Recent Trends in Merger Enforcement in the United States: The Increasing Impact of Economic Analysis

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From its modern origins more than thirty years ago federal merger policy has centered around the use of standard surrogates for market power to make presumptions about the likely effects of mergers. Since that time it has been evolving towards an increasingly complex approach as economic considerations have expanded their influence on merger policy. This trend was solidified in the 1982 revision of the Department of Justice’s Merger Guidelines, accelerated by the Department of Justice and Federal Trade Commission 1992 Horizontal Merger Guidelines’ increased emphasis on unilateral (as opposed to collusive) anticompetitive effects, and has reached new heights in the last few years with new unilateral

*Portions of this article were presented at Nison University College of Law’s International Antitrust Law and Economics Seminar in July 28, 1998. Dr. Langenfeld was the economic expert representing various private parties in most of the recent transactions discussed in this article. This article incorporates, extends, revises and updates the authors’ earlier piece, “From Surrogates to Sur- ries: The Evolution of Federal Merger Policy,” 11 Antitrust 5 (1997). Material from this piece was incorporated into this article with the permission of the American Bar Association. The authors are grateful to Alan S. Friedel for many of the insights concerning the Staples/Office Depot case that appear in this article, to Steve Strohm for many of the insights concerning the use of consumer complaints in merger analysis, and to Ronald Bhaskar for exceptional research assistance.

theories and the application of econometric analysis of market data and
game-theory based simulation programs. In effect, merger policy has been
moving away from reliance on surrogates and towards an approach that
instead tells an economics-based story of anticompetitive harm—an
approach that directly asks and answers the ultimate question: are prices
to consumers likely to increase as a result of a merger? This new
approach can lead to surprising conclusions. Many of these issues will be
illustrated through the analysis of a merger enforcement action that was
the largest, most economically complex, and among the most controver-
sial ever brought by the Federal Trade Commission—its challenge to the
Staples/Office Depot transaction.

1. The Traditional Approach

of the first modern merger cases, held that the government must define
the relevant market and prove appropriate market share and market con-
centration data. If the government proved these surrogates for market
power, the Supreme Court was willing to declare a presumption of illegal-
ity that would control unless defendant “clearly” could overcome it. Id. at
363. Once the government had defined the relevant market and showed
an appropriate increase in concentration the case was virtually over and
the merger would be enjoined. As we have learned over the last thirty
years, the traditional approach has many problems. For example, market
definition can be an all or nothing game and can determine whether a
merger will be challenged. Suppose, for example, that two manufacturers
of luxury automobiles, such as Mercedes and BMW, want to merge. If the
“relevant market” were considered to be “all new automobiles,” the
merger would probably be regarded as harmless since their market shares
would be trivial. On the other hand, if there were such a thing as a “lux-
ury car market,” the merger might involve unduly high market shares
and could thus be challenged and prevented.

Unfortunately, the methods for and evidence of market determination
seldom lead to unambiguous market definitions. Accordingly, the conven-
tional approach can lead to little predictability in “heterogeneous” or

2 In some respects, such as requiring market definitions, Brown Shoe Co. v. United States, 370
U.S. 294 (1962), can be considered the first modern merger case.
3 The list of factors that could overturn the clear presumption was relatively short and, in the
years immediately after the decision, rarely used.
4 This was the market definition used by the FTC in evaluating the GM-Toyota joint venture in
“differentiated” markets composed of products with substantially different features and prices, such as automobiles, or with significant brand distinction and (arguably) less obvious product differences, such as bath tissues. This problem can be serious because one can almost always find enough differences in products to make an argument that any market is heterogeneous. The traditional approach to this problem, at least prior to the 1992 Horizontal Merger Guidelines, was to decide how close the products of the merging firms are in a product market space, and make this a qualitative “plus” or “minus” factor in the analysis.

Another problem with Philadelphia National Bank’s presumptive approach is that every merger involves different competitive circumstances that can affect whether a merger is likely to reduce competition. Even if one can establish that a merger would result in a post-merger industry Hirschman-Herfindahl Index (HHI) over 1800 and an increase of more than 100, these calculations by themselves seldom accurately predict whether competition will be harmed by the merger. For example, United States v. General Dynamics Corp., 415 U.S. 486 (1974), held that current production of coal was a poor measure of future competition and that uncommitted coal reserves should be used instead.\(^5\) Cases such as United States v. Blate Management, Inc., 586 F. Supp. 498 (S.D.N.Y. 1983), rev’d, 743 F.2d 976 (2d Cir. 1984), recognized the importance of potential entry as a check on post-merger market power, and United States v. Country Lake Foods, 1999–2 Trade Cas. (CCH) ¶ 69,313 (D. Minn. 1998), highlighted the impact of powerful buyers in countering increased seller concentration after a merger. Perhaps for these reasons, Philadelphia National Bank’s presumptive approach has eroded over time. For example, in United States v. Marine Bancorporation, Inc., 418 U.S. 602, 631 (1974), the Supreme Court rearticulated the formulation, but omitted “clearly” from the presumption. Moreover, even the word “presumption” may now be debatable. In United States v. Baker Hughes Inc., 731 F. Supp. 3 (D.D.C.), aff’d, 908 F.2d 981 (D.C. Cir. 1990), Judge Thomas arguably abolished the presumption completely,\(^6\) although the presumption does remain in the 1992 Horizontal Merger Guidelines.

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\(^{5}\) One can also argue that the court merely disagreed with the way market shares should be calculated, but the case does focus on future actions rather than on current sales.


\(^{7}\) Judge Thomas held that despite Philadelphia National Bank, “The ultimate burden of persuading the trier of fact... remains at all times with the plaintiff...” Baker Hughes, 908 F.2d at 991 (citation omitted).
II. Recent Government Approaches

Regardless of whether a presumption still exists under case law, the federal enforcers today do not merely define a relevant market, show the relevant market shares and HHI figures, and rest their case. Using a variety of economic models and techniques, federal enforcers are attempting to develop additional information that would shed light on whether a merger is likely to be anticompetitive. In particular, there have been many recent attempts by the Federal Trade Commission and the Department of Justice to shift the focus of investigations away from market definition, particularly in cases involving unilateral effects. Their approach is to return to first principles. Since the enforcers ultimately care about the firm’s ability to raise prices after a merger, they look at a variety of factors and try directly to predict what will happen to future industry prices.

