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MARKETS IN MERGER ANALYSIS

By Herbert Hovenkamp*

Antitrust merger policy suffers from a disconnect between its articulated concerns and the methodologies it employs. The Supreme Court has largely abandoned the field of horizontal merger analysis, leaving us with ancient decisions that have never been overruled but whose fundamental approach has been ignored or discredited. Only within the last generation has econometrics developed useful techniques for estimating the price impact of specific mergers in differentiated markets. Although the Supreme Court's *Brown Shoe* decision required a market definition, the Court was not thinking of a relevant market as a grouping of sales capable of being monopolized or cartelized. The perceived injury in *Brown Shoe* was not collusion, but rather that the postmerger firm would acquire a competitive advantage over its competitors. Indeed, *Brown Shoe* was a "unilateral effects" case in the sense that its concern was with the likelihood that the postmerger firm would be able to undersell other firms within the same market.

I. MERGER POLICY, STRUCTURALISM, AND THE LEGACY OF *BROWN SHOE*

The policy articulated in the 2010 Horizontal Merger Guidelines (the 2010 Guidelines) is that

mergers should not be permitted to create, enhance, or entrench market power or to facilitate its exercise. For simplicity of exposition, these Guidelines generally refer to all of these effects as enhancing market power. A merger enhances market power if it is likely to encourage one or more firms to raise price, reduce output, diminish innovation, or otherwise harm customers as a result of diminished competitive constraints or incentives.¹

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AUTHOR'S NOTE: The position offered here differs in some respects from ones I have taken in the *Antitrust Law* treatise. Although the treatise recognizes that alternatives to market definition can be superior when satisfactory data are available, and that traditional market definition approaches are never particularly accurate and often unhelpful, particularly when products are differentiated, it is nevertheless a book written for lawyers and reflects as best it can the ruling case law, in which the need for market definition dominates. This is particularly true of rule of reason and merger analysis. See 2B PHILLIP E. AREEDA & HERBERT HOVENKAMP, *ANTITRUST LAW* ¶¶ 515, 521 (3d ed. 2007). See also Louis Kaplow, *Why (Ever) Define Markets?*, 124 HARV. L. REV. 437, 479 n.80 (2010). But see Malcolm B. Coate & Joseph J. Simons, *In Defense of Market Definition* (Working Paper, Feb. 15, 2012), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1967208 (market definition is inherent in the process and even direct measures must assume a benchmark measured by identifying the firms to which customers can realistically substitute).

¹ U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES §1 (2010), available at <http://www.justice.gov/atr/public/guidelines/hmg-2010.html> [hereinafter 2010

This language is certainly consistent with the “may . . . substantially lessen competition” of section 7 of the Clayton Act.² The statute does not speak about altering market structures, raising prices, reducing output, facilitating exclusionary practices, restraining innovation, or any other specific conception of reducing competition. It plausibly encompasses all. The phrase “otherwise harm customers” in the 2010 Guidelines suggests a dominant concern for consumers. This suggests that merger policy should be focused on high prices and at least occasionally on mergers that restrain innovation.³

Modern American merger policy has evolved out of an era that was guided by two principles. Both are at odds with the most fundamental principles of antitrust policy today. The first principle, highly influential in the economic literature of the 1960s, was structuralism, which found a close link between economic performance and market structure. Under this view, controlling anticompetitive behavior was all about controlling market structure so as to eliminate either monopoly or oligopoly.⁴ The second principle, popular in the legal literature and political dialogue of the same period, was that merger policy must protect smaller rivals from larger firms, even at consumers’ expense. Antitrust policy has for the most part abjured both of these positions. The successive editions of the Merger Guidelines have clearly rejected the second and increasingly distanced themselves from the first.⁵ Nevertheless, our analytic tools have not entirely kept up, and a reader can detect significant differences of opinion even within the Agencies.

