CPI COMPETITION POLICY INTERNATIONAL

CPI Antitrust Journal
October 2010 (2)

Continuity and Change in the 2010 Merger Guidelines

Malcolm B. Coate (FTC) &
Joseph J. Simons (Paul Weiss)

Continuity and Change in the 2010 Merger Guidelines

Malcolm B. Coate & Joseph J. Simons[1]

I. INTRODUCTION

For almost 30 years, the U.S. antitrust enforcement agencies have described a structured, step-by-step analytical methodology in their Merger Guidelines. Prior revisions to the Guidelines were designed, in significant part, to clarify actual practice at the agencies in light of historical experience, while keeping the underlying methodology intact. The 2010 Merger Guidelines are supportive of this tradition; the document clarifies actual practice in certain respects and retains much of the core presentation.[2] However, the revision is also innovative, because it modifies the methodology to place greater emphasis on evidence of adverse competitive effects. Most of this "evidence" is completely consistent with past practice and uncontroversial. One type of "evidence" is not.

The 2010 Guidelines introduce margin evidence to support inferences on competitive behavior, market definition, and post-merger price effects. This type of evidence has not previously been systematically used by the agencies in their merger investigations. While we understand that the margin evidence and the models related to it might be proven applicable in particular fact situations, we are concerned that the Guidelines, as written, would apply these types of economic evidence to a broad set of mergers without basis. Doing so would run the risk of drastically increasing the number of mergers subject to challenge.

For most transactions reviewed by the Agencies, markets must still be defined, shares measured, unilateral or collusive effects evaluated, entry studied, and efficiencies analyzed, all within an interactive review process in which facts uncovered in any aspect of the investigation may require re-evaluation of an initial conclusion reached in other portions of the review. Within this standard structure, the revised Guidelines add numerous minor innovations. These include a more comprehensive overview for market definition, higher structural statistics, additional insights into unilateral and collusive effects, a more flexible entry section, and new openness to innovation-based efficiencies.

In this comment, we first discuss the Guidelines' increased emphasis on evidence related to a merger's adverse effect on competition. Then in section III, we address the analytical techniques introduced by the revision that relate to direct predictions of unilateral effects. We also explain how the new Guidelines can be used to modify the pre-existing structural approach in a way that makes it consistent with the new unilateral effects techniques. Next, in Section IV,

[1] Malcolm B. Coate is an economist at the Federal Trade Commission. Joseph J. Simons is a partner in the Washington, D.C. office of Paul, Weiss, Rifkind, Wharton & Garrison LLP; he was Director of the Bureau of Competition at the Federal Trade Commission from June 2001 to August 2003. The analyses and conclusions set forth in this paper are those of the authors and do not necessarily represent the views of the Federal Trade Commission, any individual Commissioner, or any Commission Bureau.

[2] U. S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (2010), *available at* http://www.ftc.gov/os/2010/08/100819hmg.pdf.

we list some of the important improvements to the standard Guidelines methodology that has come to define modern merger analysis. Finally, in section V, we add some cautions related to the use of the theoretical innovations detailed in Section III. Section VI concludes by linking the Guidelines approach to the controlling legal authority developed from *Philadelphia National Bank* to *General Dynamics* to *Baker Hughes.*[3]

II. EVIDENCE AND THE MERGER GUIDELINES

The 2010 Guidelines present an overview of the types of evidence collected in a merger investigation. While this discussion is extremely useful and the authors of the Guidelines should be commended for highlighting the facts that underpin a merger review, the presentation lacks the necessary context. It is crucial to differentiate between evidence of a competitive concern (see sections 2.1.1 and 2.1.2) and evidence needed to parameterize a structural economic model of a competitive concern (see sections 2.1.3, 2.1.4, and 2.1.5).

Evidence of a competitive concern implies that market performance may be injured if the merger is consummated and, thus, supports enforcement action. This performance evidence can be further subdivided into analyses with internal controls for alternative explanations of the facts and analyses without such internal controls. Econometric studies, similar to those in *Evanston* and *Staples*, are classic examples of controlled performance evidence, because these analyses account for the variation in other variables that might also explain the predicted poor performance.[4] By accounting for these other considerations, the evidence directly supports the inference of a competitive concern. Such direct evidence of anticompetitive effect is recognized as extremely probative in the new Guidelines.[5] And it is this evidence that sets up the potential for conflict with the standard structural analysis detailed in Section III.

