

Efficiencies in Merger Analysis: From Both Sides Now
Testimony to the Antitrust Modernization Commission

George S. Cary

Cleary Gottlieb Steen & Hamilton LLP

November 17, 2005

When the Merger Guidelines were amended in 1997 to elaborate on the appropriate consideration of efficiencies in merger review, the authors wrestled with a number of difficult questions.

- Should the Guidelines embrace the idea that efficiencies should be treated as an independent value that could serve as an affirmative defense to an otherwise illegal merger; or should efficiencies be treated in the competitive effects analysis as another market fact to inform the ultimate conclusion of whether the merger was likely to hurt consumers?
- Should the Guidelines embrace a total welfare or consumer welfare standard?
- If the latter, how should the burden of proof be adjusted to take into account relative access to information between the parties and the Agencies?
- Would the introduction of efficiencies into a competitive effects analysis so complicate assessment of the merger's likely effects on prices as to be

beyond the competence of the Agencies, the parties and, more importantly, the courts?

- As a corollary, given the government's ultimate burden of proof, would the inclusion of efficiencies in the competitive effects analysis so complicate the proof of anticompetitive effects so as to make it unduly difficult for the Agencies to block mergers?
- Is there a sound basis in economics to predict the impact of efficiencies on prices where the anticompetitive effect of concern is an increased likelihood of coordinated interaction, and if so, what is it?

With eight years of experience, it is appropriate to assess whether the Guidelines successfully answered these questions, and whether there are aspects of the Guidelines that should be modified in light of this history. I conclude that the Guidelines have indeed been a success.

The Agencies, by and large, have taken appropriate account of efficiencies in deciding whether to challenge mergers, and the courts have done quite well in evaluating efficiency arguments in litigation. On this point, I confess that I was not always convinced this would be the case. On the whole, litigants and the courts have done better at presenting and assessing efficiencies than I predicted at the time that the Merger Guidelines were adopted.¹ It therefore is my recommendation to this Commission that while aspects of the Guidelines could benefit from further development, on balance the Guidelines have been quite successful and should not be

¹ The Efficiencies Guidelines were formally adopted during the pendency of *F.T.C. v. Staples, Inc.*, 970 F.Supp. 1066 (D.D.C. 1997), in which I served as lead counsel for the FTC, and a member of this Commission served as lead defense counsel to the parties. It is interesting to contemplate in retrospect which side this helped. To be sure, at the time I was quite confident that the Government would have fared better under the existing case law than under the new Guidelines.

rewritten. The central premises of the Guidelines—that efficiencies should be considered as part of the competitive effects analysis, not as a countervailing value that would immunize anticompetitive mergers, and the related point that efficiencies should be relevant only to the extent that they provide verifiable consumer benefits—have withstood the test of time.

There is one issue, however, on which the Guidelines provide inadequate guidance. The Guidelines' complete treatment of R&D synergies can be found in one sentence: "Other efficiencies, such as those relating to research and development, are potentially substantial but are generally less susceptible to verification and may be the result of anticompetitive output reductions."² As the Guidelines recognize, R&D synergies can be the most significant efficiencies achieved through a merger. R&D efficiencies have become increasingly important as a greater proportion of difficult mergers involve intellectual property intensive products. It is fair to ask whether substantial consumer benefits are being sacrificed because there is not a more fully developed understanding of the interplay between R&D synergies and competition.

In this testimony, I defend the major choices made in the Merger Guidelines. I conclude that their treatment of efficiencies as part of the competitive effects analysis and the Guidelines embrace of the consumer welfare standard should not be disturbed. I then address the importance of dynamic efficiencies, particularly research and development efficiencies, and conclude that the traditional microeconomic pricing model which assumes that prices are related to marginal cost is ill suited to appropriate consideration of R&D cost savings. I then review the case law on efficiencies since the Guidelines, and conclude that on the whole, the courts have done a good job of applying the Guidelines as they were intended.

² Department of Justice and Federal Trade Commission, *Revision To Horizontal Merger Guidelines* at § 4 (Apr. 8, 1997) (available in 1997 WL 166999 (D.O.J.)).

The Guidelines' Choice of a Consumer Welfare Standard Is Correct and Should Not be
Disturbed

While some have questioned the point,³ fundamentally, the Guidelines adopt a consumer welfare standard in assessing efficiencies. At least one purpose of the antitrust laws, as revealed in legislative history, Supreme Court precedent, and current popular and congressional opinion, is to prevent wealth transfers from consumers to producers through the exercise of monopoly power.⁴ The Supreme Court articulated this concern in *Reiter v. Sonotone*:

It is in the sound commercial interest of retail purchasers of goods and services to obtain the lowest price possible within the framework of our competitive enterprise system. The essence of the antitrust laws is to ensure fair price competition in an open market. Here, where the petitioner alleges a wrongful deprivation of her money because the price of the hearing aid she bought was artificially inflated by reason of respondents' anticompetitive conduct, she has alleged an injury in her "property" [The treble-damages remedy was passed] as a means of protecting consumers from overcharges resulting from price fixing.