The market definition requirement in merger cases has evolved within this history.⁶ The modern conceptions of product and geographic market definition were formulated in mid-twentieth century decisions such as *Alcoa*,⁷ *Columbia Steel*,⁸ *du Pont*,⁹ *Brown Shoe*,¹⁰

GUIDELINES]. These Guidelines are issued jointly by the Department of Justice’s Antitrust Division and the Federal Trade Commission. The word “Agencies” herein describes both.
² 15 U.S.C. § 18 (2012).

³ On the 2010 Guidelines’ treatment of mergers that may restraint innovation, see Herbert Hovenkamp, *Harm to Competition under the 2010 Horizontal Merger Guidelines*, 39 REV. INDUS. ORG. 3 (2011). On innovation restraints, see CHRISTINA BOHANNAN & HERBERT HOVENKAMP, CREATION WITHOUT RESTRAINT: PROMOTING LIBERTY AND RIVALRY IN INNOVATION, ch. 9 (2012).

⁴ See Herbert Hovenkamp, *United States Competition Policy in Crisis: 1890–1955*, 94 MINN. L. REV. 311 (2009); Herbert Hovenkamp, *Introduction to the Neal Report and the Crisis in Antitrust*, 5 COMPETITION POL’Y INT’L 219, 219–22 (2009).

⁵ The Justice Department and later the Justice Department and Federal Trade Commission jointly issued Merger Guidelines in 1968, 1982 (revised in 1984), 1992 (revised in 1997), and 2010. All can be found at <http://www.justice.gov/atr/public/guidelines/significant-guidance.html>.

⁶ On the governing case law, including all Supreme Court and lower court decisions, see 2B PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶¶ 530–566 (3d ed. 2007).

⁷ *United States v. Aluminum Co. of Am.*, 148 F.2d 416 (2d Cir. 1945).

⁸ *United States v. Columbia Steel Co.*, 334 U.S. 495 (1948).

⁹ *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377 (1956).

¹⁰ *Brown Shoe Co. v. United States*, 370 U.S. 294 (1962).

Philadelphia National Bank,¹¹ and *Continental Can*,¹² at a time when market structure was thought to count for a great deal, and one could not assess structure without defining a market.¹³ As Kaysen and Turner put it in their seminal book *Antitrust Policy* in 1959, the “central aim” of antitrust should be “the elimination and prevention of unreasonable market power,” and the only way to do this was to “delimit . . . the market and get . . . a usable measure of the market share . . .”¹⁴

The actual text of the merger statute is much less explicit. Section 7 of the Clayton Act condemns mergers whose effect may be substantially to lessen competition or create a monopoly “in any line of commerce” and “in any section of the country.”¹⁵ Although section 7 was amended in important respects in 1950 by the Celler-Kefauver Act, these two phrases were similar to language contained in the original 1914 version of section 7.¹⁶ The 1950s amendments were passed partly in reaction to the Supreme Court’s *Columbia Steel* decision, which had declined to condemn a merger mainly for reasons having to do with market definition. The Court used the term “relevant market” to describe the geographic market in that decision, and the word “product” to describe the product market.¹⁷ *Columbia Steel* was the first time that the Supreme Court or any other federal court had used the term “relevant market” in a merger case, although it had used the term “line of commerce.”¹⁸ The Court did not have occasion to use the

¹¹ *United States v. Phila. Nat’l Bank*, 374 U.S. 321, 364 (1963).

¹² *United States v. Cont’l Can Co.*, 378 U.S. 441 (1964).

¹³ See, e.g., JOE S. BAIN, *BARRIERS TO NEW COMPETITION: THEIR CHARACTER AND CONSEQUENCES IN MANUFACTURING INDUSTRIES* (1956); JOE S. BAIN, *INDUSTRIAL ORGANIZATION* (1959); CARL KAYSEN & DONALD F. TURNER, *ANTITRUST POLICY: AN ECONOMIC AND LEGAL ANALYSIS* (1959); EDWARD S. MASON, *ECONOMIC CONCENTRATION AND THE MONOPOLY PROBLEM* (1957).