Much of the performance evidence used by the agencies, however, usually lacks internal controls for causation (*i.e.*, consideration of alternative explanations). For example, customer concerns, hot documents, and simple economic studies may be consistent with the prediction that a merger will lead to high prices, but may not be causal in nature (*e.g.*, prices could be rising independent of the merger). This performance evidence needs to be evaluated carefully to insure that it is consistent with a credible theory of concern. Thus, this type of evidence is best used to confirm predictions of an economic model of the merger's effect (the model implicitly controls for factors other than the merger that could cause the price effect). For example, the Merger Guidelines incorporate a number of these simple economic models, including, but not limited to, the dominant firm model, the structural collusion ("HHI") model, the Maverick firm model, and

[3] U. S. v. Philadelphia National Bank 374 U.S. 321 (1963), U.S. v. General Dynamics Corp. 415 U.S. 486 (1974), and U. S. v. Baker Hughes Inc. 731 F. Supp. 3 (D.D.C. 1990), *aff'd* 908 F.2d 981 (D.C.Cir. 1990).

[4] For an ex-post analysis of effects evidence, *see* FTC vs. Evanston, Docket 9315 (August 6, 2007) *available at* http://www.ftc.gov/os/adjpro/d9315/070806opinion.pdf at 64 and for an ex-anti analysis of effects evidence, *see* F.T.C. v. Staples 970 F. Supp. 1066 (D.D.C. 1997). The court was reluctant to accept the econometrics, but did accept the raw data that underpinned the statistical analysis (and made a number of structural findings compatible with the results of the econometric analysis).

[5] This evidence was also highlighted in the 2006 Commentaries on the Guidelines. *See* Federal Trade Commission and U.S. Department of Justice, *Commentary on the Horizontal Merger Guidelines* (2006) *available at* http://www.ftc.gov/os/2006/03/ CommentaryontheHorizontalMergerGuidelinesMarch2006.pdf.

the unilateral closest-competitor model.[6] With respect to these types of models, the performance evidence plays a synergistic role and is best seen as indirect evidence of a competitive effect.

Finally, other Guideline evidence collected in an investigation serves to parameterize simple economic models of competitive effects. For example, the value of Herfindahl statistic (implicitly noted in 2.2.3) defines a key parameter in the structural collusion model. Collusion concerns are higher if the Herfindahl is 4500 than if it is 2000. (Of course, the Herfindahl evidence has much less value if the structural collusion model does not apply.) Likewise, information on the share of customers subject to head-to-head competition involving the merging parties applies in a unilateral closest-competitor model, while evidence of historical maverick activity supports an alternative collusion structure. What is crucial to recognize is that specific economic evidence is useful when the relevant economic model applies to the market at issue. As discussed in Section V, evidence on the margin parameter is relevant when the industry analysis shows margin-related models reliably predict market outcomes. However, margin by itself has no intrinsic meaning for merger policy.

III. MODELING INNOVATIONS IN THE MERGER GUIDELINES

It is well known that a merger can be evaluated with either direct evidence of anticompetitive effect or market-based structural analysis suggestive of a competitive concern. While the previous drafts of the Merger Guidelines have been tied to this second form of merger analysis, direct evidence of anticompetitive effects played a role in both *Evanston* and *Staples*.

Traditional merger analysis builds a structural model of a competitive concern and then tests that model with the available evidence.[7] In general, this approach has been very successful but, in a few cases, the agencies may have relied too heavily on invoking a structural presumption of competitive effect based on a narrow market definition that was ultimately not accepted by the courts.[8] These outcomes have increased interest in a direct focus on anticompetitive effects. However, even if direct evidence can be developed, the analyst still may have a conflict with a standard structural Guidelines analysis that would predict no competitive concern.[9] Thus, new theoretical concepts have also been developed to make the structural/market definition approach of the Guidelines more consistent with new techniques that predict effects directly.

These new concepts relate primarily to permitting much narrower market definitions such that predictions of unilateral effect can be associated with high market shares for the

[6] We believe that the Upward Pressure on Price (UPP) model detailed in the 2010 Merger Guidelines is best considered as an addition to this list. If demonstrated to reliably predict market outcomes, the UPP model could serve to underpin a merger challenge.