In the extreme, this means forgetting about market definition, market shares, and other surrogates of market power. As the former Director of the Bureau of Economics at the Federal Trade Commission Jonathan Baker suggests, so long as the price of something is likely to rise, why should we waste time figuring out exactly what prices will go up? To use an example that Baker has used in the past, there might be an extreme case when we do not care exactly how the beer market is defined or what the precise market shares are e.g., whether “lite” beer or

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8) The economic literature in this area has been developed and refined over many years and is too extensive to discuss here. The authors of important articles in the field include current and former Department of Justice and FTC economists, including Jonathan Baker, Luke Froeb, Thomas O Everyday, George Boas, Greg Wendel, Carl Shapiro, and Robert Willig. For example, see Thomas O’Brien et al., Understanding Economic Analysis of Post Effect of Mergers Involving Differentials Product, Antitrust, Summer 1996, at 30, and Carl Shapiro, Mergers with Differentials Product, Antitrust, Spring 1996, at 25.

9) We only discuss the price effects of mergers. Others have suggested that merger enforcement should have additional concerns, but these are beyond the scope of this article. See Robert H. Lande, Wealth Transfer as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged, 34 Hastings L.J. 65, 157-60 (1982).

10) It is unclear why the government has placed a renewed emphasis on unilateral effects. In part, it is probably due to economic theory’s increased focus on the topic and the agencies’ belief that collusion or other forms of coordination may either be unlikely to occur in differentiated markets or merely difficult to prove absent evidence that it has occurred in the past in a market under investigation. The difficulty of collusion or of demonstrating it has been highlighted by the Supreme Court in Brooke Group, Ltd. v. Brown & Williamson Tobacco Corp., 113 S. Ct. 2575 (1993).

imported beer should be included in the relevant market.\textsuperscript{13} If Anheuser-Busch and Miller were to merge and the price of something (even if we have not defined precisely what it is) probably will increase, then the agencies should take this as direct evidence of reduced competition and attempt to stop the merger.

Other antitrust scholars and practitioners, such as Gregory Warden, argue that economic simulations based on estimates of own- and cross-price elasticities of demand should be used instead of analysis that centers around structural surrogates.\textsuperscript{14} In fact, the government in its internal deliberations frequently has used this type of analysis to predict directly profit-maximizing price increases. At a minimum, this new method of analysis means an increased focus on the nature of competition between the merging firms and their close substitutes, paying particular attention to the likely effects of the merger on groups of customers.\textsuperscript{10}

III. Ideology or Improved Economic Tools?

There is concern in the U.S. antitrust defense bar that economic story telling and the increased focus on unilateral effects analysis will lead to overly narrow market definitions, or no market definition at all. Some believe that the old Brown Shoe submarket concept has returned, albeit disguised by new economic language,\textsuperscript{14} or there is an attempt to avoid the statute’s reference to a “line of commerce.”

For example, in United States v. Interstate Bakers Corp., Civ. Action No. 95C 4194 (N.D. Ill. filed July 20, 1995), the government alleged that the relevant product market was “white pan bread baked by wholesale and captive bakeries sold through retail food stores,” and that the merger “would likely cause interstate to raise its prices for white pan bread sold under its brands and the brands it is acquiring from Continental [such as Wonder or Webers]” (emphasis added). According to the Department of

\textsuperscript{13} Id. at 5-6.

\textsuperscript{14} Gregory J. Warden, Simulating Unilateral Effects from Differentiated Products Mergers, 11 Antitrust 17 (1997).

\textsuperscript{10} With respect to the focus on groups of customers, the recent government approaches follow the 1989 Horizontal Merger Guidelines’ analysis of markets defined by the ability to price differently to different groups of customers. See §§ 3.12 & 3.22.

\textsuperscript{15} There is little doubt that Brown Shoe was incorrectly decided, but the reasons for this are not necessarily related to its basic approach to market definition. See John L. Peterman, The Brown Shoe Case, 10 J.L. & Econ. 81 (1977). In some ways, Brown Shoe’s approach to market definition breaks down the more recent approach of estimating elasticities of demand. “The outer boundaries of a product market are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it.” Brown Shoe Co. v. United States, 370 U.S. 294 (1962).
Justice, bread baked in stores' bakeries was not to be included in the same relevant market as branded bread, and store-brand white pan bread (such as Safeway), rolls, hearth baked, wheat, rye, diet, etc., breads would be unlikely to constrain a price increase in branded white pan breads after the merger. By contrast, during the Reagan Administration, the FTC considered the same market in Flowers Industries, Inc., 102 F.T.C. 1700 (1983), but alleged “[t]he relevant product market for each acquisition . . . is the manufacture and sale of bread and bread-type rolls produced by wholesale bakeries, grocery chain bakeries, and in-store bakeries.” where “bread shall mean white, wheat, rye, dark or variety baked bread products” and “bread-type rolls shall mean hamburger and hotdog rolls, brown and serve rolls, English muffins, hearth rolls, and similar products.” Id. at 1701, 1705. Thus, market definition and competitive analysis have shifted over the last decade. This would be desirable if the approach taken a decade ago resulted in markets that were too broad. After all, if the government could show that a merger would increase the price of “branded white bread” by 10 percent for a significant period of time, then the merger should be enjoined.

The government’s new method of analysis is, however, not inherently pro-plaintiff. In many ways it was originated by Posner and Landes in 1981.16 Posner and Landes pointed out that if it were possible to calculate elasticity of supply and elasticity of demand, we could forgo market definition and market share because we would know everything we needed to know to assess a merger’s competitive impact. However, because we cannot know this very often, we must instead use the traditional methods of calculating the surrogates of relevant market and market shares, and making presumptions.17 The government’s new approach is saying, in effect, that enforcers agree with Landes’s and Posner’s overall methodology, but that economic theory, econometric techniques, data availability,18 and developments in computer simulations have improved so much in the last fifteen years, we can now often answer Landes’s and Posner’s direct question. Werden suggests that in those cases where we can answer the direct question and calculate likely price increases, we should do that, instead of using traditional structural analysis.19

In addition to its provenance, another reason why this approach is not

17 Id. at 938, 944.
18 These data have come from sources such as Nielsen’s and BIR’s scanner-based price and quantity data on retail sales.
19 See Werden, supra note 13, at 27, 30.
necessarily pro-plaintiff is that it sometimes can be used to weigh in favor of the legality of a merger under the right circumstances. In another recent merger of two bread bakeries, for example, one of the bakeries specialized in pan bread, while the other specialized in hearth bread. After an extensive analysis, the Department of Justice decided not to challenge the merger because, among other reasons, it was shown that the products of the two bakeries were not each other's closest competitor in retail sales.24 Accordingly, these recent developments may provide more

bases for challenging mergers, but there does not appear to be an ideological bias involved in the government's new methodology.

