The 1992 Horizontal Merger Guidelines: A Brief Critique

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I. Introduction

On April 2, 1992, the United States Department of Justice (DOJ) and the Federal Trade Commission (FTC) issued revised Horizontal Merger Guidelines (Guidelines, 1992). In important respects, the Guidelines constitute a remarkable improvement over previous guidelines. For example, as discussed in Section V, below, the treatment of entry has been improved substantially. In addition, the Guidelines now recognize explicitly that the creation of market power is undesirable not only because it creates allocative inefficiency but because it can also result in a transfer of wealth from buyers to sellers (Guidelines, sec. 0.1). However, as discussed in the sections indicated, the Guidelines suffer from conceptual problems relating to market definition (Section II), the softening of the HHI presumptions (Section III), and the incorporation of a much expanded competitive effects section and the failure to assign burdens consistent with the limitations of economic theory and practice (Section IV). Finally, these and related problems appear to undermine the administrative practicality and predictability of the Guidelines in important respects (Section VI). Other sections of the Guidelines such as efficiencies and failing firms are not discussed because they have not been changed substantially from previous guidelines.

II. Market Definition and Identifying Participants

In defining markets, the Guidelines use the price test first used in the 1982 Guidelines. In essence, a product or geographic market is the narrowest group of products or smallest geographic area in which a hypothetical monopolist would impose a "small but significant and nontransitory" increase in price (SSNIP). Like the 1982 and 1984 Guidelines, the Agency will usually define SSNIP as 5 percent, though in practice the Agency may use a larger or smaller increase depending on the industry (Sec 1.11).

This may not satisfy critics of earlier Guidelines who believed there was no conceptual basis for selecting a 5 percent SSNIP or for determining appropriate departures therefrom. In practice, the agencies had used SSNIPs ranging from 5 percent to 10 percent (Scherer and Ross). The new Guidelines give only one reason for deviating: "when premerger circumstances are strongly suggestive of coordinated interaction" the Agency "will use a price more reflective of the competitive price" (1.11). This is a useful revision because it permits avoiding the Cellophane error if this means using a smaller or no SSNIP where the premerger market structure already confers substantial price elevating power on market participants.[1] Moreover, if the SSNIP is not adjusted downward sufficiently in this situation, the SSNIP could become a "tolerance level for price increases" directly contradicting another portion of the Guidelines.[2]

The 1982 Guidelines specified that the SSNIP should vary among industries with different rates of return. There is merit to this approach since the purpose of the SSNIP test is to help identify the response of nonparticipants in a tentatively defined market.[3] Economic theory and experience teaches that businessmen act in response to alternative profit opportunities. Thus, a given percentage price increase will elicit a greater response in an industry with a competitive pretax profit rate of 3 percent of sales than in one with a rate of 10 percent of sales. Recognizing this distinction made good economic sense and was eminently useful to Guidelines users. Omitting this approach in the new Guidelines may imply rejection of relative rates of return as a legitimate bases for identifying an appropriate SSNIP. In general, the lack of criteria for selection of an appropriate SSNIP reduces the predictability of the guidelines.

Having defined a tentative market, its participants include all firms currently in the market. Also included are "uncommitted participants," those that could rapidly enter without incurring significant sunk costs in response to a SSNIP assumed to last one year (Guidelines, sec. 1.32). (Supply responses requiring more time to enter or requiring firms to incur significant sunk costs are considered in the entry analysis.) Uncommitted participants include those responding to a SSNIP by switching or extending existing operations or by constructing or acquiring assets enabling them to serve the market. This methodology for identifying market

participants is a potentially useful clarification but care must be taken in determining whether output can be expanded without incurring sunk costs.

III. Calculating and Evaluating the Significance of Market Share

No significant change has been made in the general approach used to calculate market shares (Guidelines, Sec. 1.41). The Agencies again use the Herfindahl-Hirschman Index (HHI) to measure market concentration (Guidelines, Sec. 1.5). Evaluation of the probable competitive significance of markets with various HHIs follows a by now familiar tripartite classification. A post-merger HHI below 1,000 remains a safe harbor. The Guidelines have softened the presumptive language the earlier Guidelines had applied to mergers increasing the HHI by 100 and producing an HHI in the 1,000 to 1,800 range. The earlier Guideline language, "the Department is likely to challenge," such mergers has been replaced with "raise significant competitive concerns." Both sets of Guidelines permit finding such mergers legal if other factors mitigate the potential anticompetitive effects. More about this shortly.

