Market Definition in Monopolization Cases: A Paradigm Is Missing

Lawrence J. White Stern School of Business New York University lwhite@stern.nyu.edu

Draft: 3/31/05

Please do not cite or quote without the permission of the author

To be published in <u>Issues in Competition Law and Policy</u> Wayne D. Collins, ed.

Abstract

The question of market definition for monopolization cases -- and thus the issue of the possession of market power by the defendant -- is crucial for the outcome of these cases. However, unlike antitrust merger analysis, where the DOJ-FTC *Horizontal Merger Guidelines* has provided a successful paradigm for market definition, monopolization cases lack a guiding market definition paradigm. This chapter addresses this issue, shows the problems that arise when a market definition paradigm is absent, and offers some partial remedies. The best remedy, though, would be the development of a suitable market definition paradigm for these cases.

JEL Classification Numbers: K21, L12, L41

Keywords: antitrust; monopolization; market definition

Market Definition in Monopolization Cases: A Paradigm Is Missing

Lawrence J. White Stern School of Business New York University lwhite@stern.nyu.edu

I. Introduction¹

A major issue in antitrust monopolization cases (e.g., involving claims of anticompetitive restrictive practices or predatory behavior) is frequently that of market definition (or delineation). The plaintiff will claim that the relevant market is relatively narrow and thus that the defendant had a large market share and was able to exercise market power; the defendant will claim that the relevant market is relatively broad and thus that the defendant had a small market share and could not possibly have exercised market power.

Unfortunately, there is no standard paradigm to which both sides can refer in their efforts to define the boundaries of the market. This stands in sharp contrast to the situation with respect to merger analysis for antitrust purposes. In that arena the market definition paradigm that was embedded in the *Merger Guidelines* developed by the U.S. Department of Justice (DOJ) in 1982²

¹ This chapter draws heavily on Philip B. Nelson & Lawrence J. White, *Market Definition and the Identification of Market Power in Monopolization Cases: A Critique and a Proposal*, Stern School of Business, New York University, Department of Economics Working Paper EC-03-26, November 2003. The problem has been previously recognized, albeit more briefly, in Thomas G. Krattenmaker, Robert H. Lande, & Steven Salop, *Monopoly Power and Market Power in Antitrust Law*, 76 GEO L. REV. 241 (1987); Lawrence J. White, *Wanted: A New Market Definition Paradigm for Monopolization Cases*, COMP. IND (1999); Lawrence J. White, *Present at the Beginning of a New Era for Antitrust: Reflections on 1982-1983*, 16 REV. IND. ORGANIZATION 131 (2000); Lawrence J. White, *An Appraisal of Antitrust Policy during the Clinton Administration*, in Robert W. Hahn, ed., HIGH-STAKES ANTITRUST: THE LAST HURRAH? 11 (2003).

² These Guidelines are now officially called the DOJ-FTC Horizontal Merger Guidelines. They

has been widely accepted by plaintiffs, defendants, and the courts -- in the U.S. and abroad -- as the appropriate basis for merger analysis.

Indeed, the success of that paradigm has sometimes caused parties in a monopolization case to try to use it in their case. Only in special circumstances, however, is the application of the *Merger Guidelines* market definition paradigm appropriate for monopolization cases; instead, its misapplication is likely to lead to the perception that the defendant has no market power, even in instances where it truly does have market power.

The absence of a guiding paradigm for market definition in monopolization cases means that outcomes are likely to be erratic. Though there are some partial remedies that can be offered to deal with this problem, the best remedy would be the development of a widely accepted paradigm.

This chapter will expand on these ideas.

were most recently revised in 1997 and can be found at http://www.usdoj.gov/atr/public/guidelines/hmg.htm.

II. The Simple Monopoly Model and the Market Definition Problem

The simple monopoly model (and its comparison with the model of competition) is a standard part of any introductory microeconomics course -- and explicitly or implicitly underlies modern antitrust concerns about the presence and/or exercise of market power. We will reproduce it here, so as to provide a concrete illustration of the phenomenon and also to show where the market definition problems arise.

