

# VIEWS ON THE PROPOSED HORIZONTAL MERGER GUIDELINES

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These comments are in response to The Federal Trade Commission (FTC) and the Department of Justice (DOJ) request for comments on the proposed revision of the Horizontal Merger Guidelines (“HMGs”). 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 the agencies have faced in producing the proposed revision, and I commend the agencies in both the process and the speed of producing the proposed revision. The next section presents an overview of my comments, and the following sections contain specific comments on each section of the proposed revision. These comments range from issues that affect many sections of the proposed revision to some specific suggestions for changing the wording.

## General Comments

The proposed revision is generally an improvement over the existing HMGs. For example, Evidence of Adverse Competitive Effects and Sources of Evidence are new sections that are excellent additions to the HMGs.

Targeted customers and price discrimination are covered in Sections 3, 4, 5, 6, and 7 in the proposed revision. The existing HMGs address price discrimination markets, but do so in a more limited fashion in discussions of market definition (Section 1.12) and competitive effects (Section 2.21). Presumably there are reasons for the substantially increased attention in the proposed revisions. If the agencies contemplate challenging many mergers based on a loss of competition for some targeted customers of the merging firms via the use of price discrimination, then it is appropriate to devote this much space to the topic.

Section 4 on market definition does an excellent job describing how market definition should fit into merger analysis, correctly stating “[m]arket definition is not an end in itself: it is one of the tools the Agencies use to assess whether a merger is likely to lessen competition.” The proposed revision also has improved the HHI thresholds by more accurately reflecting Agency practice.

Section 6 on Pricing of Differentiated Products does a very good job explaining a number of analyses of unilateral competitive effects in differentiated product markets. Similarly, Section 7 on Coordinated Effects is an improvement over the existing HMGs in that it begins by offering a definition of coordinated interaction, and attempts to explain why coordinated interaction can create competition problems. However, Section 7 appears to suggest that

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coordinated interaction does not lend itself to as rigorous an analysis as does unilateral effects. There may be numerous forms of coordination, but there are a number of quantifiable analyses discussed in Section 7.2 that can be as useful in predicting anticompetitive behavior as those discussed in Section 6 on unilateral effects.

Before providing specific comments section by section, there are five general areas of comments that tend to cut across a number of the sections: direct and indirect evidence, market definition and competitive effects, benchmarks, the net effect of a merger on customers, and apparent inconsistencies with the proposed revision.

### *Direct and Indirect Evidence*

The only “direct” evidence on the competitive effect of a merger would be from a consummated merger. A before-and-after study of the effects of a merger would be a “direct” measure if it controlled for other influences that affected the merged firm (e.g., changes in demand unrelated to the merger) and other changes in general supply and demand factors. Since the vast majority of merger inquiries are attempts to analyze a merger that has not yet occurred, it is not surprising that the agencies use indirect evidence of competitive effects such as the other four types of evidence listed in Section 2.1.

It is important not to treat the various types of indirect evidence listed in Section 2.1 as necessarily superior to the indirect evidence that the agencies and courts have traditionally used – i.e., market shares and changes in market shares. Sections 4 and 6 appear to favor the analysis of existing head-to-head competition between the merging parties using diversion and related analyses over market structure. Clearly market definition and market shares are not definitive for predicting competitive effects from a merger; but neither is any other single analysis.

### *Market Definition and Competitive Effects*

Some of the most potentially significant changes in the proposed revisions occur in the market definition sections, with related changes discussed in the unilateral effects sections (e.g., Section 6.1). For example, it appears that the revisions contemplate defining markets starting with a hypothetical price increase for as little as one product of one of the merging firms. Assuming this change to hypothesize a single firm price increase (instead of a price increase for all of the firms in a hypothetical market) is intended in the proposed revision, it has the potential for justifying much narrower markets than the approach in the existing HMGs. I recommend that the language be clearer, and perhaps add an example following the current Example 5, if the change is intended.

Another change in the proposed revision highlights that even if most customers would choose to purchase outside the hypothetical market in the face of a price increase, the price increase could still be profitable and lead to a market that potentially would include only the merging firms. While the Agencies should be cautious in attempting to define markets using diversion ratios and upward pricing pressure tests when a significant fraction of customers do not treat the merging firms as each other’s closest competitors, those tests are useful in analyzing the competitive effects within a differentiated product or geographic market. However, accurately measuring diversions can be very difficult. As such, if the evidence shows a substantial number of customers would choose options outside the hypothetical market in

response to an assumed price increase, then other analyses should be employed to confirm the relevant market and the results of any diversion or upward pricing pressure analysis.

The sections dealing with market definition would benefit from highlighting economic and functional substitutes in market definition. As a practical matter, it is often easier to identify functional substitutes than it is to accurately estimate the subset of functional substitutes that are significant economic substitutes. The Agencies should consider explaining that functional substitutes may be a good place to start market definition analysis, but that in general there should be a next step in the analysis that determines what portion of the functional substitutes economically constrains the pricing of rivals in the hypothetical market being tested.

### *Benchmarks*

One major difference between the proposed and existing HMGs is that the proposed revisions have eliminated many of the clear – although somewhat arbitrary – benchmarks that exist in the existing HMGs. For example, the proposed revisions have eliminated the 2 year benchmark for evaluating the timeliness of entry. The proposed revision also does not include the benchmark in the existing HMGs for treating firms as market participants (Section 1.322, less than a year to affect the market). The elimination of these benchmarks tends to work against providing clear and useful predictability. Reduced predictability can create substantial costs for outside parties and the Agencies, which may outweigh the benefit of any improved accuracy from eliminating the benchmarks. As Fisher and Lande put it:

[C]ommentators have emphasized what we call Type 1 and Type 2 error; that is, stopping beneficial mergers and allowing undesirable mergers. However, merger policy can make a third type of error. Type 3 error occurs when compliance with merger policy creates excessive cost to business, enforcers, and decisionmakers. Quantitatively it is very significant, and any policy that ignores its runs substantial risk of departing from an optimal social result.<sup>2</sup>

The proposed revision's elimination of most of the benchmarks will tend to create more Type 3 errors, and it is not clear that this increase in cost will offset any gains from reducing Type 1 and Type 2 errors. After all, there are typically thousands of mergers that are subject to HSR review. Only a very small percent receive second requests, and only a fraction of them are challenged in any way. Based on my experience in and out of government, the relatively simple benchmarks have helped sort through the large number of mergers to more quickly identify potentially troublesome ones, and have helped parties considering merging to know better when their contemplated merger is likely to be investigated and challenged.