A similar softening was made in the language for mergers over 1,800. The 1984 Guidelines said that if a merger increased the HHI by 100 and resulted in a post-merger HHI substantially above 1,800, "only in extraordinary circumstances" will other factors establish

that the merger is unlikely substantially to lessen competition. The new Guidelines say that when the post-merger HHI exceeds 1,800, "it will be presumed" that mergers increasing the HHI by over 100 points "are likely to create or enhance market power or facilitate its exercise."

Unlike the 1984 Guidelines, the new ones invite overcoming the presumption, regardless of concentration levels, by showing that other factors make it unlikely that the merger will create or enhance market power or facilitate its use. Indeed, DOJ has stated explicitly that:

> The competitive effects section and the other factors are of equal weight in the analysis, regardless of the level of post-merger concentration or the magnitude of the change in concentration resulting from the merger. Conversely, the weight accorded to concentration data does not increase with the level of post-merger concentration or the change in concentration. The evidentiary role of the presumption arising from concentration remains the same. (Rill 1992)

Elements of the FTC apparently do not subscribe to this interpretation of the guidelines. Instead, as concentration exceeds the safe harbors in the guidelines, "the amount or clarity of evidence necessary to overcome the presumption of competitive concern increases as well; it does not artificially plateau at an HHI of 1800" (Yao and Arquit).

The softening of the concentration presumptions by DOJ is a major flaw in the Guidelines. DOJ's interpretation of the HHI thresholds appears to make them little more than upper bounds on

the safe harbors. Apparently, the presumptive effect of a post-merger HHI of 6,800 would be the same as an HHI of 1,800. In both cases, DOJ would feel compelled to provide a competitive effects story as to how conduct and performance are specifically affected by the increase in concentration caused by the merger.

DOJ's interpretation does not simply allow the merging parties to persuade DOJ of the prospective mergers' benign competitive effects, it appears that DOJ has concluded that it must have a plausible competitive effects story before challenging the merger. As discussed below, the theory underlying the competitive effects section is incomplete, largely untested empirically and likely to give conflicting predictions. But even if some of these competitive effects problems could be eliminated, DOJ's "everything matters" approach to thresholds would leave DOJ attempting to tell such a story even where relevant data were lacking.

The FTC's interpretation appears to be consistent with the teachings of economic theory and the substantial empirical literature finding that high concentration and significant entry barriers result in diminished performance. This literature is in sharp contrast to the meager empirical verification and the weak predictive power of the economic theory underlying the competitive effects section of the Guidelines discussed below. Indeed, the FTC's approach could probably be improved if the Guidelines indicated a HHI threshold--e.g., 1,800, 2,200, 3,000-- above which

the threshold would rarely be overcome by any evidence the merging parties could offer.

Moreover, the dilution of the presumptions and the more general failure of the Guidelines to assign burdens of proof cannot be defended on grounds that the Guidelines are only intended to be a statement of the DOJ's preferred economic methodology rather than a restatement of current merger law.[4] Previous guidelines have been cited by the courts adversely against DOJ.[5] Given this, it should be expected that as the courts look to the Guidelines for guidance, the DOJ and the FTC will be held accountable for any lapses in the analysis or factual record. This judicial tendency will, in effect, transfer burdens to the government even where the Guidelines themselves profess not to assign burdens. The problem is exacerbated in the competitive effects analysis where the information needed to do a complete analysis will likely be incomplete or will predict effects with opposite signs.

Finally, this section has been further weakened by the omission of the earlier Guidelines "leading firm proviso" applied to certain mergers resulting in HHIs over 1,800. That proviso stated the Department "is likely to challenge the merger of any firm with a market share of at least one percent with the leading firm in the market provided the leading firm has a market share that is at least 35 percent" (1982 Guidelines, Sec. 3:12).