In Figure 1 we portray a simple downward-sloping linear market demand curve and a simple horizontal linear unit cost (average cost, or AC) curve.³ If a large number of sellers have these same costs,⁴ then the competitive outcome will be a price of $P_C=MC$ (=AVC=AC), and an aggregate market quantity of Q_C . If instead a single firm (monopoly) faced the same demand and cost conditions (and entry were blockaded), then that monopolist's price⁵ would be higher, at P_M , and the monopolist's quantity would be lower, at Q_M .⁶ The monopolist will also earn above-normal profits (represented by the rectangle P_MyzP_C). This profit rectangle will represent a transfer (of consumers' surplus) from buyers to the monopolist. The social loss from monopoly will be the "deadweight loss triangle" yxz, representing the lost value to buyers of the purchases that they would have made at the

³ If the AC curve is horizontal, then AC, average variable cost (AVC), and marginal cost (MC) are all identical. Also, AC is defined to include a normal profit on invested capital.

⁴ As standard texts demonstrate, the linear horizontal line of AVC=AC=MC could arise from a large number of identical sellers that each have a U-shaped AC curve, the bottom of which is at the level of the AC=AVC=MC line in Figure 1, combined with easy entry and exit.

⁵ This assumes that the monopolist is not able to practice price discrimination and thus can charge only a single price to all its customers.

⁶ The monopolist maximizes its profits at that price and quantity. This is the quantity at which marginal revenue (MR) is the same as (equals) MC. This maximizing outcome can also be represented as the solution to $P_M=MC/(1+1/E)$, where P_M in the monopolist's profit-maximizing price and E is the price elasticity of demand at that price.

competitive price P_C but do not make at the monopoly price P_M .

There is an immediate implication, which cannot be too heavily stressed: The essence of the pricing difference between competition and monopoly is that the monopolist is able to *maintain* a higher price (and earn higher profits/rents) than can the competitive industry. Thus, the monopolist's market power is manifested through its *maintaining* a higher price, not in "raising" the price. The price P_M is the maximizing price for the monopolist; *the profit-maximizing monopolist would not want to raise its price any higher than that level* (unless other conditions changed), because it would lose too many sales -- as some potential buyers choose instead to buy other things from other sellers -- relative to the higher margins that could be gained.⁷

This concept of the monopolist's being constrained by the loss of sales, as buyers switch to other sellers, can be made more explicit by considering the model of a "dominant firm" -- which is dominant because of a superior production cost technology -- that must also face a "fringe" of smaller reactive firms that produce the identical item but with an inferior cost technology.⁸ This model is portrayed in Figure 2. The linear demand curve D is again the market demand for the item, and the horizontal unit cost curve again represents the dominant firm's production cost technology. The new element is the supply curve S_{FR} of the reactive fringe of smaller firms. If the dominant firm cannot hope to eliminate permanently this fringe through pricing below their costs, then the dominant firm must tolerate their presence. In essence, their supply curve must be subtracted from the market demand curve to reveal the "residual" demand D_{RES} that is effectively available to the

⁷ The concept of a monopolist's "raising" its price makes sense only in the context of being able to observe the process whereby *a previously competitive industry is transformed into a monopoly*, and the newly established monopolist would then want to raise its price from the competitive level P_C to the monopoly level P_M .

⁸ This model can originally be found in George J. Stigler, *The Dominant Firm and the Inverted Price Umbrella*, 8 J. L. ECON. 167 (1965). This same general approach would hold if the dominant firm's dominance instead rested on a superior brand reputation (as compared to the brand reputations of the smaller firms).

dominant firm at each price. The dominant firm can then maximize against that residual demand curve, finding the quantity at which MR_{RES} (of the residual demand curve) equals the dominant firm's MC. In this more explicit model, the dominant firm does exercise market power -- the price P_{DOM} is *maintained* above the level that would prevail if the industry were wholly competitive (i.e., if many firms could replicate the dominant firm's production cost technology) -- but it is constrained by the market demand curve generally (at higher prices, buyers in the market switch to other things) and by its residual demand curve specifically (at higher prices the fringe firms are willing to supply more and replace more of the dominant firm's sales).

Virtually all trained economists understand and would agree with this presentation. Nevertheless, the language of a monopolist's being able to "raise" its price often enters economists' informal descriptions of monopoly and market power.⁹ Further, since 1982 the *Merger Guidelines* have provided a successful market definition paradigm of a "hypothetical monopolist" that (as compared to existing market conditions) could impose a "small but significant nontransitory increase in price" (SSNIP). This successful paradigm may well have reinforced the loose use of the "raise price" language. However, the *Merger Guidelines* market definition paradigm is sensibly used only in the context of a *forward-looking* question: "Will this merger permit the creation or enhancement of market power?" The hypothetical monopolist paradigm (and the SSNIP) then can be used to identify a product or group of products (sold by a group of sellers) that could potentially be monopolized (and the remainder of the *Guidelines*' analytical steps tries to ascertain whether, in the context of that market, the merger at hand would likely allow the creation or enhancement of the potentially available market power).¹⁰ This paradigm is thus consistent with sense of footnote 7

⁹ Again, as was noted in footnote 7 *infra*, the concept of the monopolist's "raising price" is valid in the context of the transformation of a competitive industry into a monopoly.