IV. Disadvantages of the Trend

The new methodologies have a number of disadvantages, which may weigh against their use, quite aside from their lack of ideological bias and their widespread support. First, there are often problems with obtaining the necessary underlying data in a form that is of sufficient quality.25 Second, assuming that the data are available and reliable, discussions with the agencies often turn into a battle of the applicable economic assumptions, econometric analysis, and computer simulation models. For example, is the market better categorized as homogeneous or differentiated, is the firm's competition based on quantity (Cournot game-theory models) or price (Bertrand game-theory models), or any game theory model at all?26

24 Although two products do not need to be each other's closest competitors for the analysis to predict a price increase, as consumers place more products "in between" those of the merging firms, this will tend to reduce the magnitude of the projected price increase. See Shapiro, supra note 8. The Department of Justice appears willing to allow a merger below some level of projected price increase (see text).

25 For example, scanner data can provide a great deal of detailed price and quantity data by product. These data are now virtually always used in mergers involving products sold at supermarkets and drug stores, such as the bakery merger discussed above and the recent merger between Kimberly-Clark and Scott, United States v. Kimberly-Clark Corp., 1996-1 Trade Cas. (CCH) ¶ 77,479, 105 F.3d 74 (D.C. Cir. 1996) (affirming district court's decision). Even with the availability of these data, however, there can be still be problems. For example, are coupons, returns, and rebates accurately factored in? When scanner data are not available, there are usually substantially more problems with obtaining accurate price and quantity data—although economists such as Baker, Weden, and Shapiro have suggested ways to infer some of the critical information. See, e.g., Jonathan P. Baker, "Uncertain Competitive Effects in Merger Analysis," 11 Antitrust 27 (1997); Gregory J. Werden, "Simulating Uncertain Competitive Effects from Differentiated Products Mergers," 11 Antitrust 27 (1997); Shapiro, supra note 8.

26 The author of a recent article questioning the increased complexity of economic theories quotes the eminent Stanford game theorist David Kreps as saying, "Noncooperative game theory... has led a great many economists over the past decade or two... to (economic theories and research more broadly) need to keep a better sense of proportion about where and when to use it." John Cassidy, "The Decline of Economics," New Yorker, Dec. 2, 1996, at 33, 58.
What does one assume about the shape of the demand curves, the grouping of products in a demand system, and the structure of the demand estimation process? What are the relevant time periods? Which simulation models should we use? Product repositioning (a form of entry) is easy. Virtually all of these models always predict prices will rise as a result of a merger without any explicitly collusive behavior (absent significant efficiencies). Accordingly, what level of predicted price increase is sufficient to merit challenging a merger? Different answers to these and other technical questions may lead to predictions of either a de minimis or a significant price increase from a merger, so the government’s analysis risks being fragile. Spelling out in detail the assumptions is very useful, as long as decision makers understand the assumptions and their importance. However, if one can change the analysis substantially by making fair but different assumptions, or if the analysis is based on relatively small differences in statistical estimates, the government’s approach is unlikely to be very useful.

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23. Any projection of price increases after a merger can be significantly affected by the assumption that there is a constant elasticity instead of a linear demand curve. A linear demand curve assumes that the quantity of demand will fall by the same amount for a given dollar price increase, regardless of the current level of sales. That is, the decrease in the number of units demanded divided by the dollar increase in price equals a constant. Constant elasticity of demand assumes that there will be a constant percentage decrease in the quantity demanded for a given percentage increase in price. In general, linear demand curves lead to predictions of smaller price increases than constant elasticity demand curves. Moreover, the grouping of products into like categories prior to the econometric analysis frequently affects estimates of how closely products compete. In fact, whether the econometric analysis directly estimates the elasticity of demand or does this indirectly through the impact of price on market shares can also greatly affect the results.

24. Elasticity and firm behavior can also vary greatly over time, so it is crucial to choose the proper period correctly.


26. For example, if we are warned about a merger of two country and western radio stations, how difficult would it be for a classical radio station to reposition itself and reach the country and western audience? Although the 1992 Horizontal Merger Guidelines would presumably treat this as an “uncommitted” entry, and therefore it would be part of the agencies’ burden of proof in market definition, “the agency staffs frequently try to place the burden of proof on the advocates of the merger to show that other products should be included in the market share calculations.” James Langensfeld, The Merger Guidelines as Applied, at 65 & 46. The recent antitrust cases make this analysis even more critical, and there is ongoing research on this issue. See Gregory Werden & Luke Frech, The Entry-Disinterchange Effects of Horizontal Mergers, Paper Presented at the American Economic Association Meetings, New Orleans, La. (Jan. 1997).

27. These models predict prices will increase as long as there is at least some substitutability between the products of the merging firms in positive cross-elasticity of demand.
Third, the methodology may be less predictable than traditional market definition analysis. There is clearly uncertainty with both the 1992 Horizontal Merger Guidelines approach to market definition and these recent approaches. However, faced with a client that wishes to merge with a competitor, a defense lawyer might be in a position of saying "it depends on the assumptions about the shape of the demand curve." Moreover, it is not clear how often the government will be able to meet its burden of proof in court given the data and methodological issues. Many of the new economic approaches being used by the antitrust agencies have not been really tested in litigation, and the courts could substantially affect the influence these new approaches have on merger policy and analysis. Thus, the new unilateral effects analysis may lead to less business certainty, with all the negatives that flow from lower predictability.

A fourth drawback is that this new analysis can be time consuming and expensive, especially when the merging parties attempt to challenge the government's analysis or attempt to use these approaches to dissuade the agencies from challenging a merger. It can often cost hundreds of thousands of dollars to do a complete analysis in a particular case, and the analysis moves even more from existing case law to the realm of economists.

