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I. INTRODUCTION

The Federal Trade Commission ("FTC") and the Department of Justice ("DOJ") issued revised Horizontal Merger Guidelines ("HMGs") on August 19, 2010.[2] The HMGs resulted from a process that obtained comments about revising the 1992 Horizontal Merger Guidelines (1992 HMGs), held workshops, issued proposed HMGs, and received comments on the proposed HMGs before finalization.[3] The stated purposes of the HMGs are:

> [to] describe the principal analytical techniques and the main types of evidence on which the Agencies usually rely to predict whether a horizontal merger may substantially lessen competition[,] . . . to assist the business community and antitrust practitioners by increasing the transparency of the analytical process underlying the Agencies' enforcement decisions[, and to] assist the courts in developing an appropriate framework for interpreting and applying the antitrust laws in the horizontal merger context.[4]

This article discusses how well the HMGs achieve the first two of these goals, and offers some thoughts related to third. First, the HMGs change the landscape for evaluating mergers in several potentially important ways, at least compared to the 1992 HMGs and many typical past practices. These changes in part reflect Agency practices since the 1992 HMGs, and in part reflect an increased emphasis on certain types of analysis and reduced emphasis on others. Second, the HMGs offer many more details of the analyses and types of evidence considered by the Agencies, and in this way may help practitioners and the business community understand merger review by "increasing the transparency." At the same time, however, the HMGs may reduce the predictability of merger review by removing most of the simple benchmarks and not providing benchmarks for the newly described analyses. Third, it remains to be seen whether the courts will give the HMGs and their new analyses as much (or more) weight as they have given the 1992 HMGs.

The following section discusses the related, but distinct, concepts of transparency and predictability. The next section summarizes some of the major changes in the HMGs from the

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[2] "Horizontal Merger Guidelines," U.S. Department of Justice and the Federal Trade Commission, August 19, 2010, *available at*: http://www.ftc.gov/os/2010/08/100819hmg.pdf, (hereinafter HMGs).

[3] This article reflects some of the author's comments on the draft HMGs. *See* James Langenfeld, "*Views on the Proposed Horizontal Merger Guidelines*," submitted and received by the FTC on June 4, 2010, *available at*: http://www.navigantеconomics.com/docs/hmg-Langenfeldcommentsonproposedrevision-June4.pdf.

[4] HMGs § 1.

1992 HMGs, followed by a section that describes the HMGs' elimination of many benchmarks, sections that discuss many of the specific analytic techniques in the HMGS, and a section the potential impact of the HMGs on the courts.

II. TRANSPARENCY AND PREDICTABILITY

In evaluating the impact of the HMGs, it is useful to keep in mind the distinction between transparency and predictability. Providing "transparency of the analytical process" is central to the usefulness of any guidelines. However, understanding how enforcement decisions are made can be useful only if the HMGs provide clear guidance and do not imply that everything important will be analyzed. As discussed below, the substantial expansion of the HMGs suggests there has been an attempt to provide more transparency.

These added discussions have, however, reduced the predictability of the HMGs in at least one way. A major difference between the HMGs and 1992 HMGs is the elimination of many of the clear—although admittedly somewhat arbitrary—benchmarks in the 1992 HMGs. For example, the proposed HMGs eliminate the 2-year benchmark for evaluating the timeliness of entry. This and other benchmarks only provide a starting point for analyzing mergers, but starting points can be very helpful for all involved. The elimination of these benchmarks tends to work against the main goal of transparency—that is, the HMGs should provide clear and useful predictability. There are few clear starting points left in the HMGs. Accordingly, the HMGs improve transparency of the analyses the Agencies use, yet they may reduce 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 & 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 decision makers. Quantitatively it is very significant, and any policy that ignores its runs substantial risk of departing from an optimal social result.[5]

The HMGs' 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 gains from reducing Type 1 and Type 2 errors.

