HMG Review Project – Comment, Project No. P092900

Comments by James Langenfeld[1]

The Federal Trade Commission (FTC) and the Department of Justice (DOJ) should be commended in their holding a series of public workshops in the coming months to obtain public input into possibly updating the Horizontal Merger Guidelines ("Guidelines"). As a contributor to the 1992 Guidelines revision and the 1993 Statements of Antitrust Enforcement Policy in Health Care, I am aware of the challenges that face the agencies in achieving consensus on potentially revising a very important policy document.

The request for comments indicate the primary goals of the inquiry are to determine if updated guidelines could (1) more accurately and clearly describe current Agency practice, and (2) reflect and incorporate learning and experience gained since 1992. My comments are intended to address both of these points.

It is my understanding is that the Agencies also welcome comments on other aspects of the Guidelines. In this regard, there are two articles that are also attachments where I recommend the Agencies revise the 1984 Non-Horizontal Merger Guidelines. Although non-horizontal mergers typically raise substantially fewer competitive issues that horizontal mergers, the Agencies have recently indicated that they intend to carefully analyze potentially important non-horizontal mergers, the existing 1984 Non-Horizontal Merger Guidelines do not describe current Agency practice, and they do not reflect and incorporate the substantial amount of learning and experience gained since 1984.

1. The Guidelines (§0.2) specify a five-step analytical process to determine whether to challenge a horizontal merger. Should the Guidelines be revised to indicate that the Agency's assessment of whether the merger is likely to reduce competition may not entail following the five steps in the order listed and that not all five steps are needed in all cases? If so, what can be said about when such departures are and are not appropriate?

Yes. Based on my experience at the FTC and in my role as a consultant on many mergers reviewed by the Agencies, there are usually one or two critical issues that determine whether a merger should be investigated in detail. For example, it may be that if certain products are close enough substitutes for the products of the merging firms, then it would be unlikely that the merger would change competition substantially, regardless of whether there are substantial barriers to entry for new firms. Similarly, if there has been frequent entry and exit of firms selling closely competing products to those of the potentially merging firm, then it would be

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unlikely that the merger would substantially reduce competition even if there were few current competitors. The Agencies should be cautious, however, in eliminating steps from consideration if they plan on challenging a merger. For example, there may be "direct" economic evidence of potentially anticompetitive effects from a merger (such as information from "natural experiments" – see comments below on Question 2), so they may be tempted to not perform the market definition tests outlined in the current HMGs. However, there will always be some uncertainty about the competitive effects from an unconsummated merger based on direct evidence, because the merger at issue has not taken place and no natural experiment can exactly duplicate the merger. Accordingly, at least some independent inquiry into market definition can be a useful check on direct competitive effects evidence in analyzing an unconsummated merger. Such an inquiry into market definition is likely to be less critical if the investigation is of a consummate merger where the direct evidence of the competitive effects of the merger are particularly strong.

2. Should the Guidelines be revised to address more fully how the Agencies use evidence about likely competitive effects that is not based on inferences drawn from increases in market concentration? If such revisions are undertaken, what types of such direct evidence are pertinent? How should the following categories of evidence be used?

Yes. The Agencies and outside parties often use evidence or analyses of competitive effects mentioned in 2(a) to 2(f), and transparency would be improved if the HMGs explicitly state that they use such analyses and briefly state when they are most useful.

a. For an already consummated merger, evidence of actual, adverse competitive effects.

As discussed in Question 1, clear evidence of adverse competitive effects after a merger should be given significant weight. However, there may be other market forces beyond the merger that have led to an increase in price (such as cost increases) or there may be difficulties in measuring certain aspects of the market, which should be carefully addressed in evaluating the weight such evidence is given.

b. Evidence based on so-called "natural experiments," such as variations across geographic markets, time periods, customer categories, or similar product markets showing how customers are affected by competitive conditions whose variation may be comparable to the change to be wrought by the merger.

Mary Coleman and I describe and analyze natural experiments evidence in some detail in the "Natural Experiments" chapter in *Issues in Competition Law and Policy*.[2] In that chapter, we discuss the various approaches typically used in natural experiments and their limitations, and any revision of the HMGs should briefly mention the strengths and limits of the various types of natural experiments.

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[2] Mary Coleman and James Langenfeld, "Natural Experiments," *Issues in Competition Law and Policy,* American Bar Association (2008), Vol. 1, 743-772.

