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# A CLOSER ANALYSIS OF ANTITRUST MARKETS

#### GREGORY J. WERDEN\*

The promulgation of the U.S. Department of Justice's Merger Guidelines in 1982 stimulated considerable scholarly examination of market delineation in antitrust analysis.<sup>1</sup> Recently, this law review published an examination of antitrust markets by Warren G. Lavey.<sup>2</sup> According to Lavey, the "affected-buyers model" provides the most reliable approach to market delineation.<sup>3</sup> Lavey compares the "firm-competitors model," the "buyers-alternative model," and the Department of Justice's Merger Guidelines<sup>5</sup> with his affected-buyers model and concludes that the affected-buyers model is superior because it may produce relevant markets that are better suited for use in antitrust analysis.<sup>6</sup>

Section I of this Article points out a number of shortcomings in Lavey's affected-buyers model. Lavey's approach to market delineation is not completely specified, particularly in its application to mergers. Also, it ignores critical linkages among buyers with the effect that its use may result in the delineation of markets that are geographically too small. Finally, Lavey adopts a questionable treatment of supply substitutability.

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<sup>1</sup> Sec. e.g., Boyer, Is There a Principle for Defining Industries?, 50 S. Econ. J. 761 (1984); Dunfee, Stern & Sturdivant, Bounding Markets in Merger Cases: Identifying Relevant Competitors, 78 Nw. U.L. Rev. 733 (1983); Harris & Jorde, Antitrust Market Definition: An Integrated Approach, 72 Calif. L. Rev. 1 (1984); Horowitz, Market Definition in Antitrust Analysis: A Regression-Based Approach. 48 S. Econ. J. 1 (1981); Massel, Submarkets in Merger and Monopolization Cases, 72 Geo. L.J. 39 (1983); Werden, Market Delineation and the Justice Department's Merger Guidelines, 1983 Duke L.J. 514.

<sup>2.</sup> Lavey, A Close Analysis of Buyers and Antitrust Markets, 61 WASH. U.L.Q. 745 (1983).

<sup>3</sup> Id. at 747-56.

<sup>4.</sup> *Id.* at 756-67. The "firm-competitors model" and "buyers-alternative model" are not discussed in this Article. As outlined by Lavey, these models are clearly deficient, each having a fatal flaw built into it. *See id.* at 758, 764.

<sup>5.</sup> Lavey discussed the "1982 Merger Guidelines," reprinted in 2 Trade Reg. Rep. (CCH) ¶¶ 4501-05. Recently, the Department of Justice issued a revision, which is referred to herein as the "1984 Merger Guidelines" reprinted in 2 Trade Reg. Rep. (CCH) ¶¶ 44591-95. With respect to market delineation, there are no major differences between the 1982 and the 1984 Guidelines. The Justice Department did, however, substantially revise the text. Because of the similarity, this Article will refer to both herein as the "Merger Guidelines."

<sup>6.</sup> Lavey, supra note 2, at 768-72.

Section II summarizes the Merger Guidelines' approach to market delineation and clarifies a number of points that Lavey and others have confused. Finally, the Article concludes that the Guidelines' approach does not suffer from the problems associated with Lavey's approach or from the problems Lavey ascribed to it.

#### I. LAVEY'S AFFECTED-BUYERS MODEL

### A. Summary of Lavey's Approach

Lavey's affected-buyers model is a three-step approach to the delineation of a relevant market for a particular firm. Step one requires the identification of "protected buyers." "Protected buyers" are those buyers that (1) have "some common demand characteristics that can be satisfied by [the] firm's particular output (however the output is defined)", (2) "would actually purchase the particular output from [the particular firm] if the output is priced at the competitive level", and (3) are "covered by the protection of the antitrust laws." Step two is the identification of the "affected buyers." "Affected buyers" are those that would purchase some of a firm's output if the firm charged protected buyers a competitive price for the output and for which the firm's sales volume or the selling price to members would be affected if the firm charged the protected buyers a supracompetitive price. Finally, step three is the delineation of the relevant market with respect to the affected buyers. Lavey summarizes this process as follows:

The output in the relevant product market includes that to which the affected buyers could turn in response to a higher price, i.e., close demand substitutes [and] . . . the output from which sellers supplying alternatives to those buyers could divert production capacity, i.e., close supply substitutes. The relevant geographic market encompasses the locations of sellers of output in the relevant product market actually or potentially supplying the affected buyers. <sup>14</sup>

<sup>7.</sup> Id. at 749.

<sup>8.</sup> Id.

<sup>9.</sup> Id.

<sup>10.</sup> Id.

<sup>11.</sup> Id. at 750.

<sup>12.</sup> Id.

<sup>13.</sup> Id.

<sup>14.</sup> Id. at 751-52. The discussion below does not use the terms "product market" and "geographic market," but rather simply refers to the "market," which has product and geographic dimensions. While it is useful to separate geographic and product issues to some extent in market

If price discrimination<sup>15</sup> among buyers is not possible, then all buyers of a firm's product will be "affected buyers."

Lavey does not supply definite guidelines on how to apply his model. While this is not a serious flaw in Lavey's analysis, it leaves several questions unanswered<sup>16</sup> and creates needless confusion on several levels. First, it is not completely clear whether Lavey intends a pairwise comparison among products or whether he intends a collective comparison. It is imperative to make the distinction because the different comparisons create distinctly different results. A pairwise comparison delineates the relevant market for product A by asking whether each potential substitute product is in the same market as A. Thus, pairwise comparison involves inquiry into whether an increase in the price of A would cause significant consumer substitution from A to B, whether it would cause significant substitution from A to C, and so forth. On the other hand, a collective comparison delineates the relevant market for product A simply by asking whether A constitutes a market. That question is answered by considering whether an increase in the price of A would cause a significant reduction in its consumption as a result of substitution to other products.17

The uncertainty problem becomes particularly acute if Lavey intends to use pairwise comparisons in his analysis. Lavey proposes that all substitution possibilities should be assessed with respect to "affected buyers," but it is not clear whether a product must be a "close . . . substitute" for all of the "affected buyers," for just some of the "affected buyers," or for something in between. It appears from subsequent discussion that Lavey means neither all of the "affected buyers" nor just

delineation, it is more important to realize that there are not two independent tasks in market delineation. See Werden, supra note 1, at 552-55.

<sup>15. &</sup>quot;Price discrimination" is usually defined as "a pattern of pricing that yields different net returns from the sale... of the same or different products to different customers." 2 P. AREEDA & D. TURNER, ANTITRUST LAW 341-42 (1978). In its simplest form, price discrimination consists of charging two consumers different factory-gate prices for the same product. Price discrimination is often impossible in practice because the consumer paying the lower price could resell to the consumer paying the higher price.