III. KEY CHANGES IN EMPHASIS AND SUBSTANCE IN THE HMGS

Although the primary drafters and others have argued that the new HMGs are a continuation of Agency practice under the 1992 HMGs,[6] the new HMGs reflect a substantial

[5] Alan Fisher & Robert H. Lande, *Efficiency Considerations in Merger Enforcement*, 71(6) CALIF. L. REV. 71, 1670-77 (December 1983) (footnotes omitted).

[6] Diversion analysis has been advocated and used for Agency review of mergers since the 1992 HMGs were issued. *See* Carl Shapiro, *Mergers with Differentiated Products*, speech before the American Bar Association and the International Bar Association (Nov. 9, 1995), *available at*: http://www.justice.gov/atr/public/speeches/227167.htm; Carl Shapiro, *Mergers with Differentiated Products*, ANTITRUST, 23-30 (Spring 1996), *available at*: http://www.abanet.org/antitrust/mo/premium-at/at-magazine/96/Spring-1996-Vol10-No2.pdf.

increased emphasis on price discrimination and diversion analysis, and the introduction of recently developed analyses such as "upward pricing pressure" ("UPP") and related analyses.[7]

The HMGs now cover targeted customers and price discrimination in Sections 3, 4, 5, 6, and 7, with Section 3 being entirely devoted to the subject. The 1992 HMGs addressed price discrimination markets, but did so in a much more limited fashion in discussions of market definition (Section 1.12) and competitive effects (Section 2.21). Clearly the Agencies must believe there needs to be a much better understanding of the way they view the impact of price discrimination on merger analysis. Moreover, since the Agencies devote so much space to the topic, the Agencies presumably believe that there will be many mergers involving price discrimination that should be challenged.

Similarly, the HMGs employ diversion of sales between the merging parties for the hypothetical monopolist market definition test (Section 4.1.1) and for analysis of unilateral effects for differentiated products (Section 6.1), referencing diverted sales, diversion, or diversion ratios 22 times. In contrast, the 1992 HMGs mentioned these terms only twice in relation to customers diverting sales in the face of a price change: in Section 1.11 (footnote 9) on market definition and in Section 2.21 on unilateral effects in differentiated products markets.[8] The increased discussions of diversion analysis in part explain established Agency policy and practice established since 1992. However, the HMGs' substantially increase emphasis on price diversion and UPP types of analyses, and the continuing debate about their efficacy suggest there are some changes in how the Agencies currently review mergers with differentiated products.

The HMGs' detailed focus on price discrimination, diversion, and UPP analysis may have a substantial impact on merger enforcement. For example, theoretical models show that UPP-type analysis would lead to more investigations and flag more mergers as being problematic than standards typically applied by courts.[9]

IV. LOSS OF BENCHMARKS

As mentioned above, the HMGs have eliminated many of the clear—although somewhat arbitrary—benchmarks that existed in the 1992 HMGs. For example, the HMGs have eliminated the 2-year benchmark for evaluating the timeliness of entry. The HMGs also do not include the benchmark in the 1992 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

[7] Efforts to deemphasize market structure in favor of other analytical methods have been an ongoing part of Agency merger review for a number of years, but the new HMGs are the first to mention UPP analysis, and to discuss diversion analysis in detail. *See* Robert Lande & James Langenfeld, *From Surrogates to Stories: The Evolution of Federal Merger Policy*, ANTITRUST 5-9, (Spring 1997).

[8] Both the 2010 and 1992 HMGs also make frequent reference to substitution and other related terms; the many references to diversion and related terms are offered only to illustrate the change in focus of the new HMGs. The 1992 HMGs also mention these terms in different contexts—e.g., Section 2.12 on coordination interaction, Section 2.22 on capacity diversion, and Section 3.3 on likelihood of entry.

