International Competition, Market Definition, and the Appropriate Way to Analyze the Legality of Horizontal Mergers under the Clayton Act: A Positive Analysis and Critique of Both the Traditional Market-Oriented Approach and the Justice Department's Horizontal Merger Guidelines

Richard S. Markovits

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INTERNATIONAL COMPETITION, MARKET DEFINITION, AND THE APPROPRIATE WAY TO ANALYZE THE LEGALITY OF HORIZONTAL Mergers Under the Clayton ACT: A POSITIVE ANALYSIS AND CRITIQUE OF BOTH THE TRADITIONAL MARKET-ORIENTED APPROACH AND THE JUSTICE DEPARTMENT’S HORIZONTAL MERGER GUIDELINES

RICHARD S. MARKOVITS*

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* Marrs McLean Professor of Law, University of Texas Law School. B.A. 1963, Cornell University; Ph.D. 1966, London School of Economics; LL.B. 1968, Yale University.
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This Article is divided into five parts. Part I defines and discusses various fundamental concepts it employs. In particular, Section A of Part I defines the legal test the Clayton Act promulgates; Section B analyzes the general conditions under which courts would be justified in adopting "short-cuts" in defining antitrust violations and evaluates various specific "short-cuts" antitrust courts have adopted or have been urged to adopt in the merger context; and Section C delineates two systems of vocabulary for analyzing the competitive impact of any business act or practice in our monopolistically competitive world, in which the quality and variety of products (defined to include services) within any (arbitrarily) designated portion of product-space is variable and affected by competitive conditions.

Part II then outlines the appropriate way to analyze the relevant

2. For a more complete discussion of this material, see Markovits, Some Preliminary Notes on the American Antitrust Laws' Tests of Legality, 27 Stan. L. Rev. 847, 850-53, passim (1975).
3. For a more complete discussion of various presumptions of legality that others have urged the courts to adopt in the antitrust area, see Markovits, The Limits to Simplifying Antitrust: A Reply to Professor Easterbrook, 63 Tex. L. Rev. 41 (1984).
competitive impact and hence legality of horizontal mergers under the Clayton Act—a method that does not employ any market-aggregated data and hence does not presuppose any market definitions. In particular, Section A of Part II delineates the various ways in which horizontal mergers can affect the intensity of competition in the relevant sense—i.e., argues that (A) horizontal mergers that generate no efficiencies (1) may reduce price competition by freeing the merger partners (MPs) from each other’s competition and by facilitating both the MPs’ and their rivals’ (Rs’) oligopolistic pricing and (2) may reduce quality-or-variety-increasing-investment (QV-investment) competition (in physical-product, product-image, locational, and/or speed-of-service quality or variety) by inducing the MPs to consolidate their company with resources they would otherwise have used to expand, by increasing their vulnerability to retaliation, and by making each MP consider the consequences of his expansion for the other’s profits while (B) horizontal mergers that generate efficiencies may tend to increase price and/or QV-investment competition on that account. Section B of Part II then delineates the implications of the preceding section for the major determinants of the competitive impact of horizontal mergers. Section C concludes Part II with an analysis of the extent to which international competition plays a role in both the preceding analysis and the approach to predicting the competitive impact of horizontal mergers one can derive from it.

Next, Part III criticizes a crude, unqualified version of the “traditional market-oriented approach” to analyzing the Clayton-Act legality of horizontal mergers. Both this crude version and the more complicated approaches traditional courts have actually employed at different times are based on the assumption that the competitive impact of a horizontal merger can best be determined (inter alia in the case of the more complicated versions) by defining the markets in which its participants operate, calculating the four-firm (or eight-firm) concentration ratios of those markets and the MPs’ market shares, and determining whether the sum of the MPs’ market shares exceeds some al-


6. In fact, the actual traditional approach was somewhat more complicated than this sentence suggests not only because it made the legality of a horizontal merger depend on some factors other than the pre-merger concentration ratios of the relevant markets and the MPs’ market shares, but also because it made the legality of such a merger (given these other factors and the relevant concen-
lowed percentage that is inversely related to the pre-merger concentration of the market in question. In particular, Part III explains why neither a crude approach that takes only such data into consideration nor any related approach in which market-aggregated data is given a significant role would ever be justified, even if international competition were precluded, as well as why the presence of international competition strengthens the case against using any such market-oriented method to predict the competitive impact of a horizontal merger. More specifically, Section A of Part III delineates and criticizes the traditional approach's various implicit empirical assumptions both about the relationship between products in different markets ("insider-vs.-outsider" assumptions) and about the relationship between products in the same market ("insider-vs.-insider" assumptions). Section B analyzes the relationship that would exist between the competitive impact of a horizontal merger on the one hand and the concentration of the market in question and the MPs' market shares on the other in a world without international competition. And Section C analyzes the significance of international competition for the justifiability of the traditional MP-market-share-market-concentration operationalization of the Clayton-Act test of legality.

Part IV then analyzes a more complicated (though not necessarily more sophisticated) version of the market-oriented approach to predicting the competitive impact of a horizontal merger—the version promulgated by the United States Justice Department's 1984 Horizontal Merger Guidelines. Part IV is divided into two sections—one long and one short. Section A is long. It summarizes the Guidelines and provides a critique of them that does not depend on the importance of international competition. In particular, Subsection A1 delineates the Guidelines' three HHI-oriented rules and its 35%-leading-firm-merger rule and argues that in their crude original form none can bear scrutiny—indeed, inter alia, that the Department's adoption of the Herfindahl-Hirschman Index (HHI) of market concentration is mindless, that is, that no empiri-
cal or theoretical case has ever been made for the proposition that predictions based on this measure of concentration will be more cost-effective or indeed even more accurate than predictions based on traditional four-firm or eight-firm concentration ratios. Subsection A2 delineates and criticizes the various qualifications the Guidelines make to the crude rules with which they begin. More specifically, after delineating the various factors not reflected in the HHIs or market-concentration or market-share figures that the Guidelines indicate will affect the competitive impact of a horizontal merger, Subsection A2 points out that the Guidelines' discussion omits some important factors, contains some factors that are actually irrelevant, and misstates the significance of some of the relevant factors it does describe. Subsection A3 then examines the implications of the preceding analysis for the accuracy and justifiability of the Guidelines' various qualified HHI-oriented rules and its qualified 35%-leading-firm-merger rule, concluding that all the Guidelines' actual rules are inaccurate and would be cost-ineffective even if they were accurate. Section B concludes Part IV by explaining how the fact that international competitors are often effective strengthens the independently overwhelming case against the Horizontal Merger Guidelines.

Finally, Part V analyzes five antitrust-policy issues that relate to the regulation of horizontal mergers or the significance of international competition for their optimal regulation—policy issues that are not relevant to the interpretation of the current American antitrust laws. Section A analyzes the desirability of counting against the legality of a horizontal merger any negative impact it has on the welfare of the foreign customers of the MPs and their product-Rs. Section B analyzes the desirability of adopting a permissive horizontal-merger policy in order to permit American firms to achieve efficiencies that would enable them to compete more effectively against foreign competitors. Section C analyzes the desirability of shifting from a competitive-impact test of legality to an allocative-efficiency or allocative-efficiency-and-distributional-desirability test of legality. Section D analyzes the desirability of creating (1) specialized agencies to develop techniques for determining the facts that affect the competitive impact (or perhaps the allocative efficiency and distributional desirability) of horizontal mergers and to collect data on a systematic rather than case-by-case basis and (2) specialized courts to determine the legality of horizontal mergers and various other kinds of business conduct. And Section E analyzes the desirability of authorizing some

8. For a discussion of this possible goal of an ideal antitrust regime, see Markovits, An Ideal Antitrust Law Regime, 64 Tex. L. Rev. 251, 278-80 (1985). For a discussion of all the various plausible or alleged goals of such a regime, see id. at 267-82.
governmental institution to sell the right to engage in horizontal mergers that allegedly generate some efficiencies but would decrease competition if they did not.\(^9\)

I. THREE SETS OF RELEVANT FUNDAMENTAL CONCEPTS

\(\text{A. The Clayton Act's Test of Legality}\)

Unlike the Sherman Act,\(^{10}\) which focuses on the specific intent of the accused actors,\(^{11}\) the Clayton Act focuses on the effect of the act or practice in question on the intensity of competition for the patronage of United States buyers—\(i.e.,\) on whether it tends to “lessen competition” or “create a monopoly” within the United States. I will first discuss the

9. I first proposed this antitrust equivalent of an effluent tax in Markovits, Review Article, supra note 5, at 606 n.71. I explained the idea in more detail in Markovits, supra note 8, at 330-32.  
11. In my opinion, the Sherman Act prohibits any business act or practice whose profitability was (or was perceived by its perpetrators to be) \(ceteris paribus\) critically inflated by its tendency to increase the demand curve he faces (they face) by reducing the attractiveness of the offers against which he has (they have) to compete when the additional profits that are expected to result in this way cannot be said to arise from any related increase in one or more relevant actors' ability to exploit a given demand-marginal-cost-curve (DD-MC) combination. In general, horizontal mergers can violate this test by deterring one or both MPs' original rivals (including the other MP) from making attractive offers to the relevant MP's or MPs' customers on products these original rivals do produce post-merger, by deterring such rivals from making QV investments they would otherwise have made, or by inducing one or more such rivals to reduce their QV investments in the relevant area of product space. The meaning and point of several of the terms used in the above definition of the Sherman-Act test of legality require further explanation which limitations of space preclude me from providing in this Article.  

However, I should indicate (1) that the “\(ceteris paribus\) critically inflated” phrase is included to insure that limit QV investments (which would not have been made but for their tendency to deter the entry or expansion of a rival) will violate the Sherman Act only if \(ceteris paribus\) their deterrent effect would make privately profitable a QV investment that was allocatively inefficient and (2) that the “exploitation-of-a-given-DD-MC-combination” clause is included to insure that so-called “systems rivalry” is not held to violate the Sherman Act (a conclusion that is warranted by the fact that the practice in question functions by enabling its employer to take better advantage of a given DD-MC combination). For a discussion of the circumstances in which limit QV investments are illegal (are predatory), see Markovits, Potential Competition, Limit Price Theory, and the Legality of Horizontal and Conglomerate Mergers Under the American Antitrust Laws, 1975 Wis. L. Rev. 658, 695-96. For an analysis of the relationship of (1) my analysis of limit QV investments and so-called systems rivalry to (2) the positions taken on these issues by Ordover and Willig in their article An Economic Definition of Predation, 9 YALE L.J. 8 (1981), see R. Markovits, Oligopolistic and Predatory Conduct, supra note 4.

In brief, I believe that the preceding interpretation of the Sherman Act is appropriate because (1) it is consistent with the admittedly vague language of Section 1 and the somewhat clearer (“monopolizes”) language of Section 2, (2) it adopts a sensible functional distinction which underlies other American economic regulations—the distinction between (A) increasing one's profits (i) by improving one's product or lowering one's costs or (ii) by taking better advantage of a given DD-MC combination and (B) increasing one's profits by reducing the absolute attractiveness of the offers against which one has to compete, and (3) it is consistent with the overwhelming majority of Supreme Court pronouncements and decisions under the Sherman Act—\(i.e.,\) I believe this interpretation of the Sherman Act is appropriate for textual, structural, functional, doctrinal, and “precedential” reasons.
meaning of the Clayton Act's "lessen competition" language and then explain why this provision should probably be interpreted to focus exclusively on the position of American buyers.

In my opinion, with two qualifications I will delineate below, the Clayton Act's "lessen competition" language should be interpreted to prohibit mergers that on balance injure the American customers of the MPs and their product-rivals (Rs) by changing the attractiveness of the offers they receive from their "inferior suppliers" (from those firms that are not privately best-placed to supply them)—i.e., on balance by reducing the attractiveness of the offers against which the MPs and their Rs must compete for American sales. 13

12. The courts have sometimes taken the position that the Clayton Act prohibits any merger or other covered act that reduces competition in any product or geographic market even if it increases competition overall. The argument for this conclusion was exclusively textual: the fact that the Act's horizontal-merger provision has always referred to lessening competition "in any line of commerce in any section of the country." See United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 355 (1962). However, this conclusion is so counter-functional that I would not adopt it even if the statute's language were clearer than it ever has been on this point.

13. This conclusion follows from the way in which I have argued the Clayton Act should be interpreted in general. See Markovits, supra note 2, at 850-53. I should perhaps point out that the preceding discussions imply that the legality of business acts or practices under the Sherman and Clayton Acts may differ for at least three basic reasons. The first such reason is that the Sherman-Act test of legality may be subjective while the Clayton-Act test is clearly objective. Admittedly, even if the Sherman Act is read to contain a subjective test, in practice subjective intent will virtually always be inferred from objective evidence about the relevant effects. However, the possible relevance of subjective intent under the Sherman Act implies that even if any act or practice that violated the Clayton-Act test would violate the objective version of the Sherman-Act test and vice versa one or more actors who mistakenly believed that the profitability of their act did not depend on its reducing the absolute attractiveness of their rivals' offers in some dubious way might have committed an act that would violate the Clayton Act and one or more actors who mistakenly believed that the profitability of their act did depend on its reducing the competition they faced in a dubious way might have committed an act that did not violate the Clayton Act.

Second, and more importantly, the preceding discussion also suggests that the legality of a business act or practice that is covered by both the Sherman and Clayton Acts may differ under the statutes in question because some effects that clearly are relevant under the Clayton Act will normally be irrelevant under the Sherman Act. This conclusion can be best explained by focusing on the case of a horizontal merger. Thus, the fact that a horizontal merger enables the MPs' product-Rs to charge higher prices (a) by increasing the MPs' prices to their own customers and hence the contextual marginal costs they would have to incur to steal their Rs' customers, see infra the text following note 46, and/or (b) by deterring the MPs from undercutting an R's oligopolistic margin (by increasing the MPs' vulnerability to retaliation, by spreading the merged firm's defenses, and facilitating the R's oligopolistic communications, see infra text preceding note 47, would always count against its Clayton-Act legality but would usually be irrelevant to its Sherman-Act legality: since the related effects of the merger on the MPs' Rs' customers do not increase—indeed, will actually tend to decrease—the profitability of the merger to the MPs, they will be relevant under the Sherman-Act test only when their presence—or more precisely only when any related tendency of the merger to decrease the MPs' profits—makes critical any tendency the merger has to increase the MPs' profits by reducing the attractiveness of the offers each MP and perhaps some independent rivals make to the other MP's customers.

Third, and finally, a given business act or practice might violate the Sherman Act without violating the Clayton Act because, unlike the former Act, the latter deems irrelevant the effects that covered practices have on transactions involving foreign buyers.

Although historically, it has been assumed that the Clayton Act was designed to overcome the
doctrinal arguments can all be made for this interpretation of the statute's "lessen competition" language. If one ignores the two qualifications to which I referred but failed to specify above (and for which functional and structural justifications can and will be offered), this interpretation is consistent with the "lessen competition" language of the Clayton Act. Unlike its price-minus-marginal-cost (P-MC), unit-output, simple-seller-profit, and straightforward-buyer-welfare alternatives (which are incompletely specified, inconsistent with each other, and in three of the four instances functionally incoherent—at least in terms of the functions that seem to underlie the Sherman Act), my interpretation operationalizes the statute's language in a clear, functional way that is consistent with both the Sherman Act and the general structure of American economic policy.

The two qualifications I would make to this test will not affect the outcome of many cases. However, I should admit that both are difficult to reconcile with the Clayton Act's "lessen competition" language. The first qualification would render lawful any merger that benefited the customers of the MPs and their product-rivals even if it did on balance injure these buyers by reducing the attractiveness of the offers against which the relevant MPs and Rs had to compete—e.g., if it reduced the MPs' costs sufficiently to make it profitable for them to reduce their (across-the-board) prices despite the fact that absent this cost reduction it would have induced them to raise their prices by reducing the attractiveness of the offers each MP's customers received from other, inferior suppliers. Although this qualification is inconsistent with all operational definitions of the concept of the intensity of competition other than the welfare-of-the-relevant-buyers definition (which the Clayton Act clearly did not adopt), it is consistent with one apparent proximate goal of the Sherman Act's supposed inability to prevent monopolies in their incipiency, I do not think that the legality of any business act or practice will differ under these two statutes for any reason that is related to this persistent belief—e.g., I do not think that the minimum relevant equivalent-dollar net loss to the relevant buyers that will make the business act that generates it violate the Clayton Act is smaller than the minimum critical deterioration-of-rival-offer gain to the relevant seller-actor(s) that will make the business act that generates it violate the Sherman Act. In particular, in my opinion, a business act that generates any "substantial" (read, non-de-minimis) net loss to the relevant buyers violates the Clayton Act, and a business act that generates any critical relevant gain at all for its perpetrating sellers violates the Sherman Act.

14. For a discussion of the deficiencies of these operationalizations of the concept of the intensity of competition in the Clayton-Act context, see Markovits, supra note 2. I should note that the buyer-welfare test is not functionally incorrect. However, there are other reasons for rejecting the argument that the Clayton Act has adopted it. See infra note 17.

15. See the discussion supra note 13 of the functional distinction on which the Sherman Act is based.

16. For a definition, see Part IC infra.

17. This conclusion reflects two premises: (1) the Sherman Act does not prohibit a firm from
antitrust laws: to prevent buyers from being injured by sellers’ engaging in acts that reduce the absolute attractiveness of the best offer these buyers receive from any of their inferior suppliers.

The second, “natural-monopoly” qualification would apply in cases in which two conditions were fulfilled: (1) the profitability of the covered business act or practice would be assured by its enabling the relevant actor or actors to reduce their costs and/or improve their products even if any related immediate improvement in their competitive positions did not benefit them as well by leading a rival to exit (or deterring an existing rival or potential competitor from making a relevant QV investment) and (2) the business act or practice in question did injure buyers by generating efficiencies that induced exits (or deterred investments) by improving the actors’ competitive positions and thereby reducing the frequency and amount by which their rivals are (or would be) best-placed. Operationally, in our current horizontal-merger context, this “natural-monopoly” qualification would offer legal protection to qualifying merger partners despite the fact that their merger would leave or did leave the relevant buyers worse off by inducing the MPs’ Rs to exit (or deterring the MPs’ actual or potential competitors from making new QV investments). Admittedly, this “natural-monopoly” qualification (which I would implement by reading the statute to give merger partners a natural-monopoly—i.e., an organizational-allocative-efficiency—defense) is difficult to reconcile with the language of the Clayton Act taken by itself. However, structural as well as policy arguments cut against the straightforward textual interpretation. The “structural” argument for a natural-monopoly or organizational-allocative-efficiency defense is based on the fact that it would bring the Clayton Act into line both with the general American pro-natural-monopoly policy (which is manifest, for example, in the patent laws) and with the Sherman Act as it was written and has been interpreted.18 The policy argument emphasizes the allocative effi-

taking advantage of a DD-MC combination in a way that reduces the welfare of its customers—e.g., does not prohibit a monopolist from charging a higher, more supra-competitive price—and (2) the Clayton Act is based on the same functional distinctions as the Sherman Act. The textual conclusion is also consistent with the fact that no court or respected critic has ever argued that the mere fact that price discrimination, a tie-in, or a reciprocity agreement has reduced the welfare of the buyer directly involved proves that the practice in question has lessened competition in the Clayton-Act sense—i.e., has violated the Clayton Act.

18. As note 13 indicated, the Sherman Act has always been interpreted to permit firms both to increase their natural monopoly by improving their products and to take advantage of their DD-MC combinations. Indeed, the Act has always been interpreted to allow firms to engage in ancillary restraints and to enjoy the fruits of monopoly that has been obtained through “superior skill, foresight, and industry.” United States v. Aluminum Co. of Am., 148 F.2d 416, 430 (2d Cir. 1945); see also Bork, The Rule of Reason and the Per Se Concept: Price Fixing and Market Division, 74 YALE L.J. 775 (1965).
ciency and overall desirability of allowing firms to achieve efficiencies by merging when mergers are the most allocatively efficient way for them to increase their organizational allocative efficiency.

One further point needs to be examined at this juncture. I have already asserted that the Clayton-Act test of legality appears to focus exclusively on the position of American buyers—i.e., appears to make irrelevant the impact of any merger on foreign buyers. Obviously, if the impact of a horizontal merger on the welfare of foreign buyers really is irrelevant under the Clayton Act, this fact would be highly significant in the present context since we are concerned with the relevance of international competition for the appropriate interpretation of the Clayton Act—since a significant portion of the effects of international competition on the overall competitive impact of horizontal mergers relates to the attempt of domestic corporations, domestic and foreign corporations, or indeed foreign corporations to make sales abroad in competition with each other.

The basic argument for the conclusion that the Clayton Act makes irrelevant the impact of the business acts it covers on foreign buyers is a straightforward textual argument: the text of the Clayton Act has always referred to lessening competition "in any section of the country" and although no one with whom I have raised this issue had ever considered it before, all concluded that the reference to "the country" does strongly favor the interpretation I have reluctantly proposed. Moreover, in the current context, the textual argument is bolstered by both an argument from precedent, the fact that no case has ever focused on the competitive impact of a horizontal merger on foreign buyers, and a policy argument, the fact that Americans may benefit from a deterioration in the offers foreign buyers receive from their inferior suppliers when these buyers' best-placed suppliers are domestic corporations or foreign corporations in which American firms (or investors) have an interest. Admittedly, counter-arguments can be made to each of these last two contentions. The argument from precedent is weakened by the fact that no opinion has ever addressed the issue in question explicitly or clearly ignored an anti-competitive impact on foreign buyers when that impact would or might have critically affected the overall competitive impact of the merger in question (or of some other business act covered by another section of the Clayton Act that contained the same language)—a negative fact whose significance is reduced by the courts' positive belief that

19. See supra text following note 11.
the Clayton Act forbids any covered act that injures any relevant significant group of buyers even if it benefits all relevant buyers taken together.\textsuperscript{21} The policy argument (which is egoistic in any case since the foreign-buyer losses in question will usually be undesirable from any defensible world-oriented value perspective) is contingent on other countries' not responding to this feature of the Clayton Act by choosing to ignore the negative effects of their companies' behavior or their governments' (international-trade) policies on American consumers.\textsuperscript{22} However, although as we have just seen arguments for straightforward textual interpretations do not always carry the day in American jurisprudence, I think that in this instance it is most appropriate to adopt the interpretation that a straightforward reading would generate and on that basis to conclude that the Clayton Act does deem effects on foreign buyers irrelevant.

\section*{B. \textit{The Appropriateness of Various Actual or Recommended Antitrust "Short-Cuts"}}\textsuperscript{23}

In the antitrust context, various "short-cuts" have been adopted by courts and/or recommended by commentators. Some of these "short-cuts" favor the government or private plaintiffs, some favor the defendants, and some have no obvious tendency to favor one side or the other across all cases in which they are employed. Thus, in the one direction, courts have favored the government and private plaintiffs by declaring certain acts or practices to be per se unlawful in the face of their belief that on some occasions these practices will not have the illicit motivation on which the Sherman Act focuses or the on-balance effect that the Clayton Act makes critical. Similarly, in the other direction, some commentators such as Professor (now Judge) Easterbrook\textsuperscript{24} have argued that in various circumstances different types of antitrust suits should be dismissed despite the fact that the defendants might have committed the offense or wrong of which the government or some relevant private plaintiff was complaining. More specifically, Professor Easterbrook argues that various filters should be employed to dismiss cases brought by certain sorts of parties or lacking certain kinds of evidence despite the fact that the points such evidence would establish were not necessary condi-

\begin{footnotes}
\item[21.] See \textit{supra} note 12.
\item[22.] See Markovits, \textit{supra} note 8, at 278-80.
\item[23.] The word "short-cuts" is placed in quotes because not all supposed "short-cuts" the courts have adopted actually do reduce legal transaction costs. See, for example, \textit{infra} text preceding note 73 for an analysis of the relative cheapness of the market-oriented approach to horizontal-merger analysis.
\end{footnotes}
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25 For an explanation of why Judge Easterbrook’s recommended filters cannot bear scrutiny, see Markovits, supra note 3.

26 That is, the practice of basing the relevant competitive-impact predictions on market-aggregated data.

27 The focus on markets was never required by the statute’s language which until 1980 focused exclusively on the effect of any merger on competition “in any line of commerce in any section of the country.” 15 U.S.C. § 18 (1980). However, given the fact that economists have always focused on markets (even after the “discovery” of monopolistic or imperfect competition should have led them not to do so), it is hardly surprising that courts concluded that although “[l]ike other sections of our antitrust laws, section 7 does not contain the word ‘market,’ [i]t is clear . . . that ‘line of commerce’ signifies a product market and ‘section of the country’ refers to a geographic market.” United States v. Bethlehem Steel Corp., 168 F. Supp. 576, 588 (S.D.N.Y. 1958). However, surprising or not, this conclusion was neither inevitable nor advisable. The 1980 revision of the Clayton Act’s merger-provision makes the textual justification for this market-interpretation even less persuasive—i.e., given the fact that the current statute refers to lessening competition or tending to create a monopoly “in any line of commerce or in any activity affecting commerce in any section of the country” (emphasis added), I see no reason to conclude that the statute’s language even suggests, much less requires that it be given a market-oriented interpretation.

28 The courts have followed economists in basing their competitive-impact predictions on market-aggregated data.

29 I cannot offer more specific generalizations about this second factor. For example, neither narrow nor broad market-definitions can be said to favor plaintiffs or defendants in general. Narrow definitions will tend to reduce the frequency with which the defendants are said to make sales in the same market but will simultaneously tend to increase both the concentration of and the MPs’ market shares in those markets in which both are said to operate. Narrow definitions will therefore favor defendants if the associated reduction in their “same-market” sales helps them more than the associated increase in their shares in and the concentration of the markets in which both are said to operate hurts them. Obviously, even in a given case, the on-balance effect of this trade-off will depend both on the relevant market-oriented legal rule and on the relevant facts. For analogous reasons, it will also be impossible to predict the effect of narrow market-definitions on defendants across all relevant cases. For a discussion of the significance of this analysis for the litigation-strategy of the government (or a private plaintiff) and the defendants, see Markovits, Horizontal Mergers, supra note 5, at 594-95.
effectiveness issue but rather with the appropriate standards for assessing the market-oriented approach to competitive-impact predictions and various other actual or possible "short-cuts" the courts might adopt in this context—i.e., with the propriety of evaluating such choices in conventional cost/benefit terms.

Economists who have addressed such "standards" issues have virtually always assumed that such short-cuts should be adopted if the conventional transaction-cost-savings they generate exceed any additional conventional error-costs they entail—i.e., if they increase conventional allocative efficiency (generate more conventional equivalent-dollar gains than losses). However, this approach is insensitive to various rights the parties involved in such suits possess as well as to a variety of other distributional and institutional concerns that would affect many evaluators' assessments of the overall desirability of a short-cut that did not violate anyone's rights. To be more specific, in our moral and hence legal system, defendants in criminal cases have the right not to be convicted of violating a given legal norm unless the evidence establishes their guilt beyond a reasonable doubt, where the adjective "reasonable" cannot be defined by determining the standard of guilt it would be conventionally efficient to establish. Similarly, in our legal system, defendants in civil cases have the right not to be held liable for violating a statutory or traditional (principle-based) common-law norm unless the evidence creates more than a 50% probability that they did in fact violate that norm. These rights are not inconsistent with a trier-of-fact's drawing a statistically appropriate inference (e.g., of presuming negligence from the occurrence of a particular kind of accident in the absence of any other evidence if more than half of those accidents about whose occurrence nothing else is known were caused by negligence). Similarly, although this conclusion may be somewhat more controversial, I also do not think that these rights are inconsistent with the State's requiring defendants to pay the

30. In addition to the issues listed in the text, the full list of "short-cuts" might be expanded to include burden-of-proof rules relating to the burden of coming forward, the burden of persuasion on individual issues, and the probability of guilt necessary for a finding of criminal or civil liability.


32. In practice, this approach results in their evaluating a judicially-created short-cut by asking whether it increases the sum of (1) the allocative value of the court time, lawyer time, and party time consumed by legitimate litigation and settlement negotiations, (2) the misallocation potential defendants cause by making strategic adaptations in their conduct to reduce the probability that they will be prosecuted and/or convicted (sued and/or found liable), (3) the risk costs associated with legal uncertainty, (4) the allocative transaction costs associated with legal uncertainty, (5) the allocative transaction costs generated by any nuisance claims that are brought, and (6) the amount of misallocation generated by actual acts of the type the statute condemned.
cost of producing relevant evidence against them or indeed to produce that evidence themselves (e.g., when they are better-placed to produce it). Moreover, the rights in question are certainly not inconsistent with a legislature's prohibiting act B despite the fact that some acts in this class are not undesirable or immoral if it is conventionally cost-effective for the legislature to do so—e.g., if prohibiting all B-acts would be more conventionally cost-effective than prohibiting no B-acts and it would be conventionally cost-ineffective to distinguish the harmful B-acts from the harmless or desirable B-acts.\(^3\) For example, no one's rights would be violated by a legislature's prohibiting a certain class of mergers some of whose members are anti-competitive even though other members of the class are not anti-competitive.

However, in my opinion, the relevant defendants' rights as well as the rights of citizens in general would be violated by a court's establishing a per se rule, irrebuttable presumption, or statistically unjustified rebuttable presumption on its own for conventional cost-benefit reasons. In part, this conclusion reflects the right of potential defendants to fair notice, and, in part, it reflects the same kind of political distrust that underlies our opposition to ex post facto laws. Moreover, even if a conventionally cost-effective short-cut would not violate any defendant's or plaintiff's rights, its adoption might be undesirable overall for distributional or institutional (i.e., democratic-rights) reasons. For example, even if a court's adoption of a particular conventionally efficient though statistically unjustified presumption in a given case did not violate the defendant's right to fair notice (because the court had previously announced its intention to employ this presumption), an evaluator might find this decision undesirable for one or both of the following two reasons: (1) because he placed a higher weight on the average equivalent-dollar lost by defendants who had committed or who were deterred from committing the desirable acts the presumption condemned than on the average-equivalent dollar gained by the presumption's beneficiaries (though this conclusion would admittedly be less likely when those defendants were aware of the court's intentions) and/or (2) because he opposed the judiciary's making decisions it was not authorized to make—because he found such self-derogations of power (a) bad in themselves in that they violate the rights of his society's members to (self-expression through) political participation and (b) consequentially dangerous in that

\(^3\) Admittedly, this is not quite accurate: in our liberal society, some types of acts—viz., those acts that are specially related to a person's formulating or living according to his life plan—are specially protected—i.e., may not be prohibited solely because their prohibition would pass a conventional cost-benefit test that was insensitive to our society's liberal values.
they tend to encourage exercises of power that produce other undesirable results.

As I have already indicated, for the most part, this Article will be concerned with demonstrating (1) that the market-oriented approach to competitive-impact analysis would not be conventionally cost-effective even in the absence of international competition and (2) that the presence of international competition makes the market-oriented approach even more conventionally cost-ineffective. However, it is important to remember that even if the market-oriented approach were conventionally cost-effective, its judicial adoption might very well be undesirable.

C. Two Basic Systems of Vocabulary for Competitive-Impact Analysis

I have already indicated my conclusion that competitive-impact predictions can best be based on non-aggregated data that do not presuppose any market definitions. In my opinion, competition theory has suffered not only from its market-orientation but also (and only somewhat relatedly) from its focus on the gap between each relevant seller's price (P) and conventional marginal cost (MC)—i.e., from its failure to distinguish various components of any seller's P-MC gap as well as from its failure to distinguish price competition from QV-investment competition (the process by which firms compete away their potential supernormal profits by introducing additional or superior physical-product or product-image variants, additional or superior distributive outlets, and/or additional capacity and inventory, which enable suppliers to increase their average speed of service). This section will (A) delineate the various components of a firm's P-MC gap and then (B) block out the various determinants of the intensity of QV-investment competition in an arbitrarily designated portion of product-space (ARDEPPS)—arbitrarily designated because, in our monopolistically competitive world, markets (or at least their breadth) cannot be defined non-arbitrarily.