¹⁰ For a recent collection of assessments of the applications of the *Merger Guidelines*, see Jonathan B. Baker, *Responding to Developments in Economics and the Courts: Entry in the Merger Guidelines*, accessible at http://www.usdoj.gov/atr/hmerger/11252.htm; William J. Kolasky &

infra that a significant transformation of a group of sellers (creating the hypothetical monopolist) could lead to a significant price increase.

Unfortunately, regardless of the source, the "monopolist's power to raise price" language has at times crept into some economists' discussions of monopoly power in legal contexts. Consider the following:

"It is the ability of a firm to raise prices or market inferior products while excluding competition that constitutes monopoly power."¹¹

"Monopoly power is by definition the ability to control (that is to raise) prices *without* inducing entry and expansion."¹²

"... substantial evidence was introduced at trial that [original equipment manufacturers of personal computers] would not shift to another operating system, even if the price of Windows rose significantly."¹³

"Economists usually define market power as the power to raise price above competitive levels."¹⁴

Andrew R. Dick, *The Merger Guidelines and the Integration of Efficiencies into Antitrust Review of Horizontal Mergers*, accessible at http://www.usdoj.gov/atr/hmerger/11254.htm; David Scheffman, Malcolm Coate, & Louis Silva, 20 Years of Merger Guidelines Enforcement at the FTC: An Economic Perspective, accessible at http://www.usdoj.gov/atr/hmerger/11255.htm; Gregory J. Werden, *The 1982 Merger Guidelines and the Ascent of the Hypothetical Monopolist Paradigm*, accessible at http://www.usdoj.gov/atr/hmerger/11256.htm; Oliver E. Williamson, *The Merger Guidelines of the U.S. Department of Justice -- In Perspective*, accessible at http://www.usdoj.gov/atr/hmerger/11254.htm.

¹¹ Franklin M. Fisher, John J. McGowan, & Joen E. Greenwood, FOLDED, SPINDLED, AND MUTILATED: ECONOMIC ANALYSIS AND <u>U.S. V. IBM</u> 99 (1983).

¹² Id., 165.

¹³ Franklin M. Fisher & Daniel L. Rubinfeld, <u>U.S. v. Microsoft</u>: An Economic Analysis, in David S. Evans et al., DID MICROSOFT HARM CONSUMERS? TWO OPPOSING VIEWS 13 (2000).

¹⁴ David S. Evans & Richard L. Schmalensee, *Be Nice to Your Rivals: How the Government is Selling an Antitrust Case without Consumer Harm in <u>United States v. Microsoft</u>, in Evans et al., DID MICROSOFT HARM CONSUMERS? TWO OPPOSING VIEWS 65 (2000).*

This "raising price" language has also found its way into legal decisions in monopolization cases:

"Market power is usually stated to be the ability of a single seller to raise price and restrict output..."¹⁵

"Market power comes from the ability to cut back the market's total output and so raise price."¹⁶

"...a firm is a monopolist if it can profitably raise prices substantially above the competitive level." 17

The real danger from this muddying language of "raising price" arises if then the ability profitably to "raise price" from *currently observed* prices is used as the test of whether a defendant in a monopolization case has market power. As the discussion above indicates, all firms -- regardless of whether they are competitive or are true monopolists -- will be found to be unable to raise price profitably from currently observed levels, since they will already have established a profitmaximizing price for themselves; and thus this "test" will fail to separate the true monopolist that does exercise market power from the firm that does not have market power.¹⁸ Similarly, if the test is phrased as, "Does this firm face competition (at the margin) at its current price?", again the true monopolist as well as competitors would answer "yes", and again the test would fail to distinguish

¹⁷ <u>U.S. v. Microsoft Corp.</u>, 253 F.3d 34, 22 (2001).

¹⁸ This is what happened in the "cellophane" case, <u>U.S. v. E.I. du Pont de Nemours & Co.</u>, 351 U.S. 377 (1956). The district court and the Supreme Court majority employed the test of "can du Pont raise its price profitably for cellophane?" and, finding that du Pont would lose too many customers if it tried to do so, decided that du Pont did not have market power and that the relevant market therefore had to be the broader "flexible wrapping materials" market (as du Pont had argued) and not the narrower "cellophane" market (as the DOJ had argued).