Finally, section 1.522 of the Guidelines acknowledges that sometimes market shares may either understate or overstate the likely competitive effects of a merger. The first special factor considered, "changing market conditions," is virtually identical to that in 1984 Guidelines. The second special factor, which is new, recognizes that the magnitude of potential competitive harm is greater if a hypothetical monopolist would raise prices "substantially more" than a SSNIP of five percent (Sec. 1.522). Because "more market power is at stake" in this event, the Agencies presumably will be more inclined to challenge such mergers. This approach strengthens this section of the Guidelines.

IV. The Potential Adverse Effects of Mergers

This section represents the most drastic departure from earlier Guidelines. Since market concentration is "only the starting point in determining a merger's competitive effects," before challenging a merger the Agencies also will assess factors pertaining to competitive effects (Sec. 2.0). The section proposes an extensive and seemingly sophisticated competitive effects analysis in each merger case regardless of HHI level or condition of entry. Apparently, the Agencies have assumed the burden of persuading themselves, and implicitly the courts, that the normal presumption derived from market share and entry conditions are not counteracted by the unique competitive characteristics of the industry. The DOJ has explicitly rejected the notion of a sliding-

scale assumption, that is, as concentration rises in industries with entry barriers the significance of potentially countervailing procompetitive factors declines.

Although many of these ideas appeared in earlier Guidelines, additional competitive considerations have been added and one important factor included earlier has been deleted. Finally, the very length of the section, over 25 percent of the total, implies the importance attached to it by the Agencies.

The targets of the competitive effects inquiry are various factors that affect the ability of groups of firms to engage in "coordinated interaction" or for a dominant firm to engage in unilateral action (Sec. 2.1). The coordinating factors discussed are those that are conducive to coordination or to detecting and punishing deviations from coordinated behavior.

The section promises more than it delivers. An inherent problem is that the various theories underlying these factors have not been verified empirically. In addition, the theories can give conflicting predictions of post-merger conduct (See Jacquemin and Slade). Also, some theories (e.g., raising rivals' costs) are notably absent from the discussion in the Guidelines. Consequently, for virtually every story about a factor either facilitating or discouraging coordinated interaction there is a competing story with another ending. This is well-documented in

the hundreds of instances where coordinated behavior is achieved through express collusion. Such evidence is relevant because the Guidelines are designed to identify factors that enable firms to engage in coordinated interaction by either "tacit or express collusion" (Sec. 2.1). Consider these examples.

The Guidelines state that coordinated interaction is facilitated by product or firm homogeneity. It then adds, "conversely," coordination "may be limited or impeded" by product heterogeneity or by differences in firm vertical integration. This implies that the Agencies is less (or perhaps little) inclined to challenge mergers with the latter characteristics. But while economic theory suggests homogeneity makes coordination easier, it does not follow that oligopolistic coordination through "tacit or express collusion" will fail in the presence of heterogeneity. There is solid evidence demonstrating the contrary. Consider the wholesale baking industry. Wholesale bakers sell a wide array of differentiated products to large buyers, some of whom are vertically integrated. Yet the Justice Department and FTC brought 16 price fixing cases involving wholesale bakers during 1955-1985, some involving conspiracies enduring many years (Block, Nold, and Sidaks; Mueller and Parker).

Experience with price-fixing cases demonstrates that the indicators included in the Guidelines are not sufficiently precise to predict the likelihood of coordinated effects. For example,

will the availability of "key information concerning market conditions," (Guidelines, sec. 2.1), increase or decrease the likelihood of collusion in a given market? Increasing price information can make detection of chiseling more likely but can also make reaching the collusive agreement more likely thus making the sign of the factor indeterminate. For example, in the American Column & Lumber Co. v. U.S., 257 U.S. 377 (1921) price-fixing conspiracy key pricing information was readily available making collusion more likely but also making detection of chiseling likely. Indeed, in the American Column & Lumber case, numerous factors suggested that the collusion which did occur had not occurred: no common price, no stable market shares, 365 concerns operating 470 mills in 18 states were part of the conspiracy and the conspirators could and did little to punish conduct which partially undermined the conspiracy.