Natural experiments have long been used in antitrust and other economic analyses, including analyses of alleged price fixing and estimation of damages in antitrust cases. However, natural experiment analysis in mergers came to the forefront with FTC's successful challenge of Staples-Office Depot, and has only become commonly used in merger analysis since 1992. Accordingly, it would be particularly appropriate to mention this type of evidence in any revision of the HMGs.

An important part of the evidence the FTC put forward for both market definition and competitive effects in Staples-Office Depot arguably showed lower prices when the two merging firms competed in certain geographic areas, compared to areas where they did not. These analyses included company documents describing lower pricing in regions where more office superstores competed. In addition, there were econometric analyses of prices across geographic areas that measured the impact of the number and identity of office superstore competitors (and other office supply competitors), while attempting to control for important differences across the regions that could also influence prices.

Natural experiments, to the extent they are available and correctly done, may be able to directly measure the impact of a particular practice on market outcomes – such as prices or quantity. For example, the natural experiment analysis attempted to determine if the competition between Staples and Office Depot and the number of office superstore competitors (including Office Max) affected pricing. In many cases, this type of natural experiment may not be available, but other natural experiments may be.

To make an inference as to whether the event caused a difference in outcomes, one needs to control for these other factors that may impact the outcomes. In Staples/Office Depot, it was important to carefully control for factors other than the number and identity of office superstore competitors that could explain price differences across geographic areas. These other factors included regional differences in the retailing costs (e.g., wages or land values) or differences in demand (e.g., density of consumers or retailers purchasing office supplies).

In addition, the data or other information studied in the experiment, such as prices, must be appropriately and reliably measured. In Staples-Office Depot, prices were not higher for all products in regions with fewer superstores. Accordingly, there were disagreements about how to appropriately weight the mix of products sold to determine the average prices in different geographic areas, which affected the conclusions that could be drawn from the experiments.

Like other economic analyses, natural experiments analyses are only useful if (1) they reasonably fit the facts of the case, and (2) employ sound economic methodologies that are (3) based on reliable information. It is not necessary that the experiment exactly mimic the behavior or market at issue, much as an economic model need not exactly mimic an industry to be of value. However, the further away the experiment is from the facts of the case at hand, the less useful it is in assessing competitive effects. Moreover, one needs to check whether the results of the experiment are consistent with other economic analyses of the market at issue. If different aspects of the market are clearly inconsistent with

the results of the natural experiment, the experiment should also be given much less weight.

c. Evidence of the merging firms' post-merger plans.

The Agencies often consider post merger plans in their evaluation, and so should be mentioned in the HMGs. Moreover, such plans can be an important source for predicting behavior after a merger. For example, in one merger where I served as an expert witness, the planning documents indicated that post merger the firm would increase the prices charged by the acquired firm's services to those of the acquirer. Subsequent empirical research of the consummated merger by another economist on post merger price data indicated that the merged firm did increase prices on the acquired firm as planned. Obviously many planning documents do not accurate predict what firm will or can do post merger particularly where the plans have not be endorsed by senior management at the merging firms, but briefly explaining their use in the HMGs would be useful.

d. Evidence from customers about how they will respond to, and be affected by, the merger.

The Agencies for decades have given great weight to the information from customers, as I have discussed in past writings.[3] Customers presumably know the competitive situation fairly well because they are market participants, and they are the ones who are most likely to lose if competition is reduced by a merger. As such, carefully explaining the Agencies' use of customer evidence would be beneficial, especially since many courts have questioned the value of such evidence.

e. Evidence that the merging firms have engaged in significant head-to-head competition leading to lower prices or other customer benefits.

The Agencies and outside parties often study the degree of head-to-head of competition, and attempt to determine if that competition has resulted in customer benefits. This type of competition is particularly important in evaluating the competitive effects of a merger, and most economic models of differentiated products markets highlight the importance of such competition. If the Agencies decide to include a brief description of this type of evidence, it would be important to make it clear that the Agencies are basing their analyses on hard evidence of significant head-to-head competition that cannot be easily replaced by another firm, rather than the Agencies relying on presumptions (such as relatively large market shares of the merging firms).

f. Historical evidence of actual or attempted coordination in the industry.

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[3] James Langenfeld, "The Use of Customer Complaints in Antitrust Analysis," *Government Antitrust Litigation Advisory*, July 1998, 1-5.

The Agencies and outside parties have considered past experience with actual or attempted coordination for decades, and appropriately so. Past successful coordination shows that the firms must have been able to adequately meet the three conditions for successful coordination discussed in the current HMGs. However, markets often change substantially over time, and will change with a merger between two major competitors. Accordingly, a revision of the HMGs there should make clear there needs to be an analysis that attempts to determine how relevant past behavior is in predicting market behavior after a merger.

