Comments on the Horizontal Merger Guidelines

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I. The Starting Point: The Current Guidelines

The stated goal of the DOJ/FTC Horizontal Merger Guidelines ("Guidelines") is to "reduce the uncertainty associated with enforcement of the antitrust laws." In our opinion, the current Guidelines have had mixed success in achieving this goal. They have been largely successful at focusing attention on the key economic question, which is the likely impact of the proposed merger on prices and in deflecting attention away from issues that are not relevant to proper merger analysis, such as the likely impact on competitors. The Guidelines also succeeded in identifying the key economic concepts for a proper analysis of competitive effects, including the important roles of demand-side and supply-side substitution, the potential change in pricing incentives from the proposed merger, the competitive impact of actual and potential entry, and merger-specific efficiencies.

The Guidelines' most important achievement has been to clarify and endorse the role of economic analysis in the merger review process. Evaluating the likely competitive effects of a merger usually requires understanding the impact of the proposed merger on prices, but sometimes also requires predicting the likely impact on quality, variety and innovation. We believe that the Guidelines likely have played an important role in preventing the antitrust authorities from seeking to prevent proposed mergers simply because they will increase concentration or they involve a combination of large competing firms.

However, in our view the Guidelines have been substantially less successful in guiding the *process* of merger review. In practice, adherence to their overly rigid structure often limits the likelihood that the review process will uncover, and therefore its outcome will reflect, the best possible understanding of the merger's potential competitive effects. While the Guidelines have provided some clarity for the merging parties by identifying a roadmap of the analytical steps the agencies will follow, the explicit thresholds and standards set out in the Guidelines often are at odds with actual agency practice.

A second strength of the Guidelines is that they delineate the central economic factors that influence the competitive impact of a proposed merger. For example, they describe the importance of demand-side and supply-side substitution, how the likelihood and magnitude of

entry can constrain the merged firm, and the potential impact of efficiencies on prices and output. As such, the Guidelines help reduce the uncertainty about the types of factors and analyses the Agencies will rely upon in deciding whether to approve a merger. To economists, much of this seems self-evident, but the Guidelines audience includes non-economists, especially business executives and their attorneys and advisors.

The current Guidelines describe a five-part structure for the competitive effects inquiry. This process includes market definition, market share and market concentration calculations, potential adverse effects, entry, and efficiencies. For each step of the analysis, the Guidelines set forth applicable standards and some aspects of the analytical process, although with varying amounts of detail. For example, the Guidelines provide precise (in our view, overly precise) quantitative standards for market share and concentration presumptions, and a specific methodology for defining relevant markets. However, they offer limited guidance on how to interpret the requirement for timeliness, likelihood and sufficiency of entry in constraining the merging parties and do not describe appropriate methods for analyzing potential adverse effects.

The Guidelines' weaknesses reflect the attempt to be too detailed on some issues, while providing little if any guidance on others. Virtually every market and therefore every merger investigation has important idiosyncratic institutional, technological, environmental, and data availability features that determine the best approach to a competitive effects analysis. Conforming to the Guidelines five-part process necessarily constrains the Authorities' ability to conduct the best analysis and tailor the inquiry to the specifics of the merger under review. Experience shows that neither the Agencies nor the parties, if unconstrained by the Guidelines, necessarily will advance the ideal competitive analysis of the proposed merger, but experience also demonstrates that the current Guidelines are not sufficient to insure that the review process properly accounts for the idiosyncratic issues that a particular merger presents. We return to this below in our discussion of particular issues.

In considering whether and how to revise the Guidelines, we believe that the question is one of balance – is it possible to generate Guidelines for merger analysis that, in most situations, will not constrain the Agencies and the parties from conducting something close to the ideal analysis, reduce the likelihood that an improper analysis by the parties and/or the Agencies will

lead to unmerited approval or disapproval, and also reduce uncertainty about the process and likely outcome of the analysis? We think the answer is yes. We now outline goals that we recommend for revising the Guidelines and we then propose specific revisions that we believe will improve the Guidelines.

II. Goals for the Revisions to the Guidelines

In our opinion, the Guidelines have two purposes. First, the Guidelines should lay out a clear set of standards against which mergers will be judged – these standards define the competitive effects to be evaluated. The goal here should be clarity and consistency so that the parties can accurately anticipate the agencies' objectives. Second, the Guidelines should provide a general analytical framework that can be used to evaluate the potential competitive effects of the merger. Here, there must be a balance between a well defined process that can be consistently applied and the need to tailor the process to the case at hand.

