment settlements.\textsuperscript{6} Carrier’s purpose is to set the stage for his proposals; thus, his treatment of these issues is only cursory.

More important is Carrier’s primer on innovation. The “centerpiece” of the book is the “relationship between innovation and the patent, copyright, and antitrust laws.”\textsuperscript{7} Carrier defines innovation as consisting of “the discovery, development, and commercialization of new and improved products and processes,”\textsuperscript{8} and he breaks down innovation into four stages: (1) discovery or invention; (2) development, i.e., the activities necessary to transform the invention into a marketable product; (3) entrepreneurship and investment, which are aspects of commercialization; and (4) diffusion, by which the product spreads through the market.\textsuperscript{9} Carrier’s proposals affect each of these stages.

Carrier also distinguishes between various types of innovation: (1) discrete and complex (the latter typically requiring access to multiple intellectual property rights); (2) radical and incremental; (3) disruptive and sustaining; and (4) user and manufacturer innovations.\textsuperscript{10} Carrier focuses special interest on disruptive innovations—those that “displace existing business models by creating simpler, more convenient, and cheaper products that appeal to new or less-demanding customers.”\textsuperscript{11} Examples of such innovations include Google, which disrupted directories such as Yellow Pages, and Intuit’s TurboTax, which disrupted personal income tax preparation services. He also focuses on user innovations—those created by users of the product (for which open source software may be an example).\textsuperscript{12} Carrier’s proposals regarding copyright law focus on disruptive and user innovations.

The most difficult impediment to innovation-focused legal reform, according to Carrier, is the inability to measure the benefits of innovation. This inability has led economists, antitrust courts, and scholars to focus primarily on “the more measurable unit of price” and to promote allocative efficiency instead of dynamic efficiency—i.e., in other words, the measurement problem has caused policy and decision makers to focus on maximizing static welfare while ignoring long-run welfare that takes into account the impact of innovation over time. Carrier seeks to right this wrong:

My goal in this book is to erect a sustained focus on innovation that ranges across IP and antitrust law. To be sure, my innovation spotlight often will not be as precise as one shining on price. Innovation has too many characteristics to be reducible to a single metric. But at least the project shines a second light. Given the importance of innovation to economic growth, such action is vital.\textsuperscript{14}

With this as his foundation, Carrier launches into his wide-ranging proposals.

\begin{itemize}
  \item \textsuperscript{6} Id. at 87–97.
  \item \textsuperscript{7} Id. at 22.
  \item \textsuperscript{8} Id. at 19.
  \item \textsuperscript{9} Id. at 20.
  \item \textsuperscript{10} Id. at 26.
  \item \textsuperscript{11} Id. at 27.
  \item \textsuperscript{12} Id. at 29.
  \item \textsuperscript{13} Id. at 30–31.
  \item \textsuperscript{14} Id. at 31.
\end{itemize}
Copyright

Carrier offers three proposals for copyright law. The first is to reform the legal test for secondary infringement liability by makers of dual-use technologies, i.e., technologies (such as VCRs, CD burners, and peer-to-peer (P2P) file sharing software) that may be used for both legitimate and infringing uses. He notes that dual-use technologies can “create revolutionary new forms of interaction and entertainment”\(^\text{15}\)—in other words, they can be disruptive innovations. The courts, however, have created legal rules that impede the creation of such technologies by deviating from the Supreme Court’s test in *Sony v. Universal City Studios*,\(^\text{16}\) which precluded secondary liability if the product is “merely capable of substantial non-infringing uses.”\(^\text{17}\) Carrier recounts the P2P trilogy of *Napster*, *Aimster*, and *Grokster*, showing how the courts (including the Supreme Court) have imposed secondary copyright infringement liability on proprietors of P2P software, despite the presence of substantial non-infringing uses.\(^\text{18}\) In *Napster*, the Ninth Circuit “sidestepped the *Sony* question, finding that, even if Napster were capable of substantial non-infringing use, its actual knowledge [of infringing use] was sufficient to impose liability.”\(^\text{19}\) In *Aimster*, the Seventh Circuit required an estimate of the respective magnitude of infringing and non-infringing uses, adding “its own gloss to *Sony* by stating that actual (as opposed to a potential) non-infringing use was needed to avoid liability.”\(^\text{20}\) And in *Grokster*, the Supreme Court refused to resolve *Sony* applies to P2P software, holding that distributing a device with the object of promoting infringing use is sufficient for secondary liability.\(^\text{21}\)