³ See generally William J. Kolasky and Andrew R. Dick, *Symposium: Celebrating Twenty Years of the Merger Guidelines: The Merger Guidelines and the Integration of Efficiencies into Antitrust Review of Horizontal Mergers*, 71 *Antitrust L.J.* 207 (1993). Note 37 of the 1997 Merger Guidelines states that "the Agency will also consider the effects of cognizable efficiencies with no short-term, direct effect on prices in the relevant market," though the Guidelines warn that that these benefits "will be given less weight because they are less proximate and more difficult to predict." This language suggests that efficiencies not immediately passed on to consumers through lower prices may be considered when the merging parties can demonstrate that they will ultimately benefit consumers, but will otherwise receive less weight. *Horizontal Merger Guidelines* at § 4.

⁴ Robert H. Lande, *Chicago's False Foundation: Wealth Transfers (Not Just Efficiency) Should Guide Antitrust*, 58 *Antitrust L.J.* 631 (1989) (arguing that the legislative history of the Sherman Act demonstrates that Congress was concerned not only with total welfare, but with the prevention of consumers paying prices that exceed competitive levels); see also Robert H. Lande, *Proving the Obvious: The Antitrust Laws Were Passed to Protect Consumers (Not Just to Increase Efficiency)*, 50 *Hastings L.J.* 959 (1999). Compare Robert H. Bork, *The Antitrust Paradox* 66 (1978) (arguing that the primary purpose of the antitrust laws is to promote total welfare).

442 U.S. 330, 341-43 (1979).⁵ Consistent with these teachings, U.S. merger analysis has eschewed a total welfare standard that would trade-off the deadweight loss associated with a merger creating or increasing market power against the cost-savings achieved by the merging firms, in favor of the consumer welfare standard. The U.S. standard prohibits mergers that would trigger substantial anticompetitive concerns unless the parties demonstrate that the merger will provide consumers a net benefit in terms of lower prices, better products or services.

It is important to define the proper scope of the “choice of standard” problem. If post-merger prices will be lower, there is no need to object to the merger under either the consumer welfare or total welfare approach. The choice between these two standards will therefore only impact the subset of mergers where there is evidence of both: (1) post-merger price increases and (2) significant cost reductions. Some commentators have suggested that this is a trivial set of merger cases.⁶ US antitrust law appropriately rejects as a justification for this hold-up that the merger also benefits the producer through a reduction in its costs.

Antitrust history, law and policy has always at its core had concerns about the pernicious impact on income distribution of the exercise of market power, and appropriately so. The moral underpinning of capitalism has been that the free market is premised on voluntary, uncoerced, consensual exchange. Income distribution is equally premised on voluntary exchange with the underpinning that through the labor market, over the long run, wages will equal the marginal productivity of labor. Again, the justification for income inequality flows from voluntary exchanges of value for value. Allowing producers to extract monopoly prices from consumers

⁵ The Supreme Court has also described the Sherman Act as “conceived of primarily as a remedy for ‘the people of the United States as individuals, especially consumers.’” *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 486 n. 10 (1977) (quoting 21 Cong. Rec. 1767-1768 (1890) (remarks of Sen. George)).

⁶ See, e.g., Timothy J. Muris, *The Government and Merger Efficiencies: Still Hostile After All These Years*, 7 Geo. Mason. L. Rev. 729 (1999).

undercuts these premises and calls into question this fundamental bargain. Antitrust law has appropriately been conceived as the mechanism by which consumers are protected from alleged “capitalist exploitation” by the “trusts,” thereby restoring the moral underpinning of capitalism. It would be unwise to deviate from these premises in merger enforcement.