[7] At the FTC, this methodology appears to be employed in both collusion and unilateral effects cases. *See*, for example, Malcolm B. Coate, *Alive and Kicking, Collusion Theory in Merger Analysis at the Federal Trade Commission*, 4 COMPETITION POL'Y INT'L. 3-32 (2008) and Malcolm B. Coate, *Unilateral Effects under the Guidelines: Models, Merits, and Merger Policy*, (2008, rev. 2010, *available at* SSRN: http://ssrn.com/abstract=1263474.

[8] *See*, for example, U. S. v. Englehard Corp 970 F. Supp 1463 (M.D. Ga., 1997) *affd*. 126 F 3d 1302 (11th Cir. 1997); U. S. v. Long Island Jewish Medical Center 983 F. Supp. 121 (E.D.N.Y. 1997); U.S. v. Sungard 172 F. Supp. 2d 172 (D. D .C. 2001); and U.S. v. Oracle, 331 F. Supp. 2nd 1098 (N. D. Cal. 2004).

[9] Possibly the best example of this situation is FTC v. Whole Foods Mkt., Inc. 520 F. Supp. 2d 1 (D.D.C. 2007). While the plaintiff alleged direct evidence of a competitive effect, the defendant countered with evidence for a broad market that would preclude less than competitive behavior. The district court sided with the defendants, while the appellate court found the FTC had provided enough evidence to obtain a preliminary injunction.

merging firms.[10] Under the new Guidelines, markets can be defined as long as the merged firm could profitably impose a small, but significant and non-transitory increase in price ("SSNIP") ***on one product involved in the merger*** (here-after the single firm SSNIP).[11] Coupled with the assumption that demand elasticity can be predicted via margins (through the Lerner Index relationship), this approach results in very narrow markets even for industries without high margins. Markets can also be defined for an across-the-board SSNIP based on theoretical estimates of demand responsiveness via the Lerner Index and various demand assumptions (primarily linear-style demand and constant diversion ratios). Markets defined in this way will be just as narrow. Alternatively, price adjustment models (here-after Upward Pressure on Price ("UPP") models) can be parameterized and applied to predict a unilateral effect stemming from the merger, without a direct reference to market definition. However, when a material anticompetitive effect is predicted by the UPP analysis, the margin-based approach to market definition can be used to define very narrow markets such that the structural Guidelines approach (as modified by the revisions) will be consistent with the prediction of the UPP model.

These changes are derived directly from relatively recent theoretical work in the economic literature (although these approaches have not been shown to reliably predict merger outcomes for any class of products). By applying the Lerner index, along with estimates of the diversion ratio, the analyst can attempt to justify either a narrow market (single-firm SSNIP or across the board SSNIP) or a prediction of a price increase via an UPP model to support a merger challenge. Thus, to the extent that these theoretical innovations are acceptable to a court (a big "if"), they are likely to strengthen the agencies' ability to prove narrow markets and/or competitive effects. As discussed below, we are skeptical of the value of these innovations and doubt they will find wide-spread acceptance in the courts.[12]

Although the new Guidelines put quite a bit of emphasis on actual evidence of adverse competitive effects, the revisions are a little schizophrenic. On the one hand, the Guidelines emphasize hard evidence such as actual observed effects, natural experiments, documents, testimony, and data. On the other hand, they could be read to suggest that theoretical relationships that have never been accepted by a court will trump other evidence of demand responsiveness on what is often the most critical issue in merger analysis, market definition.[13] We caution that it is important to carefully consider any major changes to the basic Guidelines

[10] For market definition, *see* Joseph Farrell & Carl Shapiro, *Improving Critical Loss*, 7 ANTITRUST SOURCE (Feb. 2008), *available at* http://www.abanet.org/antitrust/at-source/08/02/Feb08-Farrell-Shapiro.pdf and for competitive effects, *see* Joseph Farrell & Carl Shapiro, *Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition,* 10 B. E. J. OF THEORETICAL ECON., 1 (2010).