Similarly, in case after case brought by the DOJ where express collusion was proved to have occurred, one could have told a competitive effects story ex ante which would have predicted that express collusion was unlikely or even perhaps impossible. In perhaps the most famous price-fixing conspiracy of all, 20 indictments were returned implicating 29 corporations and 45 individuals for price-fixing on a wide range of products of the electrical goods industry (Watkins). Market conditions suggested that collusion was not likely (e.g., non-homogeneous product, large number of competitors, unstable market shares) and that collusion

was not likely to be profitable (e.g., serious price discounting had blighted the industry for a substantial time). On the other hand, chiseling could be detected (at least after the fact) thus suggesting that collusion was likely.

While some theoretical models predict whether coordination will succeed in certain circumstances, these models can make no claim of exclusivity. As Joe Bain said in discussing conduct many years ago, there are many ways to skin a cat. Many "new IO" economists apparently believe only those ways exist that are predicted by abstract models, thus greatly underestimating the ingenuity of businessmen in devising tacit or express coordinating schemes. Such naivete explains why antitrust attorneys often grow impatient with economic advisors who explain that effective collusion is impossible in a market even in the face of facts demonstrating the contrary. This situation exists because, as Franklin Fisher put it, "there is a strong tendency for even the best practitioners to concentrate on the analytically interesting questions rather than on the ones that really matter for the study of real-life industries" (Fisher: 123).

In short, the unpredictability of a competitive effects analysis has less to do with the inaccuracy of existing theory than with the <u>incompleteness</u> of existing theory. It has always been exceedingly difficult to predict conduct especially in oligopolies, precisely the type of market about which merger analysis ought to

be most concerned. The problem is compounded by the difficulty of getting information sufficient to apply the criteria. Even in reported price-fixing cases with well-developed records it is difficult to apply all of the competitive effects criteria precisely. These problems are compounded when reviewing a prospective merger in a short time frame.

The sections dealing with lessening competition through unilateral conduct deals with mergers between firms distinguished primarily with differentiated products and those distinguished by their capacities (Guidelines, sec. 2.2). Such mergers falling outside the safe harbor protection pose opportunities to exercise unilateral control over price when the merging parties have a combined market share of at least 35 percent. But what about those with combined shares below 35 percent? Are they home free? This section may seem especially arcane to users. Also, the section is highly selective and redundant with HHI threshold tests.

Finally, the section omits the "market performance" factors included in earlier guidelines. Those guidelines considered as relevant evidence of possible noncompetitive performance of the leading firms the relative stability of market shares and profitability over a substantial period of time exceeding that of firms in comparable industries (Guidelines-1984, Sec. 3.45). Despite some difficulties in measuring relative economic profits, the presence of persistently high profits is a useful and

meaningful index of market power. Moreover, profit performance has frequently been embraced by the courts and legal-economic authorities in identifying collusive as well as tacit coordinated behavior (Posner: 128).

The Guidelines acknowledge "the difficulties of predicting likely behavior based on the types of incomplete and sometimes contradictory information typically generated in merger investigations." The final decision will turn on "whether market conditions, on the whole, are conducive . . . to coordination" (Guidelines, Sec. 2.1, emphasis added). Those familiar with the slippery and sometimes contradictory economic beliefs about these matters may feel this balancing act requires the wisdom of a Solomon not the mere mortals staffing the antitrust agencies and the courts.

V. Entry Analysis

This section is the most important revision over earlier Guidelines that defined significant entry as that occurring within a two-year period in response to a SSNIP. The brief treatment of entry (about 200 words vs. over 1,500 words in the new Guidelines) provided no analytical framework for examining entry issues nor did it suggest a preference for Stiglerian or Bainian entry. As Salop observes, the approach worked "fine in perfectly contestable

markets, where there are no sunk costs" (Salop: 314). But, of course, entry in most real-world markets involve sunk costs.