Benchmark Prices and SSNIP Size may also create uncertainty and reduce predictability by focusing on “implicit” prices. Virtually all manufacturers and distributors buy goods, and then manufacture other products for sale or resell the goods they buy. As such, the proposed

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<sup>2</sup> Alan Fisher & Robert H. Lande, *Efficiency Considerations in Merger Enforcement*, 71 Calif L. Rev. 1580 (1983) at 1670-77. (footnotes omitted)

revisions would presumably require estimating the value added for almost every company before applying a 10 percent SSNIP, which will often be a complex analysis. It would seem more practical to use a 5 percent or more test, unless it is very clear that implicit prices are important for the analysis and they can be reliably estimated.

Not only does the proposed revision remove or complicate several benchmarks in the existing HMGs, it introduces some new analyses that would be clearer with some benchmarks, or at least with some clearer examples. For example, the proposed revision states that the Agencies may “consider whether a merger will diminish innovation competition by combining two of a very small number of firms with the strongest capabilities to successfully innovate in a specific direction.” The Agencies often have a minimum benchmark in mind, so defining what they consider “a very small number” could provide some useful guidance.

More importantly, the proposed revision focuses on marginal cost and profit margins in many of the new analyses in Section 2.2 on sources of evidence, Section 4.1.3 on implementation of the hypothetical monopolist test, Section 6.1 for evaluating the unilateral effects with differentiate products, and measuring efficiencies in Section 10. The proposed revision would benefit from more precision in defining marginal cost, and perhaps even including somewhat arbitrary benchmarks. All costs are marginal in the long run, so one needs to define the relevant time frame for measuring and identifying what is included in marginal cost. Different types of operating or variable costs are often used to approximate marginal costs, but they may not reflect the relevant marginal costs without some substantial adjustments. Most critically, none of these measures of marginal costs can be reliably used unless there is a definition of an appropriate time period. The proposed revision may benefit by including a starting point for defining marginal cost -- such as costs that would change with an increase or decrease of ten percent in volume over a year or two, then adjusting it as economically appropriate for each industry. With or without some benchmark, the proposed revision should at least explain the importance of the time period in measuring marginal costs, and what principles the Agencies use in determining marginal cost.

#### *Net Effect of Mergers on Customers*

Sections 3 Targeted Customers and Price Discrimination and 4.1.4 on market definition with targeted customers raise some important issues about how the Agencies evaluate the net effect of a merger on customers. Frequently mergers may result in price increases to some customers and decreases to others. This may be due to increased ability to price discriminate, or just fixing inefficient pricing policies so that prices for each customer may better cover the cost of serving that customer.

The economics of most types of price discrimination result in prices being higher for some customers and lower for others compared to uniform pricing. Under the approach articulated in the proposed revision, would the agencies challenge a merger that resulted in price discrimination benefitting some customers and disadvantaging others? Would the agencies attempt to measure the net change in consumer welfare of the combination of the winners and losers from the merger, or just focus on the losers since they might be considered targeted customers? There should be some recognition that mergers may result in increased prices to some consumers on some products that can be offset by price decreases to more customers on more products.

There can be a loss in short term consumer surplus due to higher prices that is likely to be offset by a relatively modest increase in innovation. Even a merger that does not necessarily result in merger specific efficiencies (as defined in Section 10) could improve longer run consumer welfare. A merger may result in a short term price increase that is more than offset by benefits from innovation or longer term cost reductions, and such cost reductions may also affect currently produced products in the foreseeable future. The net effect on consumer welfare depends on how long and significant any price increase lasted after the merger and how likely the merger would be in stimulating more innovation. Highlighting this trade-off appears important, given that the proposed revision explicitly devotes a section to the competitive effects of a merger on innovation. Section 10 on efficiencies would benefit in particular from a more explicit statement about weighing the potentially mixed effects of a merger, and recognition that cost reductions are not limited to new products.

### *Inconsistencies*

There are also some inconsistencies in the proposed revision that should be addressed. For example, Section 10 on efficiencies continues to discount the importance of economies of scale in procurement and capital costs, and assumes management is fungible across firms. However, the discussion of procurement efficiencies in Section 10 appears inconsistent with the proposed revision's new Section 12 on Competing Buyers, and the language in Section 10 should be made consistent with Section 12.

## **1. Overview**

The Overview is clear and sets up the proposed revision very well. For example, the Overview states:

A merger can enhance market power simply by eliminating competition between the merging parties.

Compared to the existing HMGs, a large portion of the proposed revisions is devoted to this particular concern, so highlighting these types of changes in the Overview is import.

A few parts of the Overview merit more specific comment. Consider this statement.

[The HMGs] are not intended to describe how the Agencies analyze cases other than horizontal mergers.

Many of the economic concepts in the HMGs have been employed in other types of cases because the usefulness of these economic concepts and analyses are not limited to merger analysis. For example, the principles of market definition in the current HMGs have been used in many Sherman Act Section 1 and Section 2 cases, although the economic concepts in the HMGs have to be applied appropriately. Footnote 4 in the proposed revision appears to acknowledge this, stating:

Market definition for the evaluation of non-merger antitrust concerns such as monopolization or facilitating practices will differ [in using prevailing prices] if the

effects resulting from the conduct of concern are already occurring at the time of evaluation.

Similarly, the analysis of barriers to entry in the HMGs has been used in non-merger antitrust cases. The economic factors used to evaluate the likelihood of there being effective coordination in the HMGs have been used in antitrust and RICO conspiracy cases. Some of the proposed revision reflects economic concepts that can be useful in evaluating non-merger matters, such as the rethinking of various aspects of market definition, inferences of market power, and the observation that not all firms in a market would necessarily need to coordinate to affect competition. As such, I believe “[The HMGs] are not intended to describe how the Agencies analyze cases other than horizontal mergers.” should be revised to say something along the lines of “[The HMGs] are intended to describe how the Agencies analyze horizontal mergers, although some of the economic analyses reflected in these Guidelines may be useful in evaluating other matters.”