Carrier contends that the deviation from *Sony* creates potential for legal liability that stymies the development of dual-use technologies, which may stimulate creativity (the very thing copyright law is designed to do).\(^\text{22}\) He blames the courts’ misdirection primarily on what he calls the “innovation asymmetry”—the costs of infringement are more apparent than the benefits of non-infringing uses, leading the courts to undervalue the benefits.\(^\text{23}\) He points out that dual-use technologies are “evaluated in their infancy when their capabilities can barely be discerned,” and worries of the “silent consequences of vanquished technology and the carcasses of innovators strewn on the side of the technology highway.”\(^\text{24}\)

Carrier quickly deflects the arguments made by content providers that dual use technologies will stymie creativity and decimate artists’ income. He gives a rather amusing history of the doom-and-gloom claims by those providers, ranging from predictions by sheet music publishers that player pianos would result in “a marked deterioration in American music and musical taste” to the MPAA’s claim that “the VCR is to the American film producer and the American public as the

\(^{15}\) *Id.* at 106.


\(^{17}\) *Innovation for the 21st Century*, supra note 4, at 110.

\(^{18}\) A & M Records, Inc. v. Napster Inc., 239 F.3d 1004 (9th Cir. 2001); *In re Aimster Copyright Litig.*, 334 F.3d 643 (7th Cir. 2003); *MGM v. Grokster*, 545 U.S. 913 (2005).

\(^{19}\) *Innovation for the 21st Century*, supra note 4, at 116.

\(^{20}\) *Id.* at 117.

\(^{21}\) *Id.* at 117–18.


\(^{24}\) *Id.* at 144.
Boston strangler is to the woman home alone. In addition to these historical anecdotes, Carrier goes through an extended discussion of the creativity-innovation trade off involved in P2P technologies, concluding that the trade off decidedly favors allowing dual-use technologies to avoid secondary copyright liability. Examining the legal tests in depth, Carrier contends that “the future of innovation—and thus our economy and livelihoods—depends on a return to Sony.”

Unlike many of his proposals, however, Carrier does not give a roadmap for how to implement his recommendation. He calls for a return to the Sony test for secondary copyright liability, but he does not discuss how to get there. Given the decisions in Napster, Aimster, and the Supreme Court’s decision in Grokster, it is not clear whether Carrier’s proposal requires legislative action to amend the Digital Millennium Copyright Act (DMCA), whether the lower courts may implement his proposal despite the case law, or whether another decision by the Supreme Court is required. Many of Carrier’s arguments were made to the Supreme Court in the Grokster case. Thus, it may be that legislative action is needed, but Carrier does not provide guidance on this issue.

Carrier’s second proposal for copyright law would limit statutory damages to cases of direct infringement, precluding such damages for secondary infringement liability. To support this proposal, Carrier turns to legislative history to demonstrate that Congress recognized the need for limits on statutory damages. He then uses real-world examples of how incumbents use the threat of statutory damages, which mandate certain damages for every act of infringement, to destroy businesses based on innovative technologies. For instance, Carrier recounts how the threat of statutory damages doomed MP3.com and a service offered by XM Radio that allowed subscribers to record and store broadcasts. By limiting secondary liability to actual damages, Carrier contends his proposal would “allow technology innovators to make reasonable business decisions based on manageable levels of legal risk,” and that such innovators would no longer “face a corporate death penalty at the hands of unpredictable and unjustified legal standards and remedies.”

The final copyright-related proposal focuses on limiting claims under the DMCA. The DMCA was enacted to prevent copyright “piracy” by prohibiting acts and the distribution of tools used for circumvention of digital protections for copyrighted materials. Carrier contends that the DMCA has been co-opted to protect aftermarket sales of mechanical devices, such as printer cartridges and garage door openers, that incorporate trivial (but copyrighted) software. This use of the DMCA has restricted reverse engineering, which “has long played a central role in limiting IP.”