The approach seemed at least partly responsible for the dismal record of the Rill administration's effort at more aggressive merger enforcement based on "a realistic appraisal" of entry (Rill 1990: 8). Rill's approach met resistance in the courts. Indeed, the District of Columbia Circuit Court said the approach was in violation of the Department's own Merger Guidelines.[6]

The new Guidelines attempt to correct these deficiencies. Although lawyers may find this treatment somewhat difficult to digest, it is a masterful articulation of current entry analysis which avoids much of the controversy surrounding the treatment of entry barriers in the abstract.

The essence of the new analytical approach is to determine whether entry is "timely, likely and sufficient" to ameliorate an otherwise anticompetitive merger. A sophisticated and comprehensible analytical framework is laid out for determining each of the three necessary conditions, including, among other things, an analysis of the role of sunk costs, the impact on pre-entry prices by the entry of a minimum viable scale" operator, conditions determining the sales opportunities available to an entrant, and the conditions required to reduce post-merger prices to those existing prior to merger.

This is an important departure from the 1984 Guidelines, which did not ask whether entry would occur if the prospective entrant believed his entry would force prices back to the pre-merger levels. Defendants, and during the 1980s the agencies, interpreted the Guidelines as implying the analysis merely asked whether an entrant could be profitable at SSNIP, implying that the SSNIP would remain after entry had occurred. This, of course, often resulted in a larger number of prospective entrants than the number that could be profitable at pre-merger prices. Thus, the new Guidelines, by requiring that entry be profitable at pre-merger prices, represents an important analytical clarification that promises to improve the application of entry analysis.

VI. Administrative Practicality and Predictability

The Guidelines attempt to incorporate in one document an overview of many elements of both basic and cutting edge industrial organization theory. This attempt is to be applauded. But, in our view, "Guidelines" ought to designed to reduce uncertainty and improve predictability for the business community in merger enforcement decisions. The Guidelines, especially as interpreted by DOJ, seem to undercut this laudable purpose by diluting the importance of the HHI thresholds, introducing a competitive effects analysis in every case and by omitting assignment of burdens except in rare cases. Also, the 5 percent test seems to increase the degree of information required for the analysis.[7] The sheer length

of the Guidelines must be daunting to even antitrust practitioners much less the business community.[8] A reading of the entire document suggests that it is more of an executive summary of major elements of industrial organization economics than it is a realistic statement of benchmarks that the business community (and presumably the courts) can (should) use to evaluate mergers and to predict merger enforcement decisions. If the DOJ were to state meaningful HHI thresholds and clearly assign burdens, the administrability and predictability of the Guidelines could be improved greatly -- even if some legal-economic authorities would not necessarily agree with the chosen HHI thresholds or assignment of burdens.

VII. Conclusion

The Guidelines represent a substantial improvement in a number of respects including a statement of purpose that acknowledges redistributional effects as a legitimate concern of merger enforcement, a substantially improved entry section and somewhat improved sections on efficiencies and failing firms. However, in an apparent attempt to raise the level of economic sophistication of the Guidelines, we fear that the Guidelines, especially as interpreted by the DOJ, may undermine the ability of the federal agencies to use well-established economic theory and empirical results effectively. In addition, the Guidelines as interpreted by DOJ could make the Guidelines less predictable. We have suggested

some refinements in the Guidelines which could lessen or eliminate at least some of these problems.

Notes

*The views expressed in this article are solely those of the authors and not of any state or federal agency.

1. The Cellophane Court erred in finding a high cross elasticity of demand between cellophane and other wrapping materials merely because interchangeability occurred at current prices, thus ignoring that a profit-maximizing monopolist selects a price in the elastic portion of the demand curve. Posner; Stocking and Mueller.

2. At Section 1.0, the Guidelines state that the SSNIP "is employed solely as a methodological tool for the analysis of mergers: it is not a tolerance level of price increases." For example, assume that the hypothetical monopolist could raise price profitably 5 percent or more at current prices but the profit-maximizing price rise is 4 percent. If the firm "would" raise price only 4 percent, the Guidelines would define the market more broadly. This will likely lead to lower HHI's in the expanded market which could fall below the safe harbor thresholds. Hence, the choice of SSNIP, implicitly "tolerates" dilution of HHI's where the profit-maximizing price increase is less than the chosen SSNIP.