The Overview also states:

These Guidelines are intended to assist the business community and antitrust practitioners by increasing the transparency of the analytical process underlying the Agencies’ enforcement decisions.

This is clearly an extremely important reason to provide any guidelines. However, understanding how enforcement decisions are made can be useful only if the HMGs provide clear guidance. One major difference between the proposed and existing HMGs is that the proposed revisions have eliminated many of the clear – although somewhat arbitrary – benchmarks in the existing HMGs. For example, the proposed revisions have eliminated the 2-year benchmark for evaluating the timeliness of entry. The elimination of these benchmarks will work against the goal of transparency that should provide clear and useful predictability. The subsequent sections of my comments discuss specific instances of where there has been either an increase or decrease in clarity.

Finally, the Overview says:

[The HMGs] may also assist the courts in developing an appropriate framework for interpreting and applying the antitrust laws in the horizontal merger context.

This revision would be a clear change from the language in the existing HMGs, and was not stated as a reason for modifying the HMGs earlier in this process. However, there is no reason to change this statement, as long as the proposed revision provides practical guidance for merger review, and explains clearly the reasons for each aspect of HMGs. Again, subsequent sections of these comments discuss how practical the guidance offered in the proposed revisions is, and whether there is sufficient explanation of why the agencies perform the analyses.

## **2. Evidence of Adverse Competitive Effects**

This new section in the proposed revisions should quite helpful, and is an excellent addition to the HMGs.

## 2.1 Types of Evidence

The section discusses five types of evidence, Actual Effects Observed in Consummated Mergers, Direct Comparisons Based on Experience, Market Shares and Concentration in a Relevant Market, Substantial Head-to-Head Competition, and Disruptive Role of a Merging Party.

The only “direct” evidence on the competitive effect from a merger would be from a consummated merger, so it is entirely appropriate to list it first. A before-and-after study of the effects of a merger would be a “direct” measure if it controlled for other influences that affected the merged firm (e.g., changes in input costs) and other changes in supply and demand factors.

Since the vast majority merger inquiries are attempts to analyze a merger that has not yet occurred, it is not surprising that the agencies rely on indirect evidence of competitive effects such as the other four types of evidence listed in this section. Accordingly, Section 2.1.2 “Direct Comparisons Based on Experience” may be better titled “Comparisons Based on Experience”. This type of “natural experiment” evidence can be very helpful, and has been increasingly used in merger analysis since the 1992 HMGs.<sup>3</sup> However, like other economic analyses, this natural experiment analysis is useful only if (1) it reasonably fits the facts of the case, and (2) employs sound economic methodologies that are (3) based on reliable information. The farther away the experiment is from the facts of the case at hand, the less useful it is in assessing competitive effects. Moreover, this and the other analyses discussed in this section need to have their results checked for consistency with the other economic analyses of competitive effects. The proposed revision may want to state explicitly that if the result of any of these analyses is clearly inconsistent with the results of the other types of analyses, then it would be given less weight.

It is particularly important not to treat the various types of indirect evidence as necessarily superior to the indirect evidence that the agencies and courts have traditionally used – i.e., market shares and changes in market shares. This section appears to be balanced in its presentation of the alternative forms of evidence, although several sections of the proposed revision on unilateral effects appear to treat market share analysis as decidedly inferior to other types of analyses. In particular, Sections 4 and 6 appear to favor the analysis of existing head-to-head competition between the merging parties using diversion and related analyses over market structure. Clearly, market definition and market shares are not definitive for predicting competitive effects from a merger, and but neither is any other single analysis.

Finally, as an organizational point, it is unclear why certain other forms of economic evidence/analyses discussed elsewhere in the proposed revisions are not listed and discussed in this section. For example, Section 6.1 discusses the use of diversion ratios, upward pricing pressure, and merger simulations to evaluate the unilateral effects of a merger of differentiated products. The proposed revision appears to treat these types of economic evidence or analysis similarly to the five listed in Section 2.1. If there is a reason to treat these other analyses differently from those listed in Section 2.1, then there should be some

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<sup>3</sup> See Mary Coleman and James Langenfeld, “Natural Experiments,” *Issues in Competition Law and Policy*, American Bar Association (2008), Vol. 1, 743-772.

explanation and a highlighting of any implications for the analysis of a merger. Otherwise, it would seem appropriate to discuss them all in this section.

## *2.2 Sources of Evidence*

This section mentions three sources of evidence: Merging Parties, Customers, and Other Industry Participants and Observers. This section is also a helpful new addition in the proposed revision. In particular, the discussion of information from customers and other industry participants clarifies how the agencies have conducted their investigations for decades.<sup>4</sup> Customers presumably know the competitive situation fairly well because they are market participants, and it is they who are most likely to lose if competition is reduced by a merger. The use of information from the merging parties is also helpful, but there should probably be some caution expressed on the use of documents from the merging parties. For example, business documents frequently use the term “market” to mean something different from the term used in antitrust analysis for evaluating the competitive impact of a merger. Also, presumably one document from a lower level employee should not be given great weight when there are many other documents that imply different competitive outcomes from the proposed merger.

There is a conceptual problem with one of the examples in this section. In particular, Section 2.2.1 on page 4 states:

[I]f a firm sets price well above marginal cost, that normally indicates either that the firm is coordinating with its rivals or that the firm believes its customers are not highly sensitive to price.

This type of statement oversimplifies the economic situation in many industries, and can often lead to incorrect conclusions about the competitiveness of a market. First, all costs are marginal in the long run, and relatively few costs are marginal in the very short run. Accordingly, one needs to define the relevant time frame for measuring and what is included in marginal cost.<sup>5</sup> Operating or variable costs are often used to approximate marginal costs, but they can be reliably used only if there is a definition of an appropriate time period. For example, consider a hospital. If one wants to measure the variable costs of an inpatient for a given day, then that would typically be the cost of the medications and supplies she used during the day. The nurses’ and staffs’ time are largely fixed on a given day, so their salaries may not be considered a variable or a marginal cost of adding one patient. In this case there would be quite a large difference between patient revenue and marginal cost. However, many hospitals are in competitive markets, and at best break even when their full costs are included. If the relevant concept for measuring competitive effects and marginal cost is instead a year or two, then a hospital would be able to increase or decrease staff and the amount of equipment (such as X-Ray machines) based on the patient volume, so marginal cost would be much higher. As such, this longer run measure of marginal cost would be

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<sup>4</sup> See, for example, James Langenfeld, “The Use of Customer Complaints in Antitrust Analysis,” Government Antitrust Litigation Advisory, July 1998, 1-5.