Supporters of a total welfare standard argue that the economy as a whole is better off if resources are not wasted through inefficient production. They argue that merger policy should not stand in the way of growing the pie over concerns about how the bigger pie is divided up. They argue that consumers are just producers when they are not working. Finally, they point to the availability of other public policies, such as tax and welfare policies, to re-allocate the pie if society is concerned about income distribution. These arguments are inconsistent with antitrust law, policy and history. It matters which particular consumers and which particular producers are the losers and the winners in transactions involving illegally acquired market power. In a free market, it is not generally understood that the economy belongs to the society as a whole, such that we should be indifferent to the impact of anticompetitive price increases on particular consumers so long as producers are better off as a result. Merger law has always taken as its focus affects within a relevant line of commerce. As the Supreme Court points out, consumers in a market have a property right in not being overcharged in their own transaction.⁶ Moreover, using government to redistribute the results of market transactions is itself inconsistent with free market ideals. While beyond the scope of this paper, I will assert as a matter of faith that tax and

⁶ *Reiter*, 442 U.S. at 341-43.

fiscal policy attempting to redress income distribution problems will themselves inject inefficiencies into the economy.⁷

Accepting consumer welfare as the appropriate standard, it follows that efficiencies can save a merger only if sufficient to reverse the likely increase in prices otherwise resulting from the market power created by the merger. If pass-through rates increase with competition, mergers triggering presumptions regarding price increases in the relevant market will be coupled with evidence of significant efficiencies but *lower* pass through rates. Significantly then, the balancing of potential anticompetitive effects against those efficiencies likely to benefit consumers in the form of lower prices is *more* important in the case of mergers to monopoly or near-monopoly than in the case of competition.⁸ The pass-through requirement remains essential to protecting consumers from wealth transfers enabled by the acquisition of market power through merger. Without the pass-through requirement, one is left with only the faith that cognizable efficiencies will eventually be passed on to consumers in the long run in the form of net lower prices.⁹ While it may certainly be the case that allowing these mergers will increase total welfare, the antitrust laws voice a clear intent to protect consumers.¹⁰

⁷ See Steven C. Salop, *Question: What is the Real and Proper Antitrust Welfare Standard? Answer: The True Consumer Welfare Standard* (forthcoming 2006).

⁸ Prof. Joshua Wright, *The Economics of the Passing On Requirement*, attached as Appendix A.

⁹ This same reasoning supports the Guidelines' preference for marginal cost savings over reductions in fixed costs and other efficiencies less likely to have a short run impact on consumer welfare. Because consumer gains from these efficiencies are largely speculative, the preference for marginal cost savings is consistent with a consumer welfare standard. Significantly, the Guidelines suggest that non-marginal cost savings may be cognizable where the merging parties can demonstrate pass-through.

¹⁰ See, e.g., Robert H. Lande, *Wealth Transfers as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged*, 50 *Hastings L.J.* 871, 887 (1999) (arguing that "the evidence suggests that Congress was unwilling to subordinate its distributive-based distaste for trusts and monopolists to the goal of corporate efficiency when the efficiency gains would be retained by the monopolist.")

Similarly, the Guidelines' requirement that greater weight be given to efficiencies more likely to result in quality-adjusted price decreases over the short and medium term also follows from the choice of a consumer welfare standard. The antitrust laws do not suggest indifference to the weights attached to different types of cost savings. To the contrary, the antitrust laws rather clearly articulate giving greater weight to those affecting the prices faced by consumers. The pass-through requirement ensures that antitrust analysis remains faithful to its consumer protection origins.

The Guidelines Correctly Allocate the Burden of Persuasion to Merging Parties

The Guidelines require that efficiencies must be verifiable and merger specific to be cognizable. Some have argued that these requirements are inconsistent with consideration of efficiencies in the competitive effects analysis. The government ultimately bears the burden of showing that the challenged merger is anticompetitive. Thus, the argument goes, it must prove that consumers will be harmed, which includes a showing that efficiencies resulting from the merger will not result on balance in consumer benefits. Thus, the verifiability and merger specificity requirements inappropriately shift the burden of persuasion to the parties defending the transaction. For example, Hausman and Leonard argue that if the merger results in lower prices to consumers, the threshold requirement of a reduction in competition has not been met, leaving no basis for a challenge regardless of whether the efficiencies could have been achieved through some other means.¹¹ These views are misguided. Requiring the party with greater access to information to come forward with evidence of a proposition that is helpful to its

¹¹ Jerry A. Hausman and Gregory K. Leonard, *Efficiencies From the Consumer Viewpoint*, 7 Geo. Mason Rev. 707, 719-20 (1999).

position is not at all unusual in antitrust cases generally or merger cases particularly.¹² Nor are presumptions of anticompetitive effects from basic market facts, subject to rebuttal by defendants. Information about merger specific efficiencies is uniquely within the knowledge of the merging parties. Information about product market definition, barriers to entry or proximity of the merging parties in product space is readily obtainable from customers and other market participants. The cost structure of the merging parties in most cases will be unavailable except from the merging parties. The requirement that parties identify, quantify and document efficiencies in the first instance, is therefore not only sensible, it is necessary. To limit the obligation of the merging firms to merely identifying claimed efficiencies, and then foisting on the government the obligation to disprove them, is to impose on the government too onerous a task. Such an approach will also put a premium on parties' efforts to defeat discovery and will stand as an obstacle to meaningful Second Request reform. Nevertheless, it is not unreasonable to keep on the government the burden of performing the netting exercise, which requires both a showing of the likely price impact as well as the net efficiency calculation. The government can carry this burden by showing the minimum amount of cognizable efficiencies necessary to reverse the anticompetitive potential of the merger, which minimum is then compared to the efficiencies that the parties were able to prove.