[9] For example, a UPP test may flag as problematic a merger of two of six equal-sized firms (diversion ratio 20 percent) if profit margins are as low as 30 percent and a 10 percent efficiencies credit is assumed. *See* Joseph Simons & Malcolm Coate, *Upward Pressure on Price Analysis: Issues and Implications for Merger Policy*, 6(378) EUR. COMMISSION J. 387-389 (2010), (hereinafter Simons & Coate, UPP); Elizabeth Bailey, Gregory Leonard, G. Steven Olley, & Lawrence Wu, *Merger Screens: Market Share-Based Approaches Versus "Upward Pricing Pressure"*, ANTITRUST SOURCE, 10 (Feb. 2010), *available at* http://www.abanet.org/antitrust/at-source/10/02/Feb10-Leonard2-25f.pdf; Gopal Das Varma, *Will Use of the Upward Pricing Pressure Test Lead to an Increase in the Level of Merger Enforcement?*, 24 (1) ANTITRUST 29 (Fall 2009).

against providing clear and useful predictability. My experience in and out of government suggests 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.

More importantly, the HMGs' focus 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 (on evaluating the unilateral effects with differentiate products), and Section 10 (measuring efficiencies). The HMGs would have benefitted 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. As the HMGs recognize, none of these measures of marginal costs can be reliably used unless there is a definition of an appropriate time period. The HMGs may have benefitted 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.

The HMG's treatment of firms as market participants based on supply side responses is similar to that in the 1992 HMGs (Section 1.3). That is, the HMGs: (1) define 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"[10]) and (2) include these firms as market participants. However, the HMGs do not include the benchmark in the 1992 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). As in other parts of the HMGs, a relatively simple benchmark has been removed that may result in less clarity.

Not only do the HMGs 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. Section 6.4 on innovation and product variety avoids specific benchmarks. For example, the HMGs state:

> 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."

Finally, Section 9 of the HMGs on entry continues to follow the "Timeliness, Likelihood, and Sufficiency" paradigm of the 1992 HMGs. However, there are substantive changes that include both eliminating any benchmarks for timeliness of entry and not explicitly mentioning 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"[11]). Both of these concepts have been used by the Agencies, and there are typically

[10] HMGs § 5.1.
[11] HMGs § 9.

questions relating to each in Second Requests. Eliminating these roughly quantifiable benchmarks could create more uncertainty about Agency policies.

V. THE HMGS' DESCRIPTIONS OF ANALYTIC TOOLS

The HMGs address more issues in greater detail than the 1992 HMGs. The expanded descriptions of the types of analyses and evidence increased the length of the HMGs by approximately a third compared to the 1992 HMGs, providing more detail on how the Agencies analyze mergers. The following subsections discuss various aspects of the different sections of the HMGs, highlighting how the HMGs may affect the transparency and predictability of enforcement.

A. Increased Discussion of Economic Analyses and Evidence

The new Section 2, titled "Evidence of Adverse Competitive Effects," includes subsections on the types of evidence and analyses (Section 2.1) and on the sources of evidence (Section 2.2). Section 2.1 provides a list of five types of economic analyses and evidence: effects of consummated mergers, comparisons based on experience, market shares and concentration, head-to-head competition, and being a disruptive competitor.[12]

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 is a "direct" measure if it controls 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. The vast majority of merger inquiries are attempts to analyze a merger that has not yet occurred, so 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. These four analyses can provide useful indirect evidence of how a merger may change the competitive situation that the Agencies have considered in the past. However, since they are all indirect evidence, there presumably would need to be a compelling reason to favor one over the other.

The HMGs appear to treat some of the newly highlighted indirect evidence listed in Section 2.1 as superior to the indirect evidence that the agencies and courts have traditionally used. For example, 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. Some commentators have challenged some of these newly highlighted or developed analyses as lacking any empirical basis, and others have criticized them for other reasons.[13] Clearly market definition and market shares are not definitive for predicting competitive effects from a merger, but presumably neither is any other single analysis.

Section 2.1.2 "Direct Comparisons Based on Experience," or "natural experiments," can be very helpful and have been increasingly used in merger analysis since the 1992 HMGs.[14] However, like other economic analyses, this natural experiment analysis is useful only if: (1) it reasonably fits the facts of the case; (2) employs sound economic methodologies; and (3) these

[12] Section 6.1 discusses other types of indirect economic evidence or analysis similarly to the five listed in Section 2.1, including the use of diversion ratios, upward pricing pressure, and merger simulations to evaluate the unilateral effects of a merger of differentiated products.