<sup>5</sup> There are virtually no industries that can be sustained if price equals the cost of goods sold, since there are other costs that need to be covered by revenues. Some of these other costs may be captured in what is often call “operating” or “variable” costs, but that is certainly not always the case.

much closer to average revenue, and there may be no implication of coordinated behavior or there is an inelastic demand for a hospital's or group of hospitals' services.

Moreover, according to the theory of multiproduct firms, a competitive firm will not necessarily be driven to price being equal to marginal cost, regardless of whether the costs are short run or long run. Multiproduct firms do not set price equal to marginal costs for each product, because common costs will never be incremental cost for a single product.<sup>6</sup> Accordingly, any inference of coordination from prices being greater than marginal cost for a product would not seem appropriate, at least for multiproduct firms.

Here and in several other places the proposed revision would benefit from more precision in defining concepts such as marginal cost, and even including somewhat arbitrary benchmarks. For example, the proposed revision may benefit by including a starting point for defining marginal cost would be costs that change with an increase or decrease of ten percent in volume over a year, and then adjust this as appropriate for each industry.

The concern regarding the relevant time period also applies to the discussions on marginal costs and margins in several parts of the proposed revision, including the text in Section 4.1.3 on implementation of the hypothetical monopolist test, the use of margins in Section 6.1 for evaluating the unilateral effects with differentiated products, and has implications for measuring efficiencies in Section 10.

### **3. Targeted Customers and Price Discrimination**

As this prominent new section indicates, targeted customers and price discrimination are not only covered here, but also in Sections 4, 5, 6, and 7. The existing HMGs address price discrimination markets, but do this in a more limited fashion in discussions of market definition (Section 1.12) and competitive effects (Section 2.21). Presumably there are reasons for the substantially increased attention in the proposed revisions. If the agencies contemplate challenging many mergers based on a loss of competition for some targeted customers of the merging firms based on price discrimination, then it would appear to be entirely appropriate to devote this much space to the topic. Otherwise, the agencies should consider consolidating some of the discussions of targeted customers and price discrimination.

There is one issue related to price discrimination and targeted customers that the revision should consider covering, at least in evaluating the competitive effects of a merger. Frequently mergers may result in prices going up to some customers and down to others. This may be due to increased ability to price discriminate, or just fixing inefficient pricing policies so that prices for each customer may better cover the cost of serving that customer. The economics of most types of price discrimination result in prices being higher for some customers and lower for others compared to uniform pricing. Revised HMGs should address some fundamental questions for these circumstances. Under the approach articulated in the proposed revision, would the agencies challenge a merger that resulted in price discrimination benefitting some customers and disadvantaging others? Would the agencies

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<sup>6</sup> See, for example, William Baumol, John Panzar, and Robert Willig, *CONTESTABLE MARKETS AND THE THEORY OF INDUSTRIAL STRUCTURE* (1982).

attempt to measure the net change in consumer welfare of the combination of the winners and losers from the merger, or just target the losers since they might be considered targeted customers?<sup>7</sup> The proposed revision would benefit from addressing these questions.

#### **4. Market Definition**

In general, this and the other parts of Section 4 do an excellent job describing how market definition should fit into merger analysis, correctly stating “[m]arket definition is not an end in itself: it is one of the tools the Agencies use to assess whether a merger is likely to lessen competition.” However, the Agencies should also consider some editing in the overview section.

For example, the last sentence in the carry-over paragraph may be improved with something to the effect of:

Relevant market need not have precise metes and bounds, *and often will not, but market definitions that are not precisely drawn can still be useful in evaluating the competitive effects of a merger.* [[Suggested addition in italics.]]

This section also states:

Relevant antitrust markets defined according to the hypothetical monopolist test are not always intuitive and may not align with how industry members use the term “market.”

As mentioned above, I certainly agree that the term “market” to a businessperson often does not mean an antitrust market designed to measure the competitive impact of a merger. However, I believe antitrust markets are intuitive, if one clearly understands the purpose for defining markets in merger analysis. I suggest a minor edit to this sentence, as follows.

Relevant antitrust markets defined according to the hypothetical monopolist test *may not at first appear* intuitive and may not align with how industry members use the term “market.”

##### ***4.1 Product Market Definition***

Some of the most potentially significant changes in the proposed revisions occur in the market definition sections, with related changes discussed in the unilateral effects sections (e.g., Section 6.1 Pricing of Differentiated Products for Differentiated Products). Although not completely clear from the wording of the proposed revisions, it appears that the revisions

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<sup>7</sup> Mergers that increase price discrimination even without a reduction in output can reduce net consumer welfare. See James Langenfeld and Wenqing Li, “Price Discrimination and the Cruise Line Industry: Implications for Market Definition, Competition, and Consumer Welfare,” *International Journal of the Economics of Business*, Vol. 15, Issue 1, February 2008, 1-25.

contemplate defining markets starting with a hypothetical price increase for as little as one product of one of the merging firms. Section 4.1.1 states that the hypothetical monopolist test:

requires that a hypothetical profit-maximizing firm, not subject to price regulation, that was the only present and future seller of those products (“hypothetical monopolist”) likely would impose at least a small but significant and non-transitory increase in price (“SSNIP”) on at least one product in the market, including at least one product sold by one of the merging firms.

. . . When applying the hypothetical monopolist test to define a market around a product offered by one of the merging firms, if the market includes a second product, the Agencies will normally also include a third product if that third product is a closer substitute for the first product than is the second product.

This appears to be a substantial change from the existing HMGs, which hypothesize a SSNIP for all products in a hypothetical market, and assume that at least the competing products of the merging firms both raise their prices. Assuming this change to hypothesizing asymmetric price increases is intended in the proposed revision, it has the potential for justifying much narrower markets than the approach in the existing HMGs. I recommend that the language be clearer, and perhaps that an example be added following the current Example 5 if the change is intended. If this change is not intended, I suggest indicating that asymmetric price changes are covered in the competitive effects sections.