V. Practical Impact on Policy

One of the most important practical effects of the government's new approach is that it often can find unilateral anticompetitive effects at very low combined market shares. Dr. Jonathan Baker provides an example of how a merger can lead to a 12.5 percent price increase even though the firms' combined market share is only 20 percent. Thus, it should come as no surprise that assumptions similar to those contained in the government's models can produce many scenarios involving combined market shares of even less that 20 percent that predict price increases of more than 10 percent. In fact, this type of analysis can predict price increase from 6 percent to over 50 percent after the merger of two firms that each have only 5 percent of a hypothetical market. Under reasonable

286 Attorneys or business people might have problems defining an antitrust market without extreme analysis, but might have a good idea about which companies are their short competitors. Under these conditions, it is not clear whether the 1992 Horizontal Merger Guidelines or the new approach would create more uncertainty.


assumptions, the new approach can predict significant price increases with what most would consider small market shares. Do the Merger Guidelines permit a consideration of unilateral effects when the firms’ combined market shares is this small? Many in the antitrust bar believe that the Merger Guidelines contain a general safe harbor for unilateral effects when the combined market shares total less than 35 percent, but it is clear from Baker’s analysis that many antitrust enforcers do not believe this. The Merger Guidelines state in Sections 2.211 and 2.22 that there will be no presumption of unilateral effects if the merged firm has less than a 35 percent market share, but this does not necessarily mean that a safe harbor exists if there is evidence that the merging firms are each other’s closest competitors. Is challenging mergers with combined market shares of less than 35 percent based on noncollusive theories consistent with past enforcement practice? As a practical matter, it represents a dramatic change from the Reagan-Bush years.

For example, from 1987 to 1992 the Federal Trade Commission challenged only four mergers (out of a total of 61 challenges) that involved an HHI increase of less than 400.31 We would be surprised if any of the challenged transactions involved combined market shares as low as 20 percent. Our experience suggests that during the Reagan years many enforcers believed that if a firm has the power to unilaterally raise price and restrict output it would usually have to have more than 50 percent of a market, and even in those circumstances market power often was negated by ease of entry, repositioning, contestability, etc. Now the debate has shifted dramatically. The federal enforcers are not only concerned with market shares over 50 percent, but at least some appear concerned with combined market shares in the 20–35 percent range. Economists differ over whether this mirrors the real world. Many economists continue to believe that substantial market power, when it exists at all, requires market shares well over 50 percent.32 Others believe that market power can begin in the 30–40 percent range.33 If one holds this latter view, the government’s new policy could be justified by the incipiency mandate of Section 7 of the Clayton Act depending on how far the government and courts are willing to take these theories.

31 Alan A. Fisher & Robert H. Lande, Proposing a Structured Reformulation of the Competitively Unreasonable 1992 Merger Guidelines, Paper Presented Before the ABA Antitrust Section Annual Meeting 7-8 (Aug. 13, 1992). Only one of these challenges involved an HHI increase of less than 300. It is unclear whether any of these four challenges involved unilateral effects analysis.
VI. Testing the New Approach in Court

Ever since Philadelphia National Bank, merger enforcement has been moving away from a mechanical approach using surrogates and presumptions towards one that directly attempts to answer the ultimate question of whether price is likely to increase because of a merger. This trend has been accelerating recently, and it is likely that the agencies will take it or whether a court would ever go all the way and forgo the use of market definition, market share, and concentration. In the Department of Justice's failed attempt to challenge the acquisition of the Parker Pen Company by the Gillette Company, its expert economic witness concluded that the merger was anticompetitive without including an analysis that defined a relevant market. Would a court now adopt Baker's approach and conclude that the price of something is likely to rise by 12.5 percent, so never mind exactly what the relevant market is? Such an approach is contrary to long established case law, such as Philadelphia National Bank, which holds that it is first necessary to define the relevant market and calculate market shares.

And, of course, the Merger Guidelines would have to be amended because they now assert that the government will start its analysis by defining the relevant market. If the government is going to test the extreme version of its approach in court and assert that it did not have to define the relevant market or calculate concentration or market shares, then it should challenge a merger that is the equivalent of Coca-Cola buying Pepsi. This is probably the only way the government could convince a court to ignore the traditional surrogates and find potential harm to a relatively undefined "line of commerce." If however, the government's analysis hinges on an economic model that shows a significant anticompetitive effect when there is a constant elasticity demand curve, but a straight line demand curve predicts only a de minimis price increase, it is unlikely that any court will hold that the government

34. United States v. Gillette Co., 1993-1 Trade Cas. (CCH) ¶ 76,210 (D.C. Cir. 1993) (George A. Reznick, Declaration in the proposed acquisition of the Parker Pen Company by the Gillette Company).

35. By analogy, the attempted monopolization standard in the Ninth Circuit used to be similar to what some economists and government officials are considering in the merger area. Lomg v. California Oil Co., 317 F.2d 439 (9th Cir.); cert. denied, 377 U.S. 993 (1964) (in certain cases market definition is "not an issue"). Many Sherman Act cases do not appear to require plaintiff to prove a relevant market and market share, or market concentration. See the Court in Spectrum Sports, Inc. v. McQuillan, 113 S. Ct. 804 (1993), however, "single firm activity is unlike concerted activity covered by § 1, which inherently is fraught with anticompetitive risk. For these reasons, § 2 makes the conduct of a single threat and to do so." Id. at 809 (emphasis omitted). We believe that merger analysis, based on unilateral anticompetitive effects is more analogous to monopolization analysis than to § 1 analysis.
ment had met its burden of persuasion. Accordingly, we would expect that this approach would at least initially be tested in court in conjunc-
tion with a traditional structural analysis.

VII. A State of the Art Example: The Staples/Office Depot
Merger

Perhaps the most visible example of the recent trend toward economies-
based merger analysis is the U.S. Federal Trade Commission's successful
challenges to the proposed merger between Staples and Office Depot. In
September 1996, United States office supply retailer Staples, Inc. agreed
to acquire rival Office Depot in an acquisition valued at $3.4 billion. Sta-
peces and Office Depot are two of the three office supply 'superstore'
chains in operation in the United States (the third is Office Max). They
compete head-to-head in 42 metropolitan areas in the United States
today, and each has been expanding and entering new regions.