1. The Components of a Seller's P-MC Gap

Although I do not believe that for Clayton-Act purposes the intensity of competition should be defined in terms of the absolute difference between P and MC, the ratio of P to MC, or the absolute P-MC gap relative to P or MC, the test I think the Clayton Act promulgates does make price-increases relevant when they injure the relevant buyers. The first conceptual system this Article employs should enable me to investigate the various ways in which a horizontal merger might lead to such price-increases by distinguishing various components of a seller's P-MC
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A gap, in particular, this system subdivides a seller’s P-MC gap into two major components and a large number of smaller components. The two major components are created by using the concept of a seller’s highest non-oligopolistic price (HNOP) to separate one major component of the P-MC gap from the other. This HNOP is defined to be the highest price the relevant seller would find profitable to charge in a perfectly informed world if he knew that his rivals would always respond to his moves on the assumption that he could not react to their responses. The conceptual scheme this Article employs subdivides the two major components of the P-MC gap still further. In particular, it subdivides the P-HNOP gap into three components: (a) contrived oligopolistic margins (OM)—oligopolistic margins (components of the seller’s P-MC gap) that reflect anti-competitive threats, offers, and/or agreements that enable the seller to rely on the fact that his rivals’ responses to his prices will be influenced by his ability to react to their responses; (b) natural OMs—oligopolistic margins that do not reflect such anti-competitive threats, offers, or agreements; and (c) margins that reflect various parties’ mistakes. Superficially, the way in which the HNOP-MC gap is subdivided depends on whether prices are set on a customer-by-customer (so-called individualized) basis or across-the-board (apply to all potential customers of the seller in question). In individualized-pricing situations in which no relevant errors are made, the HNOP-MC gap is subdivided into (a) the best-placed seller’s basic competitive advantage (BCA) when dealing for the patronage of the relevant buyer (the sum of his buyer preference advantage [BPA] and conventional marginal cost advantage [MCA]) and (b) the second-best-placed seller’s contextual marginal costs. These contextual marginal costs (CMC) are the extra costs a seller has to bear because the price he is charging the buyer in question would expose the seller to some risk of arbitrage (to the extent that the price he is charging is discriminatory), induce his other customers to intensify their bargain-

34. A seller is said to have a BPA over a given rival for a particular buyer’s patronage if that buyer prefers the former seller’s product-variant or distributive outlet to that of the latter. The size of the BPA any given seller enjoys over another equals the amount by which the relevant buyer prefers the former’s variant over the latter’s.

35. A seller is said to have an MCA over a particular rival for a given buyer’s patronage if the conventional marginal cost the former seller has to incur to supply that buyer is lower than its counterpart for the latter seller. The size of the MCA any given seller enjoys over a particular rival equals the amount by which the former seller’s relevant MC (or incremental cost when the sale of more than one unit is at stake) falls below its counterpart for the latter seller. Obviously, although the textual formulation is based on an implicit assumption that any seller who has a BCA over a particular rival for a given buyer’s patronage will always have both a BPA and an MCA over that rival in their relations with the buyer in question, this assumption is unjustified: a seller who enjoys a BCA over a rival may do so because his BPA exceeds his marginal cost disadvantage (MCD) or because his MCA exceeds his buyer preference disadvantage (BPD).
ing (by putting the lie to his statements about his costs, by leading them to conclude that he has been treating them unfairly, or by suggesting that he can in fact be bargained down), expose him to ex ante legal-liability costs (to the extent that his price may appear to some to involve illegal price discrimination or some other price-regulation violation), and/or induce his rivals to retaliate (though a seller will not be able to justify the claim that a portion of his P-MC gap is non-oligopolistic by attributing it to the retaliation costs he has threatened to inflict on his rivals and may not be able to justify such a claim by citing the retaliation costs one set of rivals has threatened to inflict on another). In individualized-pricing situations, a seller who is second-best-placed to obtain the relevant buyer Y's patronage is likely to have to incur CMC to quote Y a price that makes his offer as attractive to Y overall as the offer Y received from his best-placed supplier because the price component of the second-best-placed supplier's "matching" offer to Y is likely to be discriminatory—i.e., is likely to be lower than the price he is quoting those other buyers whom he is best-placed to serve.

Part II will employ this conceptual scheme to delineate the various ways in which a horizontal merger may injure or benefit the customers of the MPs and their product-Rs by altering their MCs or the various other components of the prices they charge as well as the facts that will determine the extent to which these various possible effects will eventuate. Parts III and IV will then analyze the relationship between these facts and those emphasized by the crude, traditional, market-oriented approach to competitive-impact analysis and the Justice Department's Horizontal Merger Guidelines.

2. The Determinants of the Intensity of QV-Investment Competition

Obviously, the customers of the MPs and their Rs can be hurt (benefited) not only by an increase (reduction) in the prices these sellers charge

36. Obviously, the presence of CMC raises the possibility that a seller who has a BCA over the field in his relations with a particular buyer may not have an overall competitive advantage (OCA) in his relations with this buyer since his BCA may coincide with an absolutely larger contextual cost disadvantage (CCD). However, such an outcome probably occurs relatively seldom, for in most cases the firm that has a BCA will also enjoy a CCA. In particular, the firm that has a BCA over some rival will probably also enjoy a CCA over that rival because (1) the former firm's HNOP to his own customers will normally be less discriminatory than the price the latter firm will have to quote to match the former's offer and (2) most of the contextual costs that are generated by a given price will increase with the extent to which that price is discriminatory.

37. It is sometimes useful to describe a second-best-placed supplier's CMC as the sum of the best-placed supplier's CMC and the best-placed supplier's contextual marginal cost advantage over the second-best-placed supplier's CCA: in these terms, HNOP-MC can be said to equal the sum of the best-placed supplier's overall competitive advantage (OCA = BCA + CCA) and the best-placed supplier's CMC.
for a given set of product-variants supplied from given locations in given amounts of time but also by a decrease (increase) in the quality and variety of the products they are offered, in the quality and variety of the distributive outlets through which these products are supplied, and/or in the average speed of service they receive. Indeed, decreases in such quality, variety, and speed of service are harmful not only in themselves but also because they will tend to be associated with a reduction in the number of independent sellers in the relevant area of product-space and (as Part II will show) sellers who compete against a smaller number of independent product-variants and distributive variants will tend on that account to charge higher prices (to enjoy higher BCAs and obtain higher OMs). The second basic conceptual system this Article employs is designed to reveal the different ways in which a horizontal merger might affect the customers of the MPs and their product-rivals by changing the relationship between the equilibrium level of QV investment in the relevant area of product-space and the level that would result in the established firms' in the ARDEPPS in question realizing only a normal rate of return on their most profitable projects—in particular, by altering the (supernormal) rate of return the established firms will be able to realize on their most profitable projects in equilibrium. Once more, although the Clayton Act does not make the effect of a merger on this highest-supernormal-profit-rate (HSNII) directly relevant—i.e., although for Clayton-Act purposes the intensity of competition should not be defined \textit{inter alia} in terms of this rate, the test I think the Clayton Act promulgates does make changes in this rate relevant to the extent that they are related to changes in the welfare of the customers of the MPs and their product-Rs. Hence, to the extent that the second conceptual scheme does enable us to identify the various intermediate determinants of this equilibrium HSNII and to identify the facts that will determine the impact of a horizontal merger on this rate and relatedly on the relevant customers' welfare, it should facilitate our analysis of the determinants of the legality of horizontal mergers in Part II as well as our analyses of the accuracy and cost-effectiveness of the crude, traditional, market-oriented approach to this question (in Part III) and the Justice Department's Horizontal Merger Guidelines (in Part IV).

In any event, the second basic conceptual scheme this Article employs defines the various intermediate determinants of QV-investment competition—barriers to entry, barriers to expansion, monopolistic QV-investment disincentives and QV-investment incentives, and natural oligopolistic QV-investment disincentives. First, in this scheme's terminology, potential competitors are said to face "barriers to entry" to the
extent that the most profitable QV-investment project available to them at the relevant point in time should be expected to generate a lower certainty equivalent supernormal rate of return over its lifetime than the lifetime certainty equivalent supernormal rate of return the established firms should be expected to realize on their most profitable project(s) in the relevant area of product-space. Four different general categories of barriers to entry are distinguished: (a) the profit-differential barrier to entry—\( \Pi_D \)—which equals the difference between the rate of return (gross of risk costs) the established firms would expect to realize on their most profitable projects if no one ever retaliated or threatened to retaliate against QV investments and the comparable rate of return the best-placed potential entrant would expect to realize on his most profitable entry under these conditions; (b) the risk barrier to entry—\( R \)—which equals the difference between the normal rate of return for the established firms’ most profitable projects and the normal rate of return for the best-placed entry; (c) the scale barrier to entry—\( S \)—which equals the amount by which the best-placed entry will reduce everyone’s lifetime rate of return by increasing QV investment in the ARDEPPS in question; and (d) the retaliation barrier to entry—\( L \)—which equals the amount by which the possibility of retaliation against QV investments reduces the supernormal profit rate the best-placed potential entrant expects to realize on his most profitable entry.

Second, and relatedly, established firms (incumbents) considering making additional QV investments in the relevant area of product-space (potential expanders) are said to face “barriers to expansion” to the extent that they should expect the most profitable project available to them at the relevant point in time to yield a lower certainty equivalent supernormal rate of return over its lifetime than the certainty equivalent supernormal lifetime rate of return the most privately profitable projects in the ARDEPPS should be expected to provide their owners. In particular, just as the best-placed potential entrant to a given ARDEPPS may face \( \Pi_D, R, S, \) and \( L \) barriers to entry, the best-placed potential expander in a given ARDEPPS at some relevant QV-investment level may face analogously defined \( \Pi_D, R, S, \) and \( L \) barriers to expansion. When it would be useful to do so in the text that follows, the fact that a barrier is a barrier to entry will be indicated by the subscript “\( N \)” and the fact that a barrier is a barrier to expansion (is faced by an established firm that is a potential expander) will be indicated by the subscript “\( E \).”

Third, an established firm is said to face a “monopolistic QV-investment disincentive” to the extent that the QV investment he is contemplating would reduce the profits his pre-existing QV-investment projects
would generate even if it would not induce any rival to retaliate (to sacrifice what would otherwise be that rival's interests to gain an advantage by teaching the investor and his future counterparts a lesson) (1) by taking more profits from his pre-existing product-variants or outlets directly by taking sales from them than would have been taken in an analogous way by any QV investments the investment in question would deter or (2) by inducing his rivals to respond to his new investment in non-retaliatory ways that reduce his old investments' returns by more than they would have been reduced by the analogous responses he and his rivals would have made to any alternative QV investment his new investment would deter. Fourth, and by way of contrast, an established firm is said to face a "monopolistic QV-investment incentive" to the extent that his new QV investment would deter QV investments by others that would reduce the profits his pre-existing projects would generate by more than his new investment would reduce those profits if its execution would affect no one else's investment-decision. Fifth, an established firm is said to face a "natural oligopolistic QV-investment disincentive" to the extent that the investment in question would reduce the profits his pre-existing projects would yield not only in the ways delineated in the course of the preceding discussion of monopolistic QV-investment disincentives but also because it will make it profitable for a rival to make an additional QV investment that he would not otherwise have made (profitable for reasons that have nothing to do with any desire the rival may have to achieve contrived oligopolistic or predatory goals). Although a member of the set of firms that were potential competitors at the time of the inquiry might also face such QV-investment disincentives or QV-investment incentives in relation to any investments it might make in the ARDEPPS in question in addition to its initial entry, I will ignore this possibility in the text that follows.

Now that I have defined these various barriers to entry, barriers to expansion, monopolistic QV-investment disincentives and incentives, and natural oligopolistic QV-investment disincentives, it should be possible to explain their relationship to the intensity of QV-investment competition, which I will stipulate to be monotonically related to the inverse of the ARDEPPS' highest equilibrium supernormal profit rate (HSNPI) — i.e., to one over the lifetime supernormal rate of return that will be yielded by the ARDEPPS' most profitable projects in equilibrium. For simplicity, I will assume not only (A) that only the set of firms that were established

38. For a more detailed development of this and various related material, see Markovits, Horizontal Mergers, supra note 5, at 660-73, and R. Markovits, Oligopolistic and Predatory Conduct, supra note 4.
in the relevant ARDEPPS at the time of the inquiry may face monopolistic QV-investment disincentives and incentives, or natural oligopolistic QV-investment disincentives but also (B) that QV investment will always settle at the lowest level that would produce an equilibrium, (C) that entries and expansions will be made in the order of their profitability, and (D) that equilibrium QV investment in the ARDEPPS in question will always be at least as high as time-of-inquiry QV investment. For the same reason, I will ignore (E) the fact that the expression "infinitesimally more than" should precede all the barrier-plus-QV-investment-(dis)incentive sums that appear in the text that follows as well as (F) the fact that entries of a given size (measured in QV-investment terms) may reduce the profitability of any ARDEPPS (may increase price competition in any ARDEPPS) by more than an expansion of the same size. In any event, on these assumptions at least three conclusions that are worth noting would be justified.

The first is precise though somewhat complicated: if (for some supposedly regulatory reason) post-inquiry expansions were barred or if no expansion were profitable at the time of the inquiry (if the sum of the expansion-barriers and QV-investment [dis]incentives facing the best-placed potential expander at the time-of-inquiry QV-investment level equalled [just exceeded] the lifetime rate of return the ARDEPPS' most profitable projects would yield at that QV-investment level), the equilibrium HSNII would equal \( (\Pi_D + R + S + L)_N \) for the last entry that was just profitable (assuming that the time-of-inquiry QV-investment level was lower than the entry-preventing QV-investment level). Before proceeding, it should be emphasized that the barrier-to-entry sum just delineated will in general be higher than its counterpart for the most profitable, possible, post-inquiry entry. Although, admittedly, the conditions under which this conclusion applies will not often be satisfied in practice, this conclusion does still have some significance since the entry-barrier sum to which it refers does establish a maximum value for the relevant ARDEPPS' equilibrium HSNII.

The second, analogous conclusion is equally precise and complicated and similarly relevant: if (for some supposedly regulatory reason) post-inquiry entries were barred or if the sum of the entry-barriers facing the best-placed potential entrant at the time-of-inquiry QV-investment level made entry unprofitable for all potential competitors (if the relevant sum just exceeded the lifetime rate of return the ARDEPPS' most profitable projects would yield at that QV-investment level), the equilibrium HSNII would equal \( (\Pi_D + R + S + L)_E + (M^* \text{ or } O^*) \) for the last expansion that would just be profitable if entry were barred—hence the aster-
isks. Once more, it should be emphasized that the expansion-barrier-plus-QV-investment-disincentive sum just delineated will generally be higher than its counterpart for the most profitable, possible, post-inquiry expansion whenever the expansion-preventing QV-investment level is lower than the time-of-inquiry QV-investment level. And again, although the conditions with which this paragraph is concerned will not often be found in practice, its basic conclusion does have some significance since the expansion-barrier-plus-investment-disincentive sum to which it refers also establishes a maximum value for the relevant ARDEPPS’ equilibrium HSNII.

Unfortunately, although the third conclusion is substantially more significant, it is far less precise and more complicated. In particular, as my prospective MIT book on oligopolistic and predatory conduct will explain and specify in some detail, in the more general case in which neither all post-inquiry entry nor all post-inquiry expansion is either barred or prevented by the prevailing barriers and QV-investment disincentives, the equilibrium (supernormal) HSNII will be somewhere between zero and the lower of (1) \((\Pi_D + R + S + L)N\) for the last entry that would be profitable if expansion were barred and (2) \((\Pi_D + R + S + L)E + (M^* \text{ or } O^*)\) for the last expansion that would be profitable if entry were barred. The calculation of the actual equilibrium HSNII is complicated by two “facts” or conclusions. The first is the obvious fact that a combination of entry and expansion may result in equilibrium QV investment’s exceeding (and the equilibrium HSNII’s falling below) the level that would result if either any post-inquiry entry or post-inquiry expansion were barred or unprofitable. The second is the somewhat more complicated fact that even if each established firm that would be best-placed to make the various successive additional post-inquiry QV investments (expansions) that would have to be made to prevent all post-inquiry entry could realize nominally normal returns by doing so (normal returns if one ignored any M or O disincentives it faced), the established firms might choose not to expand sufficiently to prevent all entry—i.e., the somewhat more complicated fact that established firms that are in such positions may not find it profitable to prevent all entry (or any particular entry) when the amount of QV investment they would have to make to do so exceeds the amount of entry that would result if they did not do so (since the monopolistic QV-investment disincentives associated with such “limit investments” may be prohibitive). Regrettably, this analysis suggests that in the more general case on which we are now focusing it will not be possible to predict the equilibrium HSNII solely from the sum of the relevant barriers and
QV-investment disincentives that would confront the last entrant if post-inquiry expansions were barred or the last expander if post-inquiry entries were barred. Instead, in this more general case, predictions will have to be based on data about the barrier-plus-investment-disincentive sum that would confront (1) the best-placed entrants and the best-placed expanders at the time of the inquiry and (2) the set of all successively worse-placed entrants and expanders who turn out to be relevant—a set which will not include the “last” entrants and expanders mentioned above when neither all entries nor all expansions are either barred or prevented by prevailing barriers and QV-investment disincentives.

II. PREDICTING THE COMPETITIVE IMPACT OF HORIZONTAL MERGERS IN OUR MONOPOLISTICALLY COMPETITIVE WORLD: A NON-MARKET-ORIENTED APPROACH AND ASSESSMENT OF THE SIGNIFICANCE OF INTERNATIONAL COMPETITION

This Part will (1) delineate the various ways in which a horizontal merger can affect the welfare of the MPs and their product-Rs, (2) list the most significant non-market-aggregated determinants of the extent of each such effect, and (3) examine the implications of the preceding analysis for the relevance of international competition for the assessment of the legality of horizontal mergers under the Clayton Act. For reasons that Part I should have made clear, the analysis will also implicitly assume that all the buyers whose position it discusses are American buyers. To save space, the analysis will focus on horizontal mergers between firms that set their prices on an individualized basis. As I have shown elsewhere, virtually all of the basic conclusions we reach will also apply to across-the-board-pricing contexts.39

A. Horizontal Mergers and the Welfare of the Customers of the MPs and Their Product-Rs: A Non-Market-Oriented Analysis

It will be convenient first to assume that the mergers in question generate no static or dynamic efficiencies40 and then to relax this assump-

39. See Markovits, Horizontal Mergers, supra note 5.
40. An efficiency is said to be “purely static” if it relates exclusively to the costs the relevant firm must incur to use one of its existing QV investments—i.e., if it does not specifically relate to the firm’s ability to increase its QV investments or does not carry over to any additional QV investment it makes. An efficiency is said to be “dynamic” if it relates specifically to the firm’s ability to increase its QV investments—e.g., an efficiency would be purely dynamic if it was not static but did reduce the II,+,R barriers to entry or expansion the firm faced. A horizontal merger might generate a purely dynamic efficiency if it combined one firm with excess managerial capacity in its production division but no excess managerial capacity in its distribution division with a second firm with excess
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...tion and examine the significance of—i.e., the possible competitive impact of—any such efficiencies such a merger may generate.41

1. Horizontal Mergers that Generate No Efficiencies

Horizontal mergers that generate no efficiencies will tend to injure the customers of the MPs and their product-Rs (1) by increasing the prices the MPs charge their own customers (ceteris paribus—i.e., even if QV investment is not affected) by reducing the attractiveness of the offers against which they have to compete; (2) by increasing the prices the MPs' product-Rs charge their own customers by reducing the attractiveness of the offers these customers receive from the MPs; and (3) by increasing the operative barriers to entry, barriers to expansion, and monopolistic QV-investment disincentives.

A horizontal merger that generates no efficiencies will tend to increase the MPs' overall competitive advantages (OCAs), natural OMs, and contrived OMs. In most cases, the effect of a horizontal merger on the MPs' OCAs is quite substantial. In particular, whenever the MPs were respectively best-placed and second-best-placed to serve a given buyer pre-merger, their merger will injure that buyer inter alia by increasing the best-placed MP's OCA by the amount by which the second-best-placed supplier of the buyer in question (the other MP) was better-placed than that buyer's third-best-placed supplier—i.e., by reducing the attractiveness of the offers against which the best-placed MP has to compete by freeing him from his merger partner's competition.

Moreover, although this effect will usually be less significant, horizontal mergers will also tend to increase the prices the MPs charge by increasing their natural OMs—i.e., by deterring their product-Rs from undercutting their oligopolistic prices even if the Rs do not expect the MPs to retaliate against their undercutting or to reward their cooperation. In particular, since a firm will be able to obtain an OM naturally (without threatening retaliation or promising reciprocation) only if the extra strategic and mechanical costs it would have to incur to beat an inferior's underbid were less than the profits it could originally have real-

managerial capacity in its distribution division but no excess managerial capacity in its production division. Some static efficiencies will carry over to any additional QV investments the firm takes—e.g., a horizontal merger that enables the MPs to take advantage of economies of scale when producing their pre-merger outputs of the various members of their pre-merger product-sets would also tend on that account to reduce the costs they had to incur to produce additional product-variants (would also tend on that account to reduce the \( \Pi_n + R \) barriers they faced). Efficiencies of this kind will be referred to as "static efficiencies that carry over to new, additional QV investments."

41. The analysis that follows borrows heavily from Markovits, Horizontal Mergers, supra note 5, and Markovits, Review Article, supra note 5, at 603-08.
ized by making a sale at the reduced price in question—i.e., only if it would find it profitable in itself to beat an underbid, a horizontal merger that increases the MPs' OCAs—and hence the profitability of beating an underbid (the gap between its "beating" price and MC)—will tend on that account to increase their natural OMs as well.

Finally, and frequently more significantly, horizontal mergers will also tend to injure the MPs' customers by increasing the OMs the MPs contrive—by enabling the MPs to profit by using threats of retaliation and promises of reciprocation to deter their product-Rs from beating the MPs' offers to the MPs' customers (even when the Rs could profit in the short run by doing so). More specifically, a horizontal merger will tend to increase the MPs' contrived OMs in the following six ways:

1. by reducing the communication costs they must incur to contrive an OM (by obviating their communicating with each other and permitting both to communicate in one act to a given rival) and by increasing the extent to which one partner can rely on its pricing decisions to communicate implicitly its anti-competitive intentions (when one of the merger partners has a reputation that the other lacks for contriving or for accurately assessing its position);  
2. by increasing the merger partners' ability to detect undercutting by using repeat-sales, sales-to-other-suppliers'-customers, and new-buyer-sales records to predict the probability that any given percentage of their customers would have defected spontaneously (by increasing the number of customers they serve, particularly when some rivals might otherwise have undercut both merger partners);  
3. by increasing their ability to identify their undercutter (by eliminating one possible undercutter, by providing them with more relevant circumstantial evidence through facilitating the pooling of their sales records, and perhaps by enabling the merger partners to pool other sorts of information that would give them a more accurate picture of their individual rivals' competitive positions.
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relative to them); (4) by increasing the credibility of their threats and promises (by enabling the merged company to take advantage of the stronger reputation of one of its predecessors and by increasing the actual profitability of retaliation and reciprocation); (5) by reducing the cost of the necessary rewards and punishments by enabling the merged firm to use any excess reciprocatory power either merger partner had vis-à-vis a particular rival, by increasing each MP’s reciprocatory power (where one MP was some R’s closest rival and the other MP was that R’s second-closest rival), and by enabling the merged company to use both merger partners’ products to punish a rival for undercutting either merger partner (where the MPs face different harm-inflicted-to-cost-incurred ratios for their marginal [last necessary] acts of retaliation); and (6) by increasing the benefits generated by such behavior by increasing the BCAs the merger partners have to protect against undercutting and enabling both to profit from any reputation that either’s reciprocation or retaliation would create.  

Accordingly, although a horizontal merger that creates no efficiencies will also affect the MPs’ contrived OMs in other ways (in both directions), most mergers of this kind will tend to injure the MPs’ customers by encouraging them to make threats of retaliation and/or promises of reciprocation that will deter their rivals’ undercutting—that reduce the attractiveness of the offers against which they have to compete. 

In short, horizontal mergers that generate no efficiencies will tend to injure the MPs’ customers by raising the MPs’ OCAs, natural OMs, and contrived OMs. Moreover, such horizontal mergers may also injure other relevant buyers—viz., the customers of the MPs’ product-Rs by increasing these Rs’ competitive advantages, natural OMs, and contrived OMs. Thus, to the extent that such a horizontal merger induces the MPs to raise their prices, it will tend to increase their product-Rs’ overall competitive advantages (which include their contextual cost advantages) by increasing the contextual marginal costs the MPs will have to incur to beat such Rs’ prices to the Rs’ customers by increasing the extent to which any such underbid would be discriminatory. In addition, as we have just seen in relation to the MPs, such an increase in the product-Rs’

45. Markovits, Review Article, supra note 5, at 603-04.

46. For example, any tendency a horizontal merger may have to increase the MPs’ BCAs will affect their contrived OMs in both directions—in particular, will tend to reduce their contrived OMs by increasing the profits they can earn safely (by making them reluctant to risk their safe profits) while tending to increase their contrived OMs (by increasing the credibility of their threats and promises since sellers who have put a larger amount of safe profits at risk are more likely to carry out acts that are designed to protect them from undercutting). I should note that to the extent that the MPs’ horizontal merger enables a product-R who was sometimes their closet rival to raise his prices to his own customers for any of the reasons just delineated, it will tend to increase the MPs’ OCAs as well by raising the contextual marginal costs the relevant R would have to incur to beat the MPs’ HNOP to their customers. The cycle would continue until an equilibrium was eventually reached. I will ignore this feedback relationship in the text that follows.
OCAs and hence HNOPs will be associated with an increase in the feasibility of their obtaining OMs naturally. Finally, and probably most importantly, such a horizontal merger will increase the relevant product-Rs' ability to contrive OMs:

(1) by reducing the costs to them of making the necessary communications (by enabling such rivals to communicate simultaneously to both merger partners); (2) by reducing the costs they must incur to identify their undercutters (by reducing by one the number of independent possibilities and by enabling them to pool information about the customers they lost that either MP was well-placed to steal); and (3) by reducing the cost to them of rewarding or punishing the merged firm (by enabling them to take advantage of any excess reciprocatory power they had in relation to one of the merger partners, by enabling them to punish the merged company by stealing more of one of the merger partners' customers than would otherwise have been necessary—i.e., by spreading the MPs' defenses, and by increasing the individual MPs' BCAs and hence vulnerability to retaliation). 47

As I have already noted, 48 although on my reading of the relevant statutes these effects of a horizontal merger on the OCAs and OMs of the MPs' product-Rs are largely irrelevant to its legality under the Sherman Act, they are equally relevant as the impact of such a merger on the MPs' own OCAs and OMs to its legality under the Clayton Act.

Horizontal mergers that generate no efficiencies may also injure buyers by reducing the intensity of QV-investment competition. Reductions in the intensity of QV-investment competition and (ceteris paribus) in QV investment injure buyers both directly by eliminating a purchase-option they might have preferred and indirectly by eliminating the competitive pressure that option imposed on suppliers of other products they might have purchased in any event. As the discussion at the end of Part I should have made clear, in the general case in which neither all post-inquiry entries nor all post-inquiry expansions are either barred or rendered unprofitable by operative barriers and QV-investment disincentives, a horizontal merger will reduce QV-investment competition to the extent that it raises \((\Pi_D + R + S + L)_N\) for some relevant possible entry or \((\Pi_D + R + S + L)_E + (M \text{ or } O)\) for some relevant possible expansion. However, rather than delineating the various ways in which a horizontal merger that generates no efficiencies may produce these results, I will make the same points in a way that reveals their relevance more clearly by explaining how such a merger might reduce QV-investment competition by changing the QV-investment incentives (1) of an MP who would

47. Markovits, Review Article, supra note 5, at 605.
48. See supra note 13.
otherwise have made a QV investment that would have raised the relevant ARDEPPS' QV investment to a level it will not attain post-merger or (2) of an MP's actual or potential product-R who would otherwise have made such an investment.

I will begin by explaining how a horizontal merger can reduce QV-investment competition when one of the MPs would have added a QV investment to the ARDEPPS had he stayed independent in circumstances in which no other established or potential competitor would do so (because the other established firms faced higher barriers to expansion and QV-investment disincentives and all potential competitors faced preclusive barriers to entry). In this case, the relevant MP's participation in such a horizontal merger may deter him from making a QV investment he would have made had he stayed independent (1) by raising the \( \Pi_D + R \) barriers he faced by causing him to allocate to consolidating the new company resources that he would otherwise have used to make the QV investment, (2) by raising the L barriers he faced (a) by allowing his remaining product-Rs to retaliate by stealing not only his but also his merger partner's customers (by spreading his defenses) and (b) by increasing the amount of harm a remaining rival can inflict on him by incurring various relevant amounts of costs to steal his (or his partner's) customers by beating their offers from a position of inferiority by raising his as well as his partner's BCAs and OCAs, and (3) by raising the monopolistic QV-investment disincentive the best-placed QV investor faced by internalizing to the merged firm the losses MPI's additional QV investment inflicts on MP2 (or vice versa).\(^\text{49}\) On the other hand, when one

\(^{49}\) Admittedly, in a few perverse cases, a horizontal merger that generates no efficiencies may lead the merged firm to make a QV investment when neither MP would have done so on its own. In particular, this result may obtain when pre-merger MPI and MP2 were the only two firms not precluded from making a new QV investment by the barriers to expansion they faced but both were deterred from expanding by the combination of those barriers and the natural oligopolistic QV disincentives they imposed on each other—by the sum of (a) the monopolistic QV-investment disincentives each would face if his additional QV investment would be the last in the area of product-space in question and (b) the additional losses each would sustain because in fact his QV investment would cause the firm that became the other MP to make a QV investment it would otherwise not have made. (The fact that this second firm would not make the first QV investment is consistent with its willingness to make a QV investment after the first firm made its QV investment: once a first QV investment that will not be withdrawn has been made, the second possible investor will not be deterred from expanding by the prospect of his investment's inducing his rival to invest when it would not otherwise have done so.) In any case, this result will obtain whenever the monopolistic QV-investment disincentives the merged term faces post-merger—which will be higher than the monopolistic QV-investment disincentives each eventual MP would have faced pre-merger, which were described in (a)—are critically lower than the natural oligopolistic QV disincentives (O) each MP actually faced pre-merger. The main reasons that the relevant M may be lower than the relevant O is that unlike its antecedents the merged firm has the option of behaving in a way that results in only one additional QV investment's being made. (Indeed, even if the merger would not affect price competition, the merged firm might end up making two additional QV investments despite the fact
(or more) of the MPs' actual or potential product-Rs would have added a QV investment had the merger not taken place in circumstances in which the MPs would not have done so (at least, in the absence of such an R), an efficiency-less horizontal merger may deter that R from making such an expansion for two different sorts of reasons. First, regardless of whether the R in question was an actual or potential competitor of the MPs, their merger may deter him from investing by raising the L barrier he faced—(a) by enabling the merged company to coordinate the retaliation of its antecedents (or of its antecedents and some remaining non-expanding independent Rs) more successfully than the independent MP1 and MP2 (or than the independent MP1, MP2, and some other non-expanding independent Rs) could have done and (b) by internalizing to the merged company more of the external benefits than of the external costs an independent MP1's retaliation would have imposed on an independent MP2. Second, when the R in question is either an established firm or a potential competitor at the time of inquiry who has already made at least one QV investment in the ARDEPPS in question, the MPs' merger may deter an R from expanding either by confronting him with monopolistic QV-investment disincentives (by raising $\Pi_D + R + S + L$ for the MPs and thereby transforming a situation in which the R had to assume that one of the MPs would expand if the R did not into one in which no one would expand if the R did not). Admittedly, however, any tendency of a merger to increase the $\Pi_D + R + S + L$ barriers facing the MPs could also encourage such Rs to expand by transforming a pre-merger situation in which the R had to assume that one of the eventual MPs would expand if and only if the R expanded into one in which the R would assume that his QV-investment decision would affect no one else's (by reducing the QV-investment disincentives confronting the R—by substituting smaller M disincentives for larger O disincentives).