Another change in the proposed revision highlights that even if most customers would choose to purchase outside the hypothetical market in the face of a price increase, the price increase could still be profitable. The proposed revision in Section 4.1.1 strongly makes the point that:

The hypothetical monopolist test may identify a group of products as a relevant market even if customers would substitute significantly to products outside that group in response to a price increase.

. . . [Products A and B are a relevant market} even though two-thirds of the sales lost by one product when it raises its price are diverted to products outside the relevant market.

Economic theory supports such a statement. However, accurately measuring diversions can be very difficult. As such, if the evidence shows a substantial number of customers would choose options outside the hypothetical market in response to an assumed price increase, then other analyses should be employed to confirm the relevant market.

The ranking of products to be included in the market using diversion analysis, such as that described in Example 6, is also different from the test in the current HMGs. The existing HMGs’ approach (Section 1.0) adds the next closest substitute to a hypothetical market if a price increase for hypothetical market would not be profitable. The manner described in the proposed revision is adding to the market any product that is a closer substitute than the merger parties’ products are for each other. In most instances, it appears the two approaches would end up the same relevant market.

The analysis in Section 4.1.2, Benchmark Prices and SSNIP Size, also may be challenging to apply in practice. Consider the statement about estimating “implicit” prices.

In some cases, no explicit price is charged for the firms’ specific contribution, but an implicit price can be derived.

Examples 8 and 9 relating to oil pipelines may make sense, as does using a 10 percent hypothesized price increase for the SSNIP. However, virtually all manufacturers and distributors buy goods, and then manufacture other products for sales or resell the goods they buy. As such, the proposed revisions would presumably require estimating the value added for every manufacturer or distributor before applying a 10 percent SSNIP, which will often be a complex analysis. The proposed revision attempts to address this issue by saying the Agencies will use a 5 percent test if the “implicit prices cannot be identified with reasonable clarity.” It would seem to be much more practical and efficient to state that the agencies will use a 5 percent test, unless it is very clear that implicit prices are important for the analysis, and they can be reliably estimated.

Section 4.1.3 discusses implementation of the hypothetical monopolist test, and does a good job of making explicit much of the evidence that is frequently used in performing the test. However, this section would benefit from highlighting economic and functional substitutes in market definition. As a practical matter, it is often easier to identify functional substitutes than it is to accurately estimate the subset of functional substitutes that are significant economic substitutes. The Agencies should consider explaining that functional substitutes may be a good place to start market definition analysis, but that in general there should be a next step in the analysis that determines what portion of the functional substitutes economically constrain the pricing of rivals in the hypothetical market being tested.

Section 4.1.3 also discusses the use of margin data, and my comments above on Section 2.2 apply to the language in 4.1.3.

Section 4.1.4 on market definition with targeted customers raises some of the same issues I discuss above regarding Section 3 on Targeted Customers and Price Discrimination. In addition, this section could benefit from more explanation of why the Agencies typically define markets for groups of customers rather than individual customers. My discussion above on Section 3 regarding the net effect of a merger on a group of consumers might provide some basis, but more is needed than “the Agencies are able to rely on aggregated market shares [for a group of customers] that can be more helpful in predicting the competitive effects of the merger.”

#### ***4.2 Geographic Market Definition***

To the extent this section is based on the principles discussed for product market definition, my comments on Section 4.1 apply. The discussion of the conditions when geographic markets should be based on supplier or customer location is excellent. The supply location approach includes exports, but excludes imports. The customer locations approach is just the opposite. This section’s discussion correctly identifies important types of evidence for defining markets based on supplier location, and the use of customer location when there is geographic price discrimination.

## **5. Market Participants, Market Shares, and Market Concentration**

### ***5.1 Market Participants***

The proposed revision's treatment of firms as market participants based on supply side responses is similar to that in the existing HMGs (Section 1.3). That is, the proposed revision (1) defines the economic concept by creating the new term "rapid entrant" ("[f]irms that are not current producers in a relevant market, but that would very likely provide rapid supply responses with direct competitive impact in the event of a SSNIP") and (2) includes these firms as market participants. However, the proposed revision does not include the benchmark in the existing HMGs for treating firms as market participants (Section 1.322, less than a year to affect the market) and does not include the discussion of sunk costs (Section 1.32). The proposed revision's Examples 16 and 17 do provide some guidance but, as in other parts of the proposed revision, a relatively simple benchmark has been removed that may result in less clarity.

### ***5.2 Market Shares***

The existing HMGs favored revenue-based shares in markets with relatively differentiated markets, units of output "if firms are distinguished primarily on basis of their relative advantages in serving different buyers or groups of buyers", and capacity or reserves "if it is these measures that most effectively distinguish firms" (Section 1.41). The proposed revision states:

In most contexts, the Agencies measure each firm's market share based on its actual or projected revenues in the relevant market.

This statement might be taken to create a presumption for using revenue shares. However, the proposed revision correctly states:

In cases where one unit of a low-priced product can substitute for one unit of a higher-priced product, unit sales may measure competitive significance better than revenues.

In markets for homogeneous products, a firm's competitive significance may derive principally from its ability and incentive to rapidly expand production in the relevant market in response to a price increase or output reduction by others in that market. ... In such markets, capacities or reserves may better reflect the future competitive significance of suppliers than revenues, and the Agencies may calculate market shares using those measures.

In my experience these two market characteristics can often occur, and the revision may want to make it clearer that the economics of the market will determine how shares are calculated.

Assigning market shares to market participants that are not currently selling in the market, as appropriately contemplated in the proposed revision, can present practical challenges. There are, however, some instances where the principles articulated in the proposed revision can lead to reasonably accurate shares of firms not currently selling in the market. For example,

in many pipeline or gasoline refining mergers, firms would likely enter new geographic areas if there were an increase in the net-backs due to a merger. These new competitors presumably would be “rapid entrants” that are often limited by the capacity of pipelines, and can therefore be assigned market shares no larger than shares based on capacity. One can also calculate net-backs that can eliminate “capacity that is committed or so profitably employed outside the relevant market, or so high-cost, that it would not likely be used to respond to a SSNIP in the relevant market.”