¹⁴ KAYSEN & TURNER, *supra* note 13, at 100–01.

¹⁵ 15 U.S.C. §18 (2012).

¹⁶ The original Clayton Act provision provided that:

No corporation engaged in commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital of another corporation engaged also in commerce, where the effect of such acquisition may be to substantially lessen competition between the corporation whose stock is so acquired and the corporation making the acquisition, or to restrain such commerce *in any section or community*, or tend to create a monopoly *of any line of commerce*.

38 Stat. 730, 731 (1914) (emphasis added).

¹⁷ *United States v. Columbia Steel Co.*, 334 U.S. 495, 508, 509 (1948). Even the well known discussion of market definition in Judge Hand’s decision in *United States v. Aluminum Co. of America*, 148 F.2d 416 (2d Cir. 1945), spoke only of the “market”; it never used the terms “relevant market,” “geographic market,” or “product market,” even though the decision contains lengthy discussions of all of those issues.

¹⁸ See, e.g., *Ford Motor Co. v. United States*, 335 U.S. 303, 326 (1948). See also Gregory J. Werden, *Next Steps in the Evolution of Antitrust Law: What to Expect from the Roberts Court*, J. COMPETITION L. & ECON. 5, 61–62 (2009); Gregory J. Werden, *Simulating Unilateral Competitive Effects from Differentiated Products Mergers*, ANTITRUST, Spring 1997, at 11, 27.

terms contained in section 7 of the Clayton Act because the *Columbia Steel* action had been brought under section 1 of the Sherman Act. The case involved an asset acquisition, and prior to the 1950 amendments section 7 reached only stock acquisitions.¹⁹ However, the Supreme Court stated that the policies articulated in section 7 of the Clayton Act must be “taken into account” in applying the Sherman Act to a merger.²⁰

When it drafted the phrases “line of commerce” and “section or community” in 1914, and even when it restated them as “section of the country” in 1950, Congress almost certainly did not have a technical definition of “relevant market” in mind. The phrase “line of commerce” was very commonly used in commercial law and other settings to describe a particular “line” of business, or a set of products that a layperson might regard as in the same “line,” such as clothing or groceries. For example, referring to the pigment industry, the Supreme Court stated in 1875 that oxides and zinc are “staples of trade in that line of commerce.”²¹ Business of a certain type, such as women’s clothing or groceries, was commonly referred to as a “line.” Thus courts interpreted commercial contracts by looking to customs and usages of trade in that “line of commerce.”²² A “line of commerce” could certainly include competing products, but it could also include complements that are ordinarily sold together. As a general matter complements are not in the same relevant market, except in a few cases in which they also function as substitutes or in which transaction cost savings give an aggregation a cost advantage over independent sales.²³

The 1914 phrase “section or community” and the 1950 phrase “section of the country” were intended to create jurisdictional limits, not to define an economic geographic market. Mainly, Congress wanted to make sure that the Clayton Act’s reach would be limited to mergers whose impact was felt in the United States rather than abroad, thus giving it a somewhat narrower reach than the Sherman Act’s application to combinations “in restraint of trade or

¹⁹ *FTC v. W. Meat Co.*, 272 U.S. 554 (1926); Milton Handler, *Industrial Mergers and the Anti-Trust Laws*, 32 COLUM. L. REV. 179, 266 (1932); and Comment, *Corporate Consolidation and the Concentration of Economic Power: Proposals for Revitalization of Section 7 of the Clayton Act*, 57 YALE L.J. 613 (1948) (summarizing earlier proposals to extend section 7’s reach to asset acquisitions).

²⁰ *United States v. Columbia Steel Co.*, 334 U.S. 495, 507 & n.7 (1948).