In short, horizontal mergers that generate no efficiencies will reduce price and QV-investment competition by internalizing to the merged firm the damage each MP's price or QV-investment moves do to the other (and thereby increasing the MPs' BCAs and M QV-investment disincentives) that its antecedents would not have made any pre-merger. Such behavior is consistent with the assumption that neither antecedent would have invested pre-merger because the merged firm has an incentive to take into consideration the damage its additional QV investments inflict on both its antecedents when choosing the particular QV investments it makes—because the merged firm may make two additional QV investments that are less damaging to each other and to the MPs' pre-existing projects than the investments MP1 and MP2 would have made if independent.) I will ignore this possibility and several related "perverse" possibilities not only in the present context but also when analyzing the possible "competitive impacts" of horizontal mergers that do generate efficiencies. Markovits, Review Article, supra note 5, at 606.
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tives), by facilitating oligopolistic interactions between the MPs and their Rs (and thereby increasing the natural and contrived OMs the MPs and their Rs can obtain as well as the L barriers the MPs and their Rs face), and by making it profitable for the merged company to take steps that increase the $\Pi_D + R$ barriers to expansion it faces (to allocate to consolidating the new firm resources that could otherwise have been used to create or use a new QV investment).

2. Horizontal Mergers that Generate Static and/or Dynamic Efficiencies

Horizontal mergers that generate efficiencies will still tend to reduce competition in all the ways just described, but in general these anti-competitive effects will be more or less offset by the pro-competitive impact of the efficiencies they generate.\(^{50}\) Admittedly, a horizontal merger that generates efficiencies may decrease QV-investment competition and concomitantly price competition in the long run by inducing the exit of an established firm or deterring the entry of a potential competitor. However, this result rarely occurs,\(^ {51}\) would frequently be outweighed by the short-run pro-competitive impact of the efficiencies in question, and may not be legally relevant in any event.\(^ {52}\) The discussion that follows will

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50. The academic literature has almost totally ignored the competitive significance (as opposed to the allocative-efficiency significance) of the efficiencies mergers may generate. See Williamson, Economies as an Antitrust Defense Revisited, 125 U. PA. L. REV. 699 (1977); Markovits, Review Article, supra note 5, at 606 n.71.

51. The efficiencies a horizontal merger generates will produce an improvement in the MPs' competitive positions in relation to their product-Rs' customers (by reducing the costs the MPs must incur to produce a given product or deliver it to particular buyers or by making it profitable for the MPs to introduce new products or outlets that are better-placed than the MPs' pre-merger products to obtain the patronage of particular buyers their product-Rs were best-placed to serve pre-merger). Obviously, this improvement in the competitive position of the merged firm in relation to the MPs' product-Rs' customers entails a decrease in the frequency and amount by which the MPs' Rs are best-placed. Although, as we have just seen, the MPs' merger will simultaneously increase their product-Rs' prices and profits in various ways, a horizontal merger that generates efficiencies may reduce the profits one or more of the MPs' product-Rs can realize for the reasons just delineated sufficiently to reduce their profits on balance. If such an overall reduction occurs, it may critically affect the profitability of the product-R in question (make what would otherwise be a profitable operation unprofitable). If no one replaces the QV investment that the R in question is thereby induced to withdraw or is thereby deterred from introducing (when the product-R is a potential entrant or expander) with a QV investment that is equally beneficial to the customers of the MPs and their product-Rs—e.g., if an R is induced to withdraw despite the fact that he was better-placed to operate in the area of product-space in question than anyone else is to enter it or expand their operations in it, the net effect of the efficiencies may be to reduce competition in the long run in the sense that the Clayton Act makes relevant. Of course, as the text suggests, even if the efficiencies a horizontal merger generates do decrease competition in the long run, they may increase competition overall by increasing competition (benefiting the relevant buyers) in the short run more than they decrease competition (harm the relevant buyers) in the long run.

52. As Part IA indicated, I would not interpret the Clayton Act to prohibit a merger that decreased competition overall as a result of the long-run effect of the organizational allocative effi-
therefore focus on the various pro-competitive effects of the efficiencies a horizontal merger can generate.

In general, competition will tend to be increased by (the customers of the MPs and their product-Rs will tend to benefit from) both any purely static efficiencies a horizontal merger generates and any dynamic efficiencies it generates (or any static efficiencies to the extent that they would carry over to any additional QV investments the merged firm might make). In particular, to the extent that one of the MPs was second-best-placed or worse-than-second-best-placed by less than the static efficiency the merger generated, the static efficiency in question will benefit the pre-merger customers of the MPs' product-Rs by increasing the pressure the MPs exert (by increasing the attractiveness of the offers they receive from the MPs). The initial effect of the efficiency will be on the best-placed R's OCA. When the relevant MP was second-best-placed both pre-merger and post-merger, the reduction in the best-placed R's OCA will tend to equal the static efficiency in question (measured by its impact on the relevant MP's position in his relations with the buyer in question); when the relevant MP was worse-than-second-best-placed pre-merger but second-best-placed post-merger, the reduction in the best-placed R's OCA will tend to equal the efficiency in question minus the amount by which the relevant MP was originally worse-than-second-best-placed; and when the relevant MP was worse-than-best-placed pre-merger but best-placed post-merger, the relevant portion of the reduction of the OCA of the R that was best-placed pre-merger (the portion that will be associated with a gain to the relevant buyer) will tend to equal the relevant R's pre-merger OCA. Moreover, any tendency such an efficiency has to benefit the relevant buyers by reducing their pre-merger best-placed suppliers' positive OCAs will also tend to reduce the frequency with which their suppliers can obtain OMs naturally (by reducing the profits they could have obtained originally by charging a price.

Somewhat surprisingly, static efficiencies will be far less likely to benefit the relevant buyers when one of the MPs was best-placed pre-merger since in this case the merged firm would be unlikely to pass on to consumers the benefits associated with the static efficiency in question (e.g., the reduction in the MC of producing the good concerned). (Although there may be some tendency for some of these benefits to be passed on to the extent that the improvement in the merged company's competitive position in relation to buyers whom others were originally best-placed to serve makes it attractive for the merged company to try to obtain such buyers' patronage by offering them low prices, I doubt that any related increase in contextual marginal costs will lead such a company to reduce the prices it originally charged those buyers it was best-placed to serve pre-merger.) Hence, static efficiencies that increase allocative efficiency by reducing the production costs of a merged firm that is never second-best-placed or close-to-second-best-placed may have no pro-competitive impact whatsoever.
that would beat any undercutting offer their customers received). On the other hand, to the extent that the static efficiencies a horizontal merger generates increase the OCAs of the MPs' product-Rs by increasing the OCAs of the MPs themselves, they will tend to decrease the contrived OMs of the MPs' product-Rs by increasing the safe profits they have to put at risk to practice contrived oligopolistic pricing (though this effect may be offset by the tendency of the increase in the Rs' OCAs to increase the profitability of their contriving oligopolistic prices by making their threats and promises more believable as well as by the tendency of the increase in the MPs' OCAs to make the Rs' contrived oligopolistic pricing more profitable by deterring the MPs from undercutting by making the MPs more vulnerable to retaliation by increasing the amount of harm the Rs could inflict on the MPs at various relevant costs to the Rs in question). On balance, I am confident that in the vast majority of cases the static efficiencies horizontal mergers generate will tend to increase competition (benefit the relevant buyers) by increasing the attractiveness of the offers they receive from their inferior suppliers.

Competition will also tend to be increased by any dynamic efficiencies a horizontal merger generates or by any tendency of the static efficiencies it generates to carry over to any additional QV investments the merged firm makes. For example, when one of the MPs was the best-placed firm to add a QV investment to the relevant ARDEPPS pre-merger but was still deterred from doing so by the $\Pi_D + R$ barriers and monopolistic QV-investment disincentives it faced, a merger that reduced the $\Pi_D + R$ barrier it faced (by giving it access to some underutilized assets of its merger partner) could very well make it profitable for the

54. The static efficiencies that horizontal mergers generate may also affect the MPs' product-Rs' contrived OMs by changing the number of these Rs' rivals in a position to beat their contrived oligopolistic offers with prices that cover the undercutters' overall marginal costs. However, there is no general reason to believe that the relevant efficiencies will tend either to increase or to decrease the number of such possible undercutters ($U$) in general. Thus, on the one hand, such efficiencies may increase the number of relevant Us by adding an MP who was originally far worse than second-best-placed to the group of firms that are second-best-placed or close-to-second-best-placed. On the other hand, such efficiencies may also decrease the number of relevant Us (of rivals well-placed to undercut the contrived oligopolistic price of the relevant buyer's best-placed supplier). This result would obtain, for example, if the efficiencies made the merged firm the second-best-placed supplier of the buyer in question by a substantial margin, and pre-merger, a large number of other firms were or were close to being the relevant buyer's second-best-placed supplier.

55. I should mention one other possibility that cuts against this conclusion: to the extent that a horizontal merger enables the MPs to take advantage of economies of scale that relate to the mechanical costs they would have to incur to change an initially announced price (the cost of changing advertising layouts, of printing and distributing price lists, etc.), it will tend to injure the MPs' customers by increasing their ability to obtain OMs naturally. I have ignored this possibility in the text because such mechanical costs are usually unimportant in the individualized-pricing context on which we are now focusing.
merged firm to execute a QV investment that neither of its antecedents would have found worthwhile. And again, when (a) one of the MPs' established rivals was the only firm not deterred from adding a QV investment to the relevant ARDEPPS pre-merger by the expansion (or entry) barriers it faced but (b) that rival was deterred from doing so by the combination of the expansion barriers he faced and the monopolistic QV-investment disincentives he confronted, a merger that reduced the $\Pi_D + R$ barriers the merged company faced might induce that rival to make a QV investment by eliminating the monopolistic QV-investment disincentive $M$ confronting him by making it clear that the merged firm would make a QV investment if he did not—a QV investment that would be as damaging to the R's pre-existing projects.56

Although this section has refined the relevant analysis in several significant respects, the conclusion I reached in my Review Article still seems warranted:

the net competitive effect of any horizontal merger will depend on whether its tendency to generate static and dynamic efficiencies that will increase the competitive pressure the MPs place on their rivals outweighs its tendency to reduce such competition by internalizing to the merged firm the damage its predecessors' price and QV investment moves previously inflicted on each other as well as by facilitating various contrived and natural oligopolistic interactions between the MPs and their Rs.57

B. The Most Important Determinants of a Horizontal Merger's Competitive Impact and a Related Approach to Competitive-Impact Prediction

Before proceeding to analyze the relevance of international competition for the competitive impact of horizontal mergers (or indeed for the adequacy of both the traditional approach to making the relevant competitive-impact predictions and the Justice Department's Horizontal Merger Guidelines), it will be useful to delineate the implications of Section III for the facts on which the competitive impact of a horizontal merger depends. I will begin with the more significant factors that will influence the extent to which a horizontal merger will decrease competition and then analyze the (efficiency-related) factors that will influence

56. Admittedly, perverse outcomes are also possible when one of the MPs was not best-placed to make a relevant QV investment pre-merger since efficiencies that reduce the barriers to expansion facing the merged firm may convert a situation in which some R faced non-preclusive barriers and $M$ disincentives pre-merger to one in which he and the merged firm face preclusive natural oligopolistic QV-investment disincentives post-merger. See supra note 49.

57. Markovits, Review Article, supra note 5, at 608.
the extent to which such a horizontal merger will tend to increase competition. In particular, a horizontal merger that generates no efficiencies will tend to be more anti-competitive: (1) the greater the amount by which the merger will increase the MPs' OCAs—i.e., the greater the frequency with which the MPs are respectively best-placed and second-best-placed and the larger the amount by which the second-best-placed MP is better-placed than the third-best-placed supplier of the buyers in question; (2) more complicatedly and less usefully, the greater the extent to which the merger will increase the MPs' natural OMs—i.e., the greater the frequency with which the strategic and mechanical costs the MPs would have to incur to change their initially announced prices to those buyers they were best-placed to serve were larger than their pre-merger OCAs but smaller than their post-merger OCAs; (3) the greater the frequency with which, pre-merger, contrived oligopolistic pricing was either profitable for the MPs or unprofitable by a smaller amount than the amount by which the merger would increase its profitability—(a) the smaller the number of rivals who were either second-best-placed or close-to-second-best-placed to obtain the patronage of the MPs' customers, (b) the stronger the MPs' reputations for estimating their costs and OCAs accurately (a strong reputation for accuracy will increase their ability to communicate their contrived oligopolistic intentions cheaply simply by charging an oligopolistic price), (c) the stronger the MPs' reputations for carrying out their threats and promises, (d) the more stable through time the MPs' repeat-sales, sales-to-other-suppliers'-customers, and sales-to-new-buyers records and the smaller the likely differences between relevant future and past conditions (the greater the MPs' ability to detect undercutting from such circumstantial, sales-record evidence), (e) the greater the MPs' knowledge about the identity of their closest rivals for particular individual customers and the greater their ability to identify the new suppliers of their old customers or of any new buyers in the market, (f) the greater the amount of benefits the MPs can provide their potential undercuts (relative to the profits the relevant undercuts—Us—could realize by undercutting, absent the MPs' oligopolistic responses)—the greater the frequency with which and the amount by which the MPs were their potential Us' closest competitors (or closest competitors among those rivals whose cooperation the Us had not secured), the higher the ratio of the harm the MP can inflict on an undercutting R to the cost the MP must incur to do so for the amount of harm

58. These factors are important because it is virtually costless for a firm to reward cooperation by reciprocating in the relevant sense: since the cooperator would presumably not have given the MP in question the opportunity to undercut him profitably unless the MP has promised not to take
he has to inflict on that R to make the R regret his undercutting sufficiently to deter him and his counterparts from undercutting the MPs in the future—roughly speaking, the greater the frequency with which the MPs were second-best-placed or close-to-second-best-placed to obtain each potential U’s customers relative to the frequency with which that potential U was able to steal the relevant MP’s customers and the greater the size of each relevant U’s OCAs in relations with the buyers the MPs will find most cost-effective to steal relative to the size of the relevant MP’s contrived OMs in his relations with the buyers he was best-placed to serve and the relevant potential U was well-placed to steal; (4) the greater the amount by which the merger will increase the profitability of the MPs’ contriving oligopolistic prices—i.e., (a) the greater the frequency with which the elimination of MP2 as a potential undercutter of MP1 (and vice versa) reduces the number of potential Us because pre-merger MP2 belonged to a group of second-best-placed or close-to-second-best-placed suppliers, (b) the greater the contribution the merger makes to the MPs’ ability to estimate their costs and OCAs (by enabling the MPs to share information about their product-Rs’ costs or the attractiveness of their own products as well as the products of their product-Rs to particular groups of buyers), (c) the greater the extent to which the merged firm has a stronger reputation for carrying out its threats and promises than its antecedents (because it inherits the reputation of the tougher MP or because it creates a merged firm with a greater stake in deterring undercutting by enabling the whole company to profit from the reputational effects of any act of retaliation or reciprocation undertaken by a division formerly belonging to any of its antecedents), (d) the greater the extent to which the merged company’s ability to infer undercutting from circumstantial evidence exceeds its antecedents’ because the merger enables the company to pool its antecedents’ repeat-sales, sales-to-other-suppliers’-customers, and new-buyers-sales records (the larger the sales of the MPs and the greater the extent to which they have common product-Rs), (e) the greater the extent to which the merged company’s ability to identify its undercutter from sales-record circumstantial evidence exceeds its antecedents’ because it has access to the relevant sales-records and rival-competitive-position information of both MPs (the larger the sales of the MPs, the greater the extent to which they have common product-Rs, and the greater the complementarity of the rival-competitive-position information in their possession), (f) the greater the amount advantage of that opportunity, the only cost to the MP of reciprocating is the cost of foregoing the opportunity to promise cooperation in the future and then welch on this promise.
by which the merger increases each MP's ability to reciprocate—the greater the extent to which one MP had excess reciprocatory power pre-merger and the greater the frequency with which the MPs were a rival's closest two rivals not to be coopted pre-merger and in those instances the greater the amount by which the worse-placed MP was better-placed than the next-best-placed R not to be coopted, and (g) the greater the extent to which the merger reduced the harm-inflicted-to-cost-incurred ratio for MP-retaliation by enabling the MPs to pool their power (by combining MPs with different marginal ratios for the last act of retaliation that would have been necessary for each had they remained separate in relation to a given potential U); (5) the greater the extent to which the merger would increase the MPs' product-Rs' OCAs and natural OMs by increasing the MPs' contextual marginal costs—(a) the greater the factors listed under (1) above, (b) the greater the attention antitrust authorities pay to the MPs' price discrimination, and (c) the higher the penalties for illegal price discrimination; (6) the greater the extent to which the merger enables the MPs' product-Rs to contrive additional OMs—(a) the greater the frequency with which both MPs were potential Us of a given product-R pre-merger (the greater the frequency with which pre-merger such an R would have had to communicate with both MPs separately and would have had to consider the possibility that either MP might be their actual U and the greater the associated communication and identification costs), (b) the greater the amount by which the merger deters the MPs from undercutting by increasing their OCAs—the greater the factors listed under (1) above, (c) the greater the frequency with which the merger enables a given R to take advantage of any excess reciprocatory power he enjoyed vis-à-vis one MP and the greater the amount of excess reciprocatory power in question, and (d) the greater the extent to which the merger deters the MPs from undercutting by spreading their defenses (allowing an R to retaliate against MPI's undercutting by stealing MP2's customers as well as MP1's); and (7) the greater the extent to which the merger reduces QV-investment competition—(a) the greater the extent to which it increases the MPs' \( \Pi_D + R \) barriers by leading them to consolidate the merged company with resources they would otherwise have used to make a QV investment, (b) the greater the extent to which it increases the L barriers the merged company faces by raising its OCAs and spreading its defenses, (c) when the merger does cause \( \Pi_D + R + L \) for the merged company to exceed its counterpart for the MP who was better-placed to make an additional QV investment, the greater the frequency with which that MP was uniquely well-placed to make such an investment in the area of product-space in question, (d) when one of the MPs
was the only firm not deterred by expansion or entry barriers and QV-investment disincentives from adding a QV investment to the ARDEPPS concerned, the greater the extent to which the investment it would have made would have reduced his merger partner's profits, the smaller the extent to which he could reduce the sum of this damage and any related damage he would sustain on his own pre-existing projects by introducing a different new QV investment, and the smaller the pre-merger profitability of the QV investment he would have introduced pre-merger, and (e) when one of the MPs' product-Rs was the only firm willing to add a relevant QV investment pre-merger, the greater the extent to which the merger would increase the L barrier to expansion or entry it faced—see the factors listed in 4(a) above, the smaller the likelihood that the MPs' merger would increase the monopolistic QV-investment disincentives that R faced by making it clear that unlike one of its antecedents, the merged firm would not expand if the R did not, and the smaller the amount of profits that would have been yielded by the QV investment that R would have made had the merger not taken place.

Having completed this summary of the various factors that will affect the extent to which a horizontal merger will tend to reduce competition, we can proceed to the factors that influence the extent to which such a merger will tend to increase competition. As we have seen, virtually all the pro-competitive effects horizontal mergers may have will derive from the efficiencies they are capable of generating. More specifically, the preceding analysis suggests that a horizontal merger's pro-competitive effects will tend to be larger inter alia (8) the greater the amount by which the purely static efficiencies the merger generates reduce the MPs' product-Rs' OCAs by improving the competitive position of the MPs—(a) the larger the static efficiencies in question (up to the point at which each exceeds the relevant R's pre-merger OCA over the relevant MP), (b) the greater the frequency with which a relevant merger partner was second-best-placed to some remaining product-R or worse-than-second-best-placed by less than the size of the efficiencies in question, and (c) the smaller the amount by which the relevant MP was worse-than-second-best-placed pre-merger, and (9) the greater the amount by which the dynamic efficiencies the merger generates (or the static efficiencies it generates that will carry over to any new QV investments the merged firm makes) will induce the MPs and/or perhaps one of their remaining rivals to make a QV investment that raises the relevant ARDEPPS' equilibrium QV-investment level—(a) the larger the size of the efficiencies in question and (b) the closer one of the MPs was pre-merger to being the best-placed firm to add to the ARDEPPS' QV-in-
vestment level (both when the merger increases QV investment by making the merged firm the only firm that could profit by making a QV investment and when the merger increases QV investment by putting the merged firm in a position to profit by investing in a case in which pre-merger the best-placed investor was an established rival of the MPs who was deterred from investing by the monopolistic QV-investment disincentive he then faced but no longer faces after the merger since the efficiencies it generated put the MPs in a position to expand).

Obviously, this list of the determinants of the competitive impact of a horizontal merger provides the basis for a non-market-oriented approach to competitive-impact prediction in the horizontal-merger context. If all the information in question could be costlessly and accurately obtained, one could proceed "simply" by determining the facts just listed and deriving a competitive-impact prediction from them. Of course, I have no illusions about the practicability of analyzing the legality of horizontal mergers by accurately ascertaining and deriving the implications of all the facts listed above. However, I am confident that some more or less refined version of such a non-market-oriented approach would be preferable (1) to allowing or forbidding all horizontal mergers, (2) to using the traditional market-oriented approach to determining the legality of horizontal mergers (as Part III will show), (3) to employing the Justice Department’s Horizontal Merger Guidelines for this purpose (as Part IV will show), and indeed (4) to determining the legality of horizontal mergers by any other procedure that employs market definitions and market-aggregated data.

C. International Competition and the Effect of a Horizontal Merger on the Welfare of the Buyers on Whom the Clayton-Act Test of Legality Focuses

International competition is obviously relevant to the approach I have just described: in particular, international competition will be relevant whenever one of the MPs involved in a horizontal merger that comes under the jurisdiction of the Clayton Act is foreign and/or whenever one or more of the product-Rs of the MPs involved in such a merger is foreign.\(^{59}\) Of course, the fact that some of the firms that matter are foreign does not directly affect their significance. However, the foreignness of some relevant firms may affect both the competitive impact of a

\(^{59}\): If the relevant section of the Clayton Act were deemed to make relevant the effect of a horizontal merger on the welfare of the foreign customers of the MPs and their product-Rs, international competition might also be relevant when one MP, both MPs, and/or one or more of their product-Rs competed for the patronage of a foreign buyer.
horizontal merger and the accuracy and/or cost of the non-market-oriented approach just described to the extent that information about foreign firms is more likely to be impacted—is less likely to be available to their competitors and/or to government decisionmakers. Thus, to the extent that domestic firms are less informed about the costs and products of their foreign competitors as opposed to their domestic competitors, horizontal mergers may be either more or less likely to reduce competition by increasing contrived OMs when some sellers are foreign: in particular, foreign competition will tend to make horizontal mergers more anti-competitive when the merger combines a foreign firm with a domestic partner who was previously deterred from contriving an oligopolistic price (or possibly from charging his HNOP) by his uncertainty about the foreign firm’s position. On the other hand, foreign competition will tend to make horizontal mergers less anti-competitive to the extent that the merger is between two domestic firms and the ignorance of these firms about the position of their foreign competitors (1) precludes them from communicating their retaliatory and reciprocatory intentions more cheaply simply by charging an oligopolistic price by increasing the likelihood that they might have charged such a price unintentionally—i.e., erroneously, (2) makes it more difficult for them to identify their undercutters from circumstantial evidence by making it more difficult for them to identify their closest competitors for various buyers’ patronage, and (3) makes them less certain about the extent to which they can reciprocate to their foreign or indeed their remaining domestic competitors as well as about their relevant harm-inflicted-to-cost-incurred ratio for retaliation (by making them more uncertain about the foreign competitor’s competitive positions than they would have been about the positions of a similarly placed domestic rival). More importantly, to the extent that government decisionmakers are less well-informed about the pre-merger competitive positions of foreign competitors as well as about those aspects of their operations that will affect the amount of efficiencies the merger in question will generate, the non-market-oriented approach Part II delineated will be more costly at any given level of accuracy when one of the MPs or one or more of their product-Rs is foreign.

Accordingly, despite the egocentric focus of the Clayton Act’s test of legality, the presence of international competition will affect the application of the statute both by changing the likely competitive impact of some mergers and more substantially by making it more difficult for antitrust decisionmakers to obtain all the facts they would ideally like to have. However, although these conclusions are worth noting, the real significance of international competition is the implication it has for the
cost-effectiveness of both the traditional market-oriented approach to making competitive-impact predictions in a horizontal-merger context and the Justice Department’s Horizontal Merger Guidelines. As Parts III and IV will show, although in my opinion neither of these approaches would be attractive in the absence of international competition, various likely empirical attributes of the competitive positions of international competitors makes their presence exceedingly damaging to the accuracy and cost-effectiveness of these two market-oriented approaches.

III. THE TRADITIONAL MARKET-ORIENTED APPROACH TO PREDICTING THE COMPETITIVE IMPACT OF HORIZONTAL MERGERS: A CRITIQUE

Neither the analysis of Part II nor the approach to competitive-impact prediction derived from it presupposed any market definitions. Admittedly, the analysis of QV-investment competition did employ the concept of an ARDEPPS (arbitrarily designated portion of product-space), but even when that analysis is presented through a series of diagrams both it and the ARDEPPS-concept are used only heuristically: predictions about the impact of a horizontal merger (or any other business act or practice) on QV-investment competition never depend on the specific designation of the relevant area of product-space.

By way of contrast, courts and economists have traditionally based their predictions of the competitive impact of horizontal mergers on market-aggregated data that do presuppose market definitions whose specific designation does often critically affect the economic and legal conclusions a given court reaches in the individual case in question. As I have already noted, although the language of the Clayton Act does not necessitate the courts’ employing such a market-oriented approach, courts have generally proceeded (or at least claimed to proceed) in Clayton-
Act horizontal-merger cases by (1) defining the relevant markets objectively, (2) determining the markets in which both MPs are operating, (3) calculating the MPs' pre-merger shares in and the concentration of the markets in which both MPs are said to be operating, and (4) determining whether these data imply the illegality of the merger under the legal rules it had established or would promulgate. Although at different times other factors (such as trends in concentration or height of the barriers to entry) were also taken into consideration, the basic rule established a set of combinations of weighted pre-merger MP-market-shares and pre-merger market-concentration figures that would render a horizontal merger illegal where the weighted MP-market-share figure was calculated by assigning a greater weight to the lower MP-market-share—in particular, by weighting that share three to four times more heavily—and the market-share figure in any given combination was inversely related to the concentration figure.

This Part criticizes this market-oriented approach to predicting the competitive impact of horizontal mergers. Although the exposition focuses on the crude version of this approach just delineated, the critique applies to any approach that employs market-aggregated data.

A. The Traditional Approach's Underlying Assumptions About "Markets"

Obviously, analyzing explicit assumptions is preferable to criticizing implicit assumptions whose existence has had to be inferred. It is therefore unfortunate that advocates and practitioners of the traditional market-oriented approach to predicting the competitive impact of horizontal

"[T]he Court pronounces its work consistent with the line of decisions under § 7 since the passage of the 1950 amendment. The sole consistency that I can find is that in litigation under § 7, the Government always wins."


64. As I have noted before at least on the strongest assumption one could attribute to the traditional market-oriented approach (that all sellers within a market are "equally competitive" with each other in the sense in which that phrase will be defined in the text that follows), some weighting procedure that gave more weight to the market share of the smaller MP would be appropriate. Markovits, Horizontal Mergers, supra note 5, at 593 n.11. Assume, for example, a market that contained 100 buyers of the same size in which sellers were second-best-placed the same percentage of time they were best-placed and in which each seller was second-best-placed by the same amount for the same percentage of the customers of each of its rivals. In this case, a merger of two firms each with 20% market shares would combine firms that were each other's closest competitors for 20%\(20\)+20%\(20\)=8 buyers while a merger between one MP with 30% of the relevant market and another MP with 10% of the relevant market would combine firms that were each other's closest competitors for 30%\(10\)+10%\(30\)=6 buyers. Of course, this argument assumes the accuracy of the assumptions listed above and ignores various other ways in which horizontal mergers can decrease or increase competition.
mergers (or of any other business act or practice) have never been explicit about their assumptions about markets and even more unfortunate that they have rarely developed theories of competition from which their assumptions about the characteristics of the positions of products within a given market could be inferred.\textsuperscript{65} For the most part, I have had to infer my conclusions about the assumptions of the supporters of the traditional approach from the approach itself rather than from any explicit statements they have made or any competition-theories on which they based their approach.

In my opinion, the traditional market-oriented approach is based on one assumption about "insider-vs.-outsider" competitive positions—an assumption that vastly simplifies the task of defining markets non-arbitrarily—and a second set of assumptions about "insider-vs.-insider" competitive positions that relates to the extent to which one can predict the competitive impact of a horizontal merger from data on the MPs' pre-merger market shares and the concentration of any market in which both were operating pre-merger. After specifying the assumptions in question and examining their potential significance, I will comment on their accuracy and its significance in the present context.

The "insider-vs.-outsider" assumption is that all products (defined \textit{inter alia} to include the location of their points of supply) can be placed into sets whose individual members are far more competitive with each other (are or are close to being each other's closest competitor for a particular buyer's patronage) far more often than they are competitive with anyone else. For example, assume that the economy contains 100 products that can be placed into 10 product-markets each of which contains 10 products: product-market I, containing products 1-10; product-market II, containing products 11-20, etc. For simplicity, assume as well that each market contains 810 buyers who make purchases of equal size and that each product in each market makes 10% of its sales (is best-placed to serve 81 buyers) and is second-best-placed just as often as it is best-placed. In this case, the traditional approach's implicit "insider-outsider" assumption would be fulfilled if, for example, product 1 (and each other product in product-market I) was (or perhaps was close to being) the closest competitor of each other product in product-market I between 4 and 14 times but was never the closest competitor (or close to being the

\textsuperscript{65} The part of my analysis of contrived oligopolistic pricing that dealt with the ability of contrivers to use various kinds of sales-records to infer undercutting by inferiors and to identify such undercutters is derived from one article on competition theory that is first-rate: Stigler, \textit{A Theory of Oligopoly}, 72 J. Pol. Econ. 44 (1964). However, although Stigler's presentation did use some market-oriented terminology, his analysis did not presuppose it.
closest competitor) of any product in product-markets II-X; if each member of product-market II (products 11-20) was the closest competitor of each other member of that set of products between 4 and 14 times but was never the closest competitor of any product in any other market (of any product in the set that consists of products 1-10 and 21-100); and if analogous conditions were fulfilled for any member of any of the other product-markets in the economy. Obviously, if these insider-outsider assumptions held, it would be both theoretically possible and practically simple to define markets non-arbitrarily.