Requiring that efficiencies be merger specific in order to be cognizable is also appropriate. All merger analysis measures whether an acquisition is anticompetitive in comparison with how consumers fare in the "but for" world. There is no reason to modify this standard so as to exclude efficiencies that would likely have occurred without the merger.

Hausman and Leonard's legalistic argument that there can be no violation without a net

¹² See, e.g., *United States v. Baker Hughes, Inc.*, 908 F.2d 981, 982-83 (D.C. Cir. 1990); *United States v. Amax, Inc.*, 402 F. Supp. 956, 970 (D.Conn. 1975).

reduction of competition relative to the pre-merger world is a policy argument at best, and a technicality at worst. It is not economics. The technical legal response to Hausman and Leonard is that Section 7 was crafted to prevent anticompetitive outcomes in their incipiency. The standard is predictive. The incipient standard is certainly flexible enough to permit the prediction to be made assuming economic rationality with due consideration of evidence suggesting the existence of reasonable, practical and realistic alternatives to the merger.

More importantly, the merger specificity and the consumer welfare standard – accepted by Hausman and Leonard -- work together. If there are alternative means of securing the benefits of the merger without the risk of creating consumer harm through the exercise of market power, little is lost in allocative efficiency by blocking the merger. On the other hand, if the efficiencies can only realistically be achieved through the merger, a careful assessment of the likely price impact of the merger is warranted.

The Guidelines Treatment of R&D Efficiencies Should be Expanded and Elaborated After Careful Study

The entire discussion of R&D efficiencies in the Guidelines is the statement that “[o]ther efficiencies, such as those relating to research and development, are potentially substantial but are generally less susceptible to verification and may be the result of anticompetitive output reductions.”¹³ To the extent that the Guidelines pay too short shrift to R&D efficiencies, consumers could well be deprived of substantial benefits of efficiency creating mergers. As will be described in more detail below, because the courts have readily adopted the framework of the Guidelines in assessing efficiencies, the lack of elaboration on R&D efficiencies in the

¹³ *Horizontal Merger Guidelines* at § 4.

Guidelines has engendered skepticism in some courts about the relevance of these efficiencies.¹⁴ The Agencies should undertake a serious study of the nature and economics of R&D efficiencies, along the lines of the hearings conducted on IP Policy and Antitrust¹⁵ and Competition Policy in the High Tech Marketplace¹⁶ that presaged the Guidelines. The Agencies should produce a report with an eye to refining the Guidelines' treatment of R&D efficiencies in merger review.

This is not an easy problem and I do not presume to have a nuanced proposal. I will, however, take this opportunity to describe some relevant considerations that lead me to believe that significant efficiencies may not be sufficiently credited. Because economics teaches that marginal cost savings most directly impact price, the Guidelines focus on efficiencies that reduce marginal costs as most likely to be cognizable. Market reality, however, is that an increasing part of the economy is comprised of research-intensive products whose cost of duplication is trivial. Products such as computer chips, software, pharmaceuticals and media content have very high fixed costs, usually comprised of intellectual property, and very low marginal cost. The prices of such products often have nothing to do with the costs of producing each individual unit. I will discuss the examples of business software to illustrate.

Prices for industrial-strength software used by business for such things as managing sales, designing oil refineries or chemical plants and building bridges are often set without regard to traditional economic models. When a new product is introduced, prices may be set based on what might be described as an educated guess as to what the market will bear as informed by

¹⁴ See, e.g., *Heinz*, 246 F.3d at 723 n.22 (asserting that efficiencies “relating to research and development . . . are potentially substantial but are generally less susceptible to verification and may be the result of anticompetitive output reductions”).

¹⁵ See Federal Trade Commission, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy* (2003), available at <http://www.ftc.gov/os/2003/10/innovationrpt.pdf>.

¹⁶ See Federal Trade Commission, *Competition Policy in the New High Tech, Global Marketplace* (1996), available at http://www.ftc.gov/opp/global/report/gc_v1.pdf.

benchmarking against non-competitive products of similar complexity and value purchased by the same customer base. After the initial price is established, prices can be fairly static, notwithstanding the subsequent introduction of alternative products. Competition takes the form of expenditures in R&D designed to differentiate the product from those of rivals and to increase the value of the product in terms of enhanced productivity for customers.