¹⁵ Fortner Enterprises, Inc. v. United States Steel Corp., 394 U.S. 495, 503 (1969).

¹⁶ Ball Memorial Hospital, Inc. v. Mutual Hospital Insurance, Inc., 784 F.2d 1325, 1335 (1986).

between the two. Some of this competition at the margin might involve small-scale entry, so even the presence of entry may not provide a useful separating criterion.

What other tests might be possible? First, if the competitive price were known, then that price might be used as a benchmark for judging whether an alleged monopolist is exercising market power. In some instances, cross-section data on prices (e.g., the prices for a specific good or service in different metropolitan areas) and on corresponding structural characteristics (e.g., seller concentration in those metropolitan areas) may permit the inference (e.g., through statistical/econometric techniques) that there are separate markets for that item. Further, these data may allow the identification of markets that appear structurally to be competitive and then permit a comparison of the alleged monopolist's price with the competitive benchmark price. These types of comparisons may be possible in cases involving retail services, where local geographic areas do appear to be the relevant markets, or transportation, where city-pair routes appear to be the relevant markets, so that cross-sectional comparisons can be employed. These comparisons may also be possible for some goods that have high weight-to-value ratios (e.g., cement, concrete, many raw materials); in such instances, transportation costs loom large in the good's final price, which discourages their long-range transport, and relevant markets tend to be local. Also, if sufficient time series data on prices and other relevant information are available for a good or service, and structural changes have occurred over time, again a competitive benchmark may possibly be identified for comparison purposes.

Unfortunately, in many monopolization cases such cross-section and/or time series data are not available, so that the identification of the competitive benchmark becomes problematic.

Second, profit data might be employed. Recall that one of the distinguishing characteristics of the monopoly outcome in Figure 1 is the higher (above "normal") profits that are earned by the monopolist. Through the 1970s, profit data were a standard part of the plaintiff's efforts to show that the defendant possessed market power (and, implicitly, that the relevant market was relatively

narrow).¹⁹ Indeed, one could argue that the examination of profit rates was *the paradigm* used for the determination of market power (and thus, implicitly, for market definition) prior to the 1980s. The evidence of profits that were persistently above "normal" or "competitive" levels was used as an important indicator of the presence of market power.

Since the late 1970s, however, the substantial doubts that have been cast on the use of corporate accounting data,²⁰ combined with inherent issues of cost allocation and profitability in multi-product firms, have caused profit data to recede in importance as a means of identifying the presence of market power.

Third, the sensitivity of the defendant's price to changes in the prices of other sellers might

²⁰ Two key articles that criticized the use of accounting data are: George J. Benston, Accounting Numbers and Economic Values, 27 ANTITRUST BULL. 161 (1982); and Franklin M. Fisher & John J. McGowan, On the Misuse of Accounting Rates of Return to Infer Monopoly Profits, 73 AMER. ECON. REV. 82 (1983). For example, Fisher and McGowan wrote: "there is no way in which one can look at accounting rates of return and infer anything about relative economic profitability or, a fortiori, about the presence or absence of monopoly profits." Nonetheless, others have responded, arguing that there is "substantial evidence that accounting profits do, on average, vield important insights into economic performance." William F. Long & David J. Ravenscraft, The Usefulness of Accounting Profit Data: A Comment on Fisher and McGowan, 74 AM. ECON. REV. 494 (1984). For others who are also less critical of the use of accounting data see: Stephen Martin, The Misuse of Accounting Rates of Return: Comment, 74 AM. ECON. REV. 501 (1984); John A. Kay & Colin P. Mayer, On Applications of Accounting Rates of Return, 96 ECON. J. 199 (1986); F.M. Scherer, The Validity of Studies with Line of Business Data: Comment, 77 AM. ECON. REV. 205 (1987). It is worth noting that as early as 1941, Joe Bain pointed out similar problems: "The unadjusted accounting rate of profit, as computed by the usual methods from balance sheets and income statements, is prima facie an absolutely unreliable indicator of the presence or absence either of monopoly power or excess profits in the sense defined." Joe S. Bain, The Profit Rate as a Measure of Monopoly Power, 55 Q. J. ECON. 291 (1941).