Let's turn now to the traditional approach's three implicit “insider-insider” assumptions—viz., (1) that each product in any given market is equally competitive with all other products in that market (for example, that each product within product-market I is second-best-placed 9 times to each other product in that market), (2) that all products (both within and across given markets) have the same ratio of best-placed to second-best-placed positions (and of best-placed to close-to-second-best-placed positions), and derivatively (3) that all pairs of products in a given market are symmetrically placed vis-à-vis each other in the sense that product 1 is product 2's closest competitor or is close to being its closest competitor for the patronage of a buyer product 2 is best-placed to serve the same number of times that product 2 is second-best-placed or close-to-second-best-placed to obtain one of product 1's customers. If these three insider-insider assumptions were realistic, the frequency with which any two firms would have been each other's closest competitors pre-merger would be directly related to their market shares, while the amount by which they would have been each other's closest competitors when they were each other's closest competitors pre-merger would be directly related to the concentration of the relevant market (since it would be inversely related to the number of firms that were reasonably well-placed in relation to each of their customers)—i.e., the amount by which a horizontal merger would increase the MPs' OCAs by freeing them from each other's competition (and derivatively the amount by which such a merger would tend to increase the MPs' natural OMs and

66. This conclusion is based on an implicit assumption that the gap between a buyer's second-best-placed and third-best-placed supplier will tend to be larger the smaller the number of suppliers who are or are close to being the buyer's second-best-placed supplier. On traditional assumptions, that number will be highly correlated with the number of other insiders in the market (which will be directly related to its concentration). In reality, of course, the relationship between the number of independent products that are or are close to being a buyer's second-best-placed supplier and the number of independent insiders that have been placed in the relevant product's "market" will vary substantially from market to market. Inter alia, this conclusion reflects the fact that the ratio of best-placed to second-best-placed positions and of best-placed to close-to-second-best-placed positions for the average product in a market varies tremendously from market to market.
their product-Rs' OCAs, natural OMs, and contrived OMs) would be directly related to the MPs' market shares in and the pre-merger concentration of any market in which both were operating. Moreover, since the three implicit assumptions I have attributed to the traditional approach guarantee that there are no intra-market or inter-market differences in the ratio of the number of times a product is best-placed to the number of times it is or is close to being second-best-placed to obtain the patronage of a given insider-rival's customer, they imply that the pre-merger concentration of a given market will be positively and highly correlated with a factor that will itself be positively and highly correlated with the profitability of contrived oligopolistic pricing—viz., the number of rivals who are or are close to being each potential contriver's closest competitor (the number of possible undercutters). Indeed, for analogous reasons, these assumptions also imply that the pre-merger concentration of a given market will substantially affect the amount by which a horizontal merger would increase the profitability of contrived oligopolistic pricing both for the MPs (by reducing the number of possible undercutters each MP faced to the extent that eliminating the other MP had this effect) and for their product-Rs (since on some occasions both MPs will have been possible undercutters of the contrived oligopolistic price such an R would otherwise have charged). Equally important, by implying the absence of any inter-market differences among the competitive positions of the average product in a market, these assumptions also support the traditional approach by elevating the importance of the number of potential undercutters as a determinant of the pre-merger profitability of contrived oligopolistic pricing—i.e., by implying the absence of inter-market differences that would not be reflected in concentration ratios and MP-market-share figures that would affect the profitability of such pricing. Indeed, if one believed the traditional insider-insider assumption that (controlling for concentration) there are no significant inter-market differences in the competitiveness of insiders with each other, any concentration-ratio market-share rule that was appropriate in one market would be appropriate in all others as well.

Accordingly, from the traditional point of view, the fact that neither the preceding insider-outsider assumption nor the preceding insider-insider assumptions reflect reality is most unfortunate. I will begin by considering the insider-outsider assumption. Clearly, the various products in the economy can not be divided into sets each of which consists of

67. As the number of possible undercutters increases, communication-costs and undercutter-identification costs rise, and the profitability of contrived oligopolistic pricing decreases.
68. Of course, I do not think that any such rule will ever be justifiable in any market.
products that are strongly (and in the most extreme version of the relevant assumption equally) competitive with each other and not at all competitive with any outsider-product. Two examples should suffice to demonstrate that point: since metropolitan shoe buyers may shop either in the suburb in which they live or in the central city in which they work (on their lunch hour or after work), the retail shoe outlets in both Suburb A and Suburb B may be competitive with the retail shoe outlets in the central city without being at all competitive with each other; similarly, since the fact that medium-quality average-priced goods may often be competitive with high-quality, high-priced or low-quality, low-priced goods does not imply that any low-quality, low-priced good is ever competitive with a high-quality, high-priced good, the fact that medium-quality, average-priced goods must be put in the same market as high and low quality-and-priced goods if the market is to contain all goods that are strongly competitive with each other implies that high and low quality-and-priced goods that are never competitive with each other will also have to be put in the same market. Accordingly, it will often not be possible to devise a set of market definitions that places each product\textsuperscript{69} into a single "market" that simultaneously succeeds in placing all products that are strongly competitive with each other in the same market and avoids placing non-competitive products in the same market.

Of course, this conclusion does not imply that market definitions will sometimes have to be arbitrary. Even in the type of case just described, it may be possible to define the concept of a market in a way that corresponds with common usage and permits the concept to be applied in a non-arbitrary, "objective" way. In particular, it will be possible to define the term "market" uniquely and non-arbitrarily whenever only one division of the economy's various products into non-overlapping subsets maximizes the difference between the frequency with which the average member of one subset is second-best-placed to the other members of that subset and the frequency with which the average member of one subset is second-best-placed to a member of another subset. Specifically, whenever this condition is fulfilled, it will be possible to define the word "market" uniquely and non-arbitrarily to refer to each of the subsets just described. It will often be possible to find such a unique\textsuperscript{70} set of product-

\textsuperscript{69} Recall that each product's definition includes the location of its point of delivery when that attribute is relevant for consumers.

\textsuperscript{70} Obviously, the set of groups that is maximizing may vary with the minimum size the individual groups are allowed to have. I assume that some specification of this size can be stipulated. Admittedly, this stipulation is arbitrary. Indeed, that is why I argue that the portions of product-space that form the domains of my QV-investment-competition analysis are "arbitrarily designated."
subsets even when the insider-vs.-outsider assumption I initially attributed to supporters of the traditional approach is not fulfilled, for the existence of such a unique set of such groupings is compatible with tremendous variations in the competitiveness of different pairs of products within one or more of the individual groupings in question—indeed, is even compatible with a product’s being placed in one group despite the fact that it was far less competitive with some other members of that group than with some members of a given alternative group.

However, although there may be some purpose (that I cannot divine) to defining markets in this way, the market definitions this approach will generate will not produce MP-market-share and market-concentration figures from which accurate or useful competitive-impact predictions can be derived. I will postpone my more detailed treatment of this issue until my discussion of the traditional approach’s implicit insider-insider assumptions, for the same points will have to be made in both contexts. However, the basic argument is straightforward: the fact that this alternative approach to market definition makes it feasible to define “markets” in a broader range of circumstances (1) reduces the significance of the fact that two products are sold in the same market for the extent to which they are competitive with each other and concomitantly (2)(A) weakens or eliminates the relationship between the MPs’ shares in and the pre-merger concentration of the market concerned and (B) the anti-competitive impact of the merger in question.

The preceding comments on the traditional approach’s implicit insider-outsider assumptions should facilitate our analysis of the inaccuracy of its implicit insider-insider assumption as well as of the significance of that inaccuracy. As has just been indicated, the traditional approach seems to be based on the assumption that traditional market definitions will result in (1) each product within a given market’s being equally competitive with all other products in that market, (2) all products’ having the same ratio of best-placed positions to second-best-placed (and close-to-second-placed) positions, and derivatively (3) all pairs of products in a given market’s occupying fairly symmetric positions vis-à-vis each other—in product 1’s being product 2’s closest competitor approximately the same number of times that product 2 was product 1’s closest competitor.71 These assumptions were important be-

71. Return to our previous example of a market containing 10 sellers and 810 buyers of equal size. Assume that product 1 has 20% of the relevant buyers (is best-placed 162 times) and that product 2 has 10% of the relevant buyers (is best-placed 81 times). Assume as well that all products in the relevant market are second-best-placed equally as often as they are best-placed and that each product in this market is equally competitive with each of the others it contains. In this case, prod-
cause they implied inter alia that (1) the MPs' market shares in any market in which both were operating was an accurate indicator of the frequency with which the MPs were either each other's closest competitors or in a position to undercut any contrived OM either MP or any independent R might charge and (2) the concentration of any market was an accurate indicator of the profitability of contrived oligopolistic pricing for both the MPs and their product-Rs.

Once more, then, from the perspective of the supporters of the traditional approach, it is unfortunate that in the vast majority of situations, none of the above three insider-insider assumptions will be realistic. Thus, as has already been suggested, in many situations it will not be possible to define a market that contains all products that are strongly competitive with each other without including within its confines some products that are almost never well-placed to obtain one or more insiders' customers. Similarly, in general—i.e., within markets and a fortiori across markets, the ratio of the number of times a product is best-placed to the number of times it is second-best-placed (to an insider-rival) will vary tremendously from product to product: products that have attributes that buyers either love or hate will often be best-placed far more often than they are second-best-placed or close-to-second-best-placed; sellers of goods that are materially standardized who have a locational cost-disadvantage in their relations with a substantial number of buyers (because their plants are farther away from these buyers than their rivals' plants) will often be second-best-placed or close-to-second-best-placed far more often than they are best-placed; and, finally and more generally, for a whole series of various possible combinations of reasons, the relevant ratio for a given product may also diverge from the average substantially, though perhaps less dramatically. Moreover, these observations also imply that the symmetry of the competitive positions of various pairs of possible contrivers and undercutters will vary substantially both within and among markets.

Obviously, even if traditional market definitions can be derived non-arbitrarily, their usefulness will be limited when the three insider-insider...
assumptions I attributed to the traditional approach are not fulfilled. Although the MPs’ market shares in and the concentration of such markets can still be calculated when these insider-vs.-insider assumptions are not fulfilled, such data will have little bearing on (1) the frequency and amount by which the MPs were each other’s closest competitors pre-merger (and hence the effect of the merger on the MPs’ OCAs and derivatively both on the MPs’ natural and contrived OMs and on their product-Rs’ OCAs and natural and contrived OMs), (2) the frequency with which each was in a position to undercut the contrived OMs the other would otherwise have charged (and hence the effect of the merger on the MPs’ contrived OMs, etc.), (3) the frequency with which the two MPs were both in a position to undercut a contrived OM a given rival would otherwise have charged (and hence the effect of the merger on the product-Rs’ contrived OMs), and (4) the pre-merger profitability of natural and contrived oligopolistic pricing both for the MPs and for their product-Rs (and hence the effect of the merger on all these parties’ OMs).

In short, in my opinion, (1) in many cases it will not be possible to create market definitions that place each product (defined inter alia to reflect location) into a single market each of whose members is significantly more competitive with each of his fellow-insiders than with any outsider; (2) at least in theory, however, it will normally be possible to define markets in the sense of placing products into groups that maximize the difference between the frequency with which insiders are competitive with insiders and the frequency with which they are competitive with outsiders; but (3) when markets are defined in this latter way, the market-share and concentration figures with which they will be associated will have little predictive power—i.e., one will not be able to predict the anti-competitive effects of a horizontal merger from the MPs’ shares in and the concentration of the markets in which both are said to operate.


We have just seen that given the inaccuracy of the traditional approach’s various insider-insider assumptions, traditional market-share and concentration data will tell us much less about various important determinants of the competitive impact of a horizontal merger than traditionalists probably suppose. In fact, the list of determinants to which such market-aggregated data supposedly relate to a far greater extent
than they actually relate could be extended to include (1) the size of the OCAs enjoyed by the MPs and their product-Rs pre-merger, (2) the number of firms in a position to undercut various contrived OMs the MPs and their product-Rs might try to obtain, (3) the probability that the merger would increase the retaliation barrier to expansion or entry faced by the MPs or one of their actual or potential product-Rs, and (4) the probability that an MP was or was close to being uniquely well-placed to add to or maintain the relevant ARDEPPS' QV-investment level.

Moreover, the accuracy of the traditional approach is also undermined by the inability of market-aggregated data to reveal much about a large number of highly relevant factors to which no one believes such data are strongly correlated: (1) the amount by which the merger will reduce marginal costs or increase the average attractiveness of the MPs’ products, (2) the frequency with which the MPs were second-best-placed or worse-than-second-best-placed by less than the “efficiencies” it generated of the kind just described, (3) the size of the dynamic efficiencies the merger would generate and of the static efficiencies the merger would generate that would carry over to any additional QV investments the merged firm should make, (4) the extent to which the profitability of the optimal QV investment available to the merged firm would be reduced by the fact that the merged firm had to consider the consequences of such an expansion for the profits yielded by both rather than just one merger partner—e.g., the amount of new-QV-investment sales that would be made to the second MP’s former customers and the extent to which any remaining rivals’ non-retaliatory responses to a new QV investment would reduce the second MP’s profits, (5) the rate at which the demand for the relevant ARDEPPS’ products was increasing through time (which affects the probability that one of the MPs would have been best-placed to add to his ARDEPPS’ QV investment—in particular, the higher this rate the lower the likelihood that in the MPs’ absence their potential competitors or established rivals would find it profitable to raise the relevant ARDEPPS’ QV investment to the level that would make any expansion by the merged firm unprofitable, the lower the likelihood that the barriers they would confront when contemplating making the last QV investment necessary to deter the merged firm from expanding would be lower than the barriers the merged firm faced), (6) the extent to which the established firms can estimate their OCAs and MCs accurately (which affects their ability to communicate their contrived oligopolistic intentions cheaply simply by charging an oligopolistic price), (7) the extent to which one or both MPs has a reputation for carrying out his
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oligopolistic threats and promises (which affects the likelihood that the merger will increase the MPs’ contrived OMs), (8) the extent of the MPs’ knowledge of the identity of their former customers’ new suppliers and of the identity of their closest rivals for particular customers’ patronage, (9) the past and future stability of the function that determines repeat-sales, sales-to-other-suppliers’-customers, and new-buyer-sales percentages in the ARDEPPS in question over time (the more stable such functions, the more able will the MPs be to infer undercutting and identify their undercutter from such sales-records), (10) the larger the number of buyers each MP supplies (which also affects the impact of the merger on the MPs’ ability to use the kind of circumstantial evidence just described), and (11) the strategic and mechanical cost of changing an initial price as well as the probability that a customer who has received an underbid from an inferior supplier will give his best-placed supplier the opportunity to rebid (the public character of bids in the market in question, the extent to which the buyer is a repeat-buyer, and the extent of seller-knowledge about such buyer-behavior, all of which are relevant to the pre-merger profitability of natural oligopolistic pricing).

Of course, if the traditional approach’s only failing were the inability of market-share and concentration data to reflect the factors listed in the previous paragraph, one could simply amend the legal rules with which it is associated to make them take these additional factors into account. In fact, however, a far more radical departure from the traditional approach is required: since in a world in which its three implicit insider-

72. As I have already indicated, the actual traditional approach did take into account a number of factors other than the MPs’ market shares in and the concentration of the markets in which both MPs were said to be operating. See supra note 63 and accompanying text. However, the factors on which the text’s previous paragraph focused are quite different from those to which the courts have tended to pay attention, and the courts have not always properly assessed the factors I argue deserve some attention. Two illustrations should suffice in this connection. The first relates to the significance of the existence of a future trend toward concentration in the markets in question. I admit that the courts have correctly concluded that the existence of a trend toward concentration which is independent of its decisions about the legality of the kind of merger in question should count against a merger’s legality. To the extent that concentration figures have any predictive value whatsoever, a prediction that the relevant markets will become more concentrated in the future even if the merger in question and all similar mergers are prohibited will tend to increase the anti-competitive impact of the merger in question by making it more likely that it will increase the profitability of contrived oligopolistic pricing by increasing the probability that such pricing would be profitable or close to profitable absent the merger. However, this argument does not justify the courts’ practice of prohibiting a merger that would not be anti-competitive if all other similar mergers were prohibited in the future on the ground that a rule that allowed the merger in question and all other similar mergers (where the concept of similarity ignores any intervening merger-induced differences in the relevant situations) would reduce competition. The second illustration focuses on the significance of potential competition. Quite simply, the courts have mis-analyzed both the circumstances and the way in which potential competition may affect the competitive impact of horizontal mergers. See Markovits, supra note 11.
insider assumptions are inaccurate, the market-aggregated data it utilizes
do not even predict well the factors to which they supposedly do relate,
the traditional approach should be abandoned in favor of the kind of
non-market-oriented approach Part II delineated.

I am convinced that some more or less refined version of my non-
market-oriented approach will be both cheaper and more accurate than
the traditional approach. Instead of adopting a market-oriented ap-
proach that encourages the parties to spend vast sums of money to influ-
ence a critical market-definition decision, courts should base their
competitive-impact predictions on (1) disaggregated data on the competi-
tive positions of the MPs and their product-Rs in their relations with
different (groups of similar) buyers and (2) the various other kinds of
data (about efficiencies, etc.) described in Part II. Since courts already
collect crude versions of the relevant competitive-position data in the
course of defining the relevant markets, the approach I am recom-
mending will be more expensive only to the extent that the sum of (1) the
cost of the non-competitive-position data it employs and (2) any extra
competitive-position data-costs the approach involves (because the deci-
sionmaker or the parties choose to obtain more data or more refined data
of this kind than courts have traditionally employed) exceed the sum of
(3) the cost of the non-competitive-position data that have in practice
been submitted to courts using a supplemented traditional approach but
which my analysis demonstrates to be irrelevant and (4) the extra non-
data costs courts employing the traditional approach generated in the
course of making their market-definition decisions and calculating the
various market-aggregated figures on which that approach focused. I
suspect that the ideal version of my non-market-oriented approach will
tend to be cheaper than the traditional approach as it has been employed
by our courts: that the version of my approach that is ideal will be suffi-
ciently crude—that (2) will be sufficiently small—for (4) to exceed (2) by
more than (1) exceeds (3). However, even if in practice my non-market-
oriented approach does prove more expensive than the traditional ap-
proach, its greater accuracy will almost certainly be worth any extra

73. There is no mechanical or straightforward way to value such an increase in accuracy. For
every, even if it is clear that one should value such an increase contextually from the value-
perspective of the law, one must be able to specify not only the goals and principles of the antitrust
laws (and indeed when relevant of other laws) but also the weights to be attached to given advances
toward these goals in different circumstances. In the present context, there is a great deal of disa-
greement both about the specific antitrust goals themselves (whether competition is valued because
of its connection with allocative efficiency or for a variety of other reasons and whether the antitrust
laws were passed inter alia to achieve certain distributional goals—favor consumers over sellers or
prevent sellers from profiting by injuring consumers through acts that are not allocatively efficient in
themselves and not ancillary to other acts that are allocatively efficient in themselves) and about the
costs its use entails. In part, the greater accuracy of my approach reflects
the fact that it takes appropriate cognizance of a variety of factors that
the traditional approach ignored, but primarily it reflects the fact that it
avoids the use of market-aggregated data which have less predictive
power than the raw, disaggregated data on which the underlying market
definitions were based.

In short, since, in addition to ignoring various relevant factors, the
traditional approach spends a considerable amount of resources to make
a market-definition decision that succeeds only in reducing the predictive
value of the data on which it is based, the traditional approach must be
replaced rather than supplemented. Even in a world without interna-
tional competition, the appropriate way to predict the competitive im-
 pact of a horizontal merger would be to adopt a more or less refined
version of the non-market-oriented approach delineated in Part II. 

C. The Significance of International Competition for the Inadequacy
of the Traditional Market-Oriented Approach

So far, this critique of the traditional approach to merger analysis
has not placed any weight on the possible special characteristics of for-
geign competitors or international competition. In fact, however, certain
empirical characteristics of the competitive positions of foreign suppliers
strengthens my critique of the market-oriented approach to predicting
the competitive impact of horizontal mergers. In particular, the presence
of foreign competitors who are well-placed to obtain the patronage of
some American buyers undermines the traditional approach (1) by re-
ducing still further the accuracy of the strict insider-outsider assumption
on which traditionalists (unnecessarily) based their belief that product-
oriented markets could be defined non-arbitrarily and (2) by reducing
still further the accuracy of the insider-insider assumptions on which the

 substance and relevance of other norms that relate to the rights of parties not to be held liable or to
be convicted unless their legal responsibility or guilt has been proved beyond some requisite degree
of doubt. Obviously, the evaluative process will also be problematic for evaluators who wish to
employ their own ultimate values.

74. In fact, I would argue that the traditional product-oriented notion of a market (which in-
volves the placement of each product—defined to include those locational characteristics that are
relevant to consumers—in a single market) has no useful role to play in any antitrust analysis. For
an explanation of why such a market-concept has no useful role to play in Sherman-Act Section-2
(monopoly) cases, see Markovits, Review Article, supra note 5, at 613-18. If market-terminology is to
have any use (which I doubt), markets must be defined in a buyer-oriented rather than a product-
oriented manner—viz., to include all buyers for whose patronage a given (or similar) group of prod-
ucts is well-placed. On this definition of “market,” a given product would typically be sold in several
different “markets” even if that product were defined to include its relevant locational characteristics
since each product will typically compete against different rivals for the patronage of different groups
of buyers (with different tastes, including their locational needs).
traditional approach appears to have been based. After explaining why the real significance of foreign competitors in this context relates to the tendency of their presence to reduce the accuracy of the traditional approach's three implicit insider-insider assumptions, this section will explore that tendency and its implications.

As we saw, it will often be possible to define markets non-arbitrarily even when the strictest insider-outsider and insider-insider assumptions that could be attributed to the traditional approach is inaccurate—even when products cannot be grouped into subsets whose individual members are strongly and equally competitive with each other and not at all competitive with any outsider (indeed even when products cannot be grouped into subsets each of whose individual members is more competitive with every other member of its subset than with any outsider, even when product-oriented markets of this somewhat less strictly defined type do not exist). However, as we also saw, the only kind of non-arbitrary product-oriented market definitions that one can generate in the real world will be associated with MP-market-share and market-concentration figures that have little predictive value. This latter conclusion reflects the link between the non-existence of product-oriented markets of the more strictly defined types and the inaccuracy of all three of the insider-insider assumptions on which the traditional approach is based. Accordingly, it makes sense to discuss together the significance of foreign competition for the accuracy of both the insider-outsider assumption and the various insider-insider assumptions.

My belief that the presence of foreign competitors who are well-placed to obtain the patronage of some American buyers reduces the accuracy of the traditional approach's first two implicit insider-insider assumptions reflects my admittedly armchair empirical judgment that at least when differences in physical products or product-images are important (1) there will be substantial international differences in buyer preferences and concomitantly (2) domestic consumers of foreign products will tend to have tastes that are atypical for the country in which they live. For example, I would assume (1) that for many types of products consumer tastes are substantially different in France and the U.S. and (2) that as a result a French product that is introduced into the American market (even if it is somewhat altered for that market) will be likely to appeal either to consumers with tastes that are atypical in America (tastes to which only one or two of the American product-variants even attempt to cater) or to consumers who value in itself the fact that the product they are consuming was made in France (or bears a French name and origin)—a preference which is likely to be associated with
other preferences that lead the consumers in question to prefer some domestic product-variants over others.

I now need to explain why this series of armchair empirical judgments implies the inaccuracy of the traditional approach's implicit insider-insider assumptions. In particular, these armchair assumptions about the distribution of consumer preferences for foreign goods imply the inaccuracy of the first insider-insider assumption because they suggest that in a world with foreign competition some products in a given traditional market will be more likely to be more competitive with each other than with other products in that market—in particular, because they suggest that foreign products will tend to be far more competitive with those domestic product-variants that cater to tastes that are typical in the foreign country in question but atypical domestically than with those other domestic products that cater to more typical domestic preferences. Of course, to the extent that some Americans have such atypical preferences, American firms might also produce product-variants that cater to them—products that are far more competitive with each other than with the remaining products in the market in question. However, even if international competition would not affect the dispersion of American preferences, the greater ability of foreign firms to create products that cater to the relevant "deviant" preferences as well as their greater ability to supply a smaller American demand without sacrificing economies of scale (by using their sales in their native countries or their total non-American sales to raise their overall sales to a level that enables them to take advantage of the relevant economies of scale) will cause their presence to raise the percentage of the products in any given American market that cater to atypical preferences and hence to raise the percentage of products in any market that are substantially more competitive with some other products in that market than with the average product in that market. Moreover, in practice, I do suspect that international competition will tend to increase the dispersion of the preferences that Americans have, perceive themselves to have, and reveal through their purchasing behavior (1) by making them aware of the existence and possible attractiveness of alternative product-variants (defined in terms of their material attributes and images) and (2) by providing them with the possibility of purchasing a good with an attribute (being imported or foreign) which some may value in itself. Obviously, to the extent that foreign competition does increase the dispersion of American preferences—in particular, to the extent that it increases the number of consumers with particular atypical preferences to the point at which one or more sellers find it profitable to offer a product-variant that
caters to their atypical desires, such competition will undermine the first insider-insider assumption on this account as well—i.e., in addition to doing so because foreign sellers are more able to create such products or more able to take advantage of any economies of scale in their production by combining their American sales with sales in both their own countries and other countries that are foreign to us and them alike.

Moreover, both for reasons that relate to my armchair empirical assumptions about the American demand for foreign products and for reasons that do not, the fact that foreign products are sometimes well-placed to obtain the patronage of American buyers will also decrease the accuracy of the traditional approach's second implicit insider-insider assumption that all products have the same ratio of best-placed to second-best-placed (and/or close-to-second-best-placed) positions. In particular, my armchair assumptions imply the inaccuracy of this assumption because products that cater to atypical tastes that only a few product-variants satisfy are likely to have a far higher ratio of best-placed to second-best-placed-or-close-to-second-best-placed positions than products that appeal to a more typical set of preferences to which a far larger number of goods appeal. The presence of well-placed foreign competitors also undermines the relevant equal-ratio assumption in a second way that relates not to the armchair assumptions just delineated but to the cost-position of foreign firms and their ability to survive on the basis of their non-American sales. In many cases, foreign products (which appeal to either mainstream or atypical American tastes) that are never (rarely) best-placed to obtain the patronage of an American buyer (that have never [rarely] been bought in America) may be second-best-placed or close-to-second-best-placed very often. Since such products may very well be best-placed in their relations with many non-American buyers (given that their inferior American positions may reflect transportation and tariff costs or buyer preference disadvantages they do not face elsewhere), the fact that their American sales are low may not threaten their survival—that is, may not preclude them from influencing American outcomes for a substantial period of time (particularly since their producers may wish to maintain their American contacts in the hope that changes in exchange-rates or tariff-rates or shifts in buyer preferences will make them best-placed to obtain the patronage of more American buyers in the future). Obviously, since the ratio of the numbers of times such a foreign product will be best-placed to the number of times it will be second-best-placed or close-to-second-best-placed will be far below average, the presence of foreign products will tend to reduce the accuracy of the second insider-insider
Finally, and relatedly, the preceding discussion also implies that the presence of foreign sellers who are well-placed to obtain the patronage of American buyers will tend to reduce the accuracy of the traditional approach's third implicit insider-insider assumption—its symmetric-competitive-position-of-all-pairs-of-rivals assumption. At least, the presence of foreign competitors will have this tendency to the extent that their greater ability to survive being rarely best-placed to obtain the patronage of American buyers makes it more likely that their best-placed-to-second-best-placed-positions ratio (as well as their best-placed-to-close-to-second-best-placed-positions ratio) will be lower than average and concomitantly that they will be well-placed to steal various given rivals' customers more often than the individual rivals in question will be well-placed to steal theirs.

I should now be able to explain why this tendency of foreign competitors who are well-placed to obtain the patronage of some American buyers to reduce the accuracy of the traditional market-oriented ap-

75. Once more, I do not mean to imply that this assumption would be accurate in a world without international competition. Thus, the ratio of best-placed to second-best-placed positions of domestic products that are produced in a different geographic location may also be atypically low for reasons that are analogous to those that will tend to cause this ratio to be atypically low for foreign sellers (though the exchange-rate, tariff-rate, and possible-change-in-preferences arguments make it far more likely that the relevant ratio will be lower for foreign products). Similarly, the relevant ratio may also tend to be lower for domestic products that appeal to unusual tastes or, more generally, for members of the competitive fringe. (Indeed, so long as an individual member of the competitive fringe makes its bids sequentially and is able to know whether its earlier bids have been accepted before making its later bids, it may be second-best-placed not only far more often than it is best-placed but also for a larger volume of output than it could produce at full capacity.)

76. It may be worth noting that this conclusion cannot be derived from my armchair-empirical assumptions about the competitive positions of foreign suppliers. These assumptions do imply that such producers may be second-best-placed to obtain the patronage of a higher percentage of the customers of domestic suppliers with whom they are competitive than vice versa since I doubt that the percentage of foreign consumers who have preferences that are more typically American is as high as the percentage of American customers who have preferences for typically non-American products. However, even if this were so, the presence of well-placed foreign suppliers would not undermine the traditional approach's third implicit (symmetric-position) assumption because, like the Clayton Act, that assumption relates exclusively to domestic buyers, (2) the implicit traditional assumption in question relates to numbers and not percentages of customers, and (3) my armchair assumptions about buyer preferences do not themselves imply that foreign products will be in an asymmetric position with those domestic producers with whom they compete (or, for that matter with those domestic producers with whom they do not compete).