In such a market, efficiencies that reduce already trivial marginal costs are irrelevant. Efficiencies that result in features that add even small value to the product, on the other hand, can have a dramatic impact on customers. For example, even a small increase in the productivity of an oil refinery through better computer modeling can be worth hundreds of millions of dollars a year. Given the magnitude of the potential consumer benefits, the Agencies should be receptive to arguments that the potential to bring such innovations to the market faster and more cheaply justify an otherwise anticompetitive merger. Yet the Guidelines provide very little guidance as to how the Agencies should conduct such an analysis.

Analysis of the trade off between potential anticompetitive effects and R&D efficiencies is another area worthy of further elaboration. Direct price competition between specialized software products might be severely limited. It may be the case that there will be “the right tool for the job,” severely limiting the extent of economic substitutability by particular customers of products in a market. On the other hand, particular features of the alternative product could be quite valuable to that customer notwithstanding that the package as a whole is not a particularly good substitute. Without a merger, the costs of separately developing such features would be prohibitive. With a merger the feature could be incorporated cheaply and made available to the preferred vendor’s installed base of customers.

While a general presumption that competition spurs innovation may be justified, when faced with a credible showing of tangible and easily achieved improvements to existing products possible through a merger and unlikely without one, the Agencies should carefully consider whether there will remain sufficient incentives to innovate post merger so as to allow the merger.¹⁷ The Agencies should assess how innovation in the industry has worked in the past, and should carefully assess the role of competition between the merging firms rather than relying upon such a presumption. The Agencies should be open to a showing that other forces, such as “competition with the installed base” i.e. a desire to move customers to a new version of software, are sufficient to ensure continued innovation.¹⁸

One of the obstacles to more fully crediting R&D synergies is the problem of how to measure them. Ideally, one would try to determine the increased output per unit of input as a result of the merger. But R&D output is very difficult to measure. Knowledge builds in unpredictable ways and the breakthroughs that might be generated by combining previously isolated expertise is hard to quantify. The Guidelines limit cognizable efficiencies to those that “do not arise from anticompetitive reductions in output or services.”¹⁹ Particularly for R&D, confusing inputs and outputs in attempting to measure intangibles is a problem. Distinguishing between those cost savings that benefit and those that hurt consumers is particularly problematic in R&D. In some industries, it is quite plausible that “R&D output” is highly correlated with R&D head count, such that a reduction in head count means less R&D. In other industries,

¹⁷ This is what the FTC did in the Genzyme case, although the facts there were probably too idiosyncratic to form a model for this type of analysis. See generally News Release, Federal Trade Commission, *Protecting Competition, FTC Clears Genzyme Corp.’s \$1 Billion Acquisition of Ilex Oncology, Inc.* (Dec. 20, 2004).

¹⁸ To the extent that the relevant market is defined to exclude locked-in customers and to include only customers on the margin, the provision of fn. 2 of the guidelines regarding consideration of out of market efficiencies that are “inextricably linked” with the relevant market allows for their consideration.

¹⁹ *Horizontal Merger Guidelines* at § 4

combining institutional knowledge can result in fewer scientists achieving greater discoveries. The latter is an efficiency while the former is an anti-competitive output reduction. The management of scientific resources is an increasingly important skill at IP centric companies. Pharmaceutical companies in particular are grappling with the management challenge of getting more innovation from increasingly constrained R&D budgets. The Agencies could well benefit from exploring these issues carefully through hearings including R&D managers from major pharmaceutical and high technology companies.

Assessment of How the Courts Have Applied the Guidelines

One mark of the success of the Guidelines is that since their adoption, no court has decided a merger case without considering efficiencies. They have done so even while acknowledging that the last word from the Supreme Court on the subject disallowed consideration of efficiencies as a justification for an otherwise illegal merger.²⁰ The courts have also embraced the methodology of the Guidelines. For the most part, since the Guideline, courts have looked at efficiencies through the competitive-effects prism rather than as a counterbalancing value to a reduction in competition.²¹ Courts are requiring proof that the proffered efficiencies will reverse the anticompetitive tendencies of the merger, leaving consumers with lower, rather than higher, prices.²² Both merger specificity and verifiability have been

²⁰ See *F.T.C. v. Procter & Gamble Co.*, 386 U.S. 568 (1967).

²¹ See, e.g., *F.T.C. v. Arch Coal, Inc.*, 329 F.Supp.2d 109, 151 (D.D.C. 2004) (asserting that “evidence of efficiencies . . . is relevant to the competitive effects analysis of the market”).