Goal #1: Clearly Stating the Objective

The current Guidelines likely have had their greatest success in achieving the first goal, by making clear that a merger's impact on prices (and other outcomes directly valued by consumers, such as product quality, choice, and innovation) is the proper focus of the analysis. The effects on competitors and other interest groups such labor and local constituencies are correctly ignored.

We recommend clarifying the Guidelines' statement of the objective of merger review in two ways. First, the current Guidelines often take market structure as a proxy for competition – this is particularly true where the Guidelines rely on HHI measures to set thresholds for potential anticompetitive effects. While market structure has some relationship to competitive effects the theoretical and empirical evidence supporting such a link is rather weak. Most importantly, the relevance of market structure is likely to vary substantially across markets. We think a revised version of the Guidelines should make clearer that it is the effect of the merger on market outcomes, output and prices, and not the effect on market structure, that is the objective.

Second, the analysis of consumer welfare should incorporate a long-run view of impact. Consumers are likely to benefit in the long-run from efficient redeployment of assets even if

there are no short-run marginal cost savings. For example, arguments occasionally are made that the acquirer would add capacity if it does not acquire the target; the result is that output will be greater if the merger is prohibited. Although true, we think the correct inquiry should incorporate the longer-term benefits to consumers from a more efficient firm controlling productive assets.

Goal #2: Guidelines for the Analysis of Competitive Effects

Ultimately, merger policy should be concerned with competitive effects. The Guidelines should be designed to support and encourage a thorough but efficient analysis of those effects. The key tradeoff is to provide structure while allowing the Agencies and merging parties the flexibility to use something approximating the best analysis for a particular case.

One approach to revising the Guidelines would be to maintain the current five-part approach but eliminate misleading and flawed details and clarify and improve the definition, description and reasoning underlying the broader methods and standards. Such a revision could help the Guidelines better achieve their purpose by eliminating misinformation and updating standards and explanations to reflect current practices and research advances. In fact, a revision of the Guidelines which did nothing else other than replace every number with a more ambiguous description likely would be an improvement. However, we propose a revision that goes farther.

We think the current five-part approach often does not contribute to a sound analysis of competitive effects. In particular, the highly structured approach to market definition and the resulting emphasis on market shares and concentration based on that market definition often constrains rather than informs the analysis. It also leads to an excessive focus on structural aspects of the merger rather than the central question of the likely impact on competition in general and prices and output in particular. Market shares and market definition can be important in some cases for understanding competitive effects, but, in our experience, requiring all merger analysis to fit into that framework frequently proves to be less than helpful. Often, direct market evidence on competitive effects – from past mergers, entry and exit decisions that occur in the normal course of events and the like – is readily available, and greater focus on interpreting such evidence is likely to lead to better analysis and decisions. While this may not

eliminate the need for market definition, it does make the outcome of market definition less determinative of the outcome.[1]

At the same time, we think that the factors identified in the current Guidelines – demand-side and supply-side substitution, entry, potential efficiencies, and potential adverse effects – are the right factors to consider in a proper competitive effects analysis. Our recommendation is to revise the Guidelines to allow for a more unified competitive effects analysis (for example, allowing a more integrated approach to market definition and competitive effects) that does not specify a particular sequence or set of steps through which the various factors are incorporated. In short, we think the Guidelines should provide a clear statement of the standards used to evaluate competitive effects and the factors that should be considered in that analysis, but they should not dictate a particular hierarchy for the analysis. We think this would bring the Guidelines into closer alignment with actual practice and more importantly bring actual practice more in line with best practice.

III. Specific Recommendations

We now turn to some specific recommendations for revisions.

1. Defining a Role for Market Share Analysis

Perhaps the most useful revision of the Guidelines would be to eliminate the presumptions of anticompetitive impact from market share analysis. The Guidelines imply an anticompetitive presumption of a merger between firms with five and ten percent shares of a relevant market where the top four firms each has a 20 percent share. Fortunately, this is grossly inconsistent with practice. Although regular participants in the merger review process know that the Guidelines stated presumptions are far more aggressive than actual practice, it is still possible that some procompetitive mergers are deterred because less well-informed parties take the Guidelines' statements on the structural presumption at face value. Rather than revising the standards for an *anticompetitive* presumption to more closely align with practice and theory, we

[1] This is in keeping with economic principles which imply that the results of the analysis should depend on the underlying factors and not the way in which markets are defined. For example, the same merger could be viewed as involving two large firms in a narrow market or two smaller firms in a larger market. If both analyses are done correctly, they should lead to the same conclusion regarding competitive effects. In the first case more substitution takes place between "markets" while in the second more would be confined within the market.

recommend eliminating them entirely in order to more closely align with both practice and theory.