77. Foreign competitors are more likely to continue to make offers on products that have low American sales (1) because those products' generally higher non-American sales are more likely to make their current production immediately profitable and (2) because the long-run profitability of continuing to offer such products is likely to be increased to a greater extent by the possibility of future improvements in their competitive positions in relation to American buyers. Although the first of these arguments has an equally forceful counterpart for American firms that produce their products elsewhere in the United States, the second does not (since the position of such American producers is less likely to be improved by changes in exchange-rates, tariff-rates, or quotas or by shifts in tastes).
proach’s three insider-insider assumptions concomitantly reduces the accuracy of its predictions of the competitive impact of horizontal mergers. This conclusion is easiest to demonstrate in relation to the tendency of foreign products to have lower-than-average best-placed-to-second-best-placed-positions ratios. To simplify the exposition, take a case of a horizontal merger in a traditionally defined market which contained a foreign product that was never best-placed but was often second-best-placed or close-to-second-best-placed and examine the significance of its presence for the accuracy of the competitive-impact predictions the traditional approach would generate both when the foreign product in question was produced by one of the MPs and when the producer of the foreign product was not a party to the merger. In neither situation would the presence of the foreign product in question affect the competitive-impact prediction the traditional approach would generate because in neither case would the foreign product add to the MPs’ market shares or change the market’s pre-merger concentration. However, although the traditional approach would therefore deem the presence of the foreign product irrelevant, the foreign product would in fact be likely to have a substantial effect on the competitive impact of the horizontal merger under consideration. Thus, when the foreign product is produced by one of the MPs, the fact that it was often second-best-placed and close-to-second-best-placed suggests a high probability that the merger reduced competition by freeing the non-foreign MP from the foreign MP’s competition—by raising the non-foreign MP’s OCAs (by eliminating his closest competitor as an independent force), the non-foreign MP’s contrived OMs (by reducing by one the number of his possible undercutters), and derivatively by reducing his natural OMs and his rivals’ OCAs, natural OMs, and contrived OMs. Accordingly, to the extent that foreign products are likely to have a lower-than-average best-placed-to-second-best-placed-competitive-positions ratio, that fact will lead the traditional approach to underpredict the anti-competitive impact of a horizontal merger involving a foreign producer. On the other hand, when the producer of the foreign product was not a party to the merger, the fact that his product was second-best-placed and close-to-second-best-placed in relation to some American buyers implies that the MPs were probably each other’s closest competitors pre-merger less often and by smaller amounts than traditional MP-market-share and market-concentration figures

78. Although traditionalists might alter their competitive-impact predictions to reflect the possibility that the foreign producer might “enter” the market in question in some sense—i.e., by considering the merger to be a conglomerate merger involving a potential competitor, my description of this case does not provide the basis for such a conclusion.
would suggest since the foreign product will be each MP's closest competitor far more often than the traditional approach's "equal-ratio" assumption implies (viz., on our strong assumptions, never). Obviously, this argument suggests that to the extent that foreign products are second-best-placed and close-to-second-best-placed more often than their number of best-placed positions (their sales) would suggest, traditionalists will tend on this account to exaggerate the extent to which horizontal mergers between domestic producers in markets in which foreign goods are also sold reduce competition by increasing the MPs' OCAs by freeing them from each other's competition. For completely analogous reasons, traditionalists will also tend to overestimate the likely pre-merger profitability of contrived oligopolistic pricing and the likely amount by which a horizontal merger between domestic producers will increase the profitability of contrived oligopolistic pricing in markets in which the MPs compete against foreign goods. More specifically, traditionalists will tend to err in these ways because they will tend to underestimate the number of firms in a position to undercut any oligopolistic prices the MPs or their product-Rs try to contrive whenever the MPs compete inter alia against one or more foreign products, at least to the extent that foreign goods' best-placed-to-second-best-placed and best-placed-to-close-to-second-best-placed ratios tend to be lower-than-average. As we have seen in other contexts, various feedback-relationships imply that this tendency of traditionalists to overestimate the likely anti-competitive impact of a horizontal merger on the OCAs of the MPs and the contrived OMs of their product-Rs when the MPs compete against foreign goods will also result in their overestimating such mergers' anti-competitive impact on the MPs' natural OMs and their product-Rs' OCAs and natural OMs. Obviously, although the preceding analysis sometimes assumed that the foreign goods in question were never best-placed, all its conclusions will hold to the extent that foreign goods tend to have lower best-placed-to-second-best-placed and lower best-placed-to-close-to-second-best-placed ratios than domestic goods.\footnote{Since the text is concerned with whether the presence of effective foreign competitors reduces the accuracy of the traditional approach, the critical question is whether that approach is more likely to make the kinds of errors with which the text is concerned when one or more foreign products are well-placed to obtain the patronage of some of the buyers in question. Of course, in individual cases, the traditional approach's predictions will be inaccurate, \textit{ceteris paribus}, whenever either a foreign or a domestic product has non-average competitive-position ratios.}

A very similar argument will demonstrate that to the extent that foreign goods are more likely than domestic goods to be more competitive with some products in a given market than with other products in a
given market, this tendency of the effective presence of foreign competition to reduce the accuracy of the traditional approach’s first implicit (all-insiders-equally-competitive-with-each-other) assumption will also reduce the accuracy of the traditional approach’s competitive-impact predictions, *ceteris paribus.* \(^80\) This conclusion follows from (1) the fact that the traditional approach will be inaccurate, *ceteris paribus,* to the extent that it is based on a false premise about the frequency with which the MPs are or are close to being each other’s closest competitors and (2) the assumption that the presence of foreign goods will increase the frequency with which traditionalists make this kind of error because the competitiveness of foreign goods with other insider-goods is more likely to vary from insider to insider than the competitiveness of domestic goods. Although the second of these two points should not require any explication, it would probably be useful to illustrate the first. Thus, when a foreign good that is not equally competitive with all its insider-rivals is produced by one of the MPs, (1) the traditional approach will tend to underestimate the relevant horizontal merger’s anti-competitive impact to the extent that the foreign product is more competitive with his merger partner’s product than with the average product in the market (which will tend to be the case if the courts are insensitive to this possibility) while (2) it will tend to overestimate the relevant horizontal merger’s anti-competitive impact to the extent that the foreign product is less competitive with his merger partner’s product than with the average product in the market because the traditional approach will lead the court to assume (implicitly) that the two MPs were or were close to being each other’s closest competitors the number of times that would be average for firms with their market shares in the market in question; on the other hand, when a foreign good that is not equally competitive with all its insider-rivals continues to compete with the merged firm post-merger, (3) the traditional approach will tend to overestimate the relevant horizontal merger’s anti-competitive impact to the extent that the foreign

\(^80\) The term *ceteris paribus* is included because the errors with which this portion of the text is concerned could actually increase the accuracy of the traditional approach’s overall prediction if that approach contained other errors. For example, if the overall error in any prediction that would be generated by the traditional approach could be expressed as the sum of this error and the net other error that approach would make, this error would reduce the overall error whenever its sign was the opposite of the sign of the net other error the traditional approach would make and the absolute value of this error was less than twice the absolute value of the net other error. The text will ignore such “second-best” possibilities. For a more complex analysis of the conditions under which one error or distortion will increase or will be likely to increase the total error or distortion (say, between marginal allocative cost and marginal allocative value), see Markovits, *A Basic Structure for Micro-Economic Policy Analysis in Our Worse-Than-Second-Best World: A Proposal and Related Critique of the Chicago Approach to the Study of Law and Economics,* 1975 *Wis. L. Rev.* 950, 1053-54.
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Part III has explained why I think the traditional market-oriented approach could not bear scrutiny even in a world without international competition and why I believe that the presence of foreign suppliers who are well-placed to obtain the patronage of some American buyers tends to reduce still further the accuracy of the traditional approach's various implicit insider-outsider and insider-insider assumptions and concomitantly the accuracy of its competitive-impact predictions. The latter discussion focused exclusively on the crude traditional approach—which based its predictions solely on MP-market-share and market-concentration figures. As Part IV's discussion of the Justice Department's Horizontal Merger Guidelines will suggest, some courts employ not the crude version of the traditional market-oriented approach with which we have so far been concerned but a more complex version of that approach that takes account of such factors as the position of potential entrants (in addition to the MPs' market shares and the relevant market's concentration). As we shall see, the presence of foreign sellers (who might be either potential entrants or potential expanders) reduces the accuracy of this attempt at supplementation as well (an attempt that would, admittedly, have been wholly misfounded in a world without international
competition). 81

IV. The Justice Department’s Horizontal Merger Guidelines: A Critique and Analysis of the Significance of International Competition

For expositional reasons, it is convenient to divide the 1984 Justice Department Horizontal Merger Guidelines 82 into three groups. The first group of Guidelines announces the Justice Department’s intention to use a different measure of a market’s concentration (the so-called Herfindahl-Hirschman Index [HHI]) and promulgates a new set of crude, unqualified rules for determining the legality of horizontal mergers that focus solely on market-aggregated data—rules that are supposed to apply in a straightforward way only when conditions do not suggest that the competitive impact of the merger in question will be mispredicted by pre-merger and post-merger HHI-figures or pre-merger MP-market-share figures. The second group of Guidelines then delineates the various conditions under which the straightforward rules the first group delineates will have to be qualified and explains the way in which the competitive-impact predictions 83 that would otherwise be made and the legal conclusions that would otherwise be reached on the basis of pre-merger and post-merger HHI figures or pre-merger MP-market-share figures will have to be revised when these conditions obtain.

Part IV is divided into two sections. Section IVA—the far longer section—analyzes (1) the crude, unqualified versions of the Guidelines’ HHI-oriented and 35%-leading firm-merger rules, (2) the various fac-

81. See subsection IVA2 infra.
83. In fact, this description is somewhat inaccurate in relation to the Guidelines’ treatment of one of the sets of “supplementary” factors they indicate the Department will consider when qualifying the Guidelines’ crude (unqualified) rules. In particular, the Guidelines’ comments about the efficiencies a merger may generate suggest that the Department will consider such efficiencies not because of their relevance for the competitive impact of the merger in question but rather because of their relevance for its allocative efficiency. This conclusion is suggested by the Guidelines’ statement that “the parties must establish a greater level of expected net efficiencies the more significant are the competitive risks” of the merger. Had the Department’s efficiency-rules reflected (1) its realization that a horizontal merger’s efficiencies were pro-competitive and relatedly (2) its conclusion that a merger which would otherwise have been anti-competitive and illegal would not be anti-competitive or illegal if it generated sufficient efficiencies, the Guidelines would have been written differently. For example, they might have said: “To exonerate themselves on the basis of their merger’s efficiencies, parties to a horizontal merger must show that their merger would generate efficiencies that would be large enough in the circumstances in question to have a pro-competitive impact that would exceed the anti-competitive impact their merger would have in their absence.” The text’s conclusion is also supported by the fact, already noted, that both academic lawyers and academic economists have ignored the possible pro-competitive tendencies of the various kinds of efficiencies horizontal mergers may generate. See supra note 50.
tors the Guidelines indicate the Justice Department will consider in addition to the market's pre-merger and post-merger HHIs and in the case of leading-firm mergers the market shares of the leading firm and its merger partner, and (3) the Guidelines' actual proposals—the qualified versions of the Guidelines' various HHI-oriented and 35%-leading-firm-merger rules. This first section will not pay special attention to the relationship between (1) the fact that foreign firms are sometimes well-placed to obtain the patronage of some American buyers and are sometimes well-placed to enter into American markets and (2) the accuracy and cost-effectiveness of the Guidelines' various proposals. Section B analyzes this relationship—i.e., analyzes the significance of international competition for the justifiability of the Horizontal Merger Guidelines.

A. The Guidelines: A Summary and Critique that Does Not Pay Special Attention to the Significance of the Presence of Effective Foreign Competition

This section will analyze and for the most part cast doubt upon the justification for the two major changes the Guidelines propose making in the traditional approach to horizontal-merger analysis: (1) the substitution of the HHI measure of concentration for the traditional four-firm or eight-firm concentration-ratio and the associated substitution of rules that focus on pre-merger and post-merger HHI figures (or merger-generated-increases-in-HHI figures and post-merger-HHI figures) for rules that focus on MP-market-shares and four-firm-market-concentration-ratios and (2) the attempt to supplement market-aggregated data with a number of other factors that are said to affect the competitive impact (or at least the legality) of a horizontal merger (including any efficiencies it has generated or would be predicted to generate).

The analysis is presented in three subsections. Subsection 1 delineates and criticizes the crude, unsupplemented (unqualified) HHI-oriented and 35%-leading-firm-merger rules the Guidelines initially propose and then qualify. Subsection 2 then analyzes the various additional non-market aggregated

84. Some of these factors are said to be relevant because their consideration will help the Department estimate various determinants of the competitive impact of a horizontal merger that HHI-oriented data and MP-market-share figures are supposed to be able to predict. Other such factors (say, efficiencies) are thought to be relevant because, despite the fact that they will affect the competitive impact of a horizontal merger, no one has ever argued that they are significantly or strongly correlated with the HHI or MP-market-share figures on which the Guidelines' crude rules focus.

85. Normally, this ratio is equated with the percentage of market-sales made by the four or eight firms making the largest amount of sales in the market. On occasions, economists have measured concentration by the percentage of market-assets owned by the four or eight firms that owned the largest amounts of assets used to produce and distribute the market's products.

factors the Guidelines indicate the Department will (and presumably the courts should) consider when deciding whether to challenge a horizontal merger—*i.e.*, the factors the Guidelines use to qualify the crude rules with which they begin. Finally, Subsection 3 assesses the accuracy and cost-effectiveness of the various supplemented or qualified HHI-oriented and 35%-leading-firm-merger rules the Guidelines actually do propose. Hence, although this section will initially discuss the crude rules and the "qualifying factors" separately, it will eventually consider them together in order to avoid the risk that "divide-and-conquer" strategies always generate: the risk that they may lead to the conclusion that each member of a series of proposals is either unjustified or superfluous when the whole package of proposals viewed as a unit makes perfectly good sense.\(^87\)

1. The Crude (Unqualified) HHI-Oriented and 35%-Leading-Firm-Merger Rules

\(a. \) The Crude (Unqualified) HHI-Oriented Rules

Rather than focusing on traditional MP-market-share and four-firm-concentration-ratio figures, all but one of the four basic rules the Guidelines promulgate focus on the pre-merger and post-merger HHIs of the market in question—*i.e.*, on the pre-merger and post-merger sum of the squares of the individual market shares of all the firms included in the market. In particular, the Guidelines state (1) that a horizontal merger that leaves the market in which it occurred with an HHI below 1000\(^88\) will not be challenged "except in extraordinary circumstances"; (2) that a horizontal merger that leaves the market in which it occurred with an HHI between 1000 and 1800\(^89\) is unlikely to be challenged if it raised the HHI by fewer than 100 points and is likely to be challenged if

\(^87\) Such a situation may arise both when various proposals that would individually lead to incorrect conclusions produce errors that are perfectly offsetting and when some proposals that would seem superfluous if considered in isolation (because they appear to state the obvious) actually correct the shortcomings of other proposals with which they have been combined.

\(^88\) 49 Fed. Reg. at 26,831. A market that consisted of 10 firms with equal (10%) market shares would have a 1000 HHI—since 10(10)\(^2\)= 1000—as would a market that consisted of one firm with a 20% market share, one firm with a 15% market share, one firm with a 10% market share, and 11 firms with 5% market shares—since \((20)^2+(15)^2+(10)^2+11(5)^2=400 +225+100+275=1000\). On the other hand, a market that consisted of two 15%-firms, two 10%-firms, seven 5%-firms, and fifteen 1%-firms would have an HHI of less than 1000—more precisely, of \(840 = (2(15)^2 + 2(10)^2 + 7(5)^2 + 15(1)^2=450 +200 +175 +15\).

\(^89\) Id. A market that consisted of a leading firm with a share of 30%, a "challenger" with a share of 20%, two reasonably large firms with shares of 10%, four successful small firms with 5% market shares, and a competitive fringe of ten small companies each of which had 1% market shares would have an HHI between 1000 and 1800—more precisely, of \(1610 = (30)^2+(20)^2+2(10)^2+4(5)^2+10(1)^2=900+400+200+100+10\).
it raised the HHI by more than 100 points;90 and (3) that a horizontal merger in a given market that leaves the market in which it occurred with an HHI of more than 180091 is unlikely to be challenged if it increased the HHI by fewer than 50 points,92 is likely to be challenged if it increased the HHI by 50-100 points,93 and will virtually always be challenged (regardless of the presence of any "qualifying" factors) if it raised the HHI by more than 100 points. The text that follows will criticize these crude, unqualified HHI-oriented rules.

Even on the realistic assumption that in practice the post-merger-HHI numbers 1000 and 1800 and the merger-generated increase-in-HHI numbers 50 and 100 will not play critical roles in the application of the Guidelines—that the Department will assume that the relevant relationships are continuous and not discontinuous, the Guidelines' three crude, unqualified HHI-oriented rules cannot bear scrutiny. In particular, my non-market-oriented analysis of the determinants of the competitive impact of horizontal mergers and my related critique of the implicit assumptions of the traditional market-oriented approach to predicting the competitive impact of such mergers undermine the case for these rules by demonstrating the inaccuracy of the two implicit assumptions on which they are based: viz., that ceteris paribus the anti-competitive impact of a merger that raised the relevant market's HHI to a particular level will be positively and strongly related to the amount by which it raised the market’s HHI and the anti-competitive impact of a merger that generated a given increase in the relevant market’s HHI will be positively and strongly related to that market’s post-merger (and hence pre-merger) HHI. The accuracy of each of these assumptions will now be explored in turn.

The first of the above two assumptions is the equivalent of the claim that the anti-competitive impact of a horizontal merger will be strongly and positively related to (A) the average size94 of the MPs’ pre-merger

90. Id. A merger between one firm with a 12% market share and another with a 5% market share would increase the relevant market’s HHI by more than 100 points—more precisely, by 120 points since \((12+5)^2-((12)^2+5^2)=289-(144+25)=120\).

91. Id. A market that consisted of a Big Three that respectively had 30%, 20%, and 20% market shares and a set of six relatively small competitors each of whom had 5% market shares would have an HHI of over 1800—more precisely, of \(1850=(30)^2+2(20)^2+6(5)^2=900+800+150\).

92. Id. A merger between one firm with a 6% market share and another with a 2% market share would increase the relevant market’s HHI by fewer than 50 points—more precisely, by 24 points since \((6+2)^2-(6^2+2^2)=64-40=24\).

93. A merger between one firm with an 8% market share and another with a 4% market share would increase the relevant market’s HHI by more than 50 but fewer than 100 points—more precisely, by 64 points since \((8+4)^2-(8^2+4^2)=144-(64+16)=64\).

94. Thus, although as just noted a merger between firms with 8% and 4% market shares will increase the relevant market’s HHI by 64 points, a merger between firms with 7% and 3% market...
market shares and strongly and inversely related to (B) the difference between their market shares, controlling for their average market share. The first assumption implicit in the Guidelines' HHI-oriented rules implies these claims because the immediate amount by which a horizontal merger will increase the HHI of the market in which it takes place will vary as indicated with these factors. Accordingly, for the Guidelines' first assumption to be accurate, (A) and (B) must be appropriately related to (1) the frequency with which and amount by which the MPs are each other's closest competitors; (2) the amount by which the merger increased the profitability of contrived oligopolistic pricing for the MPs and their product-Rs---e.g., the extent to which the merger reduced the number of firms in a position to undercut any oligopolistic prices the MPs or their product-Rs attempted to contrive, the frequency with which the MPs were originally second-best-placed and third-best-placed to obtain the patronage of some product-R's customers and the amount by which the third-best-placed MP was better-placed than the fourth-best-placed supplier of the buyers in question, the frequency with which a given product-R was second-best-placed to supply a buyer whom the MPs were respectively best-placed and third-best-placed to supply and the competitive advantage of the third-best-placed MP over the fourth-best-placed supplier of the buyer in question, the extent of any excess reciprocatory power an MP had in relation to a product-R who was also well-placed to steal the other MP's customers, the extent of any excess reciprocatory power any product-R of the MPs had in relation to one MP when the other MP was also in a position to undercut the product-R in question, the extent to which the harm-inflicted-to-cost-incurred shares will increase the HHI of the market in question by \((7+3)^2-(7^2+3^2)=100-(49+9)=42\) points.

95. This conclusion is a corollary of the fact that, if one lets \(x\) stand for MPI's pre-merger market share and \(y\) stand for MP2's, an MPI-MP2 merger's contribution to the HHI of the market in which the MPs were operating will equal \((x+y)^2-(x^2+y^2)=x^2+2xy+y^2-(x^2+y^2)=2xy\). A simple proof will reveal why this result implies the textual conclusion. The proof assumes that \(x\) is the larger of the two MPs' market shares (that \(x>y\)) and proceeds to compare the HHI-contribution of a merger between firms whose shares are respectively \(x\) and \(y\) with the HHI-contribution of a merger between one firm with a market share of \((x-a)\) and another with a market share of \((y+a)\) where \(a\) is a positive number which is smaller than \((x-y)\). Since, as we have just noted, the immediate contribution of any horizontal merger to the HHI of the market in which it takes place is equal to twice the product of the MPs' market shares, the merger between two firms with the same total but more equal individual market shares will increase the HHI by less than the merger between two firms with the same total but less equal individual market shares if and only if \(2(x-a)(y+a)>2xy\) where \(x,\, y,\) and \(a\) are all positive, \(x>y,\) and \((x-y)>a\). Working through the elementary algebra, the above inequality-condition is equivalent to the inequality-condition \(2xy+2ax-2ay-2a^2>2xy,\) which is itself equivalent to \((x-y)-a>0,\) which we have assumed to be the case (when we assumed \([x-y]>a\)).
ratio for MP1 for the last act of price-cut retaliation he might have found necessary to commit as an independent against a given product-R was different from its counterpart for MP2, the extent to which this ratio for a given product-R in his relations with MP1 was different from its counterpart for MP2, the extent to which the MPs have complementary information about various product-Rs’ competitive positions; (3) the pre-merger profitability of contrived oligopolistic pricing—the number of firms in a position to undercut contrived oligopolistic offers, the public visibility of the identity of particular customers’ suppliers, the stability of the functions that determine a seller’s repeat-sales-percentage, other-suppliers’-customers sales-percentage, and new-buyer sales-percentage, the number of buyers in the market in question; and (4) all the other determinants of the competitive impact of a horizontal merger Part I delineated.

Considerations of space and reader-patience militate against a point-by-point analysis of the relationship between each of these factors and (A) the MPs’ pre-merger market shares and (B) the difference between their market shares, controlling for their average market share. However, I will take up a few of the above putative relationships to illustrate the basic point. Just as the accuracy of the traditional approach’s predictions was destroyed by the inaccuracy of that approach’s three implicit insider-insider assumptions, the accuracy of the assumptions on which the crude HHI rules are based (and hence of these rules themselves) are destroyed by the following facts: the fact that the frequency with which a given product in a given market is highly competitive with another (second) product in that market varies from second product to second product; the fact that the ratio of the number of times a given product is best-placed to the number of times it is second-best-placed and also close-to-second-best-placed varies from product to product within a market as well as (on the average) among markets; the related fact that the competitiveness of any two products in a given market varies from product-pair to product-pair and the average competitiveness of product-pairs in different markets varies from market to market (even controlling for the relevant markets’ four-firm or eight-firm concentration ratios or HHI indices); and the fact that the competitive positions of two products vis-à-vis each other is often asymmetric.

I will now illustrate my basic objection to the first implicit assumption of the crude HHI rules by examining the implications of the preceding empirical propositions for the relationship between (A) the average size of the MPs’ pre-merger market shares and (B) the difference between the MPs’ market shares (controlling for their average size) and some of the more significant determinants listed in categories (1) through (4) in
the next-to-preceding paragraph. Let’s focus first on determinant (1)—the frequency with which and the amount by which the MPs were each other’s closest competitors. Obviously, if (a) every product in a given market were the closest competitor of each of its insider-rivals for the same percentage of each such rival’s customers, (b) every firm’s best-placed-to-second-best-placed-to-an-insider ratio were the same, and (c) (at least controlling for concentration or HHI as this part of the analysis does) the above ratios were the same in all markets, (i) one could predict the frequency with which if not the amount by which the MPs were each other’s closest competitors from their market shares, (ii) that frequency would be directly related to the MPs’ average market shares, and (iii) that frequency would also be inversely related to the difference between the MPs’ market shares, controlling for their total or average market share. 96 Thus, if one assumes that the relevant market consists of a given number of sellers with a one-to-one best-placed-to-second-best-placed ratio (which would be the only assumption compatible with equal ratios if the closest competitor of any firm in a given market for a particular buyer’s patronage were always another insider) and (for simplicity) 1000 buyers of equal size, a merger between two MPs with 10% market shares would consist of sellers who were each other’s closest competitors a total of 20 times—i.e., would combine sellers each of whom was the other’s closest competitor for 10 buyers (10% of the 100 [which is 10% of 1000] buyers the other was best-placed to serve); a merger between two MPs with 20% market shares would combine sellers who were each other’s closest competitors a total of 80 times—i.e., each of whom was the other’s closest competitor for 40 (which is 20% of 200) buyers; and a merger between one firm with a 15% market share and another with a 5% market share would combine sellers who were each other’s closest competitors a total of 15 times (15%[5%]1000+5%[15%]1000 =7.5+7.5=15). However, in practice, the effects of these tendencies are likely to be overwhelmed by the effects of those facts that make the above assumptions (a), (b), and (c) inaccurate. Thus, in practice, I expect that variations in different MPs’ best-placed-to-second-best-placed ratios or in the ratio of the percent of each other’s customers they are best-placed to obtain to the percent of all other insiders’ customers they are best-placed to obtain—i.e., in the extent to which the different pairs of MPs are more competitive with each other than they are with their average other insider-Rs—will have at least as much to do with the absolute frequency

96. As we shall see, the Guidelines also implicitly assume that there is a significant relationship between a horizontal merger’s competitive impact and the difference between the MPs’ market shares, controlling for their product rather than their sum. See infra text following note 98.
with which a given pair of MPs are each other's closest competitors as will the size of their market shares.

A very similar argument will apply to the relationship between the sum of the MPs' market shares and the amount by which the second-best-placed MP is better-placed than the third-best-placed supplier of those buyers the MPs are respectively best-placed and second-best-placed to serve. In this case, the argument for a connection between the MPs' average market share and the amount in question would probably be based on the following three hypothesized relationships: the larger the MPs' combined market shares, the smaller the number of non-MP insider-products; the smaller the number of non-MP insiders, the smaller the number of products that will be close-to-second-best-placed; and the smaller the number of close-to-second-best-placed products, the larger the gap between the second-best-placed MP and the third-best-placed supplier of the buyers the MPs were respectively best-placed and second-best-placed to serve. Although this argument is not completely unfounded, each of the relationships on which it is based is too weak for the overall conclusion to be strong enough to accomplish its purpose. Thus, in the real world, the relationships between non-MP market shares (or non-MP contributions to the relevant market's HHI) and the number of non-MP insiders is very weak: even if one constrains the analysis by indicating the non-MP contribution to the relevant market's HHI, any number of independent firms could be operating in the market in question. Similarly, in the real world, the relationship between the number of non-MP insiders and the number of such products that were close to being second-best-placed to serve those customers the MPs were respectively best-placed and second-best-placed to serve is also likely to be very weak across markets or, at least, this conclusion is suggested by the posited difference in the average best-placed-to-second-best-placed ratio of firms in different markets as well as by the positive difference in the extent to which any given product in a market (or indeed any subset of the products in a market) is competitive with other particular insider-products. Finally, the relationship between the OCA a second-best-placed supplier of some buyer enjoys over that buyer's third-best-placed supplier and the number of rivals who are close to being second-best-placed may also be much less strong than the supporters of the Guidelines' HHI rules would prefer.

Hence, in general, I do not think that supporters of the crude HHI

97. And any number of outsider-firms could be second-best-placed to obtain the patronage of the average buyer the MPs were respectively best-placed and second-best-placed to serve.
rules can gain much confidence from the relationship between the MPs' average or total market share and the frequency with which and the amount by which the MPs were each other's closest competitors. Accordingly, even if (contrary to my beliefs) any relationship of this kind would favor rules that distinguished among cases in which the relevant merger raised the market's HHI by fewer than 50, 50 to 100, or over 100 points, this relationship would not contribute significantly to the case for such rules' accuracy.

Precisely the same conclusion is justified in relation to the supposed tendency of increases in the difference between the MPs' market shares (controlling for their total or average market share) to be associated with decreases in the extent to which they are each other's closest competitors. Our initial argument for this conclusion relied on the assumption that MP1 and MP2 would each be second-best-placed as often as they were best-placed as well as on the assumption that the percentage of each other's customers in relation to whom they were second-best-placed is the same as the percentage of all customers of their insider-rivals whom they were second-best-placed to serve (that each MP was just as competitive [in this case] with his partner as he was with his average pre-merger insider-rival). Obviously, both of these assumptions are very dubious. As I argued earlier, best-placed-to-second-best-placed ratios vary substantially both from product to product within markets and a fortiori from product to product across markets, and typically the percentage of the customers of any insider-rival that a given product is second-best-placed to serve will vary substantially from rival to rival. Although there is reason to believe that absent legal disincentives to the contrary MPs would tend to be more competitive with each other than with their average insider-rival, I do not know to what extent this tendency will be offset by the positive correlation between the probability that a merger will be challenged and declared illegal and the extent to which the MPs are more competitive with each other than with their average insider-rival (though in theory no such correlation would exist if the operative law consisted solely of the Guidelines' crude HHI-oriented rules). In any event, the strength of any tendencies of unusually close competitors to merge will obviously vary from market to market with the extent to which the competitiveness of pairs of products within each market in question differs. In short, neither the MPs' average market share nor the difference between their market shares, given their average market share, is likely to be sufficiently correlated with the frequency with which and amount by which the MPs are each other's closest competitors to be strongly correlated with the merger's effect on the relevant market's HHI.
For similar reasons, a merger's impact on the profitability of contrived oligopolistic pricing is unlikely to be strongly and positively correlated with its effect on the relevant market's HHI—i.e., with (A) the MPs' average market share on the one hand and (B) the difference between the MPs' market shares given their average market share on the other. Thus, as we have already shown in the context of evaluating the traditional market-share concentration-ratio approach to predicting the competitive impact of horizontal mergers, even if (A) and (B) were appropriately correlated with the frequency with which and amount by which the MPs were respectively best-placed and second-best-placed, they would have little bearing on (1) the number of undercutters the best-placed MP faced both pre-merger and post-merger since (A) and (B) provide little information about the distribution of the competitive disadvantages of the worse-than-second-best-placed suppliers of those buyers that one of the MPs is best-placed to serve, (2) the effect of the merger on the MPs' ability to reciprocate to cooperators—since (A) and (B) are not likely to be correlated with the frequency with which the MPs are second-best-placed and third-best-placed to supply various remaining product-Rs' customers, (3) the extent to which one and only one MP has excess reciprocatory power vis-à-vis a non-MP R who is also in a position to undercut the other MP, (4) the extent to which a given R has excess reciprocatory power in relation to one MP that it can use to gain the cooperation of the other MP, (5) the extent to which the merger will reduce the cost to the MPs of inflicting relevant amounts of harm through retaliation by combining firms whose competitive positions vis-à-vis a given R are offsettingly asymmetric, (6) the extent to which the merger will increase the MPs' contrived oligopolistic pricing by increasing their ability to detect undercutting and identify undercutters by combining firms that have complementary information about some Rs' competitive positions, etc.

Moreover, the same argument would apply to the relationship between (A) and (B) and the various determinants of the pre-merger profitability of contrived oligopolistic pricing for the MPs and their Rs or the various other determinants of the competitive impact of a horizontal merger—say, of its impact on QV-investment competition or of its efficiency-related competitive impact.

Of course, even if the crude HHI-oriented rules' first implicit

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98. See supra Section III.B.
99. To be fair, the more complicated, qualified HHI-oriented rules the Guidelines actually announce do attempt to take QV-investment-competition-related factors and efficiencies into account though, as the next section will demonstrate, they do not do so very satisfactorily.
(merger-generated-increase-in-HHI) assumptions were not sufficiently accurate to guarantee by themselves the accuracy of the rules' implicit competitive-impact predictions, they might succeed when combined with the rules' second implicit assumption—that the anti-competitive impact of a horizontal merger that generated a given increase in the relevant market's HHI will be positively and strongly related to that market's post-merger (and hence pre-merger) HHI. This second assumption is equivalent to the claim that the anti-competitive impact of a given merger will be positively and strongly related to both (a) the contribution the MPs' market-insider product-Rs make to the relevant market's HHI and (b) the contribution the MPs made pre-merger to the relevant market's pre-merger HHI—i.e., as well as with the difference between the MPs' market shares (given the contribution of their merger to the relevant HHI). Hence, for this second assumption to be accurate, (1) the frequency and amount by which the MPs were each other's closest com-

100. Since, as note 95 demonstrated, a horizontal merger's immediate contribution to the HHI of the market in which it took place is equal to two times the product of the MPs' market shares, one cannot determine the MPs' market shares or their pre-merger contribution to the relevant market's HHI from knowledge of the contribution their merger made to the relevant market's HHI. For example, the fact that a horizontal merger generated an immediate increase of 64 in the MPs' market's HHI is compatible with their shares' being either 16% and 2%—since 2(16)(2)=64—or 8% and 4%—since 2(8)(4)=64 or any other combination of percentages whose product is 32. (A 16%-2% merger will generate an immediate increase in HHI of 64 because [8+4]^2-[8^2+4^2]=144-[64-16]=64, and a 32%-1% merger will generate an immediate increase in HHI of 64 because [32+1]^2-[(32)^2+1^2]=1089-[1024+1]=64.)

101. This point is illustrated by the examples presented in the preceding footnote. Thus, although as it showed the immediate contribution of 32%-1%, 16%-2%, and 8%-4% mergers to the HHI of the market in question would all be the same—viz., 64, the pre-merger HHI-contribution of the MPs involved in the 32%-1% merger (1025) would be larger than its counterpart for the MPs involved in the 16%-2% merger (260), which would in turn be larger than its counterpart for the MPs involved in the 8%-4% merger (80). This outcome reflects two facts. First, if one starts with a hypothetical merger between two equal-share firms that will increase the relevant market's HHI by some specified amount and then raises MPI's market share and lowers MP2's market share such that a merger between firms with such a pair of adjusted market shares will also raise the relevant market's HHI by the same amount, the upward adjustment that will have been made in MPI's market share will always be larger than the downward adjustment that will have been made in MP2's associated market share. (This "fact" can be illustrated by examining our previous example. The equal-share merger that will raise the HHI in the market in which it takes place by 64 points is a merger between two firms with market shares of [8/\sqrt{2}]% since 2[8/\sqrt{2}][8/\sqrt{2}]=64. If, for simplicity, we set \sqrt{2} equal to 1.4, [8/\sqrt{2}]% will approximately equal 5.7%. Obviously, the upward adjustment involved in the move to an equal-HHI-impact merger between firms whose market shares were respectively 8% and 4%—viz., 2.3%—will be larger than the downward adjustment involved in this move—1.7%. Similarly, the upward adjustment (10.3%) involved in the move from a 5.7%-5.7% equal-share merger to a 16%-2% merger which will have the same impact on the relevant market's HHI will be larger than the downward adjustment involved in such a "move"—viz., 3.7%.) Second, if, starting with two firms with equal shares, equal increases and decreases are made in MPI's and MP2's respective market shares, the increase in MPI's share will increase his contribution to the pre-merger HHI by more than the decrease in MP2's share will decrease his contribution to pre-merger HHI. These results imply that given the contribution of a merger to the relevant market's HHI, the MPs' pre-merger contribution to their market's pre-merger HHI will increase with the difference in their market shares.
petitors, (2) the pre-merger profitability of contrived oligopolistic pricing, not to say (3) all the other determinants of the anti-competitive tendencies of horizontal mergers will have to be strongly and appropriately related to (C) the MPs' product-Rs' contribution to the relevant market's HHI and (D) the difference between the MPs' market shares (given the impact of their merger on their market's HHI—i.e., given the product of their market shares). For reasons we originally discussed when analyzing the traditional market-oriented approach to predicting the competitive impact of horizontal mergers, neither of these sets of relationships seems sufficiently significant or strong for the Guidelines' crude HHI-oriented rules to be even modestly accurate, much less cost-justified. Indeed, this conclusion would be justified even if the relationships between (A) and (1)-(3) and (B) and (1)-(3) were far more helpful to supporters of the Guidelines' crude HHI-oriented rules than I believe them to be.