3. Should the Guidelines include a more detailed discussion of how the hypothetical-monopolist test for market definition (§1.11) is applied? This could include discussion of the following points.

a. Why the hypothetical monopolist approach often leads to properly defined relevant antitrust markets that do not include the full range of functional substitutes from which customers choose.

Consideration of both economic and functional substitutes is important in market definition. As a practical matter, it is often easier to identify functional substitutes than it is accurately estimate the subset of functional substitutes that are significant economic substitutes. The HMGs would benefit by explaining more clearly that functional substitutes are good place to start market definition analysis, but that in general there should be a next step in the analysis that attempts to determine what portion of the functional substitutes economically constrain the pricing of rivals in the hypothetical monopolist market being tested.

b. How to conduct "critical loss analysis," including the proper use of evidence regarding pre-merger price/cost margins.

Critical loss analysis can be useful in both market definition and competitive effects analyses.[4] More explanation of how the Agencies use critical loss analysis may be useful in the HMGs. However, more research would need to be performed before any radical changes are made in current HMGs market definition approach that critical loss analysis attempts to address, since at this stage there is no consensus on the best way to use evidence on premerger price/cost margins in market definition.[5]

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[4] See, for example, James Langenfeld and Wenqing Li, "Critical Loss Analysis in Evaluating Mergers," *Antitrust Bulletin*, Summer 2001, 299-337.

[5] See Joseph Farrell and Carl Shapiro, "Improving Critical Loss," Antitrust Source, (Feb. 2008), http://www.abanet.org/antitrust/at-source/08/02/Feb08-Farrell-Shapiro.pdf. and Joseph Farrell and Carl Shapiro, "Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition ," (25 November 25 2008), available at: http://ssrn.com/abstract=1313782, compared to Malcolm B. Coate, and, Joseph J. Simons., "Models, Mathematics and Critical Loss," (November 3, 2009), available at SSRN: http://ssrn.com/abstract=1346067.

4. Should the hypothetical monopolist test in the Guidelines (§1.11) be simplified so that any collection of substitute products constitutes a relevant product market if a hypothetical monopolist over that group of products would find it profitable to impose at least a small but significant and non-transitory increase in price (SSNIP), including the price of a product of one of the merging firms? This would involve dropping the requirement that products be added in the order of "next best substitutes" and the use of the "smallest market" principle.

The economics behind the SSNIP test does not require the use of the "next best substitute" or "smallest market" principles. However, both concepts are useful in establishing a systematic basis for defining markets when there is no robust evidence of the own price elasticity of demand for a set of products in a hypothetical market. Also, as a practical matter, if two products are each other's closest substitutes and both have substantial sales, it is unlikely that any market definition under a SSNIP would exclude either product.

5. The Guidelines state (§1.11) that the size of the SSNIP will "in most contexts" be five percent. All else equal, the larger the SSNIP, the broader the market. Should the size of the SSNIP "in most contexts" be increased to ten percent? Should the Guidelines provide further explanation of the base price from which the SSNIP is calculated? Should the Guidelines provide further explanation of the conditions under which the Agencies will use a SSNIP other than the standard SSNIP?

The HMGs already provide an example of when a smaller test price increase would be used. More guidance would only be helpful if it reflects a systematic approach followed by both Agencies.

6. In defining the geographic market, the Guidelines refer (§1.21) to the locations at which the relevant product is *produced.* The locations of *customers* who are likely to be affected by the merger may be quite different from the locations of the suppliers. Should the Guidelines be revised to state that the geographic market may be defined based on the locations of customers rather than, or in addition to, the locations of suppliers, depending upon circumstances? Should other indicia employed in geographic market definition be discussed, such as legal and regulatory constraints?

Yes. Ted Frech, Forrest McCluer, and I discuss production vs. consumer based approaches for defining markets and calculating market shares in the context of hospital mergers.[6] Production-based shares are measured on the "supply-side" (hospital-based) and consumer-based shares have been measured by "demand-side" (patient-based) approaches. The Agencies have traditionally used the supply-side approach for hospitals, basing calculations on the patient discharges or capacity of the hospitals in the geographic market. The alternative approach is to base the calculation on the discharges of consumers who live in the geographic market. The

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[6] H.E. Frech III, James Langenfeld, and R. Forrest McCluer, "Elzinga-Hogarty Tests and Alternative Approaches for Market Share Calculations in Hospital Markets," *Antitrust Law Journal* Vol. 71, No.3, 2004, 921-947.

supply-side approach includes exports, but excludes imports. The demand-side approach is just the opposite.