One area where this section could use clarification relates to markets defined as serving targeted customers. This section of proposed revision states:

In most contexts, each firm’s market share is based on its actual or projected revenues from the targeted customers. However, the Agencies may instead measure market shares based on revenues from a broader group of customers if doing so would more accurately reflect the competitive significance of different suppliers in the relevant market.

Similar to my comments above on Section 3, the proposed revision would be improved if there were a clear statement of an economic principal for measuring market that include the customers not in a position to be targeted by a price increase due to the merger.

### ***5.3 Market Concentration***

The proposed revision has certainly improved the HHI thresholds by more accurately reflecting Agency practice. As I pointed out in my comments on the initial 20 questions the Agencies raised about the HMGs, a poll of 40 antitrust experts at a recent seminar before the Workshops 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, clearly in line with revised levels.

One aspect of the proposed revision may raise some concerns, however:

The Agencies may measure market concentration using the number of significant competitors in the market. This measure is most useful when there is a gap in market share between significant competitors and smaller rivals or when it is difficult to measure revenues in the relevant market. The Agencies also may consider the combined market share of the merging firms as an indicator of the extent to which others in the market may not be able readily to replace competition between the merging firms that is lost through the merger.

This approach would appear to discount a competitive fringe that could expand substantially if there were an attempt to raise price after the merger. In addition, there is no clear definition of what constitutes a “significant competitor” and “smaller rivals”. I believe the proposed revision would benefit from specific criteria and definitions for determining when one would “measure market concentration using the number of significant competitors in the market.”

## 6. Unilateral Effects

This section offers more specifics on the evaluation process of unilateral effects analysis than the current HMGs, and there is certainly merit in explaining in more detail what the agencies consider and do. To understand how important each potential analysis of competitive effects is, it is also important to explain in simple terms why each set of analyses is performed, any limitations they may have, and how different types of effects are part of an overall assessment. There are some instances where this section could be clearer.

For example, the proposed revision in Section 6 Unilateral Effects has sections on differentiated products, markets where sellers negotiate price or use auctions, relatively homogeneous products and the potential for output or capacity reductions, and innovation and product variety. The beginning of the section says:

These [four] effects do not exhaust the types of possible unilateral effects; for example, exclusionary unilateral effects also can arise.

It is certainly true that any list of relevant issues relating to predicting unilateral effects resulting from a merger would not be exhaustive. However, if the HMGs are going to mention “exclusionary unilateral effects”, then there should be at least some discussion that explains what the Agencies intend here, albeit perhaps in a footnote.<sup>8</sup>

The introductory section also states:

A merger may result in different unilateral effects along different dimensions of competition. For example, a merger may increase prices in the short term but not raise longer-term concerns about innovation, either because rivals will provide sufficient innovation competition or because the merger will generate cognizable research and development efficiencies. See Section 10.

There is a balancing implied in this statement that is actually very important if the goal of merger enforcement is to maximize consumer welfare, which relates to my comments on Sections 3 and 4.1.3. As has been demonstrated, there can be a loss in short-term consumer surplus due to higher prices that is likely to be offset by relatively modest increase in innovation.<sup>9</sup> Relying on the proposed revision’s Section 10 to address this balancing may

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<sup>8</sup> The proposed revision recognizes the existence of potential foreclosure effects from a horizontal merger, but the current Non-Horizontal Merger Guides (last updated in 1984) do not even mention foreclosure. Presumably foreclosure concerns are more central to the competitive effects from vertical mergers, and that would argue for updating the vertical as well as the horizontal merger guidelines. See, James Langenfeld, “Non-Horizontal Merger Guidelines in the United States and the European Commission: Time for The United States to Catch Up?,” *George Mason Law Review*, Vol. 16, No. 4, Summer 2009, 851-884, and James Langenfeld “Needed Revisions of the Non-Horizontal Merger Guidelines,” *The Threshold*, Vol. 9, No. 2, Spring 2009, 30-39.

<sup>9</sup> See, for example, James Langenfeld and Wenqing Li, “Intellectual Property and Agreements to Settle Patent Disputes: The Case of Partial Settlement Agreement with Payments from Branded to Generic Drug Manufacturers,” *Antitrust Law Journal*, Vol. 70, Issue 3, Spring 2003, 777-818.

result in challenges to mergers where the merger would likely increase (or at least not decrease) consumer surplus in the long run. Footnote 12 in Section 10 of the proposed revision states “The Agencies normally give the most weight to the results of this analysis over the short term.” However, even a merger that does not necessarily result in merger-specific efficiencies (as defined in Section 10) could improve longer-run consumer welfare. The net effect on consumer welfare depends on how long and significant any price increase was after the merger and how likely the merger would be in stimulating more innovation. This trade-off would appear important, given the proposed revision explicitly devotes a section in the competitive effects of a merger on innovation. Accordingly, the proposed revision would benefit from some clearer recognition of the potential trade-off between short run and long run consumer surplus.

### ***6.1 Pricing of Differentiated Products***

This section does a very good job of explaining a number of analyses of unilateral competitive effects in differentiated products markets. For example, while the Agencies should be cautious in attempting to define markets using diversion ratios and upward pricing tests when a significant fraction of customers do not treat the merging firms as each other’s closest competitors, those tests are useful in analyzing the competitive effects within a differentiated product or geographic markets. However, the proposed revision may overstate the case for these analyses when it says:

Diagnosing unilateral price effects based on the value of diverted sales need not rely on market definition or the calculation of market shares and concentration. The Agencies rely much more on the value of diverted sales than on the level of the HHI for diagnosing unilateral price effects in markets with differentiated products.

Presumably the level of concentration should provide a minimum threshold for challenging a merger, and after that evidence of diversion between the products of the merging parties may be used to determine the likely impact of a merger. Moreover, under many circumstances other firms with substantial shares would be more likely to follow a post-merger unilateral price increase, since larger share firms are more likely to find a price increase profitable than smaller competitors with fewer sales (who would be more likely to benefit from expanding sales rather than increasing prices). The existence of other large firms should be reflected in the HHI, so that HHIs could be important in evaluating both unilateral and coordinated effects.