[13] *See, for example*, Dennis Carlton, *Revising the Horizontal Merger Guidelines*, J. COMPETITION L. & ECON. 619, 641-644 (August 18, 2010) (hereinafter Carlton).

[14] *See* Mary Coleman & James Langenfeld, *Natural Experiments*, (1) ISSUES IN COMPETITION LAW. & POL'Y, American Bar Association, 743-772 (2008).

methodologies are based on reliable information. The farther away the experiment is from the facts of the case, the less useful it is in assessing competitive effects. Presumably 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.

Section 2.2 mentions three sources of evidence: Merging Parties, Customers, and Other Industry Participants and Observers. The discussion of information from customers and other industry participants clarifies how the agencies have conducted their investigations for decades.[15] Customers typically 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.

In evaluating information from the merging parties, Section 2.2.1 of the HMGs states:

> [I]f a firm sets price well above incremental cost, that normally indicates either that the firm believes its customers are not highly sensitive to price (not itself of antitrust concern, see Section 4.1.3) or that the firm and its rivals are engaged in coordinated interaction (Section 7). Incremental cost depends on the relevant incremental output as well as on the time period involved, and in the case of large increments and sustained changes in output it may include some costs that would be fixed for smaller increments of output or shorter time periods.

This type of statement puts a great deal of weight on margins, in effect taking larger margins to imply market power (i.e., inelastic demand for differentiated products) or the implication that there already exists coordinated behavior that is raising prices about a competitive level.

There are a number of questions about placing this much weight on this type of evidence.[16] Apart from these concerns, the HMGs recognize the need to correctly measure costs, which may not be easy to measure in many industries, and so can lead to incorrect conclusions about the competitiveness of a market. Although the HMGs recognize both time and the increment of sales can substantially affect marginal cost estimation, they do not provide any approach or benchmark for determining how either will be determined for a given merger. The concern regarding the relevant time period and the appropriate increment of sales also applies to the discussions on marginal costs and margins in several parts of the HMGs, including the text in Section 4.1.3 on implementation of the hypothetical monopolist test and the use of margins in Section 6.1 for evaluating the unilateral effects with differentiate products. There are also implications for measuring efficiencies in Section 10.

In addition, according to the theory of multiproduct firms, a competitive firm will not necessarily be driven to price being equal to marginal cost for each product, 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 costs for a single product.[17] Accordingly, any inference of coordination from prices being greater than marginal cost for a product would not seem appropriate, at least for multiproduct firms. The HMGs do not discuss whether the Agencies will take this into account.

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[15] *See, for example*, James Langenfeld, *The Use of Customer Complaints in Antitrust Analysis*, Government Antitrust Litigation Advisory, 1-5 (July 1998).

[16] *See* Statement of Commissioner J. Thomas Rosch on the Release of the 2010 Horizontal Merger Guidelines, FTC Project No. P092900 (Aug. 19, 2010), *available at* http://www.ftc.gov/os/2010/08/100819hmgrosch.pdf.

[17] *See, for example*, WILLIAM BAUMOL, JOHN PANZAR, & ROBERT WILLIG, CONTESTABLE MARKETS AND THE THEORY OF INDUSTRIAL STRUCTURE (1982).

B. Targeted Customers and Price Discrimination

As mentioned above, the HMGs cover targeted customers and price discrimination in Sections 3, 4, 5, 6, and 7. Presumably the reasons for the substantially increased attention is a combination of concern that the Agencies need to better explain the implications of price discrimination and an interest in challenging more mergers based on a loss of competition for some targeted customers of the merging firms via the use of price discrimination.