[11] Although this possibility was technically in the prior Guidelines, it was almost never used. *See* Malcolm B. Coate & Jeffrey H. Fischer, *A Practical Guide to the Hypothetical Monopoly Test for Market Definition*, 4 J. COMP. L. & ECON. 1031 (2008).

[12] Scheffman & Simons identify an anomaly in the core Lerner index analysis linked to its implications for the make-or-buy decision of the firm. Take the situation of a firm considering a switch from making a product (at a low marginal cost and high fixed cost) to sourcing the product (at a high marginal cost and low fixed cost). Standard analysis would compute the costs under the likely levels of output and choose the cheaper alternative. Lerner analysis predicts firms changing from internal production to outside sourcing will raise prices significantly when marginal costs increases dramatically and such a price increase should be empirically observable. However, no such evidence has been produced, *see* David Scheffman & Joseph Simons, *Unilateral Effects with Differentiated Consumer Products: A Response to Werden*, 9 ANTITRUST SOURCE 3 (August 2010), *available at* http://www.abanet.org/antitrust/at-source/10/08/Aug10-Scheffman8-2f.pdf.

[13] *See* Statement of Commissioner J. Thomas Rosch on the Release of the 2010 Horizontal Merger Guidelines, http://www.ftc.gov/os/2010/08/100819hmgrosch.pdf (2010) at 3-4.

structural model prior to their implementation, because the insights from the standard structural analysis have been tested over a long period without evidence of widespread problem.

IV. THE GUIDELINES MODEL OF COMPETITIVE ANALYSIS

The 2010 revision of the Merger Guidelines notes a number of subtle improvements in the standard methodology, starting with market definition, and moving through structural analysis, competitive effects, entry, and efficiencies. As discussed below, some of the revisions patch oversights in the 1992 Guidelines, while others (at least partially) align the formal policy with actual experience. These changes, on balance, improve the guidance in the Guidelines, although some of the text leaves room for further improvement.

For market definition, the revised Guidelines further explain the basis for the SSNIP, enhance the discussion on price discrimination, and improve the methodology for defining geographic markets. As noted in the next section, careful fact-based analysis is needed for market definition. Higher critical levels for the Herfindahl are introduced in the structural analysis, thus allowing the Guidelines to more closely reflect the historical enforcement policy over the last 20 years. However, empirical evidence shows that these new structural levels are too low to reflect the FTC's actual enforcement practice over this period; thus, the transparency benefits from the revision are sub-optimal (unless the agencies are signaling a significant increase in enforcement).[14] Two new unilateral theories are introduced. A section on bargaining and auction analysis supplements the standard differentiated products presentation, while a focus on innovation and product variety clearly recognizes the possibility of non-price unilateral effects. Collusion analysis is also expanded, with an economic model associated with parallel accommodating conduct introduced.

The entry discussion retains the core issues of timeliness, likelihood, and sufficiency,[15] but notes actual entry plans might be particularly useful when entrants can be identified. By moving the focus of the analysis from hypothetical actions to actual actions, the revised methodology may offer a more concrete analysis.[16] Moreover, the Guidelines recommend a focus on expected entrants when the necessary assets for entry are not widely available. Left unsaid is the fact that expected entrants are rarely identified in the investigations; thus, this approach to entry will not usually be viable.[17] Finally, the efficiency section generally re-states the policy innovations from

[14] *See* Federal Trade Commission, *Horizontal Merger Investigation Data, Fiscal Years 1996-2007*, available at http://www.ftc.gov/os/2008/12/081201hsrmergerdata.pdf. A few exceptions should be noted. Enforcement actions in the oil industry were historically brought at relatively low HHI levels; thus, prior agency practice in this industry is more consistent with the new HHI thresholds. Limited details on Department of Justice ("DOJ") enforcement are available in *Merger Challenges Data, Fiscal Years 1999-2003, available at* http://www.ftc.gov/os/2003/12/mdp.pdf. Two industries, associated with DOJ review, show enforcement for a Herfindahl under 2000 and a change under 200.

[15] The two-year standard for timeliness is deleted from the revised text (9.1), but probably remains a reasonable generic standard, which may need to be customized to specific industry facts when appropriate. Moreover, the likelihood section (9.2) comments on the importance of the output of the entrant, the price charged by the entrant, and the costs incurred by the entrant. In effect, this seems to imply that a Net Present Value model of entry could be useful to resolve the likelihood question.