²² See, e.g., *United States v. Oracle Corp.*, 331 F.Supp.2d 1098, 1174 (N.D.Cal. 2004); *F.T.C. v. Tenet Healthcare Corp.*, 17 F.Supp.2d 937, 947 (1998); *F.T.C. v. Staples, Inc.*, 970 F.Supp. 1066, 1088 (D.D.C. 1997).

required.²³ Speculative efficiency gains or efficiencies that do not materially contribute to the decision to proceed with the merger have not been credited.²⁴

As was privately predicted by the authors when the Guidelines were being developed, courts have not allowed the government to impose a different standard in litigation than that used by the government in exercising prosecutorial discretion, despite language in the Guidelines to the contrary. In *Staples*,²⁵ the D.C. District Court rejected the notion that defendants are required to prove efficiencies by “clear and convincing” evidence, a standard accepted in prior cases and in the prior guidelines but rejected by the Agencies in the Guidelines.²⁶ The Court asserted that, “. . . like all rebuttal evidence in Section 7 cases, the defendants must simply rebut the presumption that the merger will substantially lessen competition by showing that the Commission’s evidence gives an inaccurate prediction of the proposed acquisition’s probable effect.”²⁷ It went on to say that “[d]efendants, however, must do this with credible evidence”²⁸

The case law since the adoption of the Guidelines reflects that the Guidelines are largely being applied as intended. Courts are requiring that defendants carry the weight of

²³ *E.g.*, *Staples*, 970 F.Supp. at 1090 (discussing both the merger specificity and verifiability components).

²⁴ *See, e.g.*, *Oracle Corp.*, 331 F.Supp.2d at 1175 (finding two senior executives’ “personal estimations regarding the potential cost-savings . . . [associated with the merger] much too speculative to be afforded credibility”); *Tenet Healthcare*, 17 F.Supp.2d at 948 (holding that “defendants’ claimed cost savings are too speculative and unsubstantiated to be relied upon”).

²⁵ 970 F.Supp. at 1089.

²⁶ *See, e.g.*, *United States v. Country Lake Foods, Inc.*, 754 F. Supp. 669, 680 (D.Minn. 1990) (declaring that “a party arguing significant net efficiencies as a primary justification for an acquisition, must prove those efficiencies by clear and convincing evidence”).

²⁷ *Id.* (citing *United States v. Baker Hughes, Inc.*, 908 F.2d 981, 991 (D.C.Cir. 1990)).

²⁸ *Id.*

demonstrating that the efficiencies claimed are sufficient to reverse the anticompetitive tendencies of the merger. While few parties have been able to carry the weight, the cases do not suggest that this is because the courts are requiring too much by way of proof. More likely, the result flows from the fact that the government will rarely litigate cases in the absence of fairly clear evidence of a likely anticompetitive effect that would be difficult to overcome with efficiencies in any event. In the following paragraphs, I will discuss the most notable cases for examples of how the Courts are applying the guidelines.

Verifiability and Merger Specificity: *Staples*, *Heinz*, *Arch Coal*

Staples was being actively litigated when the Guidelines were adopted. With or without the Guidelines, the parties certainly would have highlighted the cost-savings potential of the transaction. Indeed, given that superstores owed their success to economies of scale that drove low price strategies, it could reasonably be anticipated that the court would be predisposed to credit efficiency arguments. Despite their novelty, the court did not hesitate to faithfully follow the Guidelines in analyzing the proffered efficiencies. The court followed the taxonomy of the FTC's testifying expert, David Painter, who applied the Guidelines in rebutting the parties' efficiency case.²⁹ Painter painstakingly went through each item of claimed cost savings and reduced the total amount of cognizable efficiencies proffered by the parties by excluding those outside the alleged relevant market, those that were fixed rather than marginal cost saving, and those that could be shown to be derived from demonstrably false methodology.³⁰ Mr. Painter conceded that there remained a residual of efficiencies that, while they could not be disproven,

²⁹ *Id.* at 1089-90.

³⁰ *Id.*

remained unverified.³¹ The court adopted Mr. Painter’s analysis, finding his testimony to be more credible than that of the parties’ expert.³² The court found that the parties’ methodology systematically overstated the likely cognizable efficiencies.³³

In rejecting the parties’ efficiency arguments, the court was nonetheless careful to make clear that parties are not required to quantify efficiencies precisely in order to prevail, stating that “it is impossible to quantify precisely the efficiencies that [an unconsummated merger] will generate.”³⁴ Nonetheless, in the rare case (like *Staples*) where the merger’s likely impact on prices is itself quantified, it is difficult to see how defendants can overcome such a showing without quantifying efficiencies in order to net the efficiencies against expected anticompetitive price effects as mandated by the Guidelines.