<sup>16.</sup> For example, which buyers are "protected buyers" could depend on what is meant by "some common demand characteristics," yet Lavey does not indicate what he meant by the phrase. Nor is what Lavey means explicit when he refers to "close supply" and "close demand" substitutes. Also, Lavey does not explain under what conditions a seller should be considered as "potentially supplying" a particular buyer. By failing to define these terms, which are the operative phases of his approach, Lavey fails to provide a procedure that can be applied in practice.

<sup>17.</sup> Lavey seems to favor pairwise comparisons, but he never specifically addresses the issue. See infra note 37 and accompanying text.

some of the "affected buyers." The remaining middle ground is large enough to create considerable uncertainty as to what Lavey's test for close demand or supply substitutes really is.

A third level of uncertainty relates to questions of degree raised by key phrases.<sup>19</sup> First, with respect to the delineation of the product dimensions of markets, Lavey refers to products "to which the affected buyers could turn in response to [a] higher price."20 However, what consumers can or will do obviously depends on the magnitude of the price increase. Unfortunately, Lavey does not indicate how much of a price increase he has in mind. Moreover, he fails to indicate the magnitude of the response to a price increase that is necessary before certain products are considered "close" substitutes. A second ambiguity problem arises in the delineation of geographic market boundaries. Under what circumstances should one conclude that a seller can "potentially" supply the affected buyers? Conceivably, under some conditions any seller in the world can supply any given buyer. The circumstance to which Lavey seems to refer is a price increase made solely by the particular firm for which a market is being delineated.21 Lavey does not, however, indicate the magnitude of the postulated price increase.

A final, closely related difficulty with Lavey's approach arises because he proposes to examine the "closeness" of substitutes and to identify "affected buyers" at the competitive price. It is difficult, if not impossible, to use the competitive price as a benchmark because there is no reliable method of determining the competitive price. If there is no method for determining the competitive price, how are "good . . . substitutes" identified at some unknown price?

## B. Problems in Application of Lavey's Approach to Mergers

Lavey's purpose "is to assess the ability of a firm profitably to charge a supracompetitive price," i.e., to determine whether the firm has "mar-

<sup>18.</sup> See Lavey, supra note 2, at 757, 769-70. But see id. at 767.

<sup>19.</sup> Such uncertainties are not unique to Lavey's affected-buyers model. They arise in all approaches to market delineation because market delineation inherently raises difficult (quite possibly unanswerable) questions of degree. Nonetheless, Lavey fails to shed light on these important subjects.

<sup>20.</sup> Lavey, supra note 2 at 751-52.

<sup>21.</sup> While this is not made explicit in Lavey's formulation of his approach, Lavey seems to indicate that such is the case in his discussion of alternatives. See Lavey, supra note 2, at 760 n.41.

<sup>22.</sup> Lavey, supra note 2, at 772 (emphasis added). Lavey also refers to "firms with market power," id. at 748, and to "evaluating the firm's market power," id. at 751.

ket power." Thus, his affected-buyers model is designed to delineate a relevant market for a particular firm in order to assess its market power. Single-firm market power is often the relevant issue in antitrust cases, particularly those brought under section two of the Sherman Act. <sup>23</sup> In merger cases, however, the issue is whether the effect of the merger of two firms "may be substantially to lessen competition." <sup>24</sup> The competitive danger in mergers generally is not that the merged firm might possess market power; rather, the concern is that the merger will significantly increase the likelihood that several firms will successfully coordinate their actions and raise prices. <sup>25</sup> Because the primary concern in merger cases is the increased likelihood of collusion, market delineation in the merger context presents different problems than those presented by the need to identify single-firm market power under the Sherman Act. Thus, a different approach is necessary to deal correctly with market delineation in merger cases. <sup>26</sup>

One difference between these two situations concerns the price at which substitutes should be evaluated. Lavey uses the competitive price, which theoretically is the proper standard in determining whether a single firm has market power.<sup>27</sup> However, the competitive price usually is

<sup>23 15</sup> U.S.C. § 2 (1982). Section 2 prohibits "monopolization" which has been defined to mean the acquisition or maintenance of market power through unfair or predatory means. See, e.g., United States v. Grinnell Corp., 384 U.S. 563, 570-71 (1966); United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377, 389-92 (1956); United States v. Aluminum Co. of Am., 148 F.2d 416, 429-32 (2d Cir. 1945). Thus, a threshold question in Section 2 cases is whether the defendant possesses market power.

<sup>24.</sup> Clayton Act, ch. 323, § 7, 38 Stat. 730, 731-32 (1914) (Current version at 15 U.S.C. § 18 (1982)).

<sup>25</sup> See 1982 Merger Guidelines, 2 TRADE REG. REP. (CCH)  $\P$  4501; Werden, supra note 1, at 517, 522-23.

<sup>26.</sup> Landes and Posner have argued that market delineation is a necessary step in the determination of whether a firm has market power because the direct determinants of market power (i.e., elasticities of demand and supply) cannot be measured easily. See Landes & Posner, Market Power in Antitrust Cases, 94 Harv. L. Rev. 937, 962 (1982); see also R. Posner, Antitrust Law: An Economic Perspective 125 (1976). While it may be possible to determine whether a single firm has market power without delineating a market, the situation is quite different when the issue is whether a merger significantly increases the likelihood that sellers will coordinate their actions and collectively exercise market power. In such merger cases, it is necessary to determine which sellers have to coordinate their actions to exercise market power. Accurately delineated markets are essential for accomplishing this task.

<sup>27.</sup> Because market power is defined as the ability profitably to raise prices above the competitive level, it is clear that the proper base price is the competitive price if the issue is whether a single firm possesses market power. The Supreme Court's decision in United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377 (1956), has been the subject of severe criticism because it failed to focus on the competitive price as the benchmark for assessing market power. See, e.g., R. POSNER,

not the proper benchmark in merger cases. The issue in merger cases generally is not whether existing firms possess market power but whether the merger will create or enhance market power. The proper benchmark for analysis, therefore, is generally the price that currently prevails in the market place (the "prevailing price") even if it is well above the competitive price.<sup>28</sup>

Assume the firms in an industry are colluding successfully with the result that price is well above the competitive level. Further assume that two of the colluders propose to merge. Is this merger likely to create or enhance market power and, therefore, should be prevented? Three possibilities must be considered. First, if collusion successfully produces the monopoly outcome and would be unaffected by the merger, then the merger would not create or enhance market power and should be allowed. Second, if the collusion would continue regardless of the merger, but the merger would allow the cartel to function more effectively, resulting in a significantly higher price, then the merger would enhance market power and should be prevented. Finally, if the collusion would continue only if the merger occurred, then the merger would create or enhance market power and should be prevented.