Even with the expanded discussion, there is at least one issue related to price discrimination and targeted customers that the HMGs do not explain clearly. In particular, Sections 3 on 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 prices going up for some customers and down for 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. In fact, research shows that prices of some products would be likely to go up and others go down when ones applies some of the competitive effects analyses discussed by the HMG.[18] Will the Agencies challenge a merger that resulted in price discrimination benefitting some customers and disadvantaging others? Will the Agencies 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?[19] If the agencies are willing to just challenge customers who are disadvantaged and not take into account customers who benefit from the merger, then the Agencies may be increasing their scrutiny and potential challenges of mergers in industries exhibiting price discrimination.

C. Market Definition

The HMGs' Section 4 on market definition correctly states "[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." From this starting point, some of the most potentially significant changes in the HMGs occur in the market definition sections, with related changes discussed in the unilateral effects sections (e.g., Section 6.1).[20]

The HMGs rank the products to be included in the market in a different way than in the 1992 HMGs. The 1992 HMGs' approach (Section 1.0) added the next closest substitute to a

[18] Analyses such as upward pricing pressure balance product specific efficiencies that tend to lower prices for each product of the merging firms against the incentive to raise prices of each product after the merger. *See* Carlton, *supra* note 11, at 645-49.

[19] Mergers that increase price discrimination even without a reduction in output can reduce net consumer welfare. *See* James Langenfeld & Wenqing Li, *Price Discrimination and the Cruise Line Industry: Implications for Market Definition, Competition, and Consumer Welfare*, 15(1) INT'L J. ECON. BUSINESS 1-25 (February 2008).

[20] Market definition revisions missed some opportunities to clarify the implementation of market definition. For example, the HMGs may have benefitted by highlighting the differences between 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 have explained 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.

hypothetical market if a price increase for hypothetical market would not be profitable. HMGs' 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.

The HMGs in Section 4.4.1 then highlight that even if two-thirds of 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.

> 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.

The HMGs' approach appears to be an attempt to make sure the relevant product market does not exclude the products of merging firms from being in the same market because they are not each other's closest substitutes.[21] 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 presumably the Agencies will employed other analyses to confirm the relevant market—if for no other reason to be sure they can prevail in court if necessary.

Of potentially more significance is the HMGs now explicitly state the Agencies may apply the hypothetical monopolist test to define relevant markets by using an assumed price increase for only one product of one of the merging firms.[22] This "variable SSNIP" approach can present challenging problems in practice,[23] and has not been typical in past Agency merger reviews even though the 1992 HMGs may have allowed for its use.[24] Rather, "critical loss" analyses used to

[21] The HMGs acknowledge in Section 4.1.1 that other rival products may be included in the relevant market if diversion analysis shows that these products are closer substitutes for the merged firm's products than those products are for each other.

[22] For a discussion of variable price increases, *see* Carl Shapiro, *The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, 77 ANTITRUST L.J. (Sept. 2010), *available at* http://faculty.haas.berkeley.edu/shapiro/hedgehog.pdf.

[23] The traditional hypothetical monopolist test would identify a group of products that are the closest substitutes and then analyze whether a simultaneous price increase on all of those products would be profitable. However, it may be difficult to determine which products to include in the market when the merged firm is assumed to increase the price of only one product of one of the merging firms. For example, assume firms A and B produce products A1, A2, B1, and B2, and the combined diversion ratios between A1 and B1 and between A1 and B2 show it would profitable to increase the price on A1 following the merger. The relevant market should not be limited only to product A1, because firm A must compete with sales of products B1 and B2 for firms A and B to be in the same market. A narrow variable SSNIP test does not explain whether the relevant market should include (1) just A1 and B1, (2) A1, B1, and B2, (3) A1, A2, B1, and B2, or (4) these products plus similar products sold by other rivals.

[24] "In performing successive iterations of the price test, the hypothetical monopolist will be assumed to pursue maximum profits in deciding whether to raise prices on any or all of the additional products under its control," U.S. Department of Justice and Federal Trade Commission, 1992 Merger Guides, § 1.11 (April 2, 1992), (emphasis added), *available at* http://www.justice.gov/atr/public/guidelines/hmg.htm. *See* Joseph Farrell & Carl Shapiro,

define relevant markets typically have assumed price increases for all directly competing products of both merging firms.