²¹ *Meyer v. Arthur*, 91 U.S. 570, 573 (1875). *See also* *Bowles v. Gulf Ref. Co.*, 61 F. Supp. 149 (D. Ohio 1945) (provisions of Emergency Price Control act designed not to affect the way that business is conducted in any particular “line of commerce”).

²² *See, e.g.*, *Gilbert v. Citizens’ Nat’l Bank of Chickasha*, 61 Okla. 112, 160 P. 635 (Okla. 1916) (contract interpretation depends upon the customs or usage of trade of “those engaged in that line of commerce”); *Dixon v. Dunham*, 14 Ill. 324, 324 (1853) (a usage of trade that is indispensable in a particular “line of commerce” is an allowable interpretation); *Mobile Fruit & Trading Co. v. J.H. Judy & Son.*, 91 Ill. App. 82 at 90 (1900) (“The rule is well recognized that where a commercial contract is in any respect ambiguous, and the necessities of the particular line of commerce render a particular custom or usage so indispensably necessary as to commend itself,” that usage will be presumed.).

²³ *See* 2B AREEDA & HOVENKAMP, *supra* note 6, ¶ 565a.

commerce among the several States, or with foreign nations²⁴ For example, original section 2 of the Clayton Act, which condemned a form of predatory pricing, reached only commodities destined for use, sale or consumption in the United States.²⁵ Section 3 of the Clayton Act, which reached tying and exclusive dealing, contained a similar limitation.²⁶ The phrase “in any section or community” contained in the 1914 version of section 7 was changed to “section of the country” in 1950 largely because Congress was concerned about anticompetitive effects only in the United States.²⁷

As noted above, in 1948 *Columbia Steel* had used the term “relevant market,” and the 1950 Celler-Kefauver revisions to the merger statute heavily targeted that decision. As a result it is far from obvious that Congress intended to write the term “relevant market” into the language that it chose, and there is at least as much reason for thinking that it wished to avoid that inference. In his provocative and widely cited 1960 article on the Celler-Kefauver amendments, Derek Bok gave no analysis to the “line of commerce” and “section of the country” language. Nevertheless, he appeared to assume throughout that merger policy required an assessment of competitive consequences based on shares of a relevant market, a term that he used numerous times.²⁸

Brown Shoe was the Supreme Court’s first application of the 1950 amendments of section 7 to a horizontal (as well as vertical) merger. It was also the Court’s first equation of the 1950 Act’s phrases “line of commerce” and “section of the country” with product and geographic markets. The Supreme Court stated quite categorically that “[t]he ‘area of effective competition’ must be determined by reference to a product line (the ‘line of commerce’) and a geographic market (the ‘section of the country’).”²⁹ It also stated that:

²⁴ 15 U.S.C. § 1 (2012).

²⁵ See 15 U.S.C. § 13(a) 38 Stat. 730 (Oct. 15, 1914) (“where either or any of the purchases involved in such discrimination are in commerce, where such commodities are sold for use, consumption, or resale within the United States or any Territory thereof or the District of Columbia or any insular possession or other place under the jurisdiction of the United States”).

²⁶ 15 U.S.C. §14 (2012) (“for use, consumption, or resale within the United States or any Territory thereof or the District of Columbia or any insular possession or other place under the jurisdiction of the United States”).

²⁷ See *United States v. Pabst Brewing Co.*, 384 U.S. 546 (1966):

The language of this section requires merely that the Government prove the merger may have a substantial anticompetitive effect somewhere in the United States— “in any section” of the United States Proof of the section of the country where the anticompetitive effect exists is entirely subsidiary to the crucial question in this and every § 7 case which is whether a merger may substantially lessen competition anywhere in the United States.

Id. at 549–50.

²⁸ Derek C. Bok, *Section 7 of the Clayton Act and the Merging of Law and Economics*, 74 HARV. L. REV. 226, 250, 309–10 (1960).