[16] The new focus on evidence of actual entry may not have much effect on merger policy because, in an overall sample of 138 merger investigations, Coate observed that only two findings of relatively easy entry were made when no evidence of actual or expected entry was identified. Malcolm B. Coate, *Theory Meets Practice: Barriers to Entry in Merger Analysis*, 4 REV. L. & ECON 183, 205 (2008).

[17] For example, in a study of 138 merger reviews, only 18 contained information on the identity of potential entrants, with only 6 offering clear evidence on expected entry. *Id* at 206.

the 1997 Guidelines and expands the discussion to address innovation. Basically, the Guidelines suggest that innovation issues can be important when the actual effect on innovation can be clearly demonstrated.

Abstracting from the changes detailed in Section III, the 2010 Merger Guidelines leave mostly intact the standard analytical approach, with clarifications added as needed to reflect the learning of the last two decades. While use of margin-based approaches could lead to a substantial increase in merger enforcement activity, their success in court is open to serious question. As a result, it is possible that the bulk of the cases will continue to be evaluated with the standard fact-intensive methodology developed over the last 20 years. We detail our concerns with the margin-based approaches in the following section.

V. DANGERS ASSOCIATED WITH THE OVERUSE OF MARGIN-BASED APPROACHES

While we firmly believe that the 2010 revision of the Merger Guidelines improves the transparency of enforcement policy in significant respects, an emphasis on margins and a generic use of related differentiated products models would be problematic. The potential for over-enforcement is complicated to understand, because the derivation of a narrow market or a conclusion on a price effect appears to be derived directly from economic theory. To the extent that the short-run Nash-Bertrand optimization structure is considered to be a broadly applicable (generalizing) model of competition for a differentiated product market, the narrow single firm SSNIP market and the UPP-related anticompetitive effect appear to be logical deductions derived from economic science. For a broad range of parameterizations, theory predicts that the relevant market **will be** extremely narrow and/or the anticompetitive price effect **will be** material. If the market is very unconcentrated or the merged firms are very distant rivals, the theoretical model will predict a *de-minimis* price increase and arguably no enforcement action is necessary.[18]

The fundamental problem with use of these models in merger analysis is the special case nature of the static, price-based Nash-Bertrand equilibrium structure that underlies the core modeling innovations introduced in the 2010 Merger Guidelines.[19] While the profit maximization assumption implicit in the Nash-Bertrand equilibrium is fundamental to economics, many of the other critical assumptions serve to create a manageable mathematical problem rather than represent the underlying competitive process. Thus, these models should be seen more as defining "testable hypotheses" for the competitive effect of a merger than as predicting a likely outcome of a merger. More general models, based on alternative sets of assumptions, can easily generate more competitive predictions for the price effect of merger and thus negate the need for enforcement action.[20]

---

[18] There is no price increase tolerance under Section 7 of the Clayton Act, so to the extent the agencies really believe the results of these models, a challenge to almost any horizontal merger could be justified. For an overview on just how aggressive the UPP model could be, *see* Joseph J. Simons, & Malcolm B. Coate, *Upward Pressure on Price Analysis: Issues and Implications for Merger Policy*, 6 EUROPEAN COMP. REV. 145 (2010). For a discussion on other implementation problems with an UPP model, *see* Dennis Carlton, *Revising the Horizontal Merger Guidelines*, 6 J. COMP. L. & ECON. 619 (2010) at section III-C.

[19] The problems detailed below generally apply to game theoretic equilibrium structures other than Nash-Bertrand, although the discussion could need to be customized to the specific game under review.

[20] Dynamic Chicago Economics is a term of art we apply to encompass a growing set of responses to the Post-Chicago possibility models in which the static game theory analysis is generalized for market realities. These

In differentiated product markets, competition is more realistically considered to be a rivalry for sustainable competitive advantages, rather than a static price game. Competition generally requires each firm to define a product line, create a promotional scheme, place the product with distributors, and set price.[21] The standard Nash-Bertrand theory takes the first three issues as entirely exogenous and simply focuses on defining price to maximize profits for a representative product. However, to the extent that product, promotion, and placement are also strategic variables, the simple analysis may be misleading. To do justice to a more general model, it is necessary to (1) focus in the dynamics of product introduction and (2) introduce transaction cost considerations.[22] To the extent that the generalizations impose mathematical constraints on the optimization process that lack the necessary "differentiability," the standard implications of the Nash-Bertrand equilibrium may be undermined.[23]