¹⁹ In the <u>Cellophane</u> case, the Supreme Court minority, echoing an article by Stocking and Mueller that commented on the district court's opinion, pointed out that du Pont's profits were far higher in cellophane than in rayon, despite the fact that its market shares in rayon (less than 20%) and in du Pont's claimed "flexible wrapping materials" market (17.9%) were about the same. *See* 351 U.S. 377, 414 (1956); and George W. Stocking & Willard F. Mueller, *The Cellophane Case and the New Competition*, 45 AM. ECON. REV. 29 (1955).

be considered. But the demand for a monopolist's product should be expected to be sensitive (at the margin) to the prices of sellers of some substitutes (the "dominant firm" model makes this point clearly), and thus the monopolist's price should be expected to vary as well. This is yet another test ("Does the seller's prices respond to changes in prices by other sellers?") to which the monopolist as well as competitors could be expected to answer "yes" and thus would not serve as a means for identifying firms with market power.²¹

Fourth, the elasticity of the defendant's demand curve might appear to offer useful information. After all, a perfect competitor that sells a commodity (e.g., the introductory textbook's archetypical "wheat farmer") faces an infinitely (perfectly) elastic demand curve, whereby the slightest unilateral change in price would trigger either the complete loss of sales (in response to an upward price movement by the firm) or the complete migration of buyers in the market to that seller (in response to a downward price movement). By contrast, a monopolist's elasticity of demand should be finite, greater than one (in absolute value), and satisfy the condition described in footnote 6 *supra*.

However, as Chamberlin²² and Robinson²³ separately realized 7-8 decades ago, if there are distinctive firms that are not selling commodities (so that they cannot be characterized as the perfect competitor of the "wheat farmer" variety), then each firm will face a downward-sloping demand curve; i.e., at a lower price the firm will sell more, and at a higher price the firm will sell less (but not the "all or none" phenomenon of the perfectly competitive firm). Such distinctiveness may be based

²¹ Nevertheless, in <u>Cellophane</u>, the Supreme Court minority, echoing Stocking and Mueller, argued that du Pont's prices for cellophane were invariant to changes in the prices of other "flexible wrapping materials". *See* 351 U.S. 377, 414 (1956).

²² Edward H. Chamberlin, THE THEORY OF MONOPOLISTIC COMPETITION, 1st edn. (1933). The concept was initially presented in Chamberlin's Ph.D. dissertation, which was submitted in 1927.

²³ Joan Robinson, THE ECONOMICS OF IMPERFECT COMPETITION (1933).

on the brand-name reputation of the seller or simply on location (in a context where transportation costs matter). The equilibrium outcome for each firm will be at an output for that firm where P>MR=MC, which is conceptually similar to that of the monopolist portrayed in Figure 1, and the elasticity of demand for the firm will satisfy the condition described in footnote 6 *infra*. However, if entry by similar (though not identical) such firms is easy, the long-run equilibrium outcome will involve such firms' earning only "normal" profits. This long-run equilibrium is portrayed in Figure 3. In that diagram, the Chamberlin-Robinson (C-R) firm is in equilibrium at the price P_{C-R} and output Q_{C-R} , where P>MR=MC but also where (because of entry) the firm's demand curve is tangent to its average cost (AC) curve and thus P=AC.²⁴

Though the development of the Chamberlin-Robinson model subsequently led to a controversy concerning the allocative efficiency of C-R firms,²⁵ that controversy did not involve the exercise of market power in a meaningful sense. Thus, a firm that can be identified as a C-R firm of Figure 3 should not raise the antitrust concerns that arise from the actions of the monopolist of Figure 1 or the dominant firm of Figure 2, even though the C-R firm's elasticity of demand is less than the infinite elasticity of the perfect competitor and satisfies the condition specified in footnote 6 *infra*.

Thus, we are left with the fundamental dilemma of determining the boundaries of the relevant market in a monopolization case and whether the defendant possesses market power.

²⁴ Again, it should be emphasized that average costs include the opportunity costs of invested capital, so that the P=AC outcome means that the firm is earning a "normal" return on its investment.

²⁵ See A. Michael Spence, Product Selection, Fixed Costs, and Monopolistic Competition, 43 REV. ECON. STUD. 217 (1976); and Avinash K. Dixit & Joseph E. Stiglitz, Monopolistic Competition and Optimum Product Diversity, 67 AM. ECON. REV. 797 (1977).