Compare the effects of using competitive price as opposed to the prevailing price as a benchmark in these situations. If there were good substitutes at the competitive price, it would not have been profitable for the colluders to raise prices. Therefore, it must be the case that there were no good substitutes at the competitive price.<sup>29</sup> Good substitutes may exist, however, at the prevailing price. If the cartel is completely successful, producing the monopoly outcome, then a further increase in price would not be profitable. The cartel already has imposed the most profitable price increase, and any further increase would not be profitable. If the cartel is not completely successful, then further increases in price still would be profitable because of a lack of good substitutes at the prevailing price. The former possibility corresponds to the first case in the preced-

supra note 26, at 128. Nevertheless, as a practical matter it is very difficult to analyze substitution possibilities at the competitive price.

<sup>28.</sup> See also id. at 128-29; Baxter, Responding to the Reaction: The Draftsman's View, 71 CA-LIF. L. REV. 618, 623 n.35 (1983).

<sup>29.</sup> This is a bit of an oversimplification. The colluders might raise prices despite the existence of good substitutes if the substitutes are available in only very limited quantities. The colluders may also increase prices if a small increase in price did not cause a substantial increase in the quantity of substitutes supplied. Whether either of the foregoing is the case, however, has no effect on the basic point that substitution possibilities should not be evaluated at the competitive price.

653

ing paragraph, while the latter possibility corresponds to the second case above. In either case, using the prevailing price as a benchmark results in the correct enforcement decision. Using the competitive price, however, produces the correct result only in the second case.

The only situation in which using the prevailing price produces an incorrect result is that in which the prevailing price is likely to change without the merger—the third case above. In that case, substitution possibilities should be evaluated at the price that will prevail if the merger does not occur, which may or may not be the competitive price. Evaluating substitutes at future prices, in fact, always produces the correct result. Determining future prices, however, is not an easy task. Normally, prevailing prices are the best measures of future prices and should be used as proxies. On occasion, however, good reason may exist to believe prices will change. For example, an environmental regulation scheduled to go into effect may raise costs of production in a predictable manner, which, in turn, may have a predictable effect on prices. It is unlikely, however, that knowledge of collusion and the necessity of a merger to sustain the exercise of market power would be of any value in predicting future prices because it is unlikely that one could ever possess such knowledge.

Applying Lavey's approach to mergers also raises the additional question of how to delineate the relevant market if there are two firms at issue, as in merger cases. Lavey may intend to delineate the relevant market for each of the merging firms separately, without reference to the identity of the merger partner. Lavey also may intend to redefine the terms "protected buyers" and "affected buyers" to refer to "one of the merging firms" rather than "the firm." This redefinition would result in a much larger group of "affected buyers" than if only one firm were considered. Finally, Lavey may intend to define the market by reference to the customers that the two firms have in common or those for which the products of the merging firms are "good substitutes." This results in a much smaller group of "affected buyers" than if only one firm were considered; indeed, there may be no "affected buyers" at all.

Each of these three approaches could produce different results. Under the first approach, the merging firms are in the same relevant market if the relevant market delineated for one firm includes the other. Under the second approach, the merging firms always are in the same relevant market. Finally, under the third approach, the merging firms are in the same relevant market if, and only if, they have common customers or customers for which their products are "good substitutes." Because the latter two results could not be correct,<sup>30</sup> it will be assumed that Lavey intends markets to be delineated separately for each merging firm. Even if Lavey intends to delineate markets separately, however, it is not clear whether he intends the merger to affect the analysis.

### C. Lavey's Affected Buyers Model Overlooks a Critical Linkage

The salient theme of Lavey's analysis is that market delineation must consider linkages among buyers. Despite the often repeated theme of linkages,<sup>31</sup> Lavey's affected buyers model fails to take into account one very important type of linkage among buyers—namely the link between affected-buyers and those buying from indirect competitors. This oversight often will result in delineation of markets that are geographically too small.<sup>32</sup> This shortcoming becomes evident when Lavey's method of delineating geographic market boundaries is applied to specific facts.

Assume that a particular firm located at point A sells a homogeneous product at its factory gate and is unable to discriminate among customers. Further assume that other sellers of the same product charge the same price and are located in a series of concentric rings centered on A, each ten miles from the next. Given that all sellers charge the same price, consumers will be assumed to buy from the closest seller. If sellers charge different prices, then each customer will be assumed to buy from the seller with the lowest delivered price. The "affected buyers" for the firm at point A will be individuals within a five mile radius of point A. According to Lavey, "the relevant geographic market encompasses the locations of sellers . . . actually or potentially supplying the affected buyers." The term "potentially" appears to refer to what would hap-

<sup>30.</sup> The problems that arise from looking only to common customers are very similar to others discussed *infra* at notes 31-36 and accompanying text. Clearly, it is not necessary for two firms to have common customers to be in the same market.

<sup>31.</sup> Lavey refers to "linkage" among buyers "links" between buyers or "linked" buyers at least twenty times. Lavey, supra note 2, at 749 n.11, 750, 754, 757 n.33, 758, 761, 764-67, 769, 771 n.76 & 772.

<sup>32.</sup> It appears that Lavey's approach may result in markets that are geographically too small. It also is possible that the approach may result in markets that are too small in their product dimensions for similar reasons. According to Lavey: "The output in the relevant product market includes that to which the affected buyers could turn in response to [a] higher price." Lavey, supra note 2, at 751. This is similar to his phrasing for geographic markets. Because Lavey's criterion for delineating the dimensions of the product markets is somewhat similar to his geographic criterion, a similar result may occur with respect to indirectly competing products.

<sup>33.</sup> Lavey, supra note 2, at 752.

pen if the firm at A raised its price.<sup>34</sup> In the event of price increase, some or all of the "affected buyers" would buy from the sellers ten miles from point A. Thus, the relevant geographic market for the firm at point A could include its direct competitors ten miles away.<sup>35</sup> The "affected buyers" would not buy from indirect competitors at more distant locations because the delivered price from any indirect competitor would be higher than the delivered price for one of the direct competitors. Lavey, therefore, leads one to conclude that indirect buyers are not in the relevant market. This conclusion, however, is likely to be incorrect because "affected buyers" typically are linked closely with those buying from indirect competitors.