Even if the static Nash-Bertrand optimization routine is potentially applicable to the market under review, it is still important to understand how price competition works prior to applying the model. Textbook Nash-Bertrand analysis applies in situations in which each significant competitor posts prices. Other possible pricing structures involve auctions (Nash-Bertrand price analysis relevant for exogenous bidders), negotiated prices (Nash-Bertrand price analysis relevant only in special cases in which the negotiations proxy simple auctions), and customer-based partnership structures (Nash-Bertrand price analysis very unlikely to be relevant). Unless the price-based Nash-Bertrand optimization structure appears to drive the competitive process, the applicability of the model is open to serious question. Instead, the analyst may need to consider a more complex model in which firms negotiate with their customers and each negotiation may lead to a unique price.[24]

---

responses include introducing transactions costs concepts into the analysis, considering the impact of price discrimination on the methodology, recognizing customers may be players in the economic game, and adjusting modeling structures to make entry endogenous to the analysis. The Dynamic Chicago critique can be traced to Fisher and Peltzman, *see* Franklin M. Fisher, *Games Economists Play: A Noncooperative View*, 20 RAND J. ECON.113,117 (1989) and Sam Peltzman, *The Handbook of Industrial Organization: A Review Article*, 99 J. POL. ECON. 201 (1991).

[21] David T. Scheffman, *Antitrust, Economics and Reality*, in THE ECONOMICS OF THE ANTITRUST PROCESS (Malcolm B. Coate & Andrew N. Kleit, eds.) (1996).

[22] By introducing transactions cost economics into the dynamic model, it is necessary to include various commitment mechanisms that impose lump sum losses for opportunistic behavior. Thus, the standard marginal structure might not apply. For the basics on transaction costs, *see* OLIVER WILLIAMSON, MARKETS AND HIERARCHIES: ANALYSIS AND ANTITRUST IMPLICATIONS (1975) and for a broad context of the idea, *see* Oliver Williamson, *The New Institutional Economics: Taking Stock, Looking Ahead*, 38 J. ECON. LIT. 595 (2000).

[23] An introduction to the importance of the mathematical assumption of differentiability is given in Scheffman & Simons. (They note that if the demand is kinked, then margin-based theories are not applicable.) *See* David Scheffman & Joseph Simons, *Unilateral Effects with Differentiated Products: Theory, Assumptions and Research*, ANTITRUST SOURCE 4-8 (April 2010), *available at* http://www.abanet.org/antitrust/at-source/10/04/Apr10-Scheffman4-14f.pdf. When the basic optimization model is generalized for dynamics and transactions costs, the analyst must add constraints to the optimization problem. Pindyck has shown that the generalization may be relatively straight-forward as a theoretic matter, although it may not be capable of practical implementation. *See* Robert Pindyck, *The Measurement of Monopoly Power in Dynamic Markets*, 28 J. L. & ECON. 193 (1985). However, if the relevant functions are not differentiable, the mathematics becomes much more complex and the simple results may collapse. Constraints that fix the values taken on by choice variables are particularly problematic for the standard analysis.

[24] Price discrimination analyses might offer some insights. *See*, for example, Benjamin Klein & John S. Wiley, Jr., *Competitive Price Discrimination as an Antitrust Justification for Intellectual Property Refusal to Deal*, 70 ANTITRUST L. J. 599 (2003) and *Reply to Baker*, 70 ANTITRUST L. J. 655 (2003). Klein & Wiley note product differentiation means the firm holds firm-specific assets (which imply negatively sloped demand curves). They also note "However, it is now universally accepted that the existence of these (firm-specific) assets does not imply the existence of market power" (at 657). In effect, theorists are in error when they systematically view the slope of the demand curve (or the elasticity) as

Third, when modeling the market equilibrium, it often makes sense to consider entry to be endogenous such that the incumbent's current pricing decisions affect the longer-run market structure. Etro has explored a number of these dynamic entry models and generally finds that the static game theoretic results do not hold.[25] While the Guidelines' exogenous two-year entry standard may have made sense for collusion analysis in 1982, it is less clear that the same standard should be applied to unilateral effects analysis in 2010 (as competition to offer new products or product extensions to the market may be as important as competition to set price).[26] To the extent that it is the threat of entry that maintains the market's competitive performance, structural analysis of diversions and margins is much less relevant.