²⁹ *Brown Shoe Co. v. United States*, 370 U.S. 294, 324 (1962).

Congress neither adopted nor rejected specifically any particular tests for measuring the relevant markets, either as defined in terms of product or in terms of geographic locus of competition, within which the anti-competitive effects of a merger were to be judged.³⁰

And also:

[d]etermination of the relevant market is a necessary predicate to a finding of a violation of the Clayton Act because the threatened monopoly must be one which will substantially lessen competition “within the area of effective competition.” Substantiality can be determined only in terms of the market affected.³¹

As well as:

The outer boundaries of a product market are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it. However, within this broad market, well defined submarkets may exist which, in themselves, constitute product markets for antitrust purposes.³²

These statements are among the most quoted in the antitrust lexicon. They retain vitality even though many other aspects of *Brown Shoe* have been either rejected or ignored—in particular, its making of market shares virtually dispositive, its willingness to condemn both the horizontal and the vertical merger on very small market shares, its identification of “submarkets” as alternative relevant markets,³³ and its concern about the postmerger firm’s ability to underprice rivals or produce a better product. Today *Brown Shoe*’s fundamental approach to merger analysis is either rejected or ignored by the lower courts. Nevertheless, prevailing opinion continues to give full precedential regard for *Brown Shoe*’s insistence on a market definition.³⁴

Further, the rationale for market definition in *Brown Shoe* was very different from, and is fundamentally at odds with, the rationale for market definition in horizontal merger cases today. When Chief Justice Warren wrote the above quoted statements about “relevant market” for the Supreme Court he was not thinking of a relevant market in terms of a “hypothetical monopolist” or an “ideal collusive group,” or as a grouping of sales for which prices could profitably and durably be raised above the competitive level.³⁵ The perceived injury in *Brown Shoe* was manifestly not that the merger threatened higher shoe prices resulting from increased concentration in the shoe market—thus benefitting rivals but harming customers. Rather, his concern was precisely the opposite—namely, that postmerger Brown Shoe would acquire a competitive advantage over its competitors.

³⁰ *Id.* at 320–21.

³¹ *Id.* at 324 (quoting *United States v. E.I. du Pont de Nemours & Co.*, 353 U.S. 586 (1957), a vertical merger case).

³² *Id.* at 325 (quoting *du Pont*, 353 U.S. at 593–95).

³³ See 2B AREEDA & HOVENKAMP, *supra* note 6, ¶ 533.

³⁴ See, e.g., *FTC v. Lundbeck, Inc.*, 650 F.3d 1236 (8th Cir. 2011) (applying *Brown Shoe*’s relevant market approach in merger case).

³⁵ On the development of these definitions of a relevant market see ¶ 530 at 226.

The district court decision that the Supreme Court affirmed was categorical on this issue:

The testimony in this case further shows that independent retailers of shoes are having a harder and harder time in competing with company-owned and company-controlled retail outlets. National advertising by large concerns has increased their brand name acceptability and retail stores handling the brand named shoes have a definite advertising advantage. Company-owned and company-controlled retail stores have definite advantages in buying and credit; they have further advantages in advertising, insurance, inventory control and assists and price control. These advantages result in lower prices or in higher quality for the same price and the independent retailer can no longer compete in the low and medium-priced fields and has been driven to concentrate his business in the higher-priced, higher-quality type of shoes—and, the higher the price, the smaller the market.³⁶

The government took the same position in its brief to the Supreme Court, signed by Solicitor General Archibald Cox:

[T]he integration of manufacturer-retailer Brown with the large Kinney retail organization will seriously aggravate the difficulties that independent retailers are already having in competing with the substantial and ever-expanding retail chains. The manufacturer-owned or controlled retail outlet can sell its own product at a significantly lower price than the non-integrated independent retailer can obtain for a comparable product The conclusion was inevitable that the advantages the merged company would have over its smaller retailing competitors would be so great as to threaten to become decisive.³⁷