This approach to market definition is grounded on the view that sales diversion and profit capture due to a price increase for only one product sold by one merging firm is sufficient to show that some post-merger price increases would be profitable, and is the same type of analysis as the UPP and other competitive effects tests in Section 6.1. Although not stated in the HMGs, a variable SSNIP for one or a small number of products of one merging firm (rather than a uniform SSNIP for all directly competing products of both firms), combined with a majority of customers purchasing other products that are deemed to be outside the relevant market, will likely lead the Agencies to define narrower relevant markets and flag more mergers for investigation and possible challenge.[25] The arithmetic logic of diversion analysis using a variable SSNIP may support this view in theory, but this approach may be difficult to reconcile with commercial realities and the standards typically applied by courts to define markets and analyze market structure.[26]

D. Concentration and Market Shares

The HMGs have certainly improved the Herfindahl-Hirschman Index ("HHI") thresholds by more accurately reflecting Agency practice.[27] As I pointed out in my comments on the draft 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 HMGs' treatment of concentration in Section 5.3 creates some uncertainty in enforcement:

> 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.

Recapture, Pass-Through, and Market Definition, 76 ANTITRUST L.J. 585-604 (2010), (discussing use of diversion analysis for market definition). Despite the reference to a variable SSNIP test in the 1992 HMGs, the experience of practitioners has not been to define markets based on a price increase of only one product sold by one of the merging firms. *See* Malcolm Coate & Joseph Simons, *Critical Loss vs. Diversion Analysis: Clearing Up the Confusion*, GCP ANTITRUST CHRONICLE, 15 (Dec. 2009), (hereinafter Coate &Simons, Confusion); Malcolm Coate & Joseph Simons, *Critical Loss v. Diversion Analysis: Another Attempt at Consensus*, CPI ANTITRUST J., 6 (April 2010).

[25] Research shows that using a variable price increase for only one product instead of a uniform price increase for all competing products of the merged firm has the potential for defining much narrower relevant markets, which may flag more mergers for full review and possible challenge. *See*, e.g., Coate & Simons, Confusion, *Id.*, at 14, and articles referenced therein.

[26] *See* Simons & Coate, UPP, *supra* note 9 at 389 ("[T]he UPP approach even with the 10 percent standard efficiencies deduction would mark a substantial break with historical enforcement patterns over the last two decades, let alone the outcome of recently litigated cases.")

[27] *See* HMGs' Section 5.3. The Agencies have presented no formal analysis justifying the higher HHIs, but there was never one presented for the 1992 HMGs levels.

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." The HMGs do not provide specific criteria and definitions for determining when one would "measure market concentration using the number of significant competitors in the market."[28]

The HMGs' approach to calculating market shares of existing competitors is fairly clear. However, assignment of market shares to market participants that are not currently selling in the market can present practical challenges and create uncertainty about how the Agencies will weigh the impact of these potential competitors. Nevertheless, there are some instances where the principles articulated in the HMGs 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."[29]

E. Unilateral Effects

Section 6 of the HMGs offers more specifics on the evaluation process of unilateral effects analysis than the 1992 HMGs, and there is certainly merit in explaining in more detail what the Agencies consider and do. In order to understand the importance of each potential analysis of competitive effects, 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 have been clearer.

For example, the HMGs 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, the HMGs mention "exclusionary unilateral effects" without any discussion that explains what the Agencies intend, and so provide little guidance.[30]

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[28] HMGs § 5.3

[29] HMGs § 5.2.

[30] The HMGs recognize 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?,* 16(4) GEORGE MASON L. REV, 851-884 (Summer 2009) and James Langenfeld, *Needed Revisions of the Non-Horizontal Merger Guidelines,* 9(2) THRESHOLD 30-39 (Spring 2009).