In this case, Carrier clearly spells out how to implement his proposal: by amendment to the DMCA. Carrier would limit DMCA claims to instances in which the “expressive copyrightable features of a product protected by a [technological protection measure] play an essential role in the demand for the item” and the plaintiff would suffer a direct negative market effect. His proposal

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25 Id. at 107.
26 Id. at 119–30.
27 Id. at 145.
28 Id. at 149–53.
29 Id. at 153–60.
30 Id. at 160.
31 Id. at 184–90.
32 Id. at 197.
33 Id. at 193.
would thus require only a narrow amendment, clearly focused on preventing the application of the DMCA to software “that plays a peripheral role in a functional, unprotected end product.” The proposal would therefore not impact other applications of the DMCA.

**Patents**

Carrier offers four proposals for patent law reform. The first follows the well-trodden path of suggesting a post-grant opposition system for patents. According to Carrier, such a system would provide a quicker and less expensive means to determine validity than litigation, target the most valuable patents (those asserted to be used in actual products), allow the patent office to access better information, reduce uncertainty, reduce the number of invalid patents, and promote innovation. Recognizing that many others (such as the FTC and NRC reports) have called for a post-grant opposition system, Carrier proposes a number of details, including the required threshold showing, limits on when an opposition could be brought, the validity matters subject to review, the required evidentiary showing, the venue for the opposition, the type of proceeding, whether the requesting party must disclose its identity, and the estoppel effect of the opposition. Carrier’s proposal thus builds on and fleshes out the proposals of others.

The second patent law proposal would limit injunctive relief for patent infringement. Expanding on the Supreme Court’s 2006 eBay decision, Carrier’s proposal seeks to limit the ability of non-practicing entities (NPEs) to obtain injunctions. In this Carrier is hardly alone. The ability of NPEs (sometimes called trolls) to obtain injunctive relief for patent infringement has been the subject of considerable debate. According to Carrier, the eBay Court’s test for injunctive relief suffers from a lack of predictability and some lower courts have focused on unhelpful factors. Building on eBay, Carrier therefore offers a four-part framework for courts to evaluate whether injunctive relief is appropriate.

His framework first focuses on whether the patentee competes with the infringer, reasoning that competition demonstrates irreparable harm and that injunctive relief is more appropriate in this circumstance to protect incentives to innovate. Next, the framework considers whether the infringing component is related to the core functionality of the defendant’s product, i.e., do consumers demand the product because of the infringing component? If not, damages are more likely an adequate remedy, which would reduce the risk of holdup by NPEs whose patented inventions are incorporated as one small component of a product. In balancing the parties’ hardships, Carrier would focus on whether the patented invention is a core component of the plaintiff’s product and whether the defendant can modify its product to avoid infringement. Carrier notes that NPEs are unlikely to satisfy the test because of the focus on the patented invention being core to the plaintiff’s product. Finally, the framework considers the public interest, which is served when injunctive

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34 Id.
35 Id. at 205.
36 Id. at 213–28.
39 INNOVATION FOR THE 21ST CENTURY, supra note 4, at 244–50.
40 Id. at 244–45.
41 Id. at 246–48.
42 Id. at 248–49.
relief is denied in cases where the patented invention serves a peripheral role in the demand for
the product but is served by granting such relief in cases of willful infringement.

Carrier’s proposal is largely driven by a desire to take the threat of injunctive relief away from
NPEs. In making his proposal, however, Carrier does not engage with those who contend that
such a rule would under-reward innovation. Given the book’s focus on innovation, the absence
of any interaction with this literature is disappointing. Carrier instead focuses on the impact on
manufacturers of infringing products, which of course impacts innovation. But the book does not
address the potential that NPEs and the rewards they offer may add to the overall amount or rate
of innovation.