I will first address the relationship between (C) and (1) and (D) and (1) (where the numbers and letters in question refer to the items they designated in the preceding paragraph). Admittedly, ceteris paribus, (i) the frequency and amount by which the MPs were each other's closest competitors will be somewhat inversely related to the average number of other firms that are or are close to being each MP's closest competitor, and (ii) this average number will also be somewhat inversely related to the contribution the MPs' insider-product-Rs make to the relevant market's HHI pre-merger since that contribution will be inversely related to the number of such Rs. However, each of these relationships is far too weak for (1) to be strongly related to (C). In particular, given the fact that the ratio of best-placed-to-second-best-placed positions will vary tremendously from insider to insider and from market to market as well as the fact that the intensity of competition between any two insiders will vary tremendously from pair to pair, the average number of non-MPs who are or are close to being each MP's closest competitor may have relatively little to do with the frequency with which and amount by which the MPs are each other's closest competitors.

Nor is there any reason to believe that (1) will be strongly and positively related to (D)—the difference between the MPs' market shares, given their product rather than "given their sum" as in (A). In fact, a little simple algebra is all that is needed to demonstrate that if the traditional approach's implicit insider-insider assumptions were accurate, (D) would be totally unrelated to the frequency with which the two MPs were each other's closest competitors. For the purpose of illustration, let's compare the frequency with which the MPs in two different mergers would be each other's closest competitors if the traditional approach's
implicit insider-insider assumptions were accurate. Let \( x \) stand for the market share of the larger MP in the first merger, \( y \) stand for the market share of the smaller MP in that merger, \( x/a \) stand for the market share of the larger MP in the second merger, \( ay \) stand for the market share of the smaller MP in the second merger, and \( N \) stand for the total number of equal-sized buyers in the market(s) in question. Four points should be made before proceeding: (1) the above assumptions imply that \( a > 1 \); (2) they also imply that \( (x/a - y/a) \) is smaller than \( (x - y) \); (3) the assumption that \( (x/a) > (ay) \) is made solely for expositional reasons; and (4) the above assumptions imply that the two mergers will increase the relevant market's (or markets') HHI(s) by the same amount—since the product of each pair of MPs' market shares is \( xy \). Now assume that all the traditional approach's insider-insider assumptions are correct and that no outsider is ever second-best-placed (so that each insider's best-placed-to-second-best-placed ratio is one). On these assumptions, the merger of firms with market shares of \( x\% \) and \( y\% \) will combine firms that were each other's closest competitors a total of \( (x\%)(y\%)N + (y\%)(x\%)N = 2(x\%)(y\%)N \) times, while the merger of firms with closer market shares of \( (x/a)\% \) and \( ay\% \) will combine firms that were each other's closest competitors a total of \( ((x/a)\%)(ay\%)N + (ay\%)([x/a]\%)N = 2(x\%)(y\%)N \) times—\( i.e., \) the same number of times. For example, on the above assumptions, a merger of MPs with 16\% and 2\% of a market with 1000 buyers would combine firms that were each other's closest competitors \( (16\%)(2\%)1000 + (2\%)(16\%)1000 = 3.2 + 3.2 = 6.4 \) times, and a merger of MPs with 8\% and 4\% of the relevant market \( (a = 2) \) would combine firms that were each other's closest competitors \( (8\%)(4\%)1000 + (4\%)(8\%)1000 = 3.2 + 3.2 = 6.4 \) times. Of course, as I argued before, in practice, the traditional approach's implicit insider-insider assumptions are very inaccurate—particularly across markets. I simply have no idea whether in general \( (D) \) will turn out to be positively related to \( (1) \). However, I am certain that any such relationship that does exist will be far too weak to give much support for any conclusion that the Guidelines' various crude HHI-oriented rules reflect even modestly accurate competitive-impact predictions.

Readers who have suffered with me thus far will not be surprised to hear that similar arguments to those developed when analyzing the relationship between \( (A) \) or \( (B) \) on the one hand and \( (2), (3), \) and \( (4) \) on the other will also demonstrate that \( (C) \) and \( (D) \) will be insufficiently related to \( (2) \) the various determinants of the extent to which the merger would increase the profitability of contrived oligopolistic pricing for the MPs and their Rs, \( (3) \) the various determinants of the profitability of such
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pricing pre-merger, and (4) the various other determinants of a horizontal merger's competitive impact for any such relationship to make me optimistic about the justifiability of the legal conclusions to which the various crude HHI-oriented rules would lead. In relation to some members of sets (2), (3), and (4), this conclusion reflects the absence of any connection between the determinants of (C) or (D) and the competitive-impact determinants in question (the size of any efficiencies the merger generated, the number of buyers in the market in question, the stability of the functions that determines a seller's repeat-sales, other-suppliers' customers-sales, and new-buyer-sales percentages). In relation to others, it represents the weakness of the connection between (C) or (D) and the relevant competitive-impact determinant in question. Sometimes, this weakness reflects the crudeness of the relevant HHI figure (e.g., the fact that the number of non-MP insiders and outsiders who may be second-best-placed or close-to-second-best-placed is only weakly correlated with the non-MP insiders' contribution to the relevant market's HHI). And sometimes, it reflects the great inaccuracy of the traditional approach's implicit insider-insider assumptions. For example, the fact that the ratio of (i) the average number of firms who are second-best-placed or close-to-second-best-placed to obtain one of the MPs' customers to (ii) the number of non-MP insiders varies tremendously from seller to seller within a market and a fortiori from seller to seller across markets would reduce the significance of the contribution non-MPs make to the relevant market's HHI even if that contribution were negatively, significantly, and strongly correlated with the number of non-MP insiders in the MPs' market.

In any event, I have no doubt that even if the Guidelines' unqualified HHI-oriented rules would be inexpensive to apply, they would be far too inaccurate to be cost-effective. Subsections A2 and A3 will assess the case for the Guidelines' actual, qualified HHI-oriented rules (as well as for their qualified 35%-leading-firm-merger rule). However, before proceeding to the analysis of the crude version of this 35%-leading-firm-merger rule as well as to the assessment of all the Guidelines' actual (qualified) rules, a final comment on the Guidelines' substitution of HHI data for traditional concentration ratios might be in order. The Guidelines explicitly state the reasons its authors decided to substitute HHI figures for four-firm concentration ratios:

Unlike the traditional four-firm concentration ratio, the HHI reflects both the distribution of market shares of the top four firms and the composition of the market outside the top four firms. It also gives proportionately greater weight to the market shares of the larger firms,
which probably accords with their relative importance in any collusive interaction.\textsuperscript{102}

I argued that neither the MP-market-share and four-(or eight)-firm-concentration-ratio figures on which the traditional approach concentrated nor the merger-generated-immediate-increase-in-HHI and the post-merger-HHI figures on which the Guidelines’ HHI-oriented rules focus predict the competitive impact of horizontal mergers even modestly accurately.\textsuperscript{103} I also argued that the fact that traditional market-share and concentration-ratio data predict the competitive impact of such mergers less well than the non-aggregated data the traditional approach uses to define markets in the first place destroys not only the case for relying exclusively on such data but also the case for collecting and using such data at all. And I will go on to argue that the same conclusion is justified in relation to the HHI-oriented data on which the Guidelines’ crude rules focus. Perhaps these conclusions render otiose any evaluation of the desirability of switching from MP-market-share and four-firm or eight-firm concentration ratios to merger-generated-increase-in-HHI and post-merger-HHI figures. Nevertheless, I will close this section with two sets of specific observations and one general comment on this issue.

First, although the distribution of market shares among the leading four firms (or eight firms) may affect the competitive impact of a horizontal merger both when one or two such firms are MPs and when no such firms are MPs, I find it difficult to generalize across markets about the importance to be given to differences among the market shares of the leading four firms. Certainly, the Guidelines’ authors have provided no theoretical or empirical basis for their claim that the additional sensitivity of the HHI index and the rules with which it is associated to such leading-firm market-share differences will make their implicit competitive-impact predictions more accurate than the traditional approach’s.

Second, although I agree that the four-firm (and indeed even the eight-firm) concentration ratio fails to take account of the possibly important effect of members of the competitive fringe (and indeed of domestic suppliers operating in different geographic or product markets or of foreign suppliers who may have made no sales whatsoever in the relevant market), the HHI gives almost no weight to such small firms either. Admittedly, if one ignores the possibility that the underweighting of low-market-share products that are second-best-placed or close-to-second-

\textsuperscript{102} 49 Fed. Reg. at 26,831.
\textsuperscript{103} See Sections IIIB and IV.A.1 supra.
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best-placed far more often than they are best-placed may offset other errors the HHI approach commits, the weight the HHI approach gives such firms favors its being substituted for the traditional market-oriented approach, but this advantage is very small both in itself and relative to the enormous disadvantages of both these market-oriented approaches compared to some more or less refined version of my non-market-oriented approach.

The final comment is an anecdote, which admittedly may not be completely on point. Writing these last few paragraphs reminded me of trying to answer those questions on the Interstate Bar Exam that ask you to select the answer that is "least wrong." I never knew how to answer those questions. Did one pick (1) the answer that seemed likely to have involved the smallest "intellectual error," however that concept might be operationally defined, (2) the answer that would get the smallest percent of cases wrong—that would minimize the number of legal errors, (3) the answer that would generate the least contextual injustice (that would minimize legal errors measured by the extent of the unjust consequences to which they lead)—the least injustice evaluated by the norms and weights that one would derive from the legal system in question, or (4) the answer that would generate the smallest amount of "erroneous consequences" evaluated by the ultimate values of the evaluator or some constituency whose values he was obligated to effectuate? And even if one could decide on an appropriate operationalization of "least wrong," how could one determine which answer would be or even would seem to be most likely to meet that standard?

I am in a similar quandary in the current context—i.e., I am uncertain both about the standard for determining whether HHI-oriented figures are preferable to traditional market-share and concentration figures and the set of figures each of the possible standards would recommend. In part, my uncertainty about standards reflects the existence of some ambiguity about the appropriate vantage-point, which will vary with the identity of the Guidelines' "evaluator." Unfortunately, the Guidelines themselves do not indicate whether they are supposed to guide only the Justice Department when deciding which mergers to challenge—i.e., on whether they are also supposed to guide the courts when interpreting the current law, the legislature when considering the possibility of passing new antitrust legislation, and/or academics when developing or testing appropriate economic theories. It should be obvious that the standards for evaluating the Guidelines' substitution of HHI-oriented figures for traditional MP-market-share and concentration-ratio data may vary with the entity that is choosing between the two approaches in
question—that a standard that would be appropriate for a legislature or an academic employer would be inappropriate for a court or for the Department itself. The Justice Department seems to be assuming that in this context it can adopt a legislative perspective, in which case the appropriate standard for it to employ would be standard (4)—i.e., in which case the choice between HHI and traditional figures would turn on which set would produce the smallest amount of erroneous consequences where the consequences of erroneous decisions are evaluated either by the Department’s values (if one adopts a modified Burkean theory of democracy) or the pertinent values of the majority of the relevant electors (or indeed of the whole populace). However, it is not clear to me that in our legal culture the Justice Department is authorized to select the cases it will bring on this ultimate-value basis: more precisely, in our legal culture, prosecutorial agencies that do not have the resources to bring all the cases they should win under the law may be supposed to bring those cases that effectuate not their own or the general populace’s ultimate values but the contextual value-choices embedded in the law. Moreover, even if this proposition is doubtful when it is applied to the Antitrust Division or other prosecutorial offices, I would regard it to be correct when applied to the courts or more specifically to the federal courts that apply our current antitrust laws.

I do not mean to imply that it will be simple to discover the values and weights embedded in our law or indeed that without more they would indicate whether standard (2)—minimize the number or percentage of errors—or standard (3)—minimize the contextually undesirable consequences of errors (the undesirable consequences measured contextually by the values embedded in the law)—should guide the prosecutor (though I believe the third standard is contextually more appropriate). However, I am certain that if the Justice Department and the courts are not supposed to act as legislatures in this context, the standards we should employ when evaluating the Guidelines’ substitution of HHI-oriented data for traditional market-share and concentration-ratio figures will vary considerably with the employer of the Guidelines’ proposals.

Moreover, although I have so far confined this discussion to the choice among standards (2), (3), and (4), the fact that the Guidelines were written by former academics who intended to return to university life as well as the fact that by and large these authors do not believe that there is a difference between the legally correct and “economically” best choice in this area suggests that at least to some extent they expected their argument for their HHI-substitution to be judged by “intellectual” standards that are at least partly independent of their proposal’s relevant
social consequences—\textit{i.e.}, to be judged on an almost aesthetic intellectual basis. Accordingly, to the extent that the Guidelines' addressees were potential academic rather than governmental employers, an argument might be made that the first standard may be relevant to their evaluation for some purposes as well. In short, in part my uncertainty about the standard for evaluating the HHI-substitution reflects my uncertainty about the appropriate standard for determining whether a particular entity such as the Justice Department may or ought to substitute HHI-figures for market-share and concentration-ratio figures, and in part it reflects the fact that different standards may be appropriate for different entities.

But let's assume that these problems can be resolved by analysis or specification. Even if I knew which standard to employ, I would find it difficult to choose between the Guidelines’ HHI-oriented figures and rules and the traditional approach’s market-share-and-concentration-ratio figures and rules (or some other traditional set of rules that employed eight-firm concentration ratios). When standard (2), (3), or (4) is applicable, the relevant choice is made difficult by my almost total uncertainty about which approach is the more likely to minimize the number of relevant errors or the contextually or ultimately evaluated consequences of the relevant errors. And to the extent that standard (1) is applicable, the relevant choice is made difficult by four facts: (1) the fact that neither the HHI approach nor the traditional approach is derived from sound theoretical or empirical work; (2) the fact that both approaches implicitly adopt a set of highly inaccurate insider-insider assumptions that would not justify them if they were accurate; (3) the fact that both basic approaches ignore a number of important determinants of the competitive impact of a horizontal merger which the factors they do consider are not even supposed to predict (as well as the fact—which we will establish in subsection A2—that the Guidelines’ attempt to deal with these additional factors separately is largely unsatisfactory); and (4) the difficulty of determining whether the “errors” the traditional approach makes in (a) ignoring the possible importance of the distribution of the shares of the leading four or eight firms and (b) ignoring altogether the possible significance of non-leading firms (including members of the competitive fringe) is larger than the “errors” the HHI-oriented approach makes (c) by counting differences in leading-firm market shares (controlling for their sum) in favor of a merger's legality while counting differences in leading-firm market shares (controlling for their product) against a merger's legality and (d) by attributing very little competitive significance to firms with small market shares.
I have tried to be careful, exhaustive, and objective even at the cost of being pedantic, exhausting, and boring, but in the end I have to let my frustration break through. The real reason I find it so difficult to determine whether the HHI-oriented approach is more intellectually respectable (involves less significant intellectual errors) than the traditional market-share concentration-ratio approach is that both approaches have been surprisingly mindless: "surprisingly," given the length of the period during which the traditional approach has been employed and the obvious intelligence of many of the people associated with the production of the Guidelines, but "mindless" nonetheless, given the failure of either approach's authors and advocates to provide them with any significant amount of theoretical or empirical support.

b. The Guidelines' Crude (Unqualified) 35%-Leading-Firm-Merger Rule

Having burned my bridges, I can turn my attention to the only basic rule the Guidelines propose that relies on traditional market-share data, the rule that states that unless certain special factors indicate to the contrary (viz., some but not all such factors that the Guidelines deem relevant to the application of its HHI-oriented rules) "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, providing that the leading firm has a market share that is at least 35 percent."\textsuperscript{104} The Guidelines do not themselves answer two questions that this announcement immediately raises:\textsuperscript{105} first, why did the authors of this 35%-leading-firm-merger rule find the rule worth specifying; and second, to the extent that this rule does make some difference, why did the Guidelines' authors think that the facts it makes salient ought to critically affect the legal outcome in ways that would not be reflected in the merger's contribution to the relevant market's HHI or the MPs' pre-merger contribution to their market's pre-merger HHI? I will address each of those questions in turn.

The first relates to the fact that the Guidelines' 35%-leading-firm-merger rule is almost superfluous. To see why, note (1) that a merger between two firms with respectively 35% and 1% market shares would

\textsuperscript{104} 49 Fed. Reg. at 26,831.

\textsuperscript{105} In fact, the proposal actually raises a third question that was discussed in Section IVA1—viz., why do the Guidelines not deem relevant to the application of its leading-firm-merger rule all the factors they do deem relevant to the application of its HHI-oriented rules (in particular, why are the factors the Department incorrectly believes to be significant solely because they are related to the "ease and profitability of collusion" as well as the factors that are relevant to failing-company analyses deemed irrelevant to the application of the leading-firm-merger rule)?
generate an immediate increase in the relevant market's HHI of 70—since \((35 + 1)^2 - (1.5)^2 = 1296 - (1225 + 1) = 70\), (2) that a merger between two firms with respectively 35% and 1.5% market shares would generate an immediate increase in the relevant market's HHI of 105—since \((35 + 1.5)^2 - (1.5)^2 = 1332.25 - (1225 + 2.25) = 105\), (3) that the post-merger HHI of the market in which a 35%-1% merger took place would be 1296 plus the HHI-contribution that would be made by the remaining firms in the relevant market (firms whose total market share would be 64%), and (4) that the post-merger HHI of the market in which a 41.5%-1% merger took place would be 1806.25 plus the HHI contribution that would be made by the remaining firms in the relevant market (firms whose total market share would be 57.5%). Since the crude (unqualified) HHI-oriented rules declare that the Department will be likely to challenge any merger in a market with a post-merger HHI of 1000 to 1800 if it increases the relevant market's HHI by more than 100 points as well as any merger in a market with a post-merger HHI of over 1800 if it increases the relevant market's HHI by 50 points or more, the preceding “facts” imply that the Guidelines' unqualified leading-firm-merger rule would lead the Department to challenge mergers it would otherwise not challenge (if no rule were ever qualified) only when (1) the smaller MP's market share fell between 1% and 1.5%, (2) the leading firm's market share was under 41.5% (when the other MP's share was 1%) and under some number between 35% and 41.5% (when the other MP's share was higher than 1% though lower than 1.5%), and (3) the rest of the market in question was very unconcentrated (for example, in the case of a 35%-1% merger, if in addition to the MPs, the market consisted of two firms with 10% market shares, 6 firms with 5% market shares, and 14 firms with 1% market shares the non-MPs would add fewer than the 504 points necessary to bring the relevant market's post-merger HHI to 1800 points—in particular, would add \(2(10)^2 + 6(5)^2 + 14(1)^2 = 364\) points to the 1296 points the MPs contributed to their market's HHI post-merger). Obviously, if one ignores any differences in the way in which the Guidelines qualify their 35%-leading-firm-merger rule and their various HHI-oriented rules, the preceding conclusion would imply that the facts the 35%-leading-firm-merger rule make salient would rarely affect the Department's decisions—indeed, would af-

106. On the other hand, if the MPs' shares were 38% and 1% rather than 35% and 1%, a set of non-MP insider-producers that consisted of two firms with 10% shares, 6 firms with 5% shares, and 11 (rather than 14) firms with 1% shares would add far more than the 279 points needed to bring the relevant market's HHI to 1800 given the \((39)^2 = 1521\) points the MPs contributed to their market's HHI post-merger—in particular, would add \(2(10)^2 + 6(5)^2 + 11(1)^2 = 361\) points to their market's HHI.
fect such decisions far less often than other facts the Guidelines allude to in far less specific ways.

Admittedly, the practical significance of the 35%-leading-firm-merger rule will be somewhat greater once one focuses on the Guidelines’ actual, qualified rules rather than on the crude, unqualified rules with which this section has been concerned, for the Guidelines stipulate that the Department will ignore some of the factors that will tend to deter it from challenging a horizontal merger under the HHI-oriented rules when considering whether to challenge such a merger under the 35%-leading-firm-merger rule—i.e., since the Guidelines inexplicably and almost certainly incorrectly indicate that those factors the Department (mistakenly) believes are relevant solely for “the ease and profitability of collusion” and those factors that would be relevant to failing-company arguments are irrelevant to the determination of whether a challenge should be brought under the 35%-leading-firm-merger rule. Nevertheless, even when these complications are considered, the Guidelines’ specification of a 35%-leading-firm-merger rule seems somewhat incongruous.

The second question the Guidelines’ 35%-leading-firm-merger rule raises is based on the premise that at least on some occasions the rule will matter—that is, will lead the Department to challenge a horizontal merger it would not otherwise have challenged. The question is: why should the facts this rule makes salient (the fact that one MP is a leading firm that has a market share of at least 35% and the fact that its merger partner’s market share is at least 1%) critically affect the decision to challenge? In other words, what are the grounds for believing that the significance of these facts is not captured by their connection to the considerations the HHI-oriented rules make salient—(1) the merger’s contribution to the relevant market’s HHI and relatedly (2) the size of that market’s post-merger HHI.

In brief, I simply do not see how one can justify giving these facts such special treatment by (1) assigning them extra weight when determining whether (qualifications aside) the merger should be challenged and (2) using them to justify disregarding certain “qualifying” factors that one would consider under the HHI-oriented rules. I will address each of these points in turn. The only argument I can imagine for giving extra weight to the fact that one MP was a leading firm with at least a 35% market share derives from the premise that such leading firms are likely to be the kind of “dominant firms” that some believe play a crucial role in organizing and initiating contrived-oligopolistic-pricing sequences and in facilitating natural-oligopolistic-across-the-board-pricing se-
quences by making premature price-announcements. However, even if this belief were correct, the 35%-leading-firm-merger rule's emphasis on the "leading-firm" position of the larger MP as well as its emphasis on the leading firm's possession of a market share of at least 35% could not be justified on such focal-point-for-oligopolistic-interaction grounds. In particular, such an argument would fail for two reasons: (1) because it would certainly be more accurate and would probably be cheaper to determine whether a participant in a suspect merger was such a facilitator of oligopolistic interactions directly than to do so indirectly by defining the relevant market and computing the market shares of such a leading firm, its merger partner, and any remaining insider-rivals and (2) because even if leading firms with market shares of at least 35% do tend to be focal points for oligopolistic interactions more than non-leading firms or leading firms with smaller market shares, there would be no reason to believe that as a class (A) mergers involving leading-firm MPs that had at least 35% of the market pre-merger and another insider with at least a 1% market share would increase these leading firms' focal-point contributions to OMs in their markets by more than (B) mergers involving leading-firm MPs with less than a 35% market share pre-merger would increase their focal-point contribution to their markets' OMs or (C) mergers involving non-leading firms would increase their focal-point contribution to their markets' OMs.

My first objection to these oligopolistic focal-point answers reflects not only my conclusions about the cost and difficulty of defining markets but also my belief that leading firms with shares of at least 35% are often neither dominant firms in any sense nor focal points for oligopolistic interactions (even if they are "dominant" in some unrelated sense). My skepticism on this issue reflects my perception that a firm's "dominance" in a particular market (in the sense of its ability to organize and enforce contrived oligopolistic pricing) as well as its focal-point status in a given market depends more on its company-wide size, its company-wide competitive record, and its behavior in the market in question than on the relative and absolute size of its share of that market (which may bear little relation to its historic share or competitive behavior).

My second objection to the oligopolistic-focal-point argument reflects the following possibilities: (1) since firms that have leading market shares of at least 35% post-merger may already be focal points for oligo-

107. Admittedly, at least in merger cases brought under the Sherman Act, the legal relevance of any tendency of a merger to facilitate natural oligopolistic pricing is open to question since neither natural oligopolistic pricing nor the kind of premature price announcements that facilitate it are illegal (involve a promise of "reciprocation" or threat of retaliation).
polistic interactions, horizontal mergers that increase their market shares still further may not increase their focal-point-related contribution to their market’s OMs and (2) since firms that pre-merger have leading market shares of under 35% or firms that are not leading firms pre-merger may not be focal points pre-merger, horizontal mergers that increase their market shares may sometimes substantially increase their focal-point contribution to their market’s OMs by critically affecting their focal-point status. Indeed, even if horizontal mergers were unlikely to increase the focal-point contribution of a large merger partner when it was not a leading firm with a pre-merger market share of at least 35%, the 35%-leading-firm-merger rule would not be justified by such oligopolistic-focal-point considerations if, as I suspect, horizontal mergers that do increase the larger MP’s oligopolistic-focal-point contribution to his market’s OMs do so to a substantially greater extent when the larger MP is a non-leading firm or a leading firm with a below-35% market share than a leading firm with a market share of at least 35%.

Moreover, if the justification for the 35%-leading-firm-merger rule is supposed to be this oligopolistic-focal-point argument, I do not see why the smaller MP’s market share should have to be at least 1%—why a merger with a firm that has less than 1% of the relevant market’s sales should be regarded on that account as having a de minimis effect on the leading firm’s oligopolistic-focal-point contribution. After all, since the volume of sales in a given market varies tremendously from market to market, the absolute sales of a firm that has less than 1% of one market may be far larger than the absolute sales of a firm that has more than 1% of another (smaller) market. And, in any case, size is not the only MP-characteristic that is relevant in this context. Since a firm with a low market share may be a very disruptive force in a market (especially if it is second-best-placed or close-to-second-best-placed far more often than it is best-placed), a leading firm’s merger with a small troublemaker may increase its focal-point status far more than would its merger with a larger but more docile rival—particularly if the former merger manifested the leading firm’s willingness to incur substantial costs to increase the OMs it could obtain (particularly if the leading firm paid a substantial premium for the troublemaker to get rid of its disruptive influence).

In short, the oligopolistic-focal-point argument cannot justify giving the facts on which the 35%-leading-firm-merger rule focuses extra weight when deciding whether the relevant merger should be challenged (if no critical qualifying factors were operative). Since I can imagine no other argument for giving this rule’s salient facts such weight for this purpose, I would have to reject the rule if this were its only signifi-
However, as I have already indicated, the Guidelines' 35%-leading-firm-merger rule also serves a second purpose—to exclude from relevance various "qualifying" factors that are supposed to influence the Department's decision to challenge a merger under the various HHI-oriented rules. Unfortunately, though, no argument for the rule can be based on this subset of its consequences, for both the exclusions it requires are unwarranted—indeed, are virtually inexplicable.

The first set of factors the rule excludes are those that the Department mistakenly attributes exclusively to their relationship to the "ease and profitability of collusion"—to what I have called the pre-merger profitability of contrived oligopolistic pricing. The 35%-leading-firm-merger rule's exclusion of these factors would be justified only if the facts it made salient guaranteed that contrived oligopolistic pricing would be either profitable pre-merger or close enough to profitable pre-merger to

108. The textual discussion focused on the argument for supplementing the HHI-oriented rules with a 35%-leading-firm-merger rule. Obviously, in any independent analysis of the 35%-leading-firm-merger rule, all of Part III's argument against the traditional market-share and concentration-ratio approach would again be applicable. Thus, a merger that would be condemned under the 35%-leading-firm-merger rule might very well have no anti-competitive tendencies whatsoever in a world in which all those products that would have to be placed in a given market would not be equally competitive with each other and some products might have high best-placed-to-second-best-placed and best-placed-to-close-to-second-best-placed ratios, for in such a world, (1) the 1% product might never be second-best-placed or close-to-second-best-placed to the 35% product, (2) the 35% product might never be second-best-placed or close-to-second-best-placed to the 1% product, and (3) the two products might never be positioned vis-a-vis an independent rival in such a way as (a) to increase the merged firm's ability to reciprocate to that rival's cooperation, (b) to increase the harm-inflicted-to-cost-incurred ratio facing the merged firm for the amount of costs the merged firm might find necessary to inflict on a given rival, or (c) to increase the counterpart ratio facing one of the merged firm's rivals for the amount of costs it might find necessary to impose on the merged firm through retaliation. In the other direction, in a world in which the intensity of competition between pairs of insiders varies substantially, a horizontal-merger involving non-leading firms with low market shares (say 1% and 10%) could be very anti-competitive: (1) the 1% product might be by far the closest competitor of the 10% product for all the customers the latter is best-placed to serve (might be second-best-placed to obtain many of these buyers and close-to-second-best-placed to supply the rest of these buyers), (2) the 10% product might be the 1% product's closest competitor by far for the customers the 1% product is best-placed to serve, and (3) (a) each of the two MP's might have reduced the other's ability to reciprocate to remaining rivals by a substantial amount pre-merger (because they were respectively second-best-placed and third-best-placed to supply the rival's customers and the third-best-placed MP was far better-placed than the fourth-best-placed supplier of these customers), (b) the marginal harm-inflicted-to-cost-incurred ratio for the last retaliatory act that the 10% MP might have found necessary to commit against some independent R might be far lower than its counterpart for the 1% MP or conversely, (c) the same marginal ratio for the last act of retaliation some R might have had to reckon with committing against the 10% MP might be far higher than its counterpart for the last retaliatory act that R would have had to reckon with committing against the 1% MP or conversely. Obviously, this argument could be elaborated if not endlessly at least in the kind of exhausting detail Parts II and III provided. However, the general point should be clear: in part because the traditional approach's three implicit insider-insider assumptions do not hold, the crude leading-firm-35%-1%-merger rule is no more justified than the various four-firm-concentration-ratio market-share rules the courts have traditionally announced and purported to apply. Moreover (as sections IVA2 will show), the various qualifications the Guidelines introduce to the actual 35%-leading-firm-merger rule do not overcome these objections.
make any merger-generated increase in the profitability of such pricing significant—if the various factors the Guidelines suggest disfavor the profitability of such pricing would not critically affect its profitability even if the Guidelines' assessment of their significance were correct.\textsuperscript{109}

In reality, however, the post-merger presence of a 35%-leading-firm does not guarantee the profitability of contrived oligopolistic pricing—indeed, does not even make the profitability of such pricing sufficiently likely to justify assuming its profitability (to make a decision not to incur the cost of investigating its profitability \textit{ex ante} cost-effective). For example, contrived oligopolistic pricing may not be profitable in a market whose leading firm has a 36% market share if that market has a large competitive fringe whose members are second-best-placed or close-to-second-best-placed far more often than they are best-placed.

The actual, qualified 35%-leading-firm-merger rule's exclusion of those factors that relate to the possible failing-company status of the smaller merger partner is also hard to defend. I will assume \textit{arguendo} (though incorrectly, I believe) that the Clayton Act requires a failing company (or indeed any other merger-or-acquisition participant) to make a good-faith effort to enter into a merger or acquisition that would increase the intensity of competition above the level it would have if the failing company (or other company) did not merge or sell out—\textit{i.e.}, does not simply forbid failing companies (or any MP or acquisition-participants) from participating in mergers or acquisitions that make competition less intense than it would have been had the company continued to operate in its pre-merger form as long as possible or perhaps been reorganized.\textsuperscript{110} Even on this assumption, there would be no reason to believe that the fact that the non-failing-company MP or acquirer was a leading firm with at least a 35% market share would guarantee that the merger or acquisition in question was either less pro-competitive than some al-

\textsuperscript{109} As we shall see, the Guidelines' conclusion on these issues are often misguided as well as misleading. For example, the Guidelines' claim that product-heterogeneity and the profitability of collusion (or contrived oligopolistic pricing) are inversely related almost certainly reverses the sign of that relationship: \textit{ceteris paribus}, the more heterogeneous a market's products the smaller the average percentage of such products that will be second-best-placed or close-to-second-best-placed to obtain its respective buyers' patronage, and the more profitable contrived oligopolistic pricing.