Prior to the emergence of superstores in the mid-1980s, businesses and
consumers typically purchased office supplies through dealers that offered
items listed in a catalog published by one of several office supply whole-
salers. These dealers also often operated small storefronts in which some
of the most popular items were kept in inventory for spot sales to end
users.25

On April 10, 1997 the Federal Trade Commission (FTC) filed suit to
obtain an injunction prohibiting Staples and Office Depot from consum-
ating the acquisition. In filing suit the Commission rejected an offer by

25 This section was in part adapted, with permission, from 'See Changes or Feel the Pain?' Fed-
eral Trade Commission v. Staples, Inc. and Office Depot, Inc., by Alan S. Frankel and James A. Lan-
26 Both Staples and Office Depot began operation in 1986. These retailers followed a new
strategy, albeit one evident in many sectors of American retailing. While traditional channels of dis-
tribution emphasized variety and specialized service (for example, offering near-morning delivery of
office supplies to the customer) superstores targeted small business and home-office customers that
were especially price-sensitive, along with other customers who preferred the availability of a large
number of items on-site for some or all of their purchases.

The superstore chains constructed large, efficient warehouse-style stores in which roughly 10,000
individual products were offered for sale. Though this fell far short of the variety offered by trad-
tional wholesalers with their massive catalogs, the resulting cost savings on those popular items (due
in part to favorable discounts negotiated with vendors eager to have their brand sold in a limited-
selection environment) were passed along to consumers in the form of lower prices. In the years
since the creation of this new format, superstores as a whole have grown rapidly at the expense of
many small dealers and their suppliers. Yet, today most consumable office supplies used in the
United States are sold through other channels, including traditional distributors and their dealers,
contract stations, mass merchandisers such as WalMart, and others, as well and directly to large
corporate users.
Staples to divest up to 63 stores to Office Max as a condition for permitting the acquisition to proceed. Because the U.S. antitrust agencies typically settle merger challenges with this type of consent agreement, many were surprised that the FTC rejected Staples’ offer.

At its heart, the FTC’s case relied primarily upon the companies’ documents and statistical evidence that the FTC believed demonstrate that Staples and Office Depot are particularly close competitors. The FTC’s analysis showed that, in geographic markets (metropolitan areas) in which the two firms compete with one another, office supply prices are significantly lower than in areas in which only one or the other competes.

Furthermore, the FTC claimed that its evidence showed that even a reduction in the number of superstores from three to two in a metropolitan area would push up prices, and that in other markets apparently unaffected by the merger these two firms were the most likely source of additional future competition. The FTC concluded that the relevant product market included only “the sale of office supplies through office superstores” and that there was “a substantial likelihood the acquisition may lessen competition in violation of Section 7 of the Clayton Act.”

Staples and Office Depot filed a joint reply to the FTC’s brief in this case in which they called the FTC’s relevant market definition “gerrymandered”, “contrived”, “artificial”, and “procrustean.” According to Staples and Office Depot, this would have been a combination between two retailers that together account for only 5.5 percent of total annual sales of office supply products in the United States and, by merging their operations, the combined entity would have achieved significant efficiencies that will be passed along to the public in the form of lower prices. Public reaction to the FTC’s challenge of this proposed transaction was anything but muted. An article in the Economist stated, “the FTC’s attempt to redefine and narrow the market is deeply flawed.”

The New York Times called the case “a sea change in policy.” Lurking just behind the scenes was an enormous amount of interest recently at the

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38 The parties pointed to their track record of reducing prices and the continuing decline in office supply prices even as the number of competing chains has diminished, as supporting evidence. The companies responded to the FTC’s statistical study of a relationship between price and head-to-head competition, competition with two principal competitors. First, they claimed that the FTC’s results were as artificial of the particular set of office supply products the FTC expert chose to analyze. Second, they argued that the FTC’s results do not properly take into account the fact that the stores in which higher prices were found tend to correspond to cities in which the cost of doing business generally is higher.

41 Perhaps this issue was not lurking at all. Staples and Office Depot called this a “test case” that advances “novel” and “misguided” legal and economic theories.
FTC in unilateral effects theories.

Both the FTC and the parties agreed that the advent of superstores has brought systematically lower prices to office supply consumers. Staples and Office Depot argued that their merger will permit more of the same, while the FTC argued that the very cost and price reductions caused by superstores had, in effect, turned the format into its own relevant market. In general, the economic analysis underlying “unilateral effects” theories aims to determine whether prices will rise following a merger, regardless of the market definition employed. Yet, price increases following a hypothetical merger is precisely the basis for market definition itself under the Merger Guidelines, and the economic arguments in the Staples case were primarily focused on market definition.

According to the Guidelines, “the Agency will delineate the product market to be a product or group of products such that a hypothetical profit-maximizing firm that was the only present and future seller of those products (monopolist) likely would impose at least a ‘small but significant and nontransitory’ increase in price.” Thus, according to the logic of the Guidelines themselves, the FTC’s determination that prices would rise following the Staples merger under a unilateral effects theory were equivalent to the FTC’s determination that the relevant market includes only the products of the merging firms.

There was a convenient distinguishing characteristic in this case—the ‘superstore’ format and designation—that minimizes any seeming disparity between these two aspects of merger analysis and cloaked the unilateral effects arguments under the traditional language of market definition. On its face Staples/Office Depot illustrates the general tendency of U.S. competition agencies in recent years to focus on anticompetitive effects involving either relatively narrower markets than in the past. The court in Staples agreed with the Federal Trade Commission, and blocked the merger. The court in large part used the Brown Shoe criteria in its determination of market definition. In particular, the court interpreted the FTC’s “pricing evidence” as Brown Shoe’s “sensitivity to price change,” and viewed the vastly larger number of disposable office products offered by office superstores and their unique format as Brown Shoe’s “practical indicia” of a market.