Carrier’s third and fourth patent law proposals are very narrow and involve issues only in the
biotech industry. His third proposal deals with patented biotechnology research tools. He demon-
strates that current law does not allow the use of these tools for experimental use. The resulting
“anticommons” supposedly threatens innovation. Carrier thus offers three “future” proposals to
remedy the situation, but he recognizes that none are currently necessary because the market
has largely solved the issue. In fact, the book cites to several empirical studies that show the
patenting of biotechnology research tools has had almost no effect on research projects and no
negative impact on innovation. Carrier attributes these results to the ubiquity of licensing of these
tools and “a regime of informal norms, or socially enforced rules” governing the relationship
between tool users (universities) and patent holders (industry).

The empirical research regarding the effect of patenting research tools on research projects is
especially interesting. The patent and antitrust literature is filled with theoretical concerns about
the impact of the dispersed rights holders on innovation. For instance, concerns about royalty
stacking and patent holdup are used to justify a number of policy proposals. But empirical evi-
dence regarding the effects of these issues is largely lacking. Here, Carrier cites market evidence
that the theoretical concerns have not materialized, forcing the development of alternative expla-
nations for firm behavior. This evidence may have broader implications outside the biotechnolo-
gy arena.

Carrier’s final patent law proposal deals with material transfer agreements in biotechnology
research. Among other dangers, according to Carrier, reach-through provisions in such agree-
ments threaten innovation. He thus proposes that federal agencies impose and universities
adopt certain requirements from a uniform biological material transfer agreement.

Antitrust
Carrier’s three antitrust law proposals are more modest than those for copyright and patent law.
He attributes this to advances in antitrust law that recognize innovation concerns, e.g., the adop-

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43 See, e.g., Vincenzo Denicolò et al., 4 J. COMPETITION L. & ECON. 571 (2008) (using an error-cost framework to find that the holdup
theory justifying categorical limitations on injunctive relief for NPEs is likely to result in substantial false positives); John M. Golden, “Patent
46 INNOVATION FOR THE 21ST CENTURY, supra note 4, at 268–77.
47 Id. at 261–67.
48 Id. at 261–67.
49 Id. at 264–65.
50 Id. at 283–84.
tion of innovation market analysis by the antitrust enforcement agencies and the judicial recognition that innovation is a concern in antitrust analysis.\textsuperscript{51} In fact, Carrier concludes that “antitrust only needs three recommendations to improve its treatment of innovation.”\textsuperscript{52}

Carrier’s first antitrust proposal involves innovation market analysis. While recognizing the limits and criticisms of innovation market analysis, Carrier makes the case for the application of this analysis in the pharmaceutical industry. Carrier thus offers a new test for the evaluation of pharmaceutical mergers involving innovation markets.

According to Carrier, the agencies “have not considered many relevant factors” with regard to pharmaceutical mergers, and the agencies’ analysis “is harmful,” justifying “unnecessary merger challenges.”\textsuperscript{53} He contends that the FTC used innovation market analysis to mistakenly challenge the mergers between Roche and Genentech and between Pfizer and Warner-Lambert. He thus offers a new test in the form of a five-part framework that incorporates the factors missed by the FTC, the first step of which is to evaluate market concentration by focusing on how far along competitors are in the FDA review process. Parting company with the agencies, Carrier would exclude all competitors in the preclinical stage.\textsuperscript{54} Second, he would require the agencies to allege a theory of harm, typically involving potential suppression of a research path.\textsuperscript{55} Third, the merging firms could offer a defense based on likely entry, which would focus again on the phase in which competitors are in the FDA review process. For instance, Carrier offers statistics that show if two firms are in Phase III of that process, there is an 81 percent chance one of them will enter the market.\textsuperscript{56} Fourth, Carrier would allow the merging firms an efficiency defense based on a showing that the merger will increase the likelihood of bringing a product to market: “The most important goal in these cases thus is not to ensure the presence of two products but to increase the likelihood that one product reaches the market.”\textsuperscript{57} Lastly, Carrier would allow what he calls a “Schumpeterian defense,” through which a small firm with a promising compound could show that it could not pursue clinical trials absent the merger.\textsuperscript{58}

Perhaps the most striking part of the proposal is Carrier’s suggestion to restrict innovation market analysis in the pharmaceutical arena to competitors past the preclinical stage. Yet Carrier does not address whether doing so would really protect R&D in the industry. The most important innovation in the industry may well be in the preclinical phase, during which firms develop the basis inventions—such as new drug compounds—that drive the pharmaceutical industry and have the greatest impact on consumers. Protecting such R&D is the very purpose of innovation market analysis.\textsuperscript{59}