The HMGs' Section 6.1 discussion of diversion ratios and upward pricing tests can be useful in analyzing the competitive effects within differentiated product or geographic markets when there is clear evidence that a significant fraction of customers do not treat the merging firms as each other's closest competitors. However, the HMGs 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.

It is true that economists and the staff of the Agencies have substantially discounted structural analysis and focused on competitive effects over the years, although it is not clear that the courts have followed this lead. Presumably the Agencies will still keep market definition and structure in mind during investigations as long as courts continue to rely on them.

Market shares also may continue to play a role in evaluating mergers for reasons beyond the courts. As proponents of diversion and UPP analyses have shown, certain assumptions about diversion and competition can result in market share and diversion analysis leading to the same results.[31] Moreover, other large rivals in many market settings may have a rational incentive to follow a post-merger price increase by the merged firm. As such, larger firms may increase their profits more from higher prices than increased sales volume, while smaller rivals may benefit more from increasing their sales volume by keeping prices relatively lower.[32] The net impact of such follow-on pricing behavior by other rivals may be modest compared to the impact of price increases by the merging firms. Nevertheless, evidence about the competitive dynamics of other firms, both large and small, in part may be reflected in HHIs calculated for the pre- and post-merger relevant markets. Despite the HMGs' stated preference for competitive analyses over market definition and market share analyses, traditional market concentration may continue to provide a minimum threshold for full Agency review and court challenges, albeit after evidence of diversion between the products of the merging companies is used to determine the likely impact of a merger.

The HMGs also specifically mention computer simulations of mergers and market definition in Section 6.1:

> [The Agencies] place more weight on whether their merger simulations consistently predict substantial price increases than on the precise prediction of any single simulation. . . . [M]erger simulation methods need not rely on market definition.

Although technically true, the HMGs fail to mention that 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*, as well as calculating average revenue and shares of expenditures for these groups. My experience is that reorganizing the same sales data into different groups can

[31] Robert D. Willig, *Merger Analysis, Industrial Organization Theory, and Merger Guidelines,* BROOKINGS PAPERS ON ECONOMIC ACTIVITY: MICROECONOMICS, (Winston & Baily, eds.) (1991).

[32] Gregory J. Werden & Luke M. Froeb, *The Effects of Mergers in Differentiated Products Industries: Logit Demand and Merger Policy*, 407 J. L, ECON. & ORG. 10 (1994).

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.

F. Innovation

The HMGs' include for the first time a separate section on innovation. Section 6.4 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 important if the goal of merger enforcement is to maximize consumer welfare. As has been demonstrated, due to higher prices there can be a loss in short-term consumer surplus, but it is likely to be offset by relatively modest increases in innovation.[33] Relying on the HMG's Section 10 to address this balancing may result in challenges to mergers where the merger would likely increase (or at least not decrease) consumer surplus in the long run. Footnote 15 in Section 10 of the HMGs state "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 would be after the merger and how likely the merger would be in stimulating more innovation. This trade-off appears important, given the HMGs explicitly devotes a section on the competitive effects of a merger on innovation, but there is little guidance on how the trade-off is performed. Even Section 10 on efficiencies provides no explicit statement about weighing the potentially mixed effects of a merger, nor recognition that cost reductions are not limited to new products.

G. Coordinated Effects

The HMGs' Section 7 on coordinated effects is an improvement over the 1992 HMGs in that it begins by offering a definition of coordinated interaction, and attempts 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.

The coordinated effects section of the 1992 HMGs organized the analysis into three criteria, all of which needed to be met before there would likely be an 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

[33] *See, for example,* James Langenfeld & Wenqing Li, *Intellectual Property and Agreements to Settle Patent Disputes: The Case of Partial Settlement Agreement with Payments from Branded to Generic Drug Manufacturers*, 70(3) ANTITRUST L.J. 777-818 (Spring 2003).

the coordination. These concepts are still in the HMGs, but many other considerations have been added.[34]

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, Section 7 states the following:

> Parallel according conduct includes situations in which each rival's response to competitive moves made by others is individually rational, and not motivated by retaliation or deterrence nor intended to sustain an agreed-upon market outcome, but nevertheless emboldens price increases and weakens competitive incentives to reduce prices or offer customers better terms.