The Federal Trade Commission and the court apparently relied heavily

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42 This is true for many categories of products carried by the superstores.
43 Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines, April 2, 1982, Section 1.13.
on statistical analyses of price comparisons across different geographic markets in showing that Staples' prices were about thirteen percent higher in cities with one chain supermarket than where there were three superstores, as well as evidence from the parties' documents that supported this conclusion. This evidence arguably answers the ultimate question of whether reducing the number of office superstores would result in higher prices to consumers, regardless of the exact dimensions of the relevant product market. However, both the Commission and the court did not use the Commission's statistical analysis to try to discard traditional market definition. According to the Commission's Chairman Pitofsky, the court instead used the results of itsprice comparisons to infer indirectly its asserted market definition of office superstores:

In my view, the Court appropriately found that office supply super stores do business in a sufficiently special way that they constitute a separate product market—not a submarket but a market. The econometric evidence showed that there was cross elasticity of demand among customers of the various super stores—hence prices were lowest when super stores met each other in the same geographic market—but there was relatively little cross elasticity between the super stores and other sources of consumable office supplies. In that view, the econometric evidence demonstrated the existence of a separate relevant market, and was not a technique whereby the government could avoid its obligation to demonstrate the existence of a market.35

In sum, Staples illustrates that U.S. antitrust agencies are actively using unilateral effects analyses and sophisticated econometric techniques in their evaluation of whether to challenge a merger and have successfully used these techniques (in conjunction with more traditional evidence) successfully in litigation. The evidence, however, has been placed in the context of traditional antitrust analysis of market definition and market structure—in effect inferring the traditional structural analysis from the direct evidence of increased concentration leading to higher prices.

VIII. U.S. v. Engelhard

Issues of the appropriate economic analysis and the relevance of the merging firms being closest competitors have been explored in several

other litigated mergers, even ones that have not relied on complex statistical and simulation techniques. In some of these recent mergers, such as
U.S. v. Engelhard, the approach taken by the antitrust agencies have not always found favor in the courts.

The Court in Staples explicitly adopted the Merger Guidelines’ usual market definition test of a price difference being greater than 5 percent as the benchmark for determining whether these price differences were significant enough to establish a separate product market given the documentation and statistical evidence in that case.40 In contrast to the Staples decision, however, the District Court for the Middle District of Georgia, disagreed with the U.S. Department of Justice’s application of the Merger Guidelines in United States v. Engelhard, 970 F. Supp. 1463 (1997). In Engelhard, the DOJ sought to block Engelhard’s acquisition of Florinol because the DOJ believed that “the transaction would reduce the number of competitors in the U.S. gel clay market from three to two.”41 Both companies mine, process, and distribute gelatin quality attapulgite (“GQA”) and sorbent quality attapulgite (“sorbent clay”), which are found together in the same locations along the Georgia-Florida border. Processed GQA is a thickener and suspension agent that has many end uses, including fertilizers, animal feeds, paints, drilling fluids, asbestos-free asphalt roof coatings, tape joint compounds, and molecular sieves. GQA was the focus of the DOJ’s challenge, and sorbent clay was not challenged because “there is vigorous competition between sorbent clay and non-attapulgite products.”42

In determining the bounds of the relevant product market, the DOJ and its experts used the approach outlined in the Merger Guidelines to show the magnitude of “cross-elasticity of demand” and “reasonable interchangeability,” but presented no statistical or simulation evidence (presumably because of a lack of data). Instead, one of the DOJ’s expert witnesses interviewed many existing customers of Engelhard and Florinol representing almost all of the end uses GQA, asking whether they would switch for a 5 to 10 percent price increase in GQA. In addition, direct evidence from a number of customers was introduced asking the same question. In general, the customers said they would not switch to other products for a 5 to 10 percent price increase in GQA.

The court explicitly disagreed with the DOJ’s and its expert’s use of the Horizontal Merger Guidelines’ 5 to 10 percent price increase test on

40. See footnote 8 at 16.
41. Id. at 1465 (emphasis added).
42. Id. at 1466 n. 5.
GQA for determining whether customers would substitute other products in sufficient numbers to make such a price increase unprofitable and, thus, excluding other products from the relevant product market definition. The court quoted the Guidelines for the proposition that the "Guidelines are not binding on the courts." 50 The court recognized that "in many cases faithful application of the 5%-10% test will, in fact, result in an accurate description of the relevant market." 51 However, the court rejected its applicability to this merger for several reasons.

First, the court noted that GQA accounted for only between 1/10 and 10 percent of the total cost of the final product in which it is an ingredient. 52 Accordingly, a 5 to 10 percent price increase would only raise the price of the final good by about, 25 percent if the GQA formed 5 percent of the cost of the final good. Since most products in which GQA is used as an ingredient would require significant reformulation costs, the Court found that a price test of this magnitude did not reflect "market realities." 53 Perhaps the key insight on which the court based this evaluation came from the fact that

[S]imply changing GQA suppliers would require product testing and potential reformulation... In the light of the low cost of GQA as a percentage of their overall product cost and the potential for significant qualification costs, some customers stated that they would not switch from Engelhard's GQA to Floridin GQA, or vice versa, if their present supplier raised the price by 5 or 10 percent... Such a conclusion would reflect the notion that only physically identical products could be in the same market. The Supreme Court has rejected such a position, Du Pont, supra, 351 U.S. at 394, 76 S.Ct. at 1006-07. 54

Given that it would take more than a 5 to 10 percent price increase before customers would switch between Engelhard's and Floridin's products, the Court believed that a higher price increase test would be necessary to establish whether other products experienced the same level of substitutability as that of the merging firms' GQA.

In addition to the criticisms of the DOT's and its experts' approach to market definition, the court also faulted them for only gathering evidence

49 Id. at 1467.
50 Id.
51 Id.
52 Id. at 1466.
53 Id. (footnote omitted).
on current purchasers of GQA, "ignoring perhaps the best source of information GQA relevant to the product market inquiry, to wit: those customers who have already switched to an alternative product.\textsuperscript{56}\textsuperscript{e} The court also found that the 5 to 10 percent price increase test competition exists only in the post formulation stage, when GQA had already been chosen for an end-use product. Accordingly, the court faulted the test applied to existing GQA customers for not taking into account that potential customers could use an alternative substance for the same function when creating a new product or retooling an older one.\textsuperscript{56}\textsuperscript{f} Finally, the court specifically found that sepiolite was a good substitute for GQA, at least in the western portion of the U.S. where the deposits are located, based on testimony and documentary evidence.\textsuperscript{56}\textsuperscript{g}

After considering the evidence in detail, the \textit{Engelhard} court concluded that the evidence did not weigh in favor of finding that the relevant product market was gel quality attapulgite. The court concluded that the evidence was insufficient to make any judgment on the relevant market, so the DOJ had failed to carry its burden of persuasion for an essential element of the case.\textsuperscript{53}\textsuperscript{j}

\section{Conclusions from Staples and Engelhard}

These two decisions provide some lessons in applying the economic concepts embodied in the Merger Guidelines to market definition and the agencies' increased interest in determining the ultimate impact of merger on consumers. First, both cases suggest that economic substitutability, rather than physical interchangeability, is the key to product market definition. Second, in addition to the Merger Guidelines' use of price increase and cross elasticity of demand tests, the courts will use other indicia of market definition to confirm the relevant product market before reaching any conclusion. Third, the use of a 5 to 10 percent price increase test to quantify the degree of economically substitutability cannot be assumed automatically. If it would take more than a 5 to 10 percent price increase on the products of one of the merging firms to lead customers to switch to the products of the other merging firm, courts might require a higher price increase threshold for establishing whether the products of non-merging firms should be included in the relevant market.