The Supreme Court itself was only a little more qualified. Speaking of the horizontal effects of that merger at the retail level it wrote:

in this fragmented industry, even if the combination controls but a small share of a particular market, the fact that this share is held by a large national chain can adversely affect competition. Testimony in the record from numerous independent retailers, based

³⁶ *United States v. Brown Shoe Co.*, 179 F. Supp. 721, 738 (D. Mo. 1959), *aff'd*, 370 U.S. 294 (1962). *See also id.* at 739–40:

The Court further finds from the evidence that due to the nature of the shoe industry, no one manufacturer, no one retailer, no one manufacturer-retailer combined, has a large percentage of the market, wholesale or retail. Yet, a small group of firms control a sizeable segment of the market. These firms definitely set the price and style trends. These firms are better able to meet the style trends and finance the change over. These firms are better able to acquire company owned stores and thus acquire ready-made markets for their production. These firms are better able to meet the changing conditions of the retail markets and to dominate the mass market in the low and medium priced fields.

³⁷ Brief for the United States at 48, *Brown Shoe*, 370 U.S. 294 (No. 4), 1961 WL 101890.

on their actual experience in the market, demonstrates that a strong, national chain of stores can insulate selected outlets from the vagaries of competition in particular locations and that the large chains can set and alter styles in footwear to an extent that renders the independents unable to maintain competitive inventories. A third significant aspect of this merger is that it creates a large national chain which is integrated with a manufacturing operation. The retail outlets of integrated companies, by eliminating wholesalers and by increasing the volume of purchases from the manufacturing division of the enterprise, *can market their own brands at prices below those of competing independent retailers*. Of course, some of the results of large integrated or chain operations are beneficial to consumers. Their expansion is not rendered unlawful by the mere fact that small independent stores may be adversely affected. It is competition, not competitors, which the Act protects. But we cannot fail to recognize Congress' desire to promote competition through the protection of viable, small, locally owned business. Congress appreciated that occasional higher costs and prices might result from the maintenance of fragmented industries and markets. It resolved these competing considerations in favor of decentralization. We must give effect to that decision.³⁸

In sum, although the Supreme Court insisted on a market definition, it did so for a purpose very different from the one used in merger analysis today. To be sure, in a horizontal merger case it is still important to know where output movements are threatened among the postmerger firm and its competitors, but the movement contemplated in *Brown Shoe* was in the opposite direction from what we consider now. Today the concern is that the postmerger firm might be able to raise prices without causing too much output to be lost to its rivals. In contrast, the *Brown Shoe* concern was that by reducing its price (or improving quality at the same price) the postmerger firm could deprive rivals of output, thus forcing them out altogether or relegating them to niche markets.

As a rough approximation, the boundaries of such a market might be about the same as the boundaries of a relevant market under today's definitions. When one takes more dynamic considerations into account, however, there are fundamental differences. For example, the focus on excess capacity in merger cases today typically examines excess capacity held by the postmerger firms' *rivals* to see if their output increase will offset the postmerger firm's anticipated output reduction.³⁹ By contrast, under the *Brown Shoe* rationale one might want to see if the postmerger firm has sufficient excess capacity so as to be able to steal sales from smaller rivals. Under modern analysis in product differentiated markets, we want to know whether rivals will be able to reposition themselves *closer* to the postmerger firm, thus increasing competitive pressures on it.⁴⁰ By contrast, under the *Brown Shoe* analysis rival firms configure themselves *away* from the postmerger firm in order to avoid competing with it on

³⁸ *Brown Shoe*, 370 U.S. at 343–44 (emphasis added). The Supreme Court's decision in *United States v. General Dynamics Corp.*, 415 U.S. 486 (1974), did not return to the issue. There the Court held mainly that the statistical evidence based on current market share exaggerated the competitive significance of the postmerger firm.

³⁹ See HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE §§ 3.5–3.7 (4th ed. 2011).