The HMGs also appear to suggest the Agencies believe the burden for showing anticompetititive coordination should not be held to an overly rigorous standard. Section 7.1 states:

> Pursuant to the Clayton Act's incipiency 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 the coordination likely would take place.

It is not clear why the incipiency 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 HMGs. It would seem that the mention of incipiency in the introduction should be sufficient, unless the HMGs intend to have different standards for different types of competitive effects analyses.

Section 7.1 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 HMGs state:

> There are, however, numerous forms of coordination, and the risk that a merger will induce adverse coordinated effects may not be 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 on unilateral effects.

Section 7.2 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 reflects 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

[34] 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.

> limits on production nor by customer reluctance to switch providers or to entrust business to a 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 three quantifiable tests in this paragraph for determining when coordinated effects are likely to occur, even without explicitly stating how the coordination would take place.

Another potentially quantifiable area is the potential gain for the market participants from coordination. The 1992 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 HMGs address the 1992 HMGs' omission of gains from coordination only by saying in Section 7.2:

> 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.

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 HMGs, but quantitative modeling of potential gains and losses for coordination can assist in evaluating the likelihood of coordinated effects. The HMGs are unclear about whether or how much the Agencies would perform such analyses.

H. Efficiencies and Merging Competing Buyers

Section 10 of the HMGs on efficiencies in general follows the discussion in the 1992 HMGs, but has added a number of useful clarifications and suggested analyses. For example, the HMGs appropriately state:

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

Section 10 of the HMGs also retains the 1992 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. However, the latter statement regarding procurement appears inconsistent with the HMGs' 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.

Despite the apparent tension between Sections 10 and 12, Section 12 on merging competing buyers is a useful addition to the HMGs. 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.[35] This is particularly true for increases in buyer market power, since the result of increased buyer power is to force pricing below the competitive level. The HMGs do not make clear the motivation for this change, and if and when quantity reductions indicate market power.

VI. THE HMGS AND THE COURTS

The final, and potentially the most significant question, is what impact the HMGs will have on court decisions. The Agencies may use different criteria than the courts to decide which cases to investigate, and communicating that to businesses can be helpful. However, if the courts use decidedly different criteria than in the HMGs, then Agencies may be able only to impose the costs of investigation on merging firms and not be able to block mergers.

The HMGs embody changes from the language in the 1992 HMGs, although many of the changes reflect changes in Agency policy and economic analysis since 1992. Presumably the courts will more likely rely on the HMGs if they are generally consistent with case law, offer practical guidance, and there is sufficient explanation as to why the Agencies perform the analyses. At this time is not clear whether these expanded HMGs, which detail a number of economic analyses but downplay traditional structural analysis and simple benchmarks, will be embraced by the courts. It is clear that the impact of the 1992 HMGs on the courts has been noticeable, and may have been greater than the HMGs imply. Consider this statement in Section 1 of the HMGs:

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

However, many of the economic concepts in the HMGs have been employed in other types of cases because the usefulness of these economic concepts is 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 5 in the HMGs appears to acknowledge the use of certain elements of the HMGs in other types of antitrust cases:

> 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 in the HMGs to evaluate the likelihood of there being effective coordination have been used in antitrust and RICO conspiracy cases. It is possible that courts may find some of the HMGs' 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

[35] There are some very limited instances where output reduction is not necessary for an anticompetitive effect from a merger. *See, for example*, James Langenfeld & Wenqing Li, *Price Discrimination and the Cruise Line Industry: Implications for Market Definition, Competition, and Consumer Welfare*, 15(1) INT'L J. ECON. BUS. 15, 1-25 (February 2008).

competition. More time will be needed to evaluate the success of the HMGs to affect court decisions on mergers, or other antitrust matters.