\textsuperscript{54} Id. at 1409.
\textsuperscript{55} Id. at 1409.
\textsuperscript{56} Id. at 1401-04.
\textsuperscript{57} Id. at 1404-05.
X. The Use of Customer Complaints in Merger Analysis

As indicated in the cases discussed above, the U. S. antitrust agencies will use complex statistical evidence or more qualitative evidence gathered from many sources—especially customers. Because, customers can provide useful information to the enforcers in merger investigations, so the Department of Justice and the Federal Trade Commission always interview customers in these investigations. Customers usually know a great deal about the nature of competition among their suppliers, and often have the incentive to oppose actions that will reduce competition.

Accordingly, customer complaints may be given substantial weight, and can shape some of the basic arguments in antitrust litigation. In a merger case where customers express opposition, the defense must argue that the complainants are not well-informed, or are not expressing concerns about the relevant antitrust issues. Similarly, if customers generally express indifference or support a merger, the plaintiff must argue that customers will be affected adversely, but are not aware of the losses they are likely to incur.

It is clear that opinions cannot take the place of detailed antitrust analysis. In some instances, customers may be affected, or perceive that they will be affected, by factors other than changes in the degree of competition. In other cases, customers’ concerns may be prejudiced by a lack of current information. Sometimes customers speak with a multitude of voices, making clear interpretation more difficult. Other times in gathering information to make a case, plaintiffs may not obtain a full picture of customer opinions. Accordingly, it is important to learn complaining customers’ knowledge of the industry, to ensure that full information has been obtained from customers, and to determine the motivating forces behind their opposition. These considerations necessitate careful evaluation of apparent customer complaints as the Department of Justice learned the hard way in its loss in Engelhard. We will first discuss problems with customers being adequately informed to provide useful information, then discuss motivations of customers that could bias their responses, and finally describe some problems with obtaining accurate information from customers.

To determine the depth of a customer’s knowledge and the motivations for his concerns, antitrust investigators often ask the customer hypothetical questions. These questions are difficult to answer in some situations. For example, in order to determine whether customers could defeat an attempted anticompetitive price increase, investigators may ask customers what products would be close substitutes for the merging firms’ products
if there were a price increase. A customer may be aware of the products that are close substitutes at current prices, but not higher prices, if it has ever had to confront those prices. Without higher prices, the customer may have lacked the incentive to incur the costs necessary to evaluate potential alternatives, including the possibility of vertically integrating into that input market. Customers are most likely to be knowledgeable about substitutes at different levels of relative prices if they have faced price fluctuations in the past.

In Engelhard, the customers stated they would not switch to other substitutes unless there were substantially higher prices. However, the customers also stated that they would not substitute between the products of the merging firms without there being same higher prices. In effect the DOJ did not adequately take into account that the two merging firms were just as good (or as poor) substitutes for each other as other product in the customers' eyes. In this situation, the customers' opinions not only undermined the notion that Engelhard and Floridin were "closest competitors" but undermined the market definition argued by the DOJ.

Some customers' knowledge of substitutes also may be limited because they have not conducted a recent search, and their information about substitutes may not be current. Often a complaining customer, when questioned about substitutes, will admit having limited information about his supplier's competitors, in part due to his long relationship with the acquired firm. Complaints from customers with such limited information seldom offer convincing support for an antitrust case.50

Customers may also be myopic in that they often focus on their portion of the market, and not include all the firms or products that affect competition. For example, non-integrated retailers facing a merger between two of their wholesale suppliers may be concerned that the merger could lead to a wholesale price increase, which would place them at a competitive disadvantage relative to their integrated rivals. However, if only the non-integrated retailers are subject to a potential wholesale price increase, then such a price increase is less likely than if the price increase would be industry-wide. Competition from the vertically integrated firms in the final good market often make in unprofitable for the wholesalers to

50 This lack of information is particularly a concern when customers describe the acquired firm as the industry "monarch," with the lowest prices and highest quality product. These customers sometimes are concerned that the takeover of their supplier will result in a reduction in competition because they perceive their supplier to be a uniquely important competitive force. However, customers of competing firms often describe their own suppliers as the low-price, high-quality supplier. This should not be surprising, because the perception of relative low prices and high quality will presumably lead customers to make their purchases from a particular supplier.
increase prices to non-integrated retailers, because such a price increase would reduce wholesaler sales.

Other limitations on their information may inhibit their evaluation of the competitive consequences of mergers. For example, customers observe the prices they pay their suppliers, but they have limited information about their suppliers’ costs and markups. Whether or not customers perceive that they are able to get a “good deal” is not necessarily indicative of the extent to which suppliers’ markups over unit cost are competitive.\textsuperscript{59}

Customers’ limited knowledge of suppliers’ costs also implies that they may not be knowledgeable about some aspects of the ease of entry into their suppliers’ market, as well as the ease of production substitution of existing capacity by firms not currently producing the relevant product. Entry may appear to be difficult because no entry has occurred in many years. However, this lack of entry may be due to the market being highly competitive and entry not being profitable, rather than because entry barriers enable incumbents to charge anticompetitive prices. These alternative conclusions obviously have divergent implications for antitrust enforcement.