A similar example better illustrates the importance of this linkage between affected buyers and those who buy from indirect competitors. Assume that identical buyers and sellers are uniformly distributed in a particular area. Further posit that consumers purchase one unit of the product per unit of area and purchase it at the factory gate from the seller with the lowest delivered price. Finally, assume that sellers have constant production costs per unit with no fixed costs and that transportation of a unit of the product between any two points costs a constant amount per unit of distance. In this hypothetical, if all sellers charge the same price, as would be the case if they acted competitively, each buyer will purchase from a seller at exactly the same point. Under this scenario, a seller at point A has one "affected buyer" that is also at point A. If this seller raised its price, even by an infinitesimal amount, adjoining sellers would have lower delivered prices at point A. Thus, the seller at A would sell nothing. The seller at A, therefore, does not possess market power and is not the only seller in the relevant market. Under Lavey's approach, the relevant market appears to encompass only point A and adjoining points. Lavey's "market" does not encompass more distant locations because, even in the event of a price increase, more distant sellers would not sell to the "affected buyers."

A geographic "market" that includes only point A and adjoining points has an arbitrarily small radius and an area equal to zero. Accord-

<sup>34.</sup> See supra text accompanying note 21.

<sup>35.</sup> Exactly how large markets are under Lavey's approach is unclear. In large part, this is because Lavey fails to specify his criteria fully. See supra notes 16-21 and accompanying text. It seems likely that Lavey would conclude that the relevant market has a geographic radius of at least ten miles, and the example was constructed so that it makes no difference whether he would conclude that the radius was as much as fifteen miles.

ingly, the sellers in Lavey's market would not impose a price increase even if they coordinated their activities perfectly and acted as a monopolist. However, a monopolist within any radius of A greater than zero would impose a price increase. The magnitude of the price increase that would be imposed depends on the radius of the area and the unit transportation costs. A monopolist within a very small area, (but still larger than Lavey's "market") would impose a very slight price increase. For that reason, the relevant market should not have a very small geographic area. How large a geographic area should be included in the relevant market depends on how large a price increase is necessary to be considered a significant exercise of market power. In addition, for any given significance level, any market radius could be produced by choosing the appropriate level of unit transportation cost.

In any event, essentially all of the sellers in the relevant market would be *indirect* competitors of the firm at A. They would not sell to the buyer at point A under any reasonable circumstances, but they still are in the relevant market for the firm at point A. Therefore, a critical linkage exists between the affected buyer at point A and more distant buyers that protects the buyer at A from a price increase. Lavey, however, does not include indirect competitors in his "markets." Although this example exaggerates the importance of indirect competitors, they often are very important in the real world and should not be overlooked.

## D. Problems with Including Good Substitutes in Supply or Demand

Lavey's affected-buyers model delineates markets that include good demand or supply substitutes for a product of a particular firm. Lavey appears to adopt several conventional treatments of demand and supply substitutability which have serious problems. Although Lavey is not responsible for these problems, they are important to note.

One such problem is with the pairwise analysis of demand substitutes, which Lavey apparently embraces.<sup>37</sup> A pairwise analysis of substitution

<sup>36.</sup> If we assume that price will be raised uniformly throughout the area monopolized, the proportionate price increase (i.e., the postincrease price divided by the preincrease price) imposed is equal to rt/3, where r is the area's radius and t is the unit transportation costs per mile divided by the base price.

<sup>37.</sup> The case law adopts a cross-elasticity-of-demand test for demand substitutes. See Brown Shoe Co. v. United States, 370 U.S. 294, 325 (1962); United States v. E.I. du Pont de Nemours & Co., 351 U.S. 337, 394-404 (1956). Cross-elasticity of demand is the percentage change in the quantity sold of one good that is produced by a certain percentage change in the price of a second good, divided by the percentage change in the price of the second good. Cross-elasticity of demand implies

possibilities is inappropriate for determining whether a particular product could be subject to the exercise of market power, which is the question posed in market delineation. A pairwise analysis delineates a market by asking for a particular product whether each alternative is a good substitute. It is possible, however, that a particular product does not have a single good substitute, yet could be not subject to the exercise of significant market power. Even though a price increase for product A would not induce substantial substitution to B, or C, or to any other individual product, it might cause a very substantial decrease in the consumption of A because of small amounts of substitution to each of many products.

A second and more fundamental problem involves the inclusion of "good supply substitutes" in relevant markets. Although it seems generally accepted that the supply substitutability must be accounted for in market delineation,<sup>38</sup> there are several alternative approaches to supply substitutability, and at least one of these alternatives will be preferable to Lavev's "market-delineation approach" in any one particular case. One alternative is the "share-measurement approach." Under this approach, the market for the product in question is delineated solely on the basis of demand substitutability, but firms capable of producing and selling the relevant product are considered competitors in the relevant market and assigned market shares. A second alternative is the "share-interpretation approach." This approach also delineates markets solely on the basis of demand substitutability but it assigns market shares only to those currently selling the relevant product. The significance of market shares and market concentration, however, are interpreted in light of the supply substitution possibilities.

An example clarifies the contrasts. Consider a merger between two producers of stamped metal hubcaps, and assume that producers of other "light metal stampings" can easily switch to hubcaps. Lavey's market-delineation approach results in a market that includes all "light metal stampings." In contrast, share-measurement and share-interpretation approaches result in a market that includes only hubcaps. The share-

a pairwise comparison. It is not clear how Lavey would assess demand substitutes, see *supra* text preceding note 17, but he does cite *du Pont* approvingly, see Lavey, *supra* note 2, at 751 n.19, which adopts a pairwise comparison.

<sup>38.</sup> See, e.g., P. AREEDA & D. TURNER, supra note 15, at 374-76; R. POSNER, supra note 26, at 127, 132; Note, The Role of Supply Substitutability in Defining the Relevant Product Market, 65 Va. L. REV. 129 (1979). For discussions of the case law on this issue, see id. at 136-46; 4 E. KINTNER, FEDERAL ANTITRUST LAW 256-58 (1984).

measurement approach assigns shares in the hubcap market to sellers of other "light metal stampings" according to their abilities to produce and sell hubcaps. The share-significance approach assigns shares in the hubcap market only to sellers of hubcaps; however, these shares are discounted qualitatively to reflect the effects of supply substitutability.

Either the "share-measurement approach" or the "share-interpretation approach" will be preferable to Lavey's market delineation approach for several reasons. First, the market-delineation approach is conceptually awkward. A market composed of products that are not good demand substitutes simply does not make much sense. The purpose of market delineation is to determine whether a single firm possesses market power or, in the context of most mergers, whether a group of firms that coordinate their action would possess market power. It is extremely difficult, however, to address the market power question intelligently in a "market" that includes products that are not good demand substitutes. What does it mean to exercise market power in such a "market"? Does it mean to raise the price of one of the products, the prices of several of them, or the prices of all of them? If it is either of the latter two, should the price increase be the same or different between the products? What if raising the price of one product were profitable while raising the price of another were not? In addition, supply substitutability often is asymmetric; some machines can produce A or B, while others can produce only A. In such a case, would A and B be in the same market? Would it depend on the character of the merger, e.g., whether two sellers of A were merging, two sellers of B were merging, or a seller of A was merging with a seller of B? There are no satisfactory answers to all these questions and, therefore, no satisfactory way of dealing with "markets" that include products that are not good demand substitutes.