\textsuperscript{110} This benchmark or "compared-with-what" issue has caused problems not only in (1) failing-company contexts but also in the context of (2) joint ventures and conglomerate mergers involving potential competitors and (3) so-called toe-hold (conglomerate) mergers (where large outside-companies have sometimes been required to merge with small insiders rather than with larger, well-established insiders despite the fact that the mergers in which they proposed to engage would have increased competition relative to the status quo on the ground that the toe-hold merger would have been even more pro-competitive). \textit{See, e.g.}, United States \textit{v.} Falstaff Brewing Corp., 410 U.S. 526 (1973). See also Markovits, \textit{Review Article, supra} note 5, at 630-39, for an analysis of the toe-hold-merger doctrine.
ternative merger or acquisition or sufficiently likely to be less pro-competitive than such a discoverable alternative to justify assuming that it was (to make a decision not to incur the cost of investigating the availability of a more pro-competitive option or the efforts the merging firm made to discover such an option *ex ante* cost-effective). In part, this conclusion reflects the reality that some failing companies will virtually never be a large leading firm's closest competitor despite the latter's large market share as well as the reality that in some cases a merger between the failing company and a leading firm with at least 35% of the relevant market's sales will generate more efficiencies (because of specialized-asset complementarities or economies-of-scale considerations) than would be generated by any other merger in which the failing company could engage.

In short, I can see no way in which the Guidelines' 35%-leading-firm-merger rule can be justified. The facts it makes salient do not deserve the extra weight the rule assigns them (over and above the weight they would receive from the Guidelines' various HHI-oriented rules), and there is no good reason to exclude from consideration in 35%-leading-firm-merger cases some of the qualifying factors the Guidelines deem relevant to the application of their HHI-oriented rules.

2. The Guidelines' Qualifying Factors

As I have already indicated, although the Guidelines begin by articulating the crude, unqualified rules with which the preceding section was concerned, they proceed to qualify those rules by stating that in specified circumstances the Department will take into consideration a variety of other factors that will not be reflected in HHI data but will affect the competitive impact of the mergers in question. In fact, the Guidelines list and articulate the alleged significance of five sets of such "qualifying factors," all of which they declare relevant to the application of the various HHI-oriented rules and three of which they declare relevant to the application of the 35%-leading-firm-merger rule. As we shall see, the Guidelines' discussion of these supplementary, qualifying factors does not include all the factors my non-market-oriented approach reveals to be important determinants of the competitive impact of a horizontal merger, includes some factors that are actually irrelevant, poorly specifies some of the relevant factors it does list, and misanalyzes the significance of some of the other factors it correctly deems relevant. This section investigates each of the five sets of supplementary, qualifying fac-
tors the Guidelines distinguish. 111

a. Factors that Are Supposedly Relevant Because of Their Relationship “to the Ease and Profitability of Collusion”

Except perhaps for the set of factors that relate to the possible pro-competitive tendencies a merger may have because of any efficiencies it generates, the most important set of supplementary factors the Guidelines distinguish are those they indicate are relevant solely because of their connection with the “ease and profitability of collusion” and hence presumably with the impact of the horizontal merger on contrived oligopolistic margins. In fact, this set of factors includes many that are primarily or at least equally relevant to the impact of a horizontal merger on the OCAs (and hence natural OMs) of the MPs and their product-Rs as to its impact on these parties’ contrived OMs. This section will analyze the significance of the various factors the Guidelines discuss under this heading. However, both because the Guidelines fail to reflect all the components of the relevant sellers’ P-MC gap to which these factors relate and because the Guidelines fail to discuss together factors that are functionally related, I will analyze these factors not in the order in which they are mentioned in the Guidelines but in groups that fit my own analytic categories. 112

The first subset of these factors I will distinguish consists of those factors that (contrary to the Department’s stated belief) primarily affect a horizontal merger’s impact by affecting the frequency with which and amount by which the MPs are each other’s closest competitors for the patronage of buyers whom one MP is best-placed to serve and consequently the amount by which their merger will reduce price competition by increasing the MPs’ OCAs on this account. The most important factors the Guidelines list in this category are “the extent to which consumers perceive the products of the merging firms to be relatively better or worse substitutes” (when the market in question is one in which products are differentiated along non-locational lines) and (“in markets with spatially dispersed sellers and significant transportation costs”) “the relative proximity of the merging firms.” 113 Obviously, although the Guidelines’ delineation of these factors is less specific and less comprehensive than its counterpart in my approach (for example, my approach also considers

111. Although each of the Guidelines’ five sets of factors will be treated separately, for expository reasons they will not be examined in the order in which they appear in the Guidelines.
112. Admittedly, my organization has the disadvantage of requiring some of the factors in question to be discussed under more than one heading.
113. 49 Fed. Reg. at 26,833.
the fact that other cost-differences than proximity-related transport-cost differences will affect two firms’ competitive positions vis-à-vis particular buyers as well as the fact that the amount by which a merger between a best-placed firm and a second-best-placed firm will increase the former’s OCA will depend on the advantage the latter has over the original third-best-placed supplier, the Guidelines’ predictions clearly will be more accurate to the extent that the factors delineated in the above quotations are taken into consideration.

The Guidelines also list a number of other factors whose consideration will permit more accurate predictions of the non-efficiency-related, direct effects a given merger will have on the MPs’ OCAs than could be generated from data on their market shares and their market’s concentration ratio or from data on their market’s pre-merger HHI and the effect of their merger on that HHI. In particular, although the Guidelines never suggest the relevant connection, they do instruct the Department to respond appropriately to at least three other factors that will be relevant to this effect. First, from this OCA-perspective, the fact that the Guidelines instruct the Department to be more likely to challenge a merger when the “closest” product placed outside the market is “close to the insiders” as opposed to “farther from” the insiders114 will also improve their accuracy since outsider-proximity (and its non-geographic analogue) will tend to reduce the frequency and amount by which the merger will increase the MPs’ OCAs by freeing them from each other’s

114. Id. Three points should be made in this connection. First, the Guidelines actually state no more than that “it matters” whether the closest outsider is further away from rather than closer to the insiders: I have simply assumed that the Department would respond to data on this issue in the appropriate way delineated in the text. Second, the Guidelines implicitly and incorrectly assume that all buyers of the products placed in any market will have the same pattern of preferences: at least, something like this assumption must be behind both (1) the Guidelines’ statement that outside products can be said to be “only slightly or significantly inferior” to the “last”—i.e., most inferior—product classified as an insider-product when products are differentiated non-locationally and (2) the Guidelines’ statement that outside products may be “only slightly or significantly farther away” from the “last”—i.e., most distant—insider-product when products are differentiated geographically.

If the authors of the Guidelines had realized that the different buyers who will be operating in the kind of seller-oriented market the Guidelines define will often have different sets of preferences, they would have distinguished markets according to differences in the frequency with which outsiders were well-placed (say, best-placed, second-best-placed, or close-to-second-best-placed)—i.e., they would have realized that inferiority or distance were buyer-specific concepts, that they varied from buyer to buyer. Third, the Guidelines also implicitly and incorrectly assume that competitive position depends solely on buyer preference advantages and disadvantages. If the authors of the Guidelines had considered this possibility, they would probably have realized that the competitive-position distribution of an outsider depends not only on the distribution of his buyer preference advantages and disadvantages but also on the distribution of his (non-proximity-based) marginal-cost advantages and disadvantages. Thus, contrary to the Guidelines, an outsider-product that is very inferior from the perspective of some buyer may be well-placed (indeed, best-placed) to obtain his patronage if its marginal costs are sufficiently lower than those of its “superior” rivals. Indeed, such an “inferior” product may actually belong in the market in question.
competition to the extent that there is a positive correlation between the proximity of outsiders and the frequency with which they (as opposed to the other MP) were each MP's closest competitor pre-merger and/or were the third-best-placed supplier of those customers whom the MPs were originally best-placed and second-best-placed to serve (were better-placed than any insider-R of the MPs to serve the relevant buyers). Second, from this OCA-perspective, the fact that the Guidelines instruct the Department to be unlikely to challenge a merger "if small or fringe firms" can expand their outputs at constant "incremental costs" will or at least may tend to improve their accuracy as well. This will occur because small firms that face constant marginal costs are more likely on that account to be second-best-placed (instead of a non-best-placed MP) to serve customers one of the MPs was best-placed to serve and are also more likely on that account to be third-best-placed to serve customers the two MPs were respectively best-placed and second-best-placed to serve (though it should be noted that rising marginal costs will not reduce the effect of firms that make offers from positions of inferiority sequentially and unsuccessfully if they learn that their earlier offers have been rejected before they have to make their later bids). On the other hand, from this OCA-perspective, the fact that the Guidelines instruct the Department to be more likely to challenge a merger when the product is "completely homogeneous and undifferentiated" and less likely to do so when it is "very heterogeneous" probably reduces their accuracy. Ceteris paribus, one would expect the intensity of insider-vs.-insider competition to vary more from product-pair to product-pair when products are heterogeneous. This conclusion in turn implies that heterogeneous product-pairs that are unusually competitive with each other will tend to be respectively best-placed and second-best-placed to obtain a given buyer's patronage more frequently than product-pairs in homogeneous product-markets. It also implies that the amount by which the second-best-placed product of a best-placed and second-best-placed heterogeneous-market product-pair will be better-placed than the third-best-

115. Id.
116. Id. at 26,832-33. The relevant provision of the Guidelines also instructs the Department to be more inclined to challenge a merger in a market in which goods are "customized" or sold "subject to complex configuration options." Except to the extent that sellers of customized goods tend to be specialized so that only a portion of the sellers in any market in which orders are customized will be able to supply any given product-option at the lowest possible cost, I do not see the relevance of this factor. Since I doubt that there is any strong tendency for producers of customized goods to be specialized in the relevant sense, I would place this "customized-commodity factor" in my fourth, "irrelevant-factor" category. (Admittedly, customized goods are likely to be priced individually rather than across-the-board, but this difference is not relevant to the ability of market-aggregated data to predict the effect of a horizontal merger on either OCAs or contrived OMS.)
placed product for the relevant buyer’s patronage will tend to be larger
than the amount by which second-best-placed products in homogeneous
product-markets will tend to be better-placed than third-best-placed
products in such markets. Since (differences in legal disincentives aside)
horizontal mergers between unusually close competitors will tend to be
more profitable and hence more common than horizontal mergers be-
tween more distant competitors, the preceding analysis suggests that (un-
less the law is far more effective than I think) increases in product-
heterogeneity will tend to be associated with increases in the extent to
which mergers will increase the MPs’ OCAs by freeing them from each
other’s competition. Indeed, this conclusion will hold even if on average
MPs do not tend to be close competitors more often than distant compet-
itors since, even in the case of mergers between distant competitors, in-
creases in product-heterogeneity will be associated with increases in the
amount by which the second-best-placed MP is better-placed than the
best-placed MP when the MPs are respectively best-placed and second-
best-placed—a conclusion that follows from the fact that such increases
in product-heterogeneity will still be associated with a decrease in the
number of firms that are well-placed to obtain any given buyer’s pa-
tronage, ceteris paribus, and hence or correlatively with increases in the
advantage that second-best-placed suppliers tend to have over third-best-
placed suppliers.

The second, somewhat overlapping subset of supplementary factors
the Guidelines discuss under their “ease-and-profitability-of-collusion-re-
lated” heading are relevant to the extent to which the merger will in-
crease the profitability of contrived oligopolistic pricing. The Guidelines
assert that mergers will have this effect (1) the greater the extent to which
the acquired firm “has been an unusually disruptive and competitive in-
fluence,” (2) the more often the MPs are each other’s closest competitors,
and (3) the more homogeneous the product-market.\footnote{117} To the extent
that the phrase “disruptive influence” refers to the extent to which the
acquired firm previously undercut contrived oligopolistic prices or
seemed sufficiently likely to do so to deter other firms from charging
them in the first place, the Department’s merger-decisions will obviously
be more accurate (ceteris paribus) if it considers this second factor.\footnote{118}
However, as we have seen, the amount by which a horizontal merger
increases contrived OMs will probably not tend to increase with the ex-

\footnote{117} Id.
\footnote{118} The Guidelines’ recommendation will also tend to be justified to the extent that the quoted
phrase refers to acquired firms that have tended to introduce more QV investments that reduce the
profit-yield of the ARDEPPS’ pre-existing projects.
tent to which it increases the MPs' OCAs by freeing them from each other's competition. Such increases in OCAs have three different relevant effects that cut in opposite or uncertain directions: thus, (1) they may tend either to increase or decrease the MPs' contrived OMs by decreasing or increasing the number of possible undercutters the MPs face (the number of firms that are second-best-placed or close-to-second-best-placed); (2) they will tend to decrease the MPs' contrived OMs by raising the safe profits the MPs' contrived oligopolistic pricing would put at risk (though this effect will be offset to the extent that such increases in OCAs increase the credibility of the MPs' contrived oligopolistic threats and promises by increasing the amount of profits the MPs can protect by carrying them out); and, finally, (3) such increases in the MPs' OCAs will tend to increase the MPs' product-Rs' contrived OMs by increasing the MPs' vulnerability to retaliation. Moreover, contrary to the Guidelines' apparent premise, there is also no reason to believe that horizontal mergers will tend to increase the profitability of contrived oligopolistic pricing more when the product-market is homogeneous. Indeed, I would suspect that if anything the opposite would be the case: that since (1) firms in heterogeneous product-markets will tend to face fewer close competitors and (2) mergers in such markets will tend to be between firms that are unusually competitive with each other, horizontal mergers in such markets will probably have a larger and more important effect on the number of positive undercutters the MPs face and hence on the contrived oligopolistic prices they charge and obtain.

The third subset of supplementary factors in the Guidelines' ease-and-profitability-of-collusion category do in fact relate to the pre-merger profitability of contrived oligopolistic pricing. Seven of the factors to which the Guidelines refer are relevant in this way. We have already discussed one—the homogeneity of the product-market—under the two previous functional headings. Once more, although the Guidelines should probably be read to imply that product-homogeneity favors the pre-merger profitability of contrived oligopolistic pricing, my own conclusion would be to the contrary. I suspect that the Guidelines' authors grounded their conclusion on the extra difficulties product-heterogeneity might create for across-the-board price-fixers if product-cost differences and general product-quality differences increased with product-heterogeneity—difficulties that could arise when sellers of lower cost-and-quality products demand to be allowed to charge lower prices. However, in my opinion, even if some positive connection between product-homogeneity and the profitability of contrived oligopolistic pricing could be established on this basis, it would be outweighed by the tendency of product-
homogeneity to reduce the profitability of such pricing by increasing the number of products that are potential undercutters (that are second-best-placed or close-to-second-best-placed)—a tendency whose strength will increase the greater the extent to which differences in the intensity of competition between various insider-pairs increase with product-heterogeneity (the greater the extent to which heterogeneous product-markets consist of more or less overlapping “submarkets”—the greater the extent to which the percent of insider-products that is second-best-placed or close-to-second-best-placed to obtain the patronage of any buyer is inversely related to the heterogeneity of the relevant market’s products).

Fortunately, the Guidelines properly assess the significance of the other six factors they list that belong in our current category. In the case of at least two of the relevant factors, the stability of the leading firms’ market shares and the presence of “frequent, regular and small” orders “relative to the total output of the typical firm,”119 the Guidelines give the correct instruction though their authors seem not to grasp the basis of these factors’ significance. In particular, the Department ought to be (as the Guidelines indicate it will be) more likely to challenge mergers in markets whose leading firms have stable market shares since (1) such market-share stability will be correlated with the stability of the functions that determine each seller’s repeat-sales, other-suppliers’-customers-sales, and new-buyers-sales percentages absent undercutting by competitive inferiors, (2) the stability of these functions is positively related to the ability of contrivers to detect such undercutting and identify their undercutter from circumstantial evidence about such percentages, and (3) this ability is positively related to the pre-merger profitability of contrived oligopolistic pricing. However, I doubt that the Guidelines’ authors grasped this connection: had they done so, they would have focused on this function-stability factor directly rather than on a crude surrogate such as the stability of the leading firms’ market shares and they would have linked this factor to other factors (such as the number of buyers in the relevant market) which are relevant for the same reason and not with such factors as “leading-firm declining-market-shares” and “leading-firm supernormal profits” which, as we shall see, are almost certainly totally irrelevant in this context. Similar points can be made in relation to the second factor delineated above. Thus, although the Department ought to be more likely to challenge a merger when orders “are frequent, regular and small relative to the total output of the typical firm in the market,” I doubt that the Guidelines’ authors understood the ar-

gument that justifies this conclusion—viz., that this factor will be positively correlated with the pre-merger profitability of contrived oligopolistic pricing and hence with the likelihood that and amount by which a horizontal merger will increase contrived OMs (1) because the relative smallness of orders is likely to be positively related to the number of buyers in the relevant market and (2) contrivers will be more able to detect undercutting by inferiors and to identify such undercutters from circumstantial evidence relating to their repeat-sales, other-firms'-customer-sales, and new-buyer-sales percentages when there are more buyers in each such category (since the law of large numbers will make random variations less troublesome as the number of buyers increases). This time, my doubts that the Guidelines' authors grasped this connection are based on three facts: (1) they focused on this relative-smallness factor rather than on the number of buyers directly; (2) they qualified the relevance of the smallness factor ("especially [relevant] when demand is stable or declining") in a way that makes no sense in the context of the above argument; and (3) they did not link this factor to such other related factors as the relevant sales-percentage-functions' stability.

The remaining four factors the Guidelines list that relate to the pre-merger profitability of contrived oligopolistic pricing are all properly stated, evaluated, and no doubt understood. Thus, from this perspective, the Department should be, as the Guidelines say it will be, less likely to challenge a merger when small or fringe firms can expand their outputs at constant marginal costs since ceteris paribus more firms will be potential undercutters (second-best-placed or close-to-second-best-placed) when this is the case. Similarly, the Department should be more likely to challenge a merger on this account when information about specific transactions or individual price-levels or output-levels is readily available or exchanged since such information will enable contrivers to detect undercutting by inferiors and identify the undercutters. Certainly, the Department should be more likely to challenge mergers—as the Guidelines indicate it will be—in markets whose insiders have previously "been found to have engaged in horizontal collusion regarding price, territories, or customers, and the characteristics of the market have not changed appreciably." And although I doubt that this factor is very important, the Guidelines may also be correct in assuming that contrived oligopolistic pricing is likely to be more profitable (and hence the Department should be more likely to challenge horizontal mergers) in markets in which various terms or product-attributes (e.g., goods must be delivered) are standardized or information is exchanged that facilitates such standardization (since as I have already indicated product-heterogeneity may
militate against contrived oligopolistic pricing by complicating the relevant negotiations and enforcement-processes).

We have finally reached my fourth and last category of factors the Guidelines place in their "ease-and-profitability-of-collusion-related" category: factors the Guidelines deem relevant but I deem irrelevant to the likely competitive impact of horizontal mergers. I simply do not see why horizontal mergers are more likely to be anti-competitive when demand is stable or declining or when the leading firms' market shares are stable or declining\(^\text{120}\) (except insofar as stable market shares reflect the stability of the functions that determine each firm's repeat-sales, new-buyer-sales, and sales-to-other-sellers'-former-customers percentages). Nor do I understand why horizontal mergers are more likely to be anti-competitive (why contrived oligopolistic pricing is more likely to be profitable or close-to-profitable pre-merger) in markets whose leading firms have supernormal profit-rates. Indeed, as I have explained elsewhere,\(^\text{121}\) supernormal profit-rates are a poor predictor of both the practice of contrived oligopolistic pricing and the presence of conditions that are favorable to its profitability. This conclusion follows from three facts: (1) since "price-fixing" will usually lead to an increase in equilibrium QV investment in the ARDEPPS in question, it may not even tend to cause supernormal profit-rates to be higher in equilibrium across all investments in the ARDEPPS; (2) even if contrived oligopolistic pricing did tend to raise equilibrium supernormal profit-rates across all investments in an ARDEPPS, inter-ARDEPPS variations in the extent of price-fixing would account for too small a percentage of inter-ARDEPPS variations in supernormal profit-rates to allow any inference from the latter to the former (given the extent to which such inter-ARDEPPS profit-rate variations reflect inter-ARDEPPS differences in the dispersion of equilibrium rates of return on different projects, the function relating OCAs to MCs and average total costs, the rates-of-growth of ARDEPPS-demands, and [somewhat relatedly] the operative \(\Pi_D+R\) barriers facing various relevant, successive, best-placed potential entrants and potential expanders—barriers that, unlike the L and S barriers that both potential entrants and potential expanders may face and the M or O QV-investment disincentives that may also affect a relevant best-placed expander, are unpred-

120. Id.

121. The relevant explanation was given in the course of criticizing Professor (now Judge) Posner's contention that illegal oligopolistic pricing could be inferred from the existence of persistent supernormal profits. See Posner, Oligopoly and the Antitrust Laws: A Suggested Approach, 21 Stan. L. Rev. 1562 (1969); Markovits, supra note 42; Markovits, Oligopolistic Pricing Suits, the Sherman Act, and Economic Welfare: A Response to Professor Posner, 28 Stan. L. Rev. 919, 943-44 (1976).
ably related to the profitability and hence practice of "price-fixing"); and (3) for primarily the same reasons inter-ARDEPPS variations in equilibrium average supernormal profit-rates will also be insufficiently related to inter-ARDEPPS differences in the profitability of contrived oligopolistic pricing in a world without legal disincentives.

Before proceeding to the other categories of factors the Guidelines distinguish, a summary may be helpful. The Guidelines mistakenly limit the relevance of the factors they list under their "ease-and-profitability-of-collusion-related" category: many of these factors are primarily, equally, or significantly related to the merger's impact on OCAs—i.e., are not related solely or even positively to its effect on the profitability of contrived oligopolistic pricing. More important, however, the Guidelines' discussion under this heading omits several factors our analysis suggests are important (factors the Guidelines do not include under other headings), poorly specifies several of the relevant factors it does list, includes several factors that are irrelevant to the competitive impact of a horizontal merger, and in at least one case (product-heterogeneity) indicates that the Department will be less likely to challenge a merger in the presence of a factor that probably tends to increase the likelihood that a horizontal merger will be anti-competitive. Obviously, these conclusions do not make one optimistic about the accuracy (much less the cost-effectiveness) of the Guidelines' various complicated, qualified rules.

b. Some Other "Factors" that Make the Current Market Shares of Particular Firms Poor Indicators of the Frequency with Which They Will Be Best-Placed or Influential in the Future

The Guidelines also distinguish a second set of four "factors" that make current market shares poor predictors of future influence.\textsuperscript{122} All four of these factors or sets of factors are relevant, and the Guidelines accurately assess their significance. Thus, as the Guidelines point out: (1) if a particular firm does not have access to a new technology, its historic market share will tend to overstate the frequency with which it will be best-placed, second-best-placed, or close-to-second-best-placed in the future; (2) similarly, if a particular firm seems unlikely to be able to finance modernization or some other investment that would help it maintain its competitive position, its historic market share will also overstate its likely future competitive importance; (3) and again, if a foreign firm's exports to the United States are limited by quotas or other trade re-

\textsuperscript{122} 49 Fed. Reg. at 26,831-32.
straints, it may be best-placed, second-best-placed, or close-to-second-
best-placed to serve American buyers far less often than would be sug-
gested by an analysis that ignored these restraints or focused simply on
its market share\textsuperscript{123} while if a foreign producer's costs measured in dollars
seem likely to be altered by changes in the exchange rate between the
dollar and the currency in which the foreign firm paid its costs, its cur-
rent market share could either overstate or understate its future compi-
tive position on that account; and finally (4) if foreign producers are
operating with substantial excess capacity, they may be second-best-
placed or close-to-second-best-placed far more often than their actual
sales would suggest.\textsuperscript{124}

c. Failing-Company Factors

Although these factors could also have been listed in the preceding
category, the Guidelines indicate separately\textsuperscript{125} that a challenge is un-
likely (under the HHI-oriented rules) if one of the MPs is a failing firm
that “probably would be unable to meet its financial obligations in the
near future,” “probably would not be able to reorganize successfully,”
and had made unsuccessful good-faith efforts to enter into mergers that
would “pose a less severe danger to competition.”\textsuperscript{126} I have two objec-
tions to the Guidelines’ comments on this possibility. First, as I have
already indicated, these provisions are based on the dubious assumption
that the Clayton Act requires a failing firm to do more than avoid merg-
ers and acquisitions that would reduce the intensity of competition below
the level it would have if the company participated in no such transac-
tions—\textit{i.e.}, are based on the assumption that the Clayton Act can require
a failing company that wishes to merge or sell out to make a good-faith
effort to do so in a way that would increase competition (that would
make competition more intense than it would be if the failing company
did not merge or sell out). Second, the Guidelines’ discussion ignores

\textsuperscript{123} The same conclusion would be valid to the extent that any improvement in the competitive
position of a foreign firm (or indeed any tendency it had to hold its own) would be likely to result in
the government’s imposing various “restraints” on it (whether in the form of quotas, tariffs, or “vol-
untary restraints”).

\textsuperscript{124} 49 Fed. Reg. at 26,831-32. The text explains in my terms the Guidelines’ somewhat cryptic
statement that “the Department will consider strong qualitative evidence that . . . there is significant
worldwide excess capacity that could readily be devoted to the United States.” \textit{Id.} at 26,832.

\textsuperscript{125} There are two obvious explanations for this choice: (1) the failing-company factors have a
separate doctrinal basis—the so-called failing-company defense—and (2) the Guidelines indicate
that, unlike the factors discussed in the previous paragraph, the failing-company factors are irrele-
vant to the application of the 35%-leading-firm-merger rule. (According to the Guidelines, both the
failing-company factors and the factors discussed in the preceding paragraph of the text are relevant
to the application of the various HHI-oriented rules.)

\textsuperscript{126} 49 Fed. Reg. at 26,837.
one possible anti-competitive consequence of making it more difficult for owners of failing companies to merge or sell out: to the extent that failing companies were founded by former managers of well-established concerns, rules that reduce the value they can obtain for their company may tend to reduce competition by deterring middle-level or upper-level managers from striking out on their own.

d. "Ease-of-Entry" Factors

The fourth set of factors the Guidelines distinguish relates to the "ease of entry." Two kinds of factors are placed in this category, those that relate to what I call "the barriers to entry" faced by a market's (ARDEPPS') best-placed potential competitor and those that relate to the period of time that firm would require to effectuate entry. In particular, the Guidelines state that the Department will be unlikely to challenge a horizontal merger when entry is easy (when barriers to entry are low and entry can be effectuated within two years) even when its crude 35%-1%-leading-firm-merger rule or one of its HHI-oriented rules is violated. Unfortunately, although the courts and virtually all economists who have addressed the relevant issues would agree with this position, it is completely unjustifiable and reflects a misanalysis of both (1) the im-

127. Id. at 26,835.
128. The Guidelines never define "ease of entry" explicitly and do not explain the relative significance of the barriers-to-entry-related factors they list and the time required to enter (to the extent that is relevant in some way that does relate to its consequences for the relevant barriers to entry). The Guidelines correctly indicate that the relevant barrier to entry—viz., the risk barrier in my terminology—will tend to be higher when entry requires long-lived, specialized assets (though I suspect that in a world in which most relevant potential entrants are huge conglomerates this factor is less important than the Guidelines appear to imply); the Guidelines may also be correct in indicating that entry may be "hindered" when it requires "scarce special skills or resources"—at least to the extent that potential entrants tend to face higher barriers in these cases; it is also true, as the Guidelines suggest, that the relevant barrier—viz., the scale barrier—will tend to be higher when economies of scale are substantial relative to the extent of the market; and, finally, the Guidelines are correct in asserting that entry is facilitated by rapid growth in market-demand though this factor is relevant not because it is connected to the relevant absolute barriers to entry facing the potential entrant who is best-placed to make the first post-inquiry entry but rather because it is connected to the relative size of the barriers to entry that would face the potential entrant who would be best-placed to make the first entry that would be unprofitable if expansions were barred post-inquiry and the barriers to expansion and QV-investment disincentives that would face the established firm that would be best-placed to make the first QV investment beyond the level the ARDEPPS would have in equilibrium if entry were barred—i.e., though this reflects the tendency of the relevant barriers to expansion to be higher in an ARDEPPS in which demand is rapidly increasing. (The preceding sentence assumed for expositional reasons that the barriers and QV-investment disincentives that are operative change continuously around the critical QV-investment levels to which it refers.) Finally, the Guidelines do not explain the supposed connection between the length of the time-period needed to effectuate entry and the height of the barriers to entry though, of course, this time-period would be relevant in any case since it would indicate the length of time that a merger's anti-competitive impact on pricing would be experienced in full (would not be "offset" by the effects of the additional QV investment it would induce).
pact potential competitors will have when they are effective and (2) the circumstances in which potential competition will be effective. In reality, contrary to the Guidelines' implicit expectations, "easy entry" that is effective will not prevent a horizontal merger from reducing price competition at the original equilibrium QV-investment level if it would otherwise have done so: the relevant established firms will not forego the price-increases the merger in question (would otherwise have) made attractive in order to deter entry—will not limit price; instead, they will increase their prices and either expand themselves sufficiently to deter entry (limit invest) or allow entry to occur.

Although the presence of effective "easy entry" will therefore reduce the loss the relevant buyers sustain (since the additional QV investment it causes to be made will help such buyers both directly by increasing the variety, locational convenience, and speed of service available to them and indirectly by reducing OCAs and OMs and hence pushing prices down toward, but not to, their pre-merger levels), it will not in general eliminate the harm to them altogether: the lower pre-merger price-QV-investment combination will normally be more advantageous to the relevant buyers than the higher, post-merger, price-QV-investment combination. Moreover, in reality, and again contrary to the Guidelines' implicit expectations, the fact that a "market's" best-placed potential competitor faces low barriers to entry

129. For a detailed explanation of these claims, see Markovits, supra note 11.

130. Limit price theorists have offered three reasons for such pricing's supposed ability to deter entry: (1) it would communicate a threat of post-entry retaliation; (2) it would deceive potential competitors into underestimating the heights of the established sellers' conventional profit-maximizing prices; and (3) it would make entry less profitable by building up the goodwill of the established-firm limit-prices. I can imagine two further reasons why such pricing might deter entry: (4) it might increase the retaliation barrier to entry by making post-entry retaliation more likely by reducing the likelihood that the retaliator would be or could successfully be sued or prosecuted by making it possible for him to retaliate simply by maintaining his pre-entry price, and (5) it would increase the risk barrier to entry by making the potential competitor uncertain of the established firms' individual conventional profit-maximizing prices even if it did not deceive him into systematically underestimating their prices. In response, I pointed out (A) that some of these arguments—(1) and (2), for example—were inconsistent with each other; (B) that others were doubtful—(3) is unlikely to work when the limit pricer is General Motors and not the village butcher, and (2) is unlikely to work when potential competitors are already-established firms in adjacent fields who practice industrial espionage and hire defecting managers who come with secrets about their previous firms' positions; (C) that limit pricing is unlikely to be the cheapest way of achieving these deterrent effects—for example, that phone calls or (better yet) conversations at trade-association meetings can convey threats more cheaply; (D) that limit pricing that works in the ways just described will rarely be more profitable than allowing entry to occur; and (E) that limit pricing will almost certainly not be as profitable as deterring entry by making a QV (limit) investment in any case. I therefore concluded that limit pricing is a theory in search of a phenomenon—that except in an extremely narrow set of circumstances (a small seller in a little-explored oligopolistic niche who fears the entry of a more efficient firm or a seller who fears the backward vertical integration of a customer), limit pricing will not be practiced. I also pointed out that none of the studies or cases that dealt with limit pricing has ever given a real-world example of the practice. See id.
and could effectuate entry within two years is neither a sufficient nor a necessary condition for potential competition's being effective.

In short, the Guidelines' easy-entry qualification is misgrounded and unjustified because established firms respond to the threat of entry by limit investing or doing nothing rather than by limit pricing and because the effectiveness of potential competition depends not on the absolute height of the barriers to entry facing the best-placed potential competitor but on whether (1) the barriers to entry that would face the potential competitor who would be best-placed to make the last entry that would just be profitable for any potential competitor if post-inquiry expansions were barred were lower than (2) the barriers to expansion and monopolistic and natural oligopolistic QV-investment disincentives that would face the established firm that would be best-placed to bring the relevant ARDEPPS' QV investment to the level it would have in equilibrium if entry were barred. Thus, easy-entry qualifications seem unlikely a priori to be good for any purpose, much less to correct the failings of the Guidelines' crude HHI-oriented and 35%-leading-firm-merger rules.

e. Efficiency-Related Factors

Unlike the actual traditional approach recommended by academics (which was at best insensitive to the pro-competitive tendencies of the various kinds of efficiencies mergers can generate) or the actual traditional approach adopted by the courts (which for a long time counted any efficiencies a horizontal merger generated against its legality on the ground that they would reduce competition by creating a natural monopoly), the Guidelines do count any efficiencies a merger can be shown to generate in favor of its legality. Nevertheless, the Guidelines' discussion of the significance of the efficiencies mergers may generate is deficient in at least three respects.