3. If the goal of merger policy is to prevent consumer welfare losses, the size of SSNIP might depend on whether "significant" welfare losses will result. We believe this approach places the user at sea without a rudder. Also a given percentage price increase tells us little about welfare losses without considering the volume involved as well.

4. The only burdens assigned by the Guidelines relate to efficiencies and failing firms. Guidelines, S-2, n. 5. This note was inserted in the Guidelines at the insistence of the FTC.

5. For example, in United States v. Syufy Enterprises, 903 F.2d 659, 666 n.11 (9th Cir. 1990), the court chided the DOJ for failing to follow the two-year entry test set forth in the 1984 Guidelines notwithstanding DOJ's disavowal in those guidelines that they were intended to guide litigation.

6. United States v. Baker Hughes Inc., 908 F.2d 981, 983 (D.C. Cir. 1990.

7. The Guidelines pose the question as whether the hypothetical monopolist "would" rather than "could" raise price profitably by the SSNIP. In general, the substitution of "would" for "could" is a healthy change especially in the entry section. It is a more straight-forward evidentiary problem to determine whether the SSNIP increase is profitable or not than it is to determine the precise profit-maximizing price increase. In fact, DOJ has rarely been able to apply the 5 percent test as presently formulated due to lack of good data. The reformulation of the test by using "could" might ameliorate this problem.

8. Perhaps a rough indicator of the growth in the complexity of the Guidelines is the growth in the number of words devoted to horizontal mergers in DOJ's four sets of Guidelines: 2,750-1968; 6,800-1982; 7,000-1984; and 12,500-1992. Note that unlike the 1992 Guidelines, the 1968 and 1982 Guidelines devoted 3,250 and 8,400 words, respectively, to other types of mergers.

References

Block, M. K., Nold, F.C., and Sidaks, J. G. (1981) 'The deterrent effect of antitrust enforcement', Journal of Political Economy, 89, 429-445.

Fisher, Franklin M. (1989) 'Games economists play: A noncooperative view', 20 Rand Journal of Economics (Spring), 113-24.

"Guidelines" (1992) Department of Justice and Federal Trade Commission Horizontal Merger Guidelines, reprinted in 4 Trade Reg. Rep. (CCH) ¶ 13,104 (April 2, 1992).

"Guidelines-1984" (1984) Department of Justice, Merger Guidelines, reprinted in 4 Trade Reg. Rep. (CCH) ¶ 13,103 (June 18, 1984).

Jacquemin, Alexis and Slade, Margaret E. (1989) 'Cartels, collusion, and horizontal merger', in R. Schmalensee and R. Willig (eds.), Handbook of Industrial Organization, Vol. 1. Amsterdam, The Netherlands, North-Holland, 415-473.

Mueller, Willard F. and Parker, Russell C. (1992) 'The bakers of Washington cartel: Twenty-five years Later', 7 Review of Industrial Organization, 7, 75-82.

Posner, Richard F. (1976) Antitrust Law: An Economic Perspective. Chicago: University of Chicago Press.

Rill, James F. (1990) Antitrust (Fall/Winter), 4-8.

Rill, James F. (1992) '60 minutes with the Honorable James F. Rill, Assistant Attorney General, Antitrust Division, U.S. Department of Justice,' 61 Antitrust L. J. (forthcoming).

Salop, Steven C. (1991) 'Comments and discussion [of R. Willig's paper]', in Brookings Papers on Microeconomics, 311-322.

Scherer, F. M. and Ross, David (1990) Industrial Market Structure and Economic Performance. Boston: Houghton Mifflin Co.

Stocking, George W. and Mueller, Willard F. (1955) 'The Cellophane case and the new competition', American Economic Review, 45, 29-63.

Watkins, Myron W. (1961) 'Electrical equipment antitrust cases -- their implications for government and for business,' 29 University of Chicago Law Review, 97-110.

Yao, Dennis A. and Arquit, Kevin J. (1992) 'Applying the 1992 Horizontal Merger Guidelines, Antitrust (Summer) 17-19.