There are numerous problems with an anticompetitive presumption based on a simple structural analysis. First, the theory and evidence on the relationship between changes in concentration and prices is weak and there are strong reasons to believe that the relationship, to the extent it exists, depends also on numerous other features of markets and the nature of competition. Thus, any presumption based on market shares will be extremely imperfect and misleading.

Second, the existence of these presumptions makes the market definition exercise a central piece of the competitive effects analysis – indeed, sometimes *the* central piece of the analysis. This leads to market definition serving as a *de-facto* competitive effects analysis, which is very far from ideal.

The Whole Foods case provides a stark example of the problem this creates. During the FTC's (and then the Court's) review of Whole Foods' planned merger with Wild Oats, the debate over market definition revolved whether the market was *Premium Natural and Organic Supermarkets* or *All Supermarkets*. If the former market definition were accepted, the merger would be to (virtual) monopoly and a strong anticompetitive presumption would follow, while if the latter market definition were accepted, the merger would seem untroubling. The market-definition exercise thus played a central role in the investigation and in the litigation. However, a reasonable economic analysis would take into account that Whole Foods and Wild Oats were relatively close substitutes because their product mix and target customers were similar, but also would take into account that both Whole Foods and Wild Oats are subject to significant competitive pressure from other supermarkets. Reducing the entire analysis to a SSNIP test (or any other approach to market definition) is not only imperfect, but it is unhelpful and unreasonable.

If market-share based anticompetitive presumptions are eliminated, market definition can play its proper role in the competitive-effects analysis, which is to help frame, focus and simplify the analysis. Market definition should never play a pivotal role, in the sense that the result of

market definition only is the basis for concluding that a merger is likely to reduce competition. It should simply make the inquiry into competitive effects clearer and more straightforward.

More broadly, the Guidelines can provide substantial value in reducing uncertainty if they can help parties identify when mergers are unlikely to raise anticompetitive concerns. The greatest value served by market-share analysis is to provide a presumption of no anticompetitive impact for mergers below certain thresholds, consistent with Agencies' practices. While market structure is not a reliable way to establish potential anticompetitive effects, it is much better as a means to screen cases where anticompetitive effects are unlikely, since a concentrated market is necessary for anticompetitive effects, even if it is not sufficient. Therefore, a presumption of no anticompetitive effects may be justified if a narrow market definition still results in the merging firms have small shares or the industry being unconcentrated.

A simple recommendation to improve the five percent price increase standard used in the market definition SSNIP test is to analyze a price increase measured as a percentage of value-added rather than price. Some industries, such as pharmaceutical wholesalers, have very low value-added as a percentage of price. For such firms, a five-percent price increase is a very different change in markups than firms in other industries, such as software.

2. Structuring the Analysis of Competitive Effects

a. Ingredients for the Analysis of Competitive Effects

The Guidelines section on potential adverse competitive effects of mergers has a somewhat odd structure. The overview states,

> This section considers some of the potential adverse competitive effects of mergers and the factors in addition to market concentration relevant to each. Because an individual merger may threaten to harm competition through more than one of these effects, mergers will be analyzed in terms of as many potential adverse competitive effects as are appropriate.

Sections on coordinated effects and unilateral effects follow, with the latter divided into "firms distinguished primarily by differentiated products" and "firms distinguished primarily by their capacities." The overview makes clear that this is not designed to be a partition, as some

mergers apparently may fit into both categories, but the overview does seem to suggest that the set of potential adverse competitive effects is exhaustive.

We find this categorization of competitive-effects analysis incomplete and misleading. The problems are numerous. The section on coordinated effects uses the terms "reaching terms of coordination," "detection," and "punishment," thereby indicating that the focus is on situations where a more cooperative outcome is supported by the threat of price wars as punishment for deviations. This is contrasted to the discussion of "unilateral effects," which are defined by environments where "merging firms may find it profitable to alter their behavior unilaterally." The Guidelines do not define "unilateral" but much of the empirical work that supports unilateral effects analysis focuses on estimating the incentives for merging firms to raise price assuming that other firms keep prices constant.