Staples’ major contribution to the assessment of efficiencies is to demonstrate that the Agencies and the courts are capable of applying the Guidelines methodology and digesting massive amounts of data and obscure methodologies in the tight time limits of the HSR act. This contribution should not be understated. Commentators as renowned as Judge Bork have opined that such an analysis is simply beyond the competencies of the Agencies and the courts.³⁵ The *Staples* court showed that such predictions were entirely too pessimistic.

F.T.C. v. H.J. Heinz Co., 246 F. 3d 708 (D.C. Cir. 2001), provides another example of the courts’ aptitude in interpreting the Guidelines and applying their directives to a discreet set of

³¹ *Id.*

³² *Id.* at 1089.

³³ *Id.*

³⁴ *Id.*

³⁵ Robert H. Bork, *Legislative Intent and the Policy of the Sherman Act*, 9 J.L. & Econ. 7 (1966).

facts. *Heinz* involved the merger of two baby food manufacturers, Heinz and Beech-Nut, that held 17.4 per cent and 15.4 per cent of the market share respectively.³⁶ Pursuant to the Guidelines, the *Heinz* court noted that the merger to such “high market concentration levels [required,] . . . in rebuttal, proof of extraordinary efficiencies.”³⁷ The defendants did not come close, while providing inadequate evidence of merger-specific and verifiable savings.³⁸ In reaching that conclusion, the court conducted a comprehensive and itemized review of the savings and found numerous deficiencies such as inflated cost savings associated with both manufacturing and processing efficiencies.³⁹ Furthermore, the defendants failed to demonstrate merger specificity for a number of efficiencies relating to distribution and product development.⁴⁰

The *Arch Coal* case provides yet another example of the relative ease with which the courts implement the Guidelines. The court applied a similar methodology to that used in *Staples*, while even relying on the same expert witness.⁴¹ Consistent with the Guidelines, the court examined each and every item of purported savings, while focusing on both the specificity and verifiability aspects.⁴² After an exhaustive review, most of the evidence proved deficient

³⁶ *Heinz*, 246 F. 3d at 711.

³⁷ *Id.* at 720.

³⁸ *Id.* at 720-23.

³⁹ *Id.* at 721-22.

⁴⁰ *Id.* at 721.

⁴¹ *Arch Coal*, 329 F.Supp.2d at 150-53.

⁴² *Id.*

with respect to both components.⁴³ In discounting for these deficiencies the court reduced the recognized efficiencies to \$35 to \$50 million from an estimated \$130 to \$140 million.⁴⁴ The reduced savings nevertheless served as “limited additional evidence to rebut the claim of post-merger anticompetitive effects.”⁴⁵

These cases⁴⁶ affirm that courts are capable of understanding and applying the Guidelines, and that the Agencies can master the forensic tools to assess proffered efficiencies

Fixed Costs vs. Marginal Cost Efficiencies: *Cardinal Health* (“*Drug Wholesalers*”),
Heinz

Drug Wholesalers provides an interesting illustration of two important aspects of the Guidelines: appropriate treatment of fixed cost savings and consideration of efficiencies as part of the competitive effects analysis rather than as an affirmative defense. While the FTC and the parties disagreed on the degree of merger specificity of the proffered efficiencies, there was no real disagreement that the merger would in fact yield efficiencies.⁴⁷ The question was whether savings resulting from elimination of duplicative distribution centers should count in favor of the merger.⁴⁸ The court concluded that these fixed cost savings resulting from elimination of excess capacity through rationalization of facilities would actually contribute to the anticompetitive

⁴³ For instance, the court disregarded \$ 27.4 million that even the defendants’ counsel admitted was not merger-specific. *Id.* at 151.

⁴⁴ *Id.* at 153.

⁴⁵ *Id.*

⁴⁶ *Cardinal Health*, 12 F.Supp.2d 34.

⁴⁷ *Id.* at 62-63.

⁴⁸ *Id.* at 63-64.

price increases likely from the merger.⁴⁹ The court concluded that the imperative of filling excess capacity spurred price competition.⁵⁰ The elimination of that excess capacity through post merger “rationalization,” while generating savings, also relieved pressure to win market share at the expense of margin.⁵¹ The court therefore declined to credit the bulk of efficiencies as mitigating the anticompetitive effects of the merger.⁵²

Conclusion

Upon the adoption of the Guidelines and in the eight years since, efficiencies have become a routine part of a Section 7 case. The analysis adopted by the Guidelines has been in large part embraced by the courts in lieu of either the position of the Supreme Court case law that efficiencies cannot immunize a merger that impermissibly reduces rivalry, or the position that all efficiencies should count in favor of a merger, whether or not they satisfy the consumer welfare or merger specificity standards. The choices made, and the methodologies adopted by the Agencies in propounding the Guidelines have largely withstood the test of time. There is no need for the Agencies or the Congress to change those choices. Rather, incremental refinement of these principles should be left to the Agencies and the Courts through continued adjudication. There are some areas, particularly related to the proper treatment of R&D efficiencies, which require further thought and elaboration. The Agencies should conduct the type of hearings that contributed to the formulation of the Guidelines in the first place to reconsider the appropriate treatment of R&D efficiencies.