III. What Is to Be Done?

The preceding section described the simple monopoly model and illustrated the difficulties -especially when profit data cannot be readily employed and adequate cross-section or time series data on prices and corresponding structural characteristics are not available -- of defining the relevant market for an observed firm and thus of determining whether an observed firm is exercising market power or is just another C-R firm. Again, the *Cellophane* case brings out the issue starkly: Was the relevant market "cellophane," as the DOJ argued, and did du Pont therefore possess market power? Or was the relevant market "flexible wrapping materials," as du Pont argued, and was du Pont therefore just another C-R firm in this wider market? What is clear from that case is that the district court and the Supreme Court majority, in addressing this issue, asked the wrong question by focusing on whether du Pont was restrained from raising its *observed* cellophane prices for fear of losing too many customers to sellers of other flexible wrapping materials.

The fundamental problem here is the absence of a paradigm for market definition in monopolization cases -- the absence of something comparable to the *Merger Guidelines* paradigm for market definition that has proved extremely functional for antitrust merger analysis.

There are, however, a few potential tools that are currently available and that can and should be used in monopolization cases. First, there must be some *de jure* or *de facto* lower limit on a defendant's size and importance -- some *de minimis* standard -- that can be used to exclude cases that would involve defendants that are likely to be truly C-R firms. Antitrust enforcement should not care if Joe (the owner of Joe's Unique Coffee Shop) insists that his manager Nora signs a "noncompete" clause when she decides to leave and start her own eatery; nor should antitrust care if Joe insists that his customers order coffee with their donuts (so that donuts and coffee are tied or bundled together) or if he insists on buying his cheesecake exclusively from a single supplier and refuses to deal with any other supplier or (when his "home-baked" carrot cake becomes so popular that local grocery stores want to sell it) if he decides to sell exclusively through only a single grocery chain and refuses to deal with the others.

Second, as was discussed in the previous section, where cross-section and/or time series data allow the inference of local markets and a competitive benchmark, this information can and should be used to ascertain the relevant market(s) and the likely market power of the defendant.

Third, careful examination and analysis of profit data may allow its use in some circumstances.²⁶

Fourth, where the monopolization practice in question is a *prospective* action and thus where the plaintiff is asking for an injunction to prevent this prospective action, the *Merger Guidelines* paradigm for market definition can be effectively employed.²⁷ This is possible because, in this type of situation, the question to be asked is, "Will this action permit or enhance the exercise of market power?", which is the exact analog to the *Guidelines*' question "Will this merger permit or enhance the exercise of market power?" The *Guidelines*' hypothetical monopolist paradigm and SSNIP test can be used to define the relevant market, and then the specific prospective practice can be examined in the context of that market to determine whether it will permit or enhance the exercise of market power.

Fifth, Nelson and White²⁸ suggest that, for cases where the plaintiff alleges that the defendant's actions were exclusionary, the question of market definition can be largely shunted aside and the focus instead should be on the price effects of the alleged exclusion; i.e., if the plaintiff had

 $^{^{26}}$ Or, as arguably occurred in the <u>Microsoft</u> case, the defendant's consistently large accounting profits may override any hesitations concerning the acceptability of accounting data in helping ascertain that the defendant has market power. <u>U.S. v. Microsoft</u>, 253 F.3d 34 (2001).

²⁷ This point is made by Gregory J. Werden, *Market Delineation under the Merger Guidelines: Monopoly Cases and Alternative Approaches*, 16 REV. IND. ORG.. 211 (2000).

²⁸ See Nelson & White, footnote 1 supra.

not been foreclosed by the defendant's actions, would the consequence have been a small but significant non-transitory *decrease* in the price (SSNDP) charged by the defendant? This test requires considerable care and qualification, including a two-step construction of the "but for" counter-factual: (a) What would the plaintiff's sales have been in the absence of the defendant's exclusionary action? and (b) What would have been the consequences have been for the defendant's price? Still, it provides a means of addressing the issues that continue to bedevil monopolization cases.

IV. Conclusion

The suggestions provided in the previous section should certainly help in many monopolization litigation contexts. Still, the absence of a generally accepted market definition paradigm stands as a genuine problem for monopolization cases. In a real sense, for market definition purposes, monopolization cases today stand where antitrust merger cases stood prior to 1982: There was (is) no generally accepted paradigm for market definition, and *ad hoc* methods of market definition were (are) likely to lead to erratic outcomes.

The parties involved in monopolization cases -- plaintiffs, defendants, and judges -- deserve better. A generally accepted paradigm for market definition is sorely needed.

Figure 1: A Comparison of Monopoly and Competition







Figure 3: The "Tangency" Equilibrium for a Chamberlin-Robinson Competitor