A problem with the division into coordinated and unilateral effects is that it leaves out large classes of models and economic forces that affect competition. In most concentrated markets, firms will take anticipated responses of rivals into account when making pricing, expansion, product choice, and all other important decisions. Such behavior does not seem to fit common definitions of unilateral (if it does, so does the behavior in non-cooperative coordinated effects equilibria), yet these models need not rely on supergame cooperation equilibria that are the only types of models considered in the coordinated effects section of the Guidelines.

There are many models that economists regularly study theoretically and empirically which include explicit dynamic links and incorporation of anticipated competitive responses, but do not support coordination through the expectation of future punishments for deviations from cooperative behavior. These models include switching cost models, dynamic capacity models, costly price adjustment models, and inventory models. In fact, almost any reasonable analysis of markets characterized by capacity competition would involve dynamic considerations. This is evident from the feature of static capacity/quantity competition, where mergers that lead to price increases are almost always unprofitable. Furthermore, the Guidelines do not appear to address the economics of bid markets, where a reduction in the number of bidders may lead to a new static (or dynamic) equilibrium in which all bidders behave differently.

In our view, the Guidelines have promoted analyses with excessive focus on estimating product differentiation demand systems that assume static Bertrand competition. The assumptions of these models are often inappropriate to the industry and firms under consideration. Furthermore, the predictions of these models are often sensitive to the choice of functional form. In particular, even within the static Bertrand structure, changes in pricing incentives depend on parameters such as unilateral and multilateral pass-through that are not directly related to the elasticity parameters obtained from demand-system estimation.

We think the problem of effectively partitioning the set of possible mergers into buckets that define specific modeling approaches and forms of potential anticompetitive effects is very difficult and that Guidelines' revisions should not undertake this task. Instead, we think the Guidelines should be explicit that, to the extent they discuss specific types of models, they are not intended to be exhaustive. If the Agencies decide to include discussions of additional classes of models, we think that the list should include models with dynamic investment, bid markets, switching costs models, two-sided markets, and non-Bertrand models of product differentiation. However, rather than trying to describe all the different manifestations of competition and the potential impact of mergers, it might be more useful for the Agencies to issue more frequent and extensive Commentary publications that explain how they have analyzed different industries in specific mergers.

b. Merger Analysis Should Allow a More Integrated Competitive Effects Analysis

The five-part investigation described in the Guidelines separates the analysis of entry, efficiencies, and potential adverse effects. In some situations, analysis of these elements may be linked in ways that make separation inappropriate. If the Guidelines continue to present these areas separately, they should note that in some situations analyses grouping these elements together may be appropriate.

One example of a situation where this occurs is the role of efficiencies that are distinct from marginal cost savings. Some mergers are motivated, wholly or in part, by the ability of the acquiring firm to operate more efficiently than the target. This could involve marginal cost savings, but it also could involve the ability or incentive to produce more output from the same plant for reasons unrelated to marginal cost, such as differential product appeal or differences in

the unilateral incentives to expand output in differentiated-products competition. In the latter case, a merger will lead to greater production, and will therefore be procompetitive. This example illustrates two points: first, that efficiencies and potential adverse effects analyses are inseparable and second, that cost savings other than marginal cost savings can benefit consumers. The current Guidelines' structure where efficiencies are considered separately from competitive effects would not provide a suitable analysis of either.

c. Merger Analysis Should Focus on How the Merger Changes Market Competition

Both the market definition and potential adverse effects sections of the Guidelines should include text that explains and emphasizes that the relevant inquiry is how pricing incentives *change* with a merger. In a static product differentiation model, this boils down to how elasticities change with a merger and how changes in elasticities affect pricing (i.e., pass-through). More generally, current market outcomes and the impacts of historical events such as entry, exit or changes in other aspects of the competitive landscape provide important empirical leverage for understanding the potential competitive effects of the merger. Revising the Guidelines to make this clear would avoid some of the most egregious misuses of critical-loss analysis. The Guidelines should emphasize that any formal analysis must be consistent in its explanation of pre-merger pricing as well as post-merger pricing. Claims that the merged firm would not have an incentive to increase price must be consistent with existing firms charging the prices that they do. A focus on how pricing incentives change does this by construction.