In addition, the market-delineation approach often fails to take into account important constraints on substitution in supply. Under the market-delineation approach, two products that are good production substitutes are placed in the same market, and market shares for the combined market are based on a firm's ability to sell either or both products. However, the ability of a seller of one product to switch to another product is often limited. For example, the availability of gate space and landing slots limits the supply substitution by airlines between city pairs. Constraints on local retail or wholesale distribution could have a similar effect in a manufacturing industry. These constraints may have an important effect on competition, but Lavey's market-delineation ap-

proach ignores them. Moreover, the market-delineation approach exacerbates the problem of having to add "apples and oranges" together to calculate market shares. Hubcaps and bumpers may be stamped out on the same machines, but it may not be possible to compute hubcap-bumper market shares sensibly. Simply counting the number of hubcaps or bumpers produced is likely to be misleading because the machine may be able to stamp several hubcaps for each bumper it could produce. Using dollars sales as a measure may not be better because one product may use more expensive materials or require more expensive finishing operations than the other.

Finally, the market-delineation approach can lead to conundrums. Assume two producers of metal hubcaps proposed to merge and that metal bumpers were good supply substitutes for metal hubcaps. Further assume that while metal hubcaps had no good consumption substitutes and molded rubber or plastic bumpers provided good demand substitutes for metal bumpers. In delineating the relevant market for the hubcap merger, are rubber and plastic bumpers included in the market, or for that matter, are all molded rubber and plastic products included because they are also good supply substitutes? If either of these two approaches were used, the market shares would be meaningless. If neither were used, the exercise of market power probably would not be possible in the resulting "market." In either case, the analysis would be hopelessly confused.

For all these reasons, the share-measurement or the share-significance approach should be used instead of the market-delineation approach. The share-measurement approach is the best of the three methods if it is possible to measure accurately a firm's ability to substitute in production. The share-measurement approach produces the same result as the market-delineation approach in many cases, but it is more refined in many cases and less awkward in all cases. If it is impossible to measure accurately a firm's ability to substitute in production, the share-significance approach is best.

#### II. MARKET DELINEATION UNDER THE MERGER GUIDELINES

#### A. Summary of the Merger Guidelines' Approach

One alternative to Lavey's affected-buyers model is the market-delineation approach contained in the Merger Guidelines. The Guidelines major premise is "that mergers should not be permitted to create or enhance 'market power.' "<sup>39</sup> The Guidelines, therefore, define a market as a group of products and a geographic area in which it is sold such that a hypothetical, profit-maximizing firm, not subject to price regulation, that was the only present and future seller of those products in that area would impose a small but significant and nontransitory increase in price above prevailing or likely future levels.<sup>40</sup>

Thus, under the Guidelines, a market is a group of products and an area that could be subject to the exercise of market power.

In delineating markets, the Guidelines begin by identifying each product of each of the merging firms and each plant that produces it. Mar-

1982 Merger Guidelines, 2 Trade Reg. Rep. (CCH) ¶ 4502 n.6. The rephrasing of the Guidelines definition of market remedied some but not all the minor problems that existed in the 1982 Guidelines approach. See also Werden, supra note 1, at 542-45. The Guidelines' definition of a market and accompanying approach to market delineation flow directly from the Guidelines' premise "that mergers should not be permitted to create or enhance 'market power.'"

Lavey's premise is that consumers should be protected from exercises of market power, i.e., increases in price or decreases in quality. Lavey asserts that this premise implies that market delineation should focus on buyers. See, Lavey, Commentary: Focus of Antitrust Markets, 62 WASH. U.L.Q. 672 n.3 (1984). This assertion is incorrect. Consumers can be harmed by the exercise of market power if and only if firms possess market power, and conversely, (absent regulation) firms will exercise market power if and only if they possess it. Therefore, the premises of the Guidelines and of Lavey, in fact, are exactly the same. Because the Guidelines' focus on sellers in market delineation flows from the Guidelines' market power premise, a market power premise clearly does not imply that market delineation should focus on buyers.

A related point I have made elsewhere is that market shares generally will be better indicators of the degree of market power if they are calculated on the basis of where goods are produced rather than where goods are consumed. See Werden, supra note 1, at 521 n.27. Lavey quotes that passage completely out of context in an attempt to make it appear that I do not share his and others concern with exercises of market power. See Lavey, supra, at 672 n.3. In doing so, Lavey overlooks the essential fact that the purpose of market delineation almost invariably is to provide a basis for the calculation of meaningful market shares. In general, the most meaningful market shares are produced by focusing on sellers in market delineation and by measuring market shares at the point of production. This is why the Guidelines focus on sellers.

Lavey also asserts that the courts have required a focus on buyers in market delineation. See Lavey, supra, at 673-74. This too is mistaken. Various courts have held that markets should be delineated on the basis of demand factors, but such a holding does not imply that market delineation should focus on buyers. The Merger Guidelines concentrate on demand factors to a greater extent than Lavey and others do even though the Guidelines focus on sellers. Compare supra text following note 38 with infra text accompanying note 50.

<sup>39. 1984</sup> Merger Guidelines, § 1, 2 Trade Reg. Rep. (CCH) ¶ 4491; 1982 Merger Guidelines, 2 Trade Reg. Rep. (CCH) ¶ 4501.

<sup>40. 1984</sup> Merger Guidelines, § 2.0, 2 TRADE REG. REP. (CCH) ¶ 4492. The 1982 Merger Guidelines used a different but very similar definition:

<sup>[</sup>A] market consists of a group of products and an associated geographic area such that (in the absence of new entry) a hypothetical, unregulated firm that made all the sales of those products in that area could increase its profits through a small but significant and nontransitory increase in price (above prevailing or likely future levels).

kets are then delineated by applying the Guidelines' definition of a market to each identified product and plant. In each case, the process focuses on whether the only present and future seller of the identified product in the identified area would impose a "significant and nontransitory" increase in price in order to maximize profits. This question is answered by using the available evidence to judge the extent to which such a price increase would cause consumers to switch to other products or to the same product produced at other locations. The focus is on a product of one of the merging firms and the location of a plant in which it is produced, and the question is first posed for a very narrow group of products in a very small area. If the hypothetical, profit-maximizing monopolist would not significantly increase the price of the group of products in the area, then the group of products, the area, or both are expanded, and the question is posed again. At each expansion, the nextbest substitute product or location for the merging firm's product and location is added. The procedure continues until there is an affirmative answer to the question. This last posited group of products and geographic area constitutes a market.41