As discussed above, it is not clear why merger simulations (and other analytical tools) specifically mentioned in this section are not included in Section 2.1 Types of Evidence. However, the proposed revision in Section 6.1 is clearly on point when it says:

[The Agencies] place more weight on whether their merger simulations consistently predict substantial price increases than on the precise prediction of any single simulation.

The Agencies may consider modifying certain statements relating to merger simulations. For example, the proposed revision states:

[M]erger simulation methods need not rely on market definition.

Although technically true, the initial classification and set up of most merger simulations make assumptions that in effect define (or at least substantially shape) a product or geographic market. For example, these models are often based on statistical estimations from a system of demand equations, which are based on organizing products into different groups ex ante, and calculating average revenue and shares of expenditures for these groups. My experience is that reorganizing the same sales into different groups can lead to very different predictions from the same simulation program. Market definition analysis can be used to narrow the number of relevant simulations, increasing the reliability of the simulations.

In addition, merger simulation models can contain a number of strong assumptions that are often not verified. As such, the proposed revision would benefit from a clearer statement that the Agencies will expect evidence to verify the key assumptions in these models before giving them substantial weight.

## ***6.2 Bargaining and Auctions***

Good section, no comments.

## ***6.3 Capacity and Output for Homogeneous Products***

Good section, no comments.

## ***6.4 Innovation and Product Variety***

The comments above on the Introduction of Section 6 above about innovation and balancing short term pricing would presumably be best addressed in Section 6.4.

As in other sections of the proposed revision, this section avoids specific benchmarks. For example, the proposed revision states:

The Agencies therefore also consider whether a merger will diminish innovation competition by combining two of a very small number of firms with the strongest capabilities to successfully innovate in a specific direction.

In reality, the Agencies often have a minimum benchmark in mind, so the Agencies should provide a range or at least an example of what they consider “a very small number”.

Regarding product variety, the proposed revision would benefit from more clarity. The revision states:

An anticompetitive incentive to reduce product variety as a result of the merger is greater and more likely, the larger is the share of the profits from one product that come at the expense of the profits from the other product.

Here, the proposed revision would be improved by either explaining the motivation behind this statement, or providing an example showing why consumers would likely be particularly at risk to be harmed under these conditions.

## **7. Coordinated Effects**

The coordinated effects section of the existing HMGs organizes the analysis into three criteria, all of which would need to be met before there would likely be increased danger of coordinated effects: ability to reach an agreement, ability to monitor the behavior of competitors with respect to any coordinated activities, and ability to punish any competitor who cheated on the coordination. These concepts are still in the proposed revision, but many other considerations have been added. The ability to reach an agreement seems to be addressed as measured by market concentration in Section 7.1, and monitoring and punishing in Section 7.2.

This section is clearly an improvement over the existing HMGs in that it begins by offering a definition of coordinated interaction, and attempting to explain why coordinated interaction can create competition problems.

Coordinated interaction involves conduct by multiple firms that is profitable for each of them only as a result of the accommodating reactions of the others. These reactions can blunt a firm's incentive to offer customers better deals, by undercutting the extent to which such a move would win business away from rivals. They also can enhance a firm's incentive to raise prices, by assuaging the fear that such a move would lose customers to rivals.

However, there is other language that is relatively confusing, and arguably could place little or no constraint on when coordinated behavior would not occur. For example:

Coordinated interaction includes situations in which each rival's response to competitive moves made by others is individually rational, and not motivated by retaliation or deterrence, but nevertheless emboldens price increases and weakens competitive incentives to reduce prices or offer customers better terms.

The proposed revision also appears to suggest that the Agencies believe the burden for showing anticompetitive coordination should not be held to an overly rigorous standard. As these sections state:

Coordinated interaction includes conduct not otherwise condemned by the antitrust laws. . . . Pursuant to the Clayton Act's incipency standard, the Agencies may challenge mergers that in their judgment pose a real danger of harm through coordinated effects, even without specific evidence showing precisely how this will happen.

It is not clear why the incipency statement appears in this section, since it presumably applies to all aspects of the Agencies challenging a merger and it has already been discussed in Section 1 of the proposed revision. It would seem that the mention of incipency in the introduction should be sufficient, unless the proposed revision intends to have different standards for different types of competitive effects analyses.

### ***7.1 Impact of Merger on Coordinated Interaction***

This section almost seems to concede that the analysis of coordinated interaction does not lend itself to as rigorous an analysis as unilateral effects. For example, the proposed revision says:

There are, however, numerous forms of coordination, and the risk that a merger will induce adverse coordinated effects typically is not susceptible to quantification or detailed proof.

It is true that there may be numerous forms of coordination, but there are a number of quantifiable analyses that are discussed in Section 7.2 that can be as useful in predicting anticompetitive behavior as the ones discussed in Section 6. See the examples discussed in the comments on the next section.

### ***7.2 Evidence a Market is Vulnerable to Coordinated Conducts***

This section starts by stating that a past history of coordinated effects or collusion in similar markets would be given significant weight in predicting the ability of a merger to increase the likelihood of coordinated effects, which does reflect Agency practice. The remainder of this section discusses various analyses, at least some of which are as “susceptible to quantification or detailed proof” as analyses in Section 6.

For example, consider:

A firm is more likely to be deterred from making competitive initiatives by whatever responses occur if sales are small and frequent rather than via occasional large and long-term contracts or if relatively few customers will switch to it before rivals are able to respond. A firm is less likely to be deterred by whatever responses occur if the firm has little stake in the status quo. For example, a firm with a small market share that can quickly and dramatically expand, constrained neither by limits on production nor by customer reluctance to switch providers or to entrust business to an historically small provider, is unlikely to be deterred. Firms are also less likely to be deterred by whatever responses occur if competition in the relevant market is marked by leapfrogging technological innovation, so that responses by competitors leave the gains from successful innovation largely intact.

There appear to be 3 quantifiable tests in this paragraph for determining when coordinated effects are likely to occur, even without explicitly stating how the coordination would take place.