Both approaches have conceptual and methodological shortcomings and advantages. Which approach is economically more appropriate for market definition and calculating market shares depends on the nature of the product/service and competition. The supply-side approach presumes market power is better measured by the capacity of the local hospitals, there is no geographic price discrimination, and the services offered by hospitals outside the geographic market are not good substitutes for the services offered by the hospitals inside the market. This approach may suffer from "sample selection" bias. That is, the denominator is calculated conditional on consumers already making the choice to go to a hospital in the area.

The demand-side approach more closely follows the HMGs' current methodology by focusing initially on consumer choice. This approach is most appropriate where there is geographic price discrimination and where the services of hospitals outside the market are good substitutes for the services of hospitals inside the market. However, price discrimination based on geographic location typically has not been found in hospital markets.

7. Should the discussion of how market shares are measured (§1.4) or interpreted (§1.52) be expanded? Is the interpretation of market shares, or the probative value of market concentration, different in cases involving unilateral effects than those involving coordinated effects?

The discussion of how market shares are calculated and interpreted should be expanded, in part as suggested in Frech, Langenfeld, and McCluer (see above). Economics analysis indicates that market shares provide more important in homogeneous goods/coordinated effects inquiries. However, market shares can also be useful in evaluating unilateral effects in differentiated products markets. Under many circumstances other firms with substantial shares would be more likely to follow a post-merger unilateral price increase, since it is more likely that a price increase would be profitable on a large existing customer based than for smaller competitors with fewer sales (who would be more likely to benefit from expanding sales rather than increasing prices).

8. Should the Guidelines be revised to explain more fully than in the current §1.521 how market shares and market concentration are measured and interpreted in dynamic markets, including markets experiencing significant technological change?

Yes, as long as it reflects a systematic approach followed by both Agencies.

9. Do the HHI thresholds in the Guidelines accurately reflect current Agency practice? Should they be adjusted? If so, to what values?

No, the HHI thresholds do not accurately reflect Agency practice in most instances. A poll of 40 antitrust experts as a recent seminar indicated that none believe the current thresholds accurately reflected Agency practice. Although some of these experts suggested that HHIs should be abandoned, the median post merger HHI of those who recommended a minimum value was 2,500. Even FTC

publications suggest that the current cut offs are not particularly meaningful as a tool for the Agencies' investigation most mergers.[7]

10. The concept of unilateral effects was explicitly introduced into the Guidelines in 1992. Since then, the Agencies and private parties have acquired a great deal of experience evaluating unilateral effects using a variety of evidence and methods, and economic learning regarding unilateral effects has advanced. Should the Guidelines be updated to reflect this experience and learning? Please comment on the value of including expanded discussion of the following topics:

a. The relationship between market definition and unilateral effects.

It would be useful to expand the HMGs to explain that there can be a reduction in competition in part of a broader market when there are substantially differentiated products.

b. Localized effects within a relevant market.

Yes.

c. Unilateral effects in markets with auctions or negotiations.

Yes.

d. The role of diversion ratios and price/cost margins in evaluating unilateral effects.

Diversion ratios and price/cost margins are useful in evaluating unilateral effects, and should be consider as one of a set of economic analyses (including critical loss) for determining the overall competitive effects of a merger reflected in the HMGs.

e. The use of market shares as a proxies for diversion ratios.

In a differentiated products market, it is much more reliable to evaluate direct competition between the merging firms than to attempt to infer diversion ratios from market shares.

f. The thirty-five percent combined market share threshold in §2.211 of the Guidelines.

There is no bright line economic basis for the 35 % test, but it is a useful in most markets to ensure that a merger is likely to substantially affect competition.

g. The use of merger simulation models to predict unilateral effects.

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[7] See FTC Merger Challenges Data 1996-2007 (081201hrsmergerdata).pdf.

Yes. These models can be useful, but contain a number of strong assumptions that are often not verified. Accordingly, the HMGs should recognize their use where sufficient information exists, but carefully explain the limitations of such models.

h. The role of product repositioning in evaluating unilateral effects.

Repositioning is extremely important in evaluating the unilateral competitive effects of a merger in a differentiated product market, and the agencies do not always give adequate consideration of firms' ability to reposition their products or services. The HMGs would benefit from a more detailed and systematic discussion of repositioning and the evidence that the agencies should consider.

11. The discussion of price discrimination in the Guidelines (chiefly §1.12 and §1.22) is quite limited. Should this discussion be expanded? Specifically, please comment on the value of elaborating on the identification of "targeted buyers" and on the analysis of competitive effects in markets where prices are negotiated.