Generally, larger groups of products and areas also are markets under the Guidelines' definition, but the relevant market is taken to be the first (i.e., the smallest) group of products and area that satisfies the Guidelines' definition of a market.<sup>42</sup>

The starting point for market delineation under the Guidelines is a particular product produced by one of the merging firms and a plant that

<sup>41.</sup> See 1984 Merger Guidelines, §§ 2.1, 2.3, 2 TRADE REG. REP. (CCH) ¶¶ 4492.10, 4492.30; 1982 Merger Guidelines, 2 TRADE REG. REP. (CCH) ¶¶ 4502.1, 4502.3. For a more detailed explanation of the procedure, Werden, supra note 1, 524-70. Clearly, how a "significant and nontransitory" price increase is defined determines the extent of the market. See also id. at 555-58. According to the 1984 Merger Guidelines:

In attempting to determine objectively the effect of a "small but significant and nontransitory" increase in price, the Department in most contexts will use a price increase of five percent lasting one year. However, what constitutes a "small but significant and nontransitory" increase in price will depend on the nature of the industry, and at times the Department may use a price increase that is larger or smaller than five percent.

<sup>1984</sup> Merger Guidelines, § 2.11, 2 TRADE REG. REP. (CCH) ¶ 4491.101. The Justice Department elaborated in a footnote: "For example, a larger increase may be appropriate if the 'price' to be increased is a tariff or commission that constitutes a small fraction of the price of the product being transported or sold." *Id.* at n.7.

<sup>42.</sup> The 1984 Merger Guidelines state: "The Department generally will consider the relevant ... market to be the smallest group of products [and area] that satisfies this test." 1984 Merger Guidelines, §§ 2.11, 2 TRADE REG. REP. (CCH) ¶ 4492.101; see also id., § 2.3, ¶ 4492.30. For further explanation and possible exceptions, see Werden, supra note 1, at 531-34.

produces it. Thus, markets are delineated for each merging firm. A merger is horizontal if either firm is in a relevant market drawn around the other. A market delineated for either of the merging firms may form the basis of a challenge to the merger.

As outlined thus far, the Guidelines' approach assumes that no price discrimination is possible and that the exercise of market power would be through a uniform increase in factory-gate prices. However, if price discrimination is possible, market power can be exercised selectively against only the most vulnerable groups of consumers. Under these circumstances, the Guidelines' approach permits delineation of "additional, [more narrow] . . . markets consisting of particular uses of the product for which [and particular locations in which] a hypothetical monopolist [would] impose a 'small but significant and nontransitory' increase in price." Markets still are delineated by applying the Guidelines' definition of a market, but the possibility of price discrimination alters the analysis. Rather than postulating a uniform increase in factory-gate prices, the Guidelines' approach postulates a discriminatory increase applied only to particular customers.

# B. The Guidelines' Approach Does Not Suffer from the Problems of Lavey's Approach

While Lavey's affected-buyers model suffers from several problems,<sup>44</sup> the Guidelines' approach avoids all of them. Moreover, the Guidelines present an incisive conceptual approach and outline a procedure for implementing that approach. The only aspect of the Guidelines' test that is not fully specified is a definition of a "significant and nontransitory" price increase, and it probably is best to reserve this issue for a case-by-case determination.<sup>45</sup> The Guidelines' approach to market delineation is well designed for application to mergers. Under the Guidelines, markets are delineated independently for each product and location of the merging firms. A merger is horizontal if either firm is in a market drawn around the other. The Guidelines also analyze substitution possibilities at prevailing or likely future prices rather than at the competitive price.

More importantly, the Guidelines' approach carefully considers the critical linkage that Lavey's affected-buyers model appears to overlook.

<sup>43. 1984</sup> Merger Guidelines, §§ 2.13, 2 TRADE REG. REP. (CCH) ¶ 4492.103; see also 1982 Merger Guidelines, 2 TRADE REG. REP. (CCH) ¶ 4502.1, 4502.3.

<sup>44.</sup> See supra notes 15-38 and accompanying text.

<sup>45.</sup> See supra note 41.

The importance of this linkage is best demonstrated by reconsidering an example presented above. 46 In that example, buyers and sellers were uniformly and continuously distributed in a given area. Thus, if all sellers behaved competitively and priced their goods equally, then each buyer would buy from the seller located at the same geographic point. If any single seller raised its price by even the slightest amount, it would lose all of its customers to immediately adjoining sellers. Because only those immediately adjoining direct competitors would be included in Lavey's market, his "relevant market" would be arbitrarily small. The Guidelines, however, define the relevant market as a group of products and an area in which a hypothetical profit-maximizing monopolist would raise prices significantly. If transportation costs are low relative to the factory-gate price of the product, this will produce a very large market. For example, if the factory-gate price is ten thousand times the per mile transportation costs<sup>47</sup> and a "significant" price increase is defined as at least five percent, 48 then the relevant geographic market would have a radius of fifteen hundred miles—large enough to encompass virtually all of the contiguous United States.49

Finally, the Guidelines' approach to analyzing supply and demand substitution possibilities also avoids several pitfalls. Demand substitution is not assessed using a pairwise analysis. Rather than ask whether B, C, and so on are good substitutes for A, the Guidelines ask whether a hypothetical, profit-maximizing monopolist for A would significantly increase price. This question may be answered in the negative even though there is no particular product that is a good substitute for A. Thus, the Guidelines' approach does a better job at getting to the basic underlying inquiry of whether an exercise of market power is likely. In addition, the

<sup>46</sup> See supra text following note 35.

<sup>47</sup> This figure may seem terribly low, but it is roughly equal to the average transportation cost per mile for manufactured products. *See* F. SCHERER, A. BECKENSTEIN, E. KAUFER & R. MURPHY, THE ECONOMICS OF MULTI-PLANT OPERATIONS 429-33 (1975).

<sup>48.</sup> This price increase is consistent with that suggested by the Merger Guidelines. See supra note 41

<sup>49</sup> Recall that proportionate price increase in an area of any given radius is given by rt/3. See supra note 36. If we let t equal .0001 and the proportionate increase in price equal .05 (five percent), then we can solve for r:  $r = (.05 \times 3)/(.0001) = 1500$ .

One commentator argues that the Guidelines' approach suffers also from the problems of excluding indirect competitors. See Boyer, Is There a Principle for Defining Industries?: Reply, S. ECON. J. (forthcoming 1985). His rationale, appears to be that the Guidelines also adopt a pairwise assessment of demand substitutes. Boyer does not provide any support for his assertions, and this Article demonstrates that they are erroneous.