Finally, even if the Nash-Bertrand model is applicable to the process driving price competition in a relevant market, the implications of the margin model analysis for competition analysis generally requires specific parameterizations for the relevant equations. This problem can be minimized by using the Lerner index to model the effect of an increase in only one price. Here, it is possible to define a market with a single firm SSNIP or evaluate the competitive effect of a merger with an UPP effect for one of the merging firms' products. However, these types of analyses may not adequately represent the competitive effect of the merger; thus, an analysis of a broader price increase will be required. This analysis is much more complicated, because multiple prices are changing and more complex customer reactions may occur.[27] While the results derived from a single firm SSNIP or a one product UPP effect might generalize to the more complicated case, they also might not. What the merger analyst has is a testable hypothesis for the hypothetical market definition or predicted competitive effect for the merger. Exogenous evidence from the study of market competition can confirm the theoretical prediction or reject the theoretical prediction. The margin-based approaches introduced in the 2010 Guidelines may turn out to be valuable in certain circumstances, but that remains to be seen while widespread application would clearly be without basis. Standing alone, margins should not be used to create presumptions or drive merger analysis.

VI. THE CASE LAW AND MERGER REVIEW

The controlling legal authority for merger policy has evolved over the years from *Philadelphia National Bank* ("PNB") to *Baker Hughes*. PNB established the structural presumption, *General Dynamics* recognized the presumption was rebuttable, and *Baker Hughes* created the modern burden-shifting analysis. The plaintiff is required to prove a highly concentrated market, the defendant is required to provide some evidence (*e.g.*, entry, buyer sophistication, complications with the unilateral or collusive outcome, or efficiencies) to rebut the structural concern, and the plaintiff bears the final burden of proof.

---

an indicator of market power. For a model based on price discrimination, *see* James Cooper, Luke Froeb, Daniel O'Brien, & Steven Tschantz, *Does Price Discrimination Intensify Competition? Implications for Antitrust*, 72 ANTITRUST L. J. 327 (2005).

[25] Federico Etro, *Endogenous Market Structures and Antitrust*, 57 INT. REV. ECON. 9 (2010).

[26] The 2010 Guidelines relaxes the tight two-year standard for entry, but fails to offer guidance on how to reform the analysis.

[27] For an explanation of how markets could be broad when a uniform SSNIP is applied, *see* Malcolm B Coate & Joseph J. Simons, *Critical Loss vs. Diversion: Clearing up the Confusion*, CPI ANTITRUST CHRONICLE (December 2009) *available at* https://www.competitionpolicyinternational.com/assets/Free/SimonsCoatesDEC-091.pdf. And for a graphical illustration of the basic concept *see* Malcolm B. Coate & Joseph J. Simons, *Critical Loss vs. Diversion Analysis: Another Attempt at Consensus* CPI ANTITRUST CHRONICLE (April 2010 (1)), *available at* https://www.competitionpolicyinternational.com/critical-loss-v-diversion-analysis-another-attempt-at-consensus.

While the Guidelines do not define specific burdens, the document must be read in light of the legal standards. Abstracting from the few cases in which the plaintiff can prove anticompetitive effects directly, markets must be defined, structural statistics calculated, competitive effects, entry, and efficiency analyses undertaken, and an argument to show how the merger violates the law identified. By highlighting performance evidence, the Guidelines formalize the staff's process for proving cases: Introduce a model of the competitive concern and provide effects evidence to suggest to the court that it accept that model (or at least something close to it). The defendants have the opportunity to present their own models and evidence (or argue that the plaintiffs model is fatally flawed) and the court decides. By introducing new economic theories of concern, the Guidelines expand the plaintiff's options in litigation. However, care must be taken to ensure that the new theories are compatible with the bulk of the empirical evidence. Theoretical musings, incompatible with the relevant effects evidence, are not admissible under *Daubert* and would thus doom an enforcement action based on such theories to failure.