Even when customers have substantial information about the market, they may be biased against a merger. For example, some customers may oppose all mergers because of perceived social consequences, such worker displacement, that are not related to market power. Moreover, some customers may also be competitors, which clearly can affect their incentives for opposing a merger. A distributor may be a customer of a manufacturer, but may also compete with the manufacturer is that engages in direct distribution. To the extent that an integrated manufacturer is acquiring a manufacturer that only uses independent distributors, one will almost always find the independent distributors objecting to the merger. However, if independent distributors are efficient and there is competition at the manufacturing and distribution levels, it is very unlikely that the distributors’ concerns reflect true competitive concerns. Instead, these distributors may really be concerned that the merger will create a more efficient competitor at the distribution level.

\textsuperscript{59} In particular, customers usually have limited access to information about their suppliers’ production process (as opposed to its distribution, marketing, etc.) and may not recognize production efficiencies from a merger or an inter-supplier agreement. Although they may be more familiar with their suppliers’ marketing and distribution, customers may not know the cost savings that might be achieved in these areas either. As such, customers may be unable to recognize cost savings that could be passed on to them in the form of improved products or lower prices.
Other customers may express opposition to mergers because there are adjustment costs associated with new management. Merged firms may make changes in their product, servicing, ordering procedures, delivery procedures, and payment requirements. Customers often face the costs of learning about the changes and of changing their own operations to conform with the supplier's changes. Customers sometimes describe these costs as "disrupting established business relationships." These are real costs borne by customers, but they may be necessary for a transition toward a more efficient system of exchange between supplier and customer. In addition, the changes may have been necessary even without the merger for the acquired firm to remain competitive. The appropriate comparison, which customers may not have sufficient information to make, is between alternative future systems, and not between past and future systems.69

Similar to adjustment costs that customers may bear after a supplier merger, customers may be concerned about "switching costs" that they incur when they change suppliers. Customers often have some assets that are valuable only if they purchase from a particular supplier, and switching may necessitate the costs of purchasing new assets that are specific to the new supplier. However, if the cost of switching to another supplier is the same as the cost of switching between the merger partners, then the level of switching costs has no effect on the potential market power that could be created by the merger, as the court recognized in U.S. v. Engelhard.

Given the potential incentives of some customers, a complete investigation should also seek information from non-complaining customers can provide useful information. Non-complaining customers may provide important counter-arguments to the concerns expressed by complaining customers, and may viewed as less biased that either complaining customers or the parties involved in a merger.

Even when customers are informed and are not biased, the gathering of information on customer complaints can result in an inaccurate picture of the competitive impact of a merger. For example, the means by which

69 In some instances, customers may be able to foresee adjustment costs, but unable to adequately foresee the associated benefits. In particular, the portion of the interviewee at the firm may fear that price's perception of the costs and benefits of a supplier merger. The manager of the firm's purchasing department may have the most information about the firm's suppliers, but may have strong concerns about adjustment costs because those costs may fall heavily on the purchasing department. The firm's president, however, may have a broader perspective on the impact of costs and benefits on the firm as a whole. His opinion could be more valuable, unless he has such limited information about the day to day workings of the competition among the firm's suppliers that he cannot evaluate the potential cost to the firm of a supplier merger.
customer complaints come to the attention of the merger enforcers can result in a biased sample of opinions. A range of degrees of competitive concern are likely to exist among customers for any given horizontal merger. Of course, those customers with the strongest concerns about the merger are most likely to contact a government agency or to agree to be interviewed when contacted by an agency. However, antitrust investigators may contact numerous customers and locate only a few with competitive concerns. Thus the existence of apparently relevant competitive complaints should be considered to be much less important than the percentage of well supported complaints from a random sample of customers.

As suggested in this discussion, complainants may have a number of sources of concern and it is difficult to know the relative importance of each concern. A customer could oppose a merger for several reasons—e.g., ideological reasons, the expectation of adjustment costs, and the possibility of anticompetitive effects. Accordingly, it is important not to focus exclusively on competitive concerns, because they may be a minor reason for a customer's complaint. Merger investigations that involve customer complaints should probe all the motivations for customer concerns to determine the relative importance of competitive concerns. Absent a careful analysis of customer opinions and their bases, the use of customer information can cut against antitrust enforcers in applying the new economic theories, as happened in Engelhardt.

XI. Clarifying Policy

In the United States the role of economic analysis in merger cases has grown so much that it is now of paramount importance. The very influential federal Merger Guidelines, which are based upon and replete with complex economic ideas, have helped this occur. At its most general level the parameters of merger analysis are, of course, established by the U.S. statutory framework and case law. Under the relevant case law this analysis has become increasingly complex. Merger analysis, as influenced by the Federal Merger Guidelines, has now evolved to the point where it consists of little more that a "safe harbor" for small mergers in unconsolidated markets, and for all other mergers a full rule of reason inquiry into every factor that conceivably could affect the final price of the products or services in question. This rule of reason inquiry is performed almost entirely by the use of economic analysis, based on sophisticated quantitative techniques to qualitatively analyzed customer opinions. However, much of this analysis is placed in the terms of traditional legal analysis (such as the requirement of market definition).
As the Staples/Office Depot transaction illustrates, the latest step in this trend has been the increased attention given by the antitrust enforcers into the question of whether horizontal mergers might give rise to anti-competitive unilateral effects. The enforcers have made a number of significant advances in the development of the optimal theoretical approach towards this issue. But in at least one significant respect these advances have come at the expense of predictability and business certainty. The models that the antitrust enforcers utilize often predict possible price increases when extremely small firms merge. This has the effect of effectively limiting the “safe harbor” contained in the Guidelines, especially to the extent that economic analysis is used to define narrower markets.

The Merger Guidelines should contain reasonably large safe harbors so that they can assure a more significant number of transactions that they will not be challenged. Specifically, we believe that business needs an explicit safe harbor from unilateral effects analysis. Because a 35 percent post-merger market share does not appear to be a safe harbor threshold, and these theories have not yet been tested often in court in their most naked form, the government should more clearly articulate its standards until these theories have been litigated more thoroughly.

Further, because the new models almost always predict some price increase, it also would be desirable for the agencies to specify what they consider an allowable (or de minimis) predicted price increase. This is particularly important because the authors’ experiences suggest have been reluctant to accept any predicted price increase resulting from a merger. Descriptions of the rationale for bringing specific cases are extremely helpful. However, it is still difficult to generalize from this type of discussion and to provide a reasonably high level of certainty when counseling many prospective mergers, absent extensive and expensive economic analysis.