First, the Guidelines seem to suggest that the Department will value such efficiencies by the allocative gains they permit rather than by the extent to which they increase competition—i.e., will trade off the relevant efficiencies (presumably measured in allocative-efficiency terms) against any anti-competitive effect the merger generates (an effect that should be measured in buyer-welfare terms, which—contrary to the Guidelines' authors' assumptions—cannot be expressed in allocative-efficiency terms). At least, this is the implication I draw from the Guidelines' statement

131. See id.; R. Markovits, Oligopolistic and Predatory Conduct, supra note 4; supra Part IC2.
133. 49 Fed. Reg. at 26,834-35.
that "the parties must establish a greater level of expected net efficiencies the more significant are the competitive risks"\textsuperscript{134} of the merger. Since I believe that the Clayton Act makes efficiencies relevant only to the extent that they increase competition and do not think that the Justice Department is authorized to substitute its own policy-views for those embedded in the statute, I reject this Guideline-position, which will often critically affect the Department's behavior, given that both the determinants and the size of the pro-competitive impact of any efficiencies a horizontal merger should generate will be different from their counterparts for the allocative gains such efficiencies will produce.

Second, the Guidelines' discussion of merger-generated efficiencies is also deficient in that it fails both (1) to distinguish among purely static efficiencies of different kinds, static efficiencies that will also carry over to any new QV investments the MPs make, and purely dynamic efficiencies and (2) to list or analyze the factors that will determine the pro-competitive impact that each of these types of efficiencies will generate. For example, the Guidelines fail to tell us that or to draw the appropriate inferences from the fact that marginal-cost efficiencies of any given size will increase competition (1) for the patronage of any buyers the MPs in question were second-best-placed to serve pre-merger (in which case the increase in competition in relation to the buyers concerned—or at least the decrease in the relevant best-placed firm's HNOP—will rise penny-for-penny with the static efficiency until a maximum equal to the pre-merger overall competitive disadvantage of the relevant MP is reached), (2) for the patronage of any buyers the MPs in question were worse-than-second-best-placed to serve by less than the static efficiency in question (in which case the increase in competition in relation to the buyer concerned—or at least the decrease in the relevant best-placed firm's HNOP—will rise penny-for-penny with the positive difference between the efficiency in question and the amount by which the MP was worse-than-second-best-placed pre-merger until a maximum is reached at the point at which the efficiency equals the amount by which the MP was worse-than-best-placed pre-merger), and (3) for the patronage of any buyers whom the MPs were worse-than-second-best-placed to serve pre-merger by more than the efficiencies in question to the extent that the efficiency-generated improvement in their position (to a still worse-than-second-best-placed status) reduced the contrived oligopolistic margin the relevant best-placed seller could obtain by increasing the number of his

\textsuperscript{134} Id. at 26,834. I assume the Guidelines are using the term "competitive risks" in a sloppy way to refer to the weighted average expected reduction in competition.
possible undercutters and/or by adding an additional possible undercutter he found difficult to deter. Similarly, the Guidelines also fail to indicate the determinants of the extent to which dynamic efficiencies or static efficiencies that will carry over to any new QV investments the MPs should make will increase QV-investment competition.

Third, and finally, the Guidelines’ discussion of efficiencies is deficient in that it fails to explain, much less justify, its conclusion that “in the majority of cases, the Guidelines will allow firms to achieve available efficiencies through mergers without interference.” In part, this deficiency derives from the previous two. Thus, since the Guidelines do not clearly state whether efficiencies are to be valued according to their contribution to allocative efficiency or to competition and since they do not indicate the factors that will determine the extent of either of these types of contributions, it would be difficult for their authors to explain their optimistic view that most mergers that generate efficiencies will produce enough related benefits of the relevant kind to outweigh the “competitive risks” they generate. In part, however, this deficiency of the Guidelines reflects their authors’ failure to anticipate that others may not share their extraordinarily optimistic view about the extent of the efficiencies horizontal mergers generate—a view that seems to be contradicted by the admittedly small amount of empirical work that has been done on this question.135

In short, although I applaud the Guidelines’ conclusion that any efficiencies a merger generates should be counted in its favor under the present law, (1) I do not find the policy-argument on which it implicitly bases that conclusion legally relevant, (2) I regret the document’s failure to specify more clearly the way in which the “efficiency-gains” and “competitive-risks” it proposes to trade off against each other will be measured136 or to explore the determinants of the competitive impact (or

135. The two studies that would seem to be most significant in this connection suggest that horizontal mergers may not be efficient as a class. In one study that Mike Scherer termed “the most careful study available” (see M. Scherer, Antitrust, Efficiency, and Progress, 11 (unpublished manuscript circulated at The Antitrust Policy Institute’s conference on The Antitrust Alternative, Mar. 27 & 28, 1987), Dennis Mueller demonstrated that over the 1950-72 period, horizontal-merger MPs lost combined market share more rapidly than non-merging sellers. See Mueller, Mergers and Market Share, 67 REV. ECON. & STAT. 263-64 (1984). Scherer’s own work with Ravenscraft is consistent with the pessimistic thrust of Mueller’s study in that it suggests that merged companies may not be sufficiently well-managed to enable the merger to make them more efficient even in a period of retrenchment such as the 1980s when “the overhead and distribution cost economies potentially realizable through merger have increased.” See Scherer, supra, at 12, commenting on the significance of D. RAVENSCRAFT & F. SCHERER, Mergers, Sell-Offs, and Economic Efficiency (1987).

136. Less significantly, I also wish the Guidelines had proposed the kind of natural-monopoly defense I think appropriate to read into the Clayton Act.
indeed of the allocative efficiency) of any efficiencies a merger generates, and (3) I doubt the accuracy of its empirical judgment of the frequency with which the fact that a merger will generate efficiencies will change its legality (or indeed its desirability).

3. The Guidelines' Actual Qualified HHI-Oriented and 35%-Leading-Firm-Merger Rules: An Assessment

Although the supplementary qualifications the Guidelines make to its 35%-leading-firm-merger rule probably improve it less than their counterparts for the various HHI-oriented rules improved them (since the Guidelines inexplicably deem irrelevant to the application of the former rule two sets of qualifications they do make relevant to the application of their HHI-oriented rules), I will consider the qualified HHI-oriented rules and the 35%-leading-firm-merger rule together—i.e., I will proceed as if the Guidelines made all five sets of qualifying factors relevant to the application of all its crude, unqualified rules. The question is: does the Guidelines' addition of these supplementary qualifications to its crude, unqualified rules produce complicated, qualified rules that are sufficiently accurate and cheap to be cost-justified either in the conventional sense or in the more distributionally and democratically sensitive sense that I think is relevant in this context? For two reasons, my answer is no.

First, even if the Guidelines' supplementary qualifications would result in a horizontal merger's being held illegal if and only if it would reduce competition—i.e., even if the qualified HHI-oriented and 35%-leading-firm-merger rules would produce accurate competitive-impact predictions and correct legal conclusions, they would not be cost-justified in either the conventional or my more elaborate sense. There is simply no good reason to start the analysis of such mergers by defining the relevant market and computing the HHI figures, market shares, and traditional concentration ratios on which the Guidelines' crude rules focus if, in the end, the relevant conclusions are going to be based on the kinds of refined data the Guidelines' supplementary qualifications make (or ought to make) salient. Why incur substantial costs to define a market when that definition does no more than enable the analyst to generate market-aggregated data on which he will not in the end rely? Of course, this argument adopts the Guidelines' own assumption that supplementary qualifications will always have to be considered. If it were cheaper to define markets and compute market-aggregated figures than to collect enough refined data to make a decision on that basis, one might justify using the Guidelines' crude rules to take a first cut at the relevant prob-
lem—i.e., these rules might be cost-effective tools for determining the desirability of incurring the cost of collecting the more refined data my approach and the supplementary Guidelines make salient. However, in fact, the Guidelines cannot be justified in this way since, as we saw in Parts II and III, markets cannot be acceptably defined without collecting refined data that would have more predictive power than any market-aggregated figures that can be based on the market definitions the refined data were used to generate. Of course, one should always consider the desirability of collecting additional useful but costly data. Still, my analysis has shown that such data-collection decisions (like the competitive-impact predictions in which we are ultimately interested in this context) can best be made on the basis of the non-aggregated, refined data the Department would have to collect to generate the market definitions on which the Guidelines' crude rules rely.

Second, even if the preceding argument were not dispositive, the case for the Guidelines would be destroyed by the inadequacy of the Guidelines' supplementary, qualifying-factor analysis. Thus, as we saw, the Guidelines failed to consider a number of important determinants of a horizontal merger's competitive impact, poorly specified a number of other factors whose relevance they did correctly reflect, gave weight to some factors that are in fact irrelevant, and classified as pro-competitive certain factors (e.g., product-heterogeneity) that will actually tend to make the relevant mergers more anti-competitive. In reality, then, the Guidelines must be rejected because they are very inaccurate as well as cost-ineffective.

B. The Relevance of the Presence of Foreign Competition to This Critique of the Horizontal Merger Guidelines

In my opinion, neither the validity of any of the arguments I have just made nor the persuasiveness of my overall critique of the Horizontal Merger Guidelines would be critically affected if foreign sellers were never effective competitors for the patronage of American buyers. However, just as the effective presence of foreign sellers in American markets increased the force of many of my criticisms of the traditional market-share concentration-ratio approach to horizontal-merger analysis, (1) the tendency of foreign sellers to be second-best-placed or close-to-second-best-placed more often than they are best-placed (a tendency the Guidelines themselves appear to recognize in the special case in which foreign sellers have excess capacity137), (2) the greater-than-average tendency of

137. 49 Fed. Reg. at 26,832.
such sellers to be more competitive with some products in a given market than with others, (3) the greater-than-average frequency with which such sellers may be best-placed potential competitors or expanders, and several other similar characteristics of the competitive positions of foreign suppliers strengthen my case against the Guidelines by reducing the frequency with which they will lead the Justice Department to challenge horizontal mergers that are actually anti-competitive and to refuse to challenge horizontal mergers that are not anti-competitive.

V. SOME POLICY-OPTIONS THAT RELATE TO THE CONNECTION BETWEEN HORIZONTAL MERGERS AND FOREIGN COMPETITION OR TO HORIZONTAL-MERGER REGULATION ITSELF

Parts II-IV were concerned with what I consider to be legal issues—issues that relate to the proper interpretation of existing statutes.138 This Part will consider briefly the desirability of five policy-options—i.e., of five ways in which the statutes that relate to horizontal mergers might be improved. The first two relate specifically to the connection between foreign competition and horizontal mergers; the third relates to the possible attractiveness of making the legality of a horizontal merger depend on its allocative efficiency and distributional desirability (on its overall desirability) rather than on its competitive impact; and the final two policy-options relate to the legal-transaction-cost and regulatory-error-cost of "regulating" horizontal mergers—i.e., consider two institutional innovations that might increase the cost-effectiveness of government efforts in this area.

A. The Desirability of Making the Legality of Horizontal Mergers Under American Law Depend on Their Impact on Foreign as well as American Buyers

As I have already noted,139 the Clayton Act appears to deem irrelevant the impact of any of the behaviors it covers on foreign buyers. Since I personally do not reduce the weight to be given to someone's welfare solely because he is not an American citizen or resident, I find this feature of the Clayton Act regrettable. However, the more interesting question is whether more parochially defined American interests would be served by a decision to make the consequences of a horizontal merger (or

138. Or, more generally, to existing constitutions, treaties, statutes (ordinances, etc.), regulations, judicial doctrines or precedents, and common-law principles.
139. See supra notes 19-20 and accompanying text.
any other business act) for foreign buyers equally relevant as its impact on domestic buyers. Obviously, by definition, evaluators who are concerned only with Americans’ welfare will not be interested in the welfare of foreign buyers for its own sake: they would support counting such foreigners’ welfare only if there were sufficient feedback from doing so to outweigh the direct net loss a decision to forbid (allow) a merger that injured (benefited) foreign buyers in relevant ways would impose on what would otherwise be American interests.

At least two such feedback mechanisms may be present. First, and probably less significantly, to the extent that the relevant foreigners’ demand for American products and services is real-income elastic, an American decision to prevent a horizontal merger that would harm foreign buyers would benefit Americans indirectly by increasing the demand for American exports. Second, to the extent that the antitrust, tariff, exchange-rate, and government-purchase policies (to name a few) of foreign countries are influenced by the extent to which American law gives weight to foreign interests, a decision to count the effect of a merger on foreign buyers may also benefit Americans indirectly by inducing foreign governments to adopt policies that are more favorable to Americans.

To be honest, although my ultimate values lead me to support counting the interests of foreign buyers as much as the interests of domestic buyers, I do not know whether such a change in the law would serve American interests, parochially defined.

B. The Desirability of Adopting a Permissive Horizontal-Merger Policy in Order to Permit American Firms to Achieve Efficiencies that Would Enable Them to Compete More Effectively Against Foreign Producers

I suspect that the title of this Article may have misled many readers to suspect that it would be substantially concerned with this possibility. There are two reasons why I have not addressed this issue previously. First, I do not believe that it is relevant to the interpretation of the Clayton Act. And, second, I am genuinely skeptical about the ability of a

140. This section will therefore not be concerned with the desirability of allowing mergers in order to free the MPs from each other’s competition when dealing for the patronage of foreign buyers. Normally, policies of these kinds stop short of allowing the relevant domestic producers to combine—try to achieve the “foreign-oriented” “benefits” without the associated domestic costs by allowing the separate companies to fix the prices they will charge foreign buyers or to divide up foreign territories or customers. Obviously, the considerations raised in Section VA will apply both to these more conventional antitrust export-exemptions and to the more dramatic merger-rule with which this footnote was initially concerned.
permissive merger-policy to increase the organizational efficiency of American industry.

Although the first of these reasons is not relevant to the policy-issue with which this section is concerned, the second is central to that inquiry. I therefore will outline the reason why I doubt that a permissive merger-policy would significantly improve the ability of American firms to compete against foreign companies.

In brief, my skepticism is based on two "facts" or apparent "facts": (1) the fact that the available relevant studies suggest that American horizontal mergers as a class may not have increased the organizational efficiency of the merger partners to any significant extent;\(^\text{141}\) and (2) the ceteris paribus tendency of any increase in the size of a firm to decrease its management's efficiency by increasing their insulation from hostile takeovers.\(^\text{142}\) For these reasons, I am skeptical both (1) about the likelihood that a permissive merger-policy would permit American firms to compete more effectively against foreign competition and concomitantly (2) about the desirability of adopting such a policy for this reason. Indeed, even if I concluded that a permissive merger-policy would enable American firms to generate efficiencies that would improve their ability to compete against foreign rivals, I doubt that any net gains the relevant Americans (or indeed all relevant affected parties) might obtain as a result would render pro-competitive, allocatively efficient, or desirable overall mergers that would otherwise be anti-competitive, allocatively inefficient, or undesirable overall.

C. The Desirability of Shifting from a Competitive-Impact Standard of Legality to an Overall-Desirability (Allocative-Efficiency-and-Distributional-Desirability) Standard of Legality

As we noted when discussing the different possible significances of the various efficiencies horizontal mergers can generate, there is a tremendous difference between the competitive impact of some act or policy (its net effect on the equivalent-dollar welfare of the customers of the actors in question and their product-Rs) and the allocative efficiency of the act or policy in question (its net effect on the equivalent-dollar welfare of all those individuals it affects—including both buyers elsewhere and the relevant actors and their product-Rs) or its overall desirability.

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141. See supra note 121.
142. Note that the text does not state that managers of large companies are totally free from control. Takeovers of even very large companies do occur, and supervision is often provided by well-informed directors selected by the investment bankers who individually may represent institutional investors who have substantial if not controlling interests in the companies concerned.
(assuming no rights have been violated, its net effect on the weighted equivalent-dollar gains and losses it generated where the weights in question reflect the evaluator's distributional values and the relevant characteristics of the winners and losers). Unfortunately, business acts or government policies that increase competition may decrease allocative efficiency on that account (a result that is most likely where the increase in question is in QV-investment competition); business acts or government policies that decrease competition may increase allocative efficiency on that account; and acts that have no effect on competition may decrease allocative efficiency (a result that occurs most often in relation to pricing practices—including some types of tie-ins, reciprocity agreements, and various other price-discrimination techniques—that expend a considerable amount of resources to transfer income from buyers to sellers in circumstances in which the transfer cannot be justified by its tendency to induce the relevant sellers to make additional, allocatively efficient QV investments).

My own reaction to changing from a competitive-impact to an allocative-efficiency or overall-desirability standard of legality is mixed. On the one hand, I do think that various functional types of vertical practices that are not anti-competitive ought to be made illegal for allocative-efficiency reasons, and I also think that the legality of mergers that generate real allocative efficiencies while decreasing competition on balance should depend on their net allocative efficiency (as well as on the attractiveness of their distributional effects)—that the relevant efficiencies and changes in competition should be evaluated in allocative-efficiency terms. On the other hand, I would prefer employing tax and/or subsidy policies to offset the various incentive-distortions that affect the private profitability of QV investments over adjusting antitrust standards to take account of their existence—i.e., I would prefer to offset the relevant distortions (A) by imposing a higher effective-tax-rate (1) on the profits generated by a conventional new QV investment than on those that are generated by the production of already-established product-variants or the operation of already-established distributive outlets, (2) on the profits generated in some sectors of the economy than on those generated in other sectors, or (3) on the profits generated by the creation and use of new QV investments and the use of old QV investments than on the profits generated by investments in production-process research (especially when the discovery being sought would be likely to reduce pollution-costs or work-or-

143. For a summary of the relevant second-best argument, see Markovits, Review Article, supra note 5, at 590-94.
consumption-related accident-costs) or (B) by offering direct subsidies to those types of resource-uses (production-process research and unit-output production) that are less privately profitable than allocatively efficient.

In short, although I reject the generally-held belief that our current antitrust laws authorize the Justice Department and courts to promulgate any rules that seem desirable overall, I do think that it might be good policy to switch from the current competitive-impact standard to an allocative-efficiency or overall-desirability test in many antitrust contexts. And even when my own preference would be to continue to employ a competitive-impact test in antitrust cases and to adopt other policies to overcome the distortions that might otherwise make such a test undesirable, I agree that a switch to an allocative-efficiency or overall-welfare standard is well worth considering.

D. Reducing Legal Transaction Costs and Legal-Error Costs by Creating Specialized Antitrust Prosecutors, Courts, and Agencies

Obviously, the basic point of this article is that the competitive impact of a horizontal merger cannot be predicted acceptably accurately without making a substantial number of factual determinations and assessing their significance in a sophisticated way. This point would hold a fortiori if the legality of a horizontal merger (or some other business practice) depended ultimately on its allocative efficiency in our worse-than-second-best-world, in which Pareto imperfections abound and data is inevitably costly and inaccurate.

In my opinion, the technical character of the analysis that antitrust decisionmakers ought to execute establishes an overwhelming case for specialized antitrust prosecutors and courts (as well as for specialized-judge trials over jury trials). Moreover, to the extent that certain facts that are highly relevant to antitrust law or policy in a given case are also significant in other antitrust cases, (e.g., facts about the competitive-position-distribution of certain firms; the stability of the functions that determine each firm's repeat-sales, new-buyer-sales, and rivals'-customers-sales percentages; or the efficiencies a horizontal merger is likely to generate), a strong case can probably be built for creating a specialized antitrust agency to work on techniques for obtaining the relevant facts and perhaps to provide testimony on those facts in individual cases. Indeed, regardless of whether the antitrust law's standard of legality is altered to take second-best considerations into account, a strong case can also be
built for creating a specialized agency to collect data on the various Pareto imperfections in a systematic way, for in practice (1) the optimal policy-response to a given imperfection in competition will often depend not just on that imperfection itself and the distribution of similar competitive imperfections throughout the economy but also on the distribution of tax-imperfections and externality-imperfections throughout the economy as well and (2) similar relationships will also affect the optimal policy-response to taxes or externalities. In any event, the creation of such agencies would enable us to take advantage of the relevant economies of scale, to collect data more slowly when doing so will enable us to reduce the cost and/or increase the accuracy of the data in question, and to escape the tendency to make decisions on inappropriate first-best criteria or on a highly inadequate information-base (as decisionmakers are prone to do when only a small percentage of the value of the data they would really like to have in a given case relates to its use in that case—e.g., when the decision in a given case ought to depend not on the extent of some Pareto imperfection in a given market but on the extent of that imperfection in that market relative to its weighted average economy-wide counterpart).

We live in an age in which skepticism about decisions by experts is common. Although I agree that many supposed experts have both lacked any real expertise and been insensitive to a variety of considerations to which their purported expertise did not relate, I am optimistic that experts can be trained, that appropriate recruitment-processes can be instituted, and that inappropriate political influence as well as sloppy performance can be prevented by reasoned-elaboration requirements, lifetime tenure, revolving-door policies, other types of politically insulating provisions, and peer review. Perhaps that as much as anything else accounts for my preference for having antitrust cases and related cases handled by experts operating out of specialized institutions.

**E. The Desirability of Authorizing Some Government Institution to Sell the Right to Enter into an Allegedly Efficiency-Generating Merger that Would Reduce Competition in Various Ways**

Most economists who have analyzed the optimal way for the government to respond to the possible externalities that manufacturers or others may generate have concluded that whenever feasible the government should proceed (1) by requiring externality-producers to pay a tax equal to the external costs they generate and allowing such parties to
generate as many externalities as they find profitable rather than (2) by
determining itself the amount of such externalities these parties may gen-
erate or the specific steps they must take to reduce the externalities they
produce. In brief, economists tend to prefer the former, decentralizing
tax-approach to the latter, centralized, command-and-control approach
because the decentralized method assigns the actual decision to private
actors who have better access to some information that is highly relevant
to the optimal choice (while correcting any distortion in these private
actors' incentives). Thus, to the extent that the private cost to a manu-
facturer of reducing the amount of externalities he generates by lowering
his unit output, changing his production-process or location, changing
the particular product-variants he produces, etc. correspond to the allo-
cative cost of his taking these steps (externality-consequences aside) or to
the extent that the government can impose a second tax that will offset
any differences in such private and allocative costs without knowing the
magnitude of the private costs in question, the externality-tax will be
likely both to reduce "regulatory" transaction costs and to reduce error-
costs by placing the relevant decisions in the hands of manufacturers who
are better informed than government regulators about various determi-
nants of the choice that is allocatively efficient.

Given this fact, it is surprising that economists have failed to recom-
mend that the government take an analogous approach when the Pareto
imperfection in question is not an externality but a reduction in competi-
tion. In the horizontal-merger context, the equivalent of the externality-
tax would be useful when a merger that had certain anti-competitive and
misallocative tendencies (the analogue of the externalities) was plausibly
alleged to generate certain efficiencies that would tend to increase both
competition and allocative efficiency (the analogue of the allocative cost-
savings or value-increases that the externality-generating choice would
generate if the externalities could be ignored). In this situation, a pro-
perly designed "reduction-in-competition" tax might enable the govern-
ment to secure the outcome that would be most pro-competitive or most
allocatively efficient or most desirable overall (depending on the statute's
goal) without having to determine the magnitude of the efficiencies the
merger would generate.

For illustrative purposes, I will explain the way in which such a tax
would be calculated and would operate on the assumption that the rele-
vant criterion of legality was the merger's net impact on competition
rather than its net effect on allocative efficiency or its overall desirability.
As I have explained elsewhere,\textsuperscript{144} on this assumption, four steps would have to be taken:

First, one would estimate the private profitability and the competitive impact of the relevant merger on the assumption that it would generate no efficiencies. Second, one would gather evidence on the character of the efficiencies in order to assess the ratio of their private value to their competitive value. To see why such information is relevant, note that a static fixed cost efficiency that will not carry over to an expansion will have no competitive value (value to the relevant consumers) though it will have considerable private value, while a static marginal efficiency that will affect the MPs' position primarily in their relations with customers whom they were originally second-best-placed to serve will have far more competitive value than private value (since it will reduce the prices these buyers pay even where the MPs do not end up supplying them by decreasing their best-placed suppliers' OCAs). Third, one would estimate this private value to competitive value ratio by combining one's conclusions about the character of the efficiencies in question with other data that are relevant for this purpose. For example, as the preceding discussion implies, in the case of marginal static efficiencies one would want to know the relative frequency with which the MPs were best-placed, second-best-placed, and close-to-second-best-placed. Finally, one would use the result generated in this fashion to calculate the merger fee that would guarantee that the decision that would be most privately profitable for the MPs would also be most pro-competitive.\textsuperscript{145}

A numerical example might be useful. Assume that one had reached the following two conclusions: (1) absent any efficiencies, the relevant merger would decrease competition by two million dollars and would generate eight hundred thousand dollars profit for its participants; (2) the ratio of the competitive value of the efficiencies the merger would generate to the profits they would yield the MPs was two to one. These facts imply that the merger would be pro-competitive only if it yielded efficiencies that were worth more than one million dollars to its participants—since only then would the competitive value of the efficiencies exceed the two million dollar competitive loss the merger would have generated absent the efficiencies in question. The public fee-setter would therefore set the merger fee at $1,800,000, since the MPs would be will-

\textsuperscript{144} See Markovits, Review Article, supra note 5, at 606-07 n.71.

\textsuperscript{145} Moreover, as I have also noted elsewhere,

\[A\] perfectly analogous method could be used if one's goal was to increase allocative efficiency. Two changes would be necessary. First, one would have to substitute in step one a calculation of the amount by which the merger would misallocate resources if it did not generate efficiencies for the original estimate of the amount by which it would reduce competition in such circumstances. Second, one would calculate in step three the ratio of the allocative value of the relevant efficiencies to their private value to the MPs rather than the competitive-value-to-private-value-to-MP ratio described above.

\textit{Id.}
ing to pay that fee only if they expected the merger to generate efficiencies that were worth at least one million dollars to them.\textsuperscript{146}

Admittedly, this procedure is very complicated and difficult, in part because it provides prospective MPs with an incentive to misrepresent the character of the efficiencies their merger will generate in the hope of lowering the merger-fee they will be required to pay.\textsuperscript{147} But if one wants to take the efficiencies mergers may generate into consideration, there is no defensible way to avoid the complications and difficulties the "reduction-in-competition" tax entails.\textsuperscript{148} In fact, the method just described is less complicated than the command-and-control approach (the centrally administered trade-off) the Guidelines propose without describing; although the implementers of the "reduction-in-competition" tax will have to identify the type of efficiency any merger under consideration will generate—fixed-cost static, marginal-cost static, static that will carry over to any new QV investments the MPs make, or purely dynamic, they will not have to estimate the actual magnitude of the efficiencies that will be generated.

Discussions of the feasibility of counting any efficiencies a merger would generate in favor of its legality have tended to focus on the difficulty courts or any outside agency would have in determining the (weighted average expected) magnitude of the efficiencies such a merger would generate in the future (or indeed the magnitude of the efficiencies it generated in the past). Why, then, has no one else ever considered decentralizing the relevant choice by levying a tax to correct the incentives of the prospective MPs—who presumably have better information about at least the private value of the efficiencies their merger should be expected to generate—and leaving the decision to them? Particularly when one considers the popularity of pollution-taxes among economists, it is hard to understand why the Justice Department or the various economists who have recommended making the legality of efficiency-producing horizontal mergers depend on some relevant welfare-trade-off\textsuperscript{149} have not even considered the "reduction-in-competition"-tax alternative to centralized command-and-control merger-decisions. In my opinion, this tax-alternative is feasible and would generate the same kinds of reduc-

\textsuperscript{146} \textit{Id.}
\textsuperscript{147} Indeed, the process will be even more complicated if the relevant goal is to increase allocative efficiency or overall welfare rather than competition.
\textsuperscript{148} Recall that the Guidelines do not specify the way in which the Department would make the relevant trade-off and indeed are even unclear about the trade-off itself.
tions in regulatory-transaction-costs and regulatory-error-costs that have led economists to prefer externality-taxes over centralized pollution-controls.

VI. CONCLUSION

I was delighted to receive this invitation to contribute a paper on the significance of international competition for the appropriate way to define markets in horizontal-merger cases. Admittedly, however, my reaction did not reflect my belief that the effective presence of foreign competitors critically or even substantially influenced the way in which markets should be defined in such cases. Indeed, those who are familiar with my work will not be surprised by this fact, since for years I have argued that markets should never be defined at all in any way either in horizontal-merger cases or in any other kind of cases—that market-definitions should be rejected on the ground that they have the remarkable capacity to consume an enormous amount of resources in order to put one in a position to calculate market-aggregated figures that have less predictive power than the non-aggregated data which one collected to define the relevant market in the first place.

I originally made this argument in the context of criticizing the traditional market-oriented approach to predicting the competitive impact (analyzing the legality) of horizontal mergers—an approach that focused primarily on the merger partners' market shares and the market's four-firm or eight-firm concentration ratio. Among other things, this Article elaborates, refines, and summarizes the competition theories I developed to criticize that approach, my critique of that approach itself, and the non-market-oriented approach I think should be used to analyze the competitive impact and legality of horizontal mergers.

In the late seventies and early eighties, dissatisfaction with the traditional market-share, market-concentration-ratio approach to horizontal-merger analysis became more general, but this dissatisfaction did not extend to the general category of market-oriented approaches. The perception was that one need only tinker with or revise and supplement the traditional approach to produce an analytic method that was truly cost-effective. Both the Justice Department's Horizontal Merger Guidelines and the academic commentaries on them reflect this attitude. Thus, the Guidelines tinker with or revise the basic traditional approach (1) by substituting HHI-figures for traditional concentration ratios and (2) by substituting merger-generated-increase-in-HHI figures for merger-partner market-share data without recognizing that the calculation and use of
any such market-oriented data is expensive and counterproductive. Admittedly, the Guidelines do supplement the market-oriented data on which their crude rules focus with a list of additional factors to be considered, but unfortunately they still disregard some important factors, describe other significant factors in a very imprecise way, list some factors that are irrelevant, and misanalyze the significance of some factors they correctly assert to be relevant. This Article offers a new critique of the Guidelines from the theoretical perspective I originally developed when criticizing the traditional market-share market-concentration-ratio approach to merger analysis.

So far, I have not mentioned the significance of foreign competition for my argument. This Article makes reference to the effective presence of foreign competition in four contexts. The first two relate to the presence of non-American firms in American markets. The last two relate respectively to foreign buyers and to international competition between American and foreign firms.

First, I argued that although my conclusion that the traditional market-oriented approach and the Guidelines' approach should be rejected did not depend on the presence of effective foreign competition, that presence did strengthen the case against them and any other market-oriented approach. In particular, I argued that because the ratio of the frequency with which foreign suppliers are best-placed to the frequency with which they are second-best-placed or close-to-second-best-placed is probably unusually low, because the intensity of competition between the average foreign product and the other products in its market probably tends to vary more from other product to other product than is the case for the average domestic product, and because foreign producers may be unusually likely to be best-placed potential competitors or expanders, the effective presence of foreign competition decreases the accuracy both of the various assumptions on which all market-oriented approaches must implicitly rely and the conclusions to which they lead. Second, and relatively, I discussed the various ways in which the presence of effective foreign competitors is taken into account by my own non-market-oriented approach to horizontal-merger analysis. Third, I noted that the Clayton Act does not seem to make relevant the effect of any horizontal merger on foreign buyers and considered the desirability of this fact from both a world-wide perspective and a more parochial American perspective. And fourth and finally, I considered and rejected the possibility that a case can be built for a permissive horizontal-merger law on the ground that the mergers it would allow would enable American firms to achieve
efficiencies that would improve their ability to compete against foreign concerns.

I hope that these arguments justify this Article's presence in this Symposium and, more importantly, that the Article persuades readers that horizontal mergers must be analyzed through a non-market-oriented approach that does not presuppose the definition of any market.