Carrier’s second antitrust law proposal focuses on standard setting organizations (SSOs). Citing the benefits of standard setting and the often-rehearsed threat of patent holdup, Carrier

\textsuperscript{51} Id. at 292.
\textsuperscript{52} Id.
\textsuperscript{53} Id. at 303.
\textsuperscript{54} Id. at 306.
\textsuperscript{55} Id. at 307.
\textsuperscript{56} Id. at 308–09.
\textsuperscript{57} Id. at 311.
\textsuperscript{58} Id. at 312.
contends that SSOs exercising monopsony power to bring down royalty rates are unlikely to harm competition. He contends that any effects of depressed rates “tend to be significantly outweighed by more numerous licenses.” Recognizing, however, that potential innovation is at stake, Carrier would allow patentees to “offer evidence of reduced innovation incentives,” but concludes that “in nearly all cases” a showing of reduced incentives “is not likely.” Carrier also rehearses the procompetitive benefits of standard setting and defends several SSO IP rules.

Carrier then proposes that all standard-setting activity, with the exception of price fixing of standardized goods, be judged under the rule of reason. While this part of his proposal is not exceptional, he goes on to declare that all SSO activity outside of three areas—patent ambush, boycott, and the exercise of monopsony power that reduces innovation incentives—“should be upheld under the Rule of Reason.”

In making this proposal, Carrier does not discuss the literature challenging the use of patent holdup concerns to justify antitrust rules regarding SSOs. This is particularly interesting given that Carrier earlier relies on empirical evidence showing that the market has virtually eliminated holdup concerns in the biotechnology arena. This clearly implicates the need for further study in this area. As in the biotechnology arena, some have proposed that certain incentives deter patent holdup. For instance, a technology company that is a repeat player may have incentives to avoid enforcing a patent holdup. Carrier, however, does not examine these issues.

The final proposal deals with reverse payment settlements in the Hatch-Waxman context, which Carrier contends should be presumptively illegal. He bases this proposal primarily on the purposes of the Hatch-Waxman Act. Carrier would “conservatively allow the parties to introduce [rebuttal] arguments that have been offered in the economic literature.” But if judicial experience did not demonstrate the validity of the justification, Carrier would apply per se illegality.

Conclusion

_Innovation for the 21st Century_ is a worthy addition to the antitrust practitioner’s library. The book is easy to read, uses little jargon, gives helpful examples, and explains technical concepts in plain

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60 [Innovation for the 21st Century, supra note 4, at 338–39.](#)

61 Id. at 339.

62 Id. at 339.

63 Id. at 340–41.

64 Id. at 343.


67 _Innovation for the 21st Century, supra note 4, at 378._

68 Id. at 372; _see also_ Brief of Amicus Curiae Federal Trade Commission, In re Tamoxifen Citrate Antitrust Litigation, No. 03-7641 (2nd Cir. filed Nov. 30, 2005) (arguing that reverse payment settlements undermine the goals of the Hatch-Waxman Act).

69 _Innovation for the 21st Century, supra note 4, at 378._

70 Id.
The book describes a series of “hot” issues without overburdening the reader with detail and minutiae. It may thus serve as a launching point for the reader to engage in debate on these issues.

The book, however, is by no means a detailed exposition of the issues. Given the format of the book and the number of issues it addresses, Carrier’s goal is to make a strong case for his proposals. The book therefore does not deal directly with opposing arguments. At times it also fails to address implementation issues, but all these issues are minor. Overall, the book is well-written, engaging, and deftly tackles tough issues. It is well worth a read.

71 For instance, although he states that antitrust law now explicitly recognizes innovation concerns, Carrier claims his book “embarks on a new era in the often-chilly IP-antitrust relationship” and “recognizes, for the first time, that the IP and antitrust laws can have a positive influence on the other.” Id. at 2. Carrier also states that “we must introduce innovation into copyright, patent, and antitrust law” because “[o]ur livelihoods and our economy demand no less.” Id. at 14, 384.