12. The Guidelines do not explicitly address the implications of large buyers. Merging firms commonly argue that the merged entity would not be able profitably to raise price because it will be selling to large, powerful buyers. Should the Guidelines be revised to discuss the implications of large buyers for merger analysis? For example, even if large buyers are able to negotiate more favorable terms than smaller buyers, what further evidence is required to establish that they are immune from harm due to the loss of competition resulting from the merger? Are large buyers less susceptible to non-price effects than small buyers? Even if large buyers are protected, under what circumstances should antitrust analysis attend to the interests of smaller buyers?

The HMGs' discussion of price discrimination should be expanded to address in more detail the seller's ability to target customers and to prevent arbitrage. However, any such discussion should be directly linked to buyer power and the ability of customers to switch to substitutes, vertically integrate, or create new suppliers. To the extend larger customers may have substantial buyer power and smaller firms do not, under certain circumstances a merger may result in adverse competitive effects limited to smaller firms. However, the Agencies should be concerned about the competitive effects of a merger on a subset of customers only if there is clear evidence of this type of adverse competitive effects. Under any circumstances, the HMGs would benefits from adding a discussion what they consider the key issues in repositioning, and the type of evidence they find most reliable.

13. The Guidelines distinguish between uncommitted and committed entry. Uncommitted entrants (§1.32) are treated as market participants and can be assigned positive market shares. Committed entrants (§3.0) are not. How useful in practice is the distinction between uncommitted and committed entry? How should the market presence of uncommitted entrants be measured?

Despite the importance of entry in merger analysis, the distinction between uncommitted and committed entrants has proven useful only in certain markets. For example, in many pipeline or gasoline production mergers, firms would likely

enter new geographic areas if there were an increase in the net backs due a merger. These firms are in effect uncommitted entrants, they are often limited by the capacity of pipelines, and can therefore be given at least maximum market shares. In most markets, however, there is no way to accurately assign market shares to uncommitted or committed entrants, and so the steps of entry analysis are similar for both.

14. The Guidelines ask (§4) whether cognizable efficiencies are sufficient to reverse the merger's potential to raise price. In making this determination, the Guidelines distinguish between fixed and marginal costs, with savings in marginal costs more likely to influence price. Should the Guidelines be updated to state that any cognizable cost reductions are relevant to the extent that they are likely to generate benefits for customers in the foreseeable future? Who should bear the burden of making this showing?

Yes. The parties to the merger should still have the initial burden of showing efficiencies and the likely beneficial impact of a merger. However, this burden should be no higher than what the Agencies bear when attempting to challenge an unconsummated merger. Both the potential competitive effects and potential efficiencies cannot be known with certainty because the merger has not taken place at the time of the HSR investigation.

15. Should the Guidelines be updated to address more explicitly the non-price effects of mergers, especially the effects of mergers on innovation?

The HMGs would be improved by a short statement explaining more clearly that price is not the only consideration in evaluating competitive effects.

16. Should the Guidelines be updated to address acquisitions involving minority interests?

17. Should Section 5 of the Guidelines, "Failure and Exiting Assets," be revised?

No, unnecessary.

18. Should the Guidelines be revised to include a discussion of how the Agencies approach merger remedies? Such a discussion could include the following topics:.

a. The overall goal of protecting customers by preserving pre-merger levels of competition.

b. The relationship between the remedy and adverse competitive effects.

b. The shortcomings of behavioral remedies in horizontal merger cases.

Yes. Many times the Agencies appear to have accepted remedies that do not address the alleged reductions in competition. The HMGs should explicitly explain how remedies should address any competitive effects from a merger, and the evidence that is the basis for the remedy likely being effective.

19. Should the Guidelines include illustrative examples? If so, which aspects of the current or revised Guidelines would benefit from the inclusion of examples? Would real-world examples or hypothetical examples be more valuable? Would the inclusion of examples risk undue reliance on them and, if so, what caveats should be provided?

The 2006 "Commentary on the Horizontal Merger Guidelines" has been helpful is some ways, but these examples have proven of limited usefulness in determining how the agencies will act on any new merger. Moreover, including these types of examples will likely tend to create confusion and lead to attempts to characterize a merger as one of the examples, when there are seldom two mergers that have identical analyses.

20. Should the Guidelines be revised to reflect learning based on merger retrospective studies?

Yes. The Agencies should learn from their successes and mistakes, so the HMGs should reflect learning from the retrospectives.