Guidelines define a market as a group of products and an area over which a hypothetical, profit-maximizing firm that was the *only present* and future seller would significantly increase price. Competition from new sellers, which may prevent the exercise of market power, is not considered in this definition. Thus, the Guidelines do not include products in the relevant market just because they are good supply substitutes. Rather, the share-measurement and the share-interpretation approaches are used to account for supply substitutability.<sup>50</sup>

# C. The Guidelines Do Not Suffer from the Problems Attributed to it by Lavey

Lavey argues that his approach is superior to that of the Merger Guidelines:

The essential distinction between the approach to market definition in the Justice Department guidelines and the affected-buyers model involves the starting point and direction of analysis. The Justice Department guidelines start on the level of the firm's product and shipment pattern, and ask whether a narrower baseline for identifying substitutes is indicated by possible price discrimination (i.e., segmentations). In contrast, the affected-buyers model starts on the level of what is demanded by a group of buyers and the locations of sellers to those buyers, and asks whether a broader baseline for identifying substitutes is indicated by possible linkages. In some cases, the distinction leads to different market definitions, with the affected-buyers model corresponding more closely to the competitive checks of the market

<sup>50.</sup> See 1984 Merger Guidelines, §§ 2.21, 3.3, 2 TRADE REG. REP. (CCH) ¶¶ 4492.201, 4493.30; 1982 Merger Guidelines, 2 TRADE REG. REP. (CCH) ¶ 4502.201.

An important distinction between the Merger Guidelines' approach and that of others including Lavey is that the Guidelines' approach separates market delineation from the measurement of market shares. This separation is most visible in the case of supply substitutability, but it extends much further. For example, issues such as whether market shares should be measured in terms of sales, shipments, production, capacity, or reserves and whether all sales, shipments, production, capacity, or reserve should be counted are considered in a separate step of the analysis. See 1984 Merger Guidelines, § 2.4, 2 Trade Reg. Rep. (CCH) ¶ 4492.40; 1982 Merger Guidelines, 2 Trade Reg. REP. (CCH) ¶ 4502.4. Lavey fails to consider this fact in reaching the erroneous conclusion that long-term coal contracts would present a problem for the Guidelines. See Lavey, supra note 40, at 674. In fact, the Guidelines' approach has been applied with great success to coal markets in which long-term contracts are used extensively, and that success is due in large part to the Guidelines' focus on sellers rather than buyers in delineating markets. See U.S. Department of Justice, Competition in the Coal Industry (December 1982) (delineating relevant markets for coal in the western U.S. on the basis of the location of coal deposits rather than coal consumers); U.S. Department of Justice, Competition in the Coal Industry (April 1983) (measuring market shares in coal markets of the western U.S. on the basis of uncommitted coal reserves).

place.51

To illustrate this point, Lavey applies the Guidelines to the facts of Spectrofuge Corp. v. Beckman Instruments, Inc. 52 Thus it is useful to consider how those facts are analyzed by Lavey and how they would be analyzed under the Guidelines' approach.

Beckman Instruments manufactured, sold, and serviced a wide variety of scientific instruments including liquid scintillation counters, amino acid analyzers, spectrophotometers, and ultracentrifuges.<sup>53</sup> Spectrofuge provided service for such instruments, and a very large portion of its total business came from servicing of Beckman's ultracentrifuges.<sup>54</sup> Spectrofuge alleged that Beckman monopolized a market consisting of the servicing of Beckman ultracentrifuges.<sup>55</sup> A Beckman witness testified that servicing its ultracentrifuges was not a distinct market because service itself was not a major source of income for instrument companies and "a good service department [was] essential to a healthy rate of sales."<sup>56</sup> While the court expressed considerable skepticism about Spectrofuge's alleged market, it appears that the court disposed of the case

<sup>51.</sup> Lavey, supra note 2, at 769. Exactly what Lavey means by this is unclear. However, it appears that he has been misled as to how the Guidelines' approach actually works. He refers to (essentially quotes) two portions of the 1982 Merger Guidelines that discuss "provisional markets." Compare Lavey, supra note 2, at 768-69 ("[The Guidelines] take the products of the merging firms and existing patterns of supply and demand as a beginning point." "[The Guidelines] . . . take the location of the merging firm as a beginning point and establish a provisional geographic market based on the shipment patterns of that firm and its closest competitors.") with 1982 Merger Guidelines, 2 TRADE REG. REP. (CCH) ¶¶ 4502.1, 4502.3 ("Taking the product at the merging firm as a starting point, the Department will establish a provisional product market. The Department will include in the provisional market those products that the merging firm's customers view as good substitutes at prevailing prices." "Taking the location of the merging firm (or each plant, for multiplant firms) as a beginning point, the Department will establish a provisional market based upon the shipment patterns of that firm and its closest competitors."). The reader may note, however, that the preceding discussion on the Guidelines' approach did not mention "provisional markets." "Provisional markets" appear to have been an undefined pedogogical tool used in the 1982 Guidelines to explain their market-delineation procedure, but really were never a part of that procedure. The 1982 Guidelines, however, were unclear on this point, and confusion has been the result. Cf. Harris & Jorde, Market Definition in the Merger Guidelines for Antitrust Enforcement, 71 CALIF. L. REV. 464, 479-81 (1983) (arguing that the Guidelines produce overly broad markets because of the way "provisional markets" are constructed). The 1984 Merger Guidelines eliminate the problem, deleting all references to "provisional markets." See 1984 Guidelines, §§ 2.1, 2.3, 2 TRADE REG. REP. (CCH) ¶¶ 4492.10, 4492.30.

<sup>52. 575</sup> F.2d 256 (5th Cir. 1978), cert. denied, 440 U.S. 939 (1979).

<sup>53.</sup> Id. at 258.

<sup>54.</sup> Id. at 259-60, 284.

<sup>55.</sup> Id. at 277.

<sup>56.</sup> Id. at 279.

primarily on other grounds.<sup>57</sup> Lavey's reading of the court's opinion is somewhat different:

The court in *Spectrofuge* found that Beckman faced vigorous competition for new buyers of its instruments and that current and future revenues from sales to new buyers were large relative to revenues from services to existing owners. The product market was defined to include the suppliers competing with Beckman for sales of the package of a new instrument and repair service. The court concluded that a supracompetitive price for the package would drive potential instrument buyers away from Beckman in a sufficient number to make the higher price unprofitable.<sup>58</sup>

Lavey argues that the court was correct in concluding that the relevant market included both the sale and the servicing of instruments.<sup>59</sup> He also applies the facts of *Spectrofuge* to hypothetical mergers and argues that the Merger Guidelines may produce the wrong result in these hypotheticals because of a "lack of guidance on how to define a firm's product":

If the analysis begins with the instruments as the product, the Justice Department guidelines would indicate that a proper product market is sales of all instruments which are demand or supply substitutes for Beckman's instruments. . . .