One potentially quantifiable area that perhaps should be given more weight in any revised HMGs is the potential gain from coordination for the market participants. The existing HMGs focus on reasons why coordination could be difficult, but they do not address why firms would find it profitable to engage in coordination. We know some form of coordination has existed in a number of industries based on pleas in a number of price fixing cases, so some firms must perceive there are potential benefits from coordination that exceed

the expected costs. The proposed revision addresses the existing HMGs' omission of gains to coordination by saying:

The Agencies regard coordinated interaction as more likely, the more the participants stand to gain from successful coordination. Coordination generally is more profitable, the lower is the market elasticity of demand.

As Prof. Marx pointed out in her testimony at one of the Washington DC workshops, there are quantitative analyses that can be applied to estimate the expected benefit from coordination, which in theory could be compared at least in general terms to the expected costs of the coordination. These types of analyses clearly have limitations, as do the other unilateral effects analyses in the proposed revision, but quantitative modeling of potential gains and losses for coordination can assist in evaluating the likelihood of coordinated effects.

## **8. Powerful Buyers**

No comment.

## **9. Entry**

This section continues to follow the Timeliness, Likelihood, and Sufficiency paradigm of the existing HMGs. However, there are substantive changes that include (1) elimination of any benchmarks for timeliness of entry and (2) no explicit mention of the minimum viable scale of entry as a percent of the market (although it does say “[r]ecent examples of entry . . . can be informative regarding the scale necessary for an entrant to be successful”). Both of these concepts have been used by the Agencies, and there are typically questions relating to each in Second Requests. Eliminating these roughly quantifiable benchmarks could create more uncertainty about Agency policies, so the Agencies should carefully consider whether the gain in generality offsets the loss of more predictable benchmarks.

## **10. Efficiencies**

This section in general follows the discussion in the current HMGs, but has added a number of useful clarifications and suggested analyses. For example, the proposed revision appropriately states

[E]fficiency claims substantiated by analogous past experience are those most likely to be credited.

There are some aspects of this section, however, that the Agencies should consider modifying.

First, my discussion above relating to Section 4.1.3 regarding short and long term pricing should be considered in modifying the footnote 12 in the proposed revision, which says:

The Agencies normally give the most weight to the results of this analysis over the short term. The Agencies also may consider the effects of cognizable efficiencies with no short-term, direct effect on prices in the relevant market. Delayed benefits

from efficiencies (due to delay in the achievement of, or the realization of customer benefits from, the efficiencies) will be given less weight because they are less proximate and more difficult to predict. Efficiencies relating to costs that are fixed in the short term are unlikely to benefit customers in the short term, but can benefit customers in the longer run, e.g., if they make new product introduction less expensive.

This footnote in the proposed revision is a slightly edited and expanded version of footnote 37 in the existing HMGs. However, a merger may result in a short-term price increase that is more than offset by the benefits in innovation or longer term cost reductions, and such cost reductions may also affect currently produced products in the foreseeable future. This section would benefit from a more explicit statement about weighing the potentially mixed effects of a merger, and recognition that cost reductions are not limited to new products.

As in the rest of the revision, the proposed revision appears to have followed Paul Denis' recommendation of avoiding detailed burden shifting arguments. However, this section retains the current HMGs' statement:

[I]t is incumbent upon the merging firms to substantiate efficiency claims so that the Agencies can verify by reasonable means the likelihood and magnitude of each asserted efficiency, how and when each would be achieved (and any costs of doing so), how each would enhance the merged firm's ability and incentive to compete, and why each would be merger-specific.

It is true that the merging parties are in a best position to document anticipated efficiencies from a merger, so the merger parties should take the lead in substantiating any efficiency claims. In requiring the merging parties to substantiate any efficiencies, presumably this substantiation should be no higher than what the Agencies might 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. Perhaps there should some explicit statement that indicates that Agencies will give very careful and even-handed weight to efficiency evidence.

Footnote 11 in this section of the proposed revision follows the existing HMGs in stating:

The Agencies normally assess competition in each relevant market affected by a merger independently and normally will challenge the merger if it is likely to be anticompetitive in any relevant market. In some cases, however, the Agencies in their prosecutorial discretion will consider efficiencies not strictly in the relevant market, but so inextricably linked with it that a partial divestiture or other remedy could not feasibly eliminate the anticompetitive effect in the relevant market without sacrificing the efficiencies in the other market(s).

As I discuss above in relation to market definition and competitive effects, there should be some recognition that mergers may result in increased prices to some consumers on some products, and decrease to many more prices. Under these conditions the merger may benefit consumers on balance, as long as the efficiencies are sufficiently merger-specific. This would be particularly true if it can be shown that the same consumers buy products where the price may increase and also buy products where they decrease, since there would be less

concern that some customers would be disadvantaged by the merger even if others would benefit.

The proposed revision also retains the current HMGs' language:

[Efficiencies] such as those relating to procurement, management, or capital cost are less likely to be merger-specific or substantial, or may not be cognizable for other reasons.

This language continues to discount economies of scale for procurement and capital costs, and assumes that management is fungible. Hopefully the statement mentioned above ("efficiency claims substantiated by analogous past experience are those most likely to be credited") could still be used to address the concerns expressed in the latter statement. However, the latter statement regarding procurement appears inconsistent with the proposed revision's new Section 12 on Competing Buyers. Section 12 states:

Reduction in prices paid by the merging firms not arising from the enhancement of market power can be significant in the evaluation of efficiencies from a merger, as discussed in Section 10.

I suggest revising the language in Section 10 be clarified and made consistent with Section 12.

## **11. Failure and Exiting Assets**

No comments.

## **12. Merger of Competing Buyers**

This section is a useful addition to the HMGs. For example, see my last comment on Section 10 above. However, Section 12 states:

The Agencies do not view a short-run reduction in the quantity purchased as the only, or best, indicator of whether a merger enhances buyer market power.

In most situations, an anticompetitive effect is best measured as an output reduction.<sup>10</sup> This is particularly true for increases in buyer market power, since the result of increased buyer power is forcing pricing below the competitive level. There appears to be a need to qualify and/or explain this statement.

## **13. Partial Acquisitions**

No comments.

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<sup>10</sup> There are some very limited instances where output reduction is not necessary for an anticompetitive effect from a merger. See, for example, James Langenfeld and Wenqing Li, "Price Discrimination and the Cruise Line Industry: Implications for Market Definition, Competition, and Consumer Welfare," *International Journal of the Economics of Business*, Vol. 15, Issue 1, February 2008, 1-25.