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² *Id.* at 66-67.

Appendix A

The Economics of the Passing-On Requirement

It is a well known result in microeconomics that a monopolist will reduce its price when marginal cost decreases.⁵³ Importantly, this result does not depend on the level of competition faced by the merged firms. As long as the post-merger firm faces a downward sloping demand curve, as all do, profit maximization implies that at least some of the marginal cost savings will be passed on in the form of lower prices.⁵⁴

Based on this economic logic, Yde and Vita argue that the passing-on requirement is inconsistent with the consumer welfare standard.⁵⁵ Yde and Vita's argument can be summarized as follows: in a perfectly competitive market, two firms merging and enjoying merger-specific marginal cost reductions will enjoy an increase in firm profits, but since other firms cost curves are unchanged, the market price will not decrease. In their view, the application of a requirement that the merging parties demonstrate that cost savings are passed on to consumers will result in the rejection of efficiency claims in "precisely those instances where careful consideration of efficiencies is of the greatest importance to sound Section 7 enforcement."⁵⁶ In other words, because pass-through is increasing in the inelasticity of firm-specific demand curve faced by the merged entity, the requirement will result in the rejection of efficiency claims for the set of mergers most likely to create benefits for consumers. From this point, Yde and Vita assert that the passing-on requirement is largely inconsistent with economic theory and should be eliminated.⁵⁷

To the contrary, the one need not hold the mistaken economic view that cost savings are only passed on via competition in order to conclude that the passing-on requirement is consistent with the consumer welfare standard. Consider the case of the monopolist, who faces the following first-order condition:

$$(1) \quad (p-c) \frac{dQ}{dP} + Q = 0$$

We can derive the optimal change in prices, dp/dc , by differentiating the first-order condition and obtaining:

⁵³ See, e.g., Andrew Mas-Colell, et al., *Microeconomic Theory* 429 (1995).

⁵⁴ See, e.g., Jerry A. Hausman & Gregory K. Leonard, *Efficiencies from the Consumer Viewpoint*, 7 *Geo. Mason L. Rev.* 707 (1999).

⁵⁵ Paul L. Yde & Michael G. Vita, *Merger Efficiencies: Reconsidering the "Passing-On" Requirement*, 64 *Antitrust L.J.* 735 (1996).

⁵⁶ *Id.* at 746-47.

⁵⁷ *Id.* at 747.

$$(2) \quad dp/dc = dq/dp / (2dq/dp + (p-c)d^2Q / dp^2)$$

Assuming linear demand, $d^2Q / dp^2 = 0$ and therefore $dp/dc = 1/2$. For demand curves that are convex relative to the origin, invoking the conventional assumption that $d^2Q / dp^2 > 0$, the pass-through rate $dp/dc > 1/2$.⁵⁸

These equations imply that the monopolist passes on 1/2 of its marginal cost savings in the linear demand case, and greater than 1/2 in the more conventional case of “convex” demand. Hausman & Leonard also derive similar results in the case of differentiated products price competition. Significantly, and contrary to Yde and Vita, Hausman & Leonard convincingly show that *the competitive pass-through rate is greater than under the monopoly conditions*.⁵⁹

While it is correct that even a monopolist passes on some cost savings to consumers in the form of lower prices, economic analysis shows that competition amplifies (rather than dampens) the pass-through of marginal cost savings. This result is critical to understanding the role of efficiencies analysis in the consumer welfare framework: precisely where anticompetitive inferences are strongest, pass-through of cost savings to consumers are weakest and deserves the closest scrutiny.

⁵⁸ These derivations appear in Hausman and Leonard, *supra* note 4. See also Jeremy I. Bulow & Paul Pfleiderer, A Note on the Effect of Cost Changes on Prices, 91 J. Pol. Econ. 181 (1983).

⁵⁹ The economic logic of this result is that cost reduction gives the initial firm the incentive to reduce its price, which induces the competing firms to reduce their prices a la the Bertrand assumption. Competition therefore magnifies the pass-through of the cost savings.