If the analysis begins with service as the product, the product market would be defined in terms of firms that provide or could provide service for Beckman's instruments, supposing that services for other machines are neither supply nor demand substitutes. . . .

Finally, if the analysis begins with packages of instruments and service as the product, the product market would include all instruments which are demand or supply substitutes for Beckman's instruments and all services for all of these instruments.<sup>60</sup>

Lavey, however, does not correctly apply the Guidelines to the facts of *Spectrofuge*.

First, the Guidelines do not take supply substitution possibilities into account in the delineation of markets. No good or service, therefore, is included in the relevant market because it is a good supply substitute for some other product. Lavey also errs in that, at the outset of the analysis, he places all instruments, or at least all Beckman instruments, in the relevant market. The Guidelines' approach never begins the analysis of a market with such a broad grouping. Rather, the Guidelines' approach

<sup>57.</sup> Id. at 277-86.

<sup>58.</sup> Lavey, supra note 2, at 754.

<sup>59.</sup> See id. at 753-54, 771.

<sup>60.</sup> Id. at 770-71.

begins with each product, narrowly defined.<sup>61</sup> Thus, an analysis of Spectrofuge under the Guidelines should begin with the sale of individual instruments and with the servicing of individual instruments. All of Lavey's three options employ overly broad groupings. Finally, Lavey fails to appreciate that the Guidelines delineate a relevant market for each product of each merging firm and that any of these relevant markets may form the basis of a challenge.<sup>62</sup> A merger is challenged if it does not pose a threat to competition in any relevant market.

In applying the Guidelines to merger hypotheticals incorporating the facts of Spectrofuge, each narrowly defined product of each merging firm should be considered. If a particular instrument produced and sold by Beckman is the starting point for delineating a market, the relevant market likely would consist of all similar instruments. While one kind of instrument is probably a poor substitute for another, one company's ultracentrifuge is probably a good substitute for any other company's ultracentrifuge. A hypothetical, profit-maximizing monopolist of Beckman ultracentrifuges probably would not raise prices significantly, but a monopolist of all ultracentrifuges probably would. If service of a particular instrument is the beginning point for delineating a market, the relevant market likely would consist of servicing of all similar instruments. An owner of a Beckman ultracentrifuge would find servicing of any spectrophotometer a poor substitute for the servicing of a Beckman ultracentrifuge. Under Lavey's interpretation of the evidence, however, the servicing of another ultracentrifuge is a good substitute; if the price of servicing Beckman ultracentrifuges were significantly increased, other brands would be purchased instead. Under alternative interpretations of the Spectrofuge facts, services and instruments still would not be in the same relevant market. Thus, the Guidelines do produce a different result than Lavey's affected-buyers model, which included both instruments and service in the relevant market.

Although the two results are different, they probably should have the same effect in the context of *Spectrofuge*. Under either analysis, a court would reject the market alleged by *Spectrofuge* and find that Beckman did not possess market power. The Guidelines' and Lavey's affected-

<sup>61</sup> The 1982 Merger Guidelines were not absolutely clear on this point, but should be interpreted as saying this. See also Werden, supra note 1, at 527 & n.50, 531. The 1984 Merger Guidelines eliminate all ambiguity by stating specifically that the product must be "narrowly defined." See 1984 Guidelines, § 2.11, 2 Trade Reg. Rep. (CCH) ¶ 4492.101.

<sup>62.</sup> See Lavey, supra note 2, at 771 n.76.

buyers model, however, will produce drastically different results in other cases. Assume that there is only one producer and seller of ultracentrifuges, that service for ultracentrifuges is supplied by a single, independent firm, and that these two firms propose to merge. Lavey would apparently oppose the merger on the grounds that the only two competitors in the "market for selling or servicing ultracentrifuges" were becoming one. Under the Guidelines, however, the merger would not be considered horizontal, and the firms probably would be allowed to merge. The Guidelines' result is much more appealing. The two merging firms are not competitors because each firm's product is not a substitute for the other's product. Rather, their products are "complements" and, therefore, the merger is vertical integration. Viewed in this light, there probably is no good reason to challenge it. Thus, the Guidelines' method of not putting complements in the same market probably is more desirable than Lavey's result of placing them in the same market.

#### III. CONCLUSION

Warren Lavey's affected-buyers model suffers from a number of significant shortcomings as a tool for antitrust analysis. Lavey's approach is not fully specified, and it is particularly unclear in its application to merger cases. Lavey focuses on "affected buyers" to explore linkages among buyers that limit the exercise of market power, yet he overlooks one critical linkage, ignoring the important influence of indirect competitors, and resulting in an overly narrow delineation of markets in many cases. Finally, the convention he adopts of including in the market good demand or supply substitutes is inappropriate.

The Merger Guidelines promulgated by the U.S. Department of Justice present a more clearly defined conceptual approach to market delineation that is particularly well suited to merger cases. While the

<sup>63.</sup> Two products are complements if, roughly speaking, an increase in the price of one would cause a decrease in the demand for the other. Often cited examples are bread and butter, or coffee and sugar. If two products are substitutes, then roughly speaking, an increase in the price of one will cause an increase in the demand for the other.

<sup>64.</sup> There may be valid reasons for challenging vertical mergers. The Merger Guidelines offer several. See 1984 Merger Guidelines, § 4.2, 2 TRADE REG. REP. (CCH) ¶ 4494.20. In this case, however, there is a strong reason to allow the merger. The situation is like a "subsequent monopoly" in which one monopolist sells to another, while the second monopolist has no market power in buying the product. In the case of "subsequent monopoly," merging the two monopolists causes price to fall. See, e.g., F. SCHERER, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 300-02 (2d ed. 1980).

Guidelines' approach does not focus on "affected buyers" as Lavey advocates, it does consider the critical linkages among buyers. The Guidelines also adopt a preferable treatment of supply substitutability. Finally, the Guidelines do not place products in the same relevant market on the grounds that they are good complements as Lavey appears to advocate. The problems with the Merger Guidelines that Lavey alleges do not actually exist, rather Lavey's criticisms stem from misunderstandings about the Guidelines' approach to market delineation. These misunderstandings were at least partially caused by the Guidelines themselves, and it is hoped that this Article will help to clarify the Guidelines' approach.<sup>65</sup>

<sup>65.</sup> Revisions in the Guidelines themselves have substantially clarified several of the most misunderstood portions of the Guidelines. See supra notes 5, 51 & 61.