⁴⁰ See discussion *infra* text at notes ____.

price. Indeed, this concern that smaller rivals would be forced to reposition themselves into niche markets played an important part in the litigation.⁴¹

Further, under the modern analysis that identifies express or tacit collusion as the feared harm, the merger tends to affect all of the firms in the market the same way. That is, if the merger tends to make collusion or interdependent pricing more likely, the nonmerging firms will benefit as well as the merging firms, and price will increase across the market. In very sharp contrast, the analysis in *Brown Shoe* saw the postmerger firm as benefiting *at the expense* of nonmerging rivals in the same market. In this sense *Brown Shoe* was very much a “unilateral effects” case—the benefits of the merger accrued to *Brown Shoe* alone.

Further, today’s merger concern with price increases as opposed to price reductions makes relevant a new set of questions that were simply not within the purview of *Brown Shoe*—namely, what are the effects of a merger between relatively adjacent firms in a product differentiated market.⁴²

Much of the current critique of the 2010 Guidelines’ de-emphasis on market definition seems to be based on the view that *Brown Shoe* requires such a definition, which it clearly does. But then the critiques read back into that definition several decades of antitrust analysis of market definition for purposes of assessing the threat of postmerger price increases, as if this is what *Brown Shoe* had in mind all along. The shift away from *Brown Shoe*’s conception of a relevant market toward one in which the concern is mainly with higher prices occurred largely in the 1982/1984 and the 1992 Guidelines, in which market definition based on the hypothetical monopolist dominated the methodology.⁴³ The 1992 Guidelines hinted at a shift toward

⁴¹ See Brief for the United States, *supra* note 37, at 48 (“The independent retailer, unable to compete in the low and medium-priced fields in which vertical integration is most pronounced is, the court found, being driven increasingly to concentrate in the declining market for higher-priced, higher-quality shoes.”); *id.* at 49 (“The end result, as the court found . . . , has been to force increasing numbers of independents to seek refuge in a higher retail price bracket, leaving the expanding market for lower and medium priced shoes to the manufacturer-owned outlets.”).

⁴² The concern showed up in some cases involving “product extension” or “market extension” mergers. Although some of these involved complementary products, others involved products whose relationship was better classified as competitive rather than complementary but the amount of existing competition between the firms was thought to be too small to warrant inclusion of the second firm’s output in the relevant market. See, e.g., *United States v. El Paso Natural Gas*, 376 U.S. 651 (1964) (merger extending firm’s reach into different geographic area). A case that involved complements rather than imperfect substitutes is *FTC v. Procter & Gamble Co.*, 386 U.S. 568, 577–78 (1967). One of the difficulties of the merger analysis of these nonhorizontal mergers is that it tended to lump together situations in which the products were imperfect competitors and those in which they were not competing at all but rather were complements.

⁴³ The 1968 Guidelines, issued when Donald F. Turner was head of the Antitrust Division, were much more ambiguous but clearly expressed at least some concern for higher prices. Speaking of fundamental merger concerns, the 1968 Guidelines declared that:

alternative methodologies in which traditional market definition would play a diminished role, and thereafter the Agencies increasingly used such methodologies. The 2010 Guidelines merely acknowledged a change in approach for a large subset of mergers that had to a considerable degree already occurred within the enforcement Agencies.⁴⁴

Those who would roll the clock back to *Brown Shoe* almost certainly do not mean to return to an era in which the purpose of market definition was to see who would be injured by the postmerger firm's more efficient production and pricing.⁴⁵ They largely agree with the merger policy of the last two generations, even though it is completely inimical to the policy reflected in the *Brown Shoe* decision. Nevertheless, they also want to adhere to *Brown Shoe*'s insistence on a market definition.

II. MARKET DEFINITION, COLLUSIVE GROUPS, AND MARKET-WIDE HARM

a concentrated market structure, where a few firms account for a large share of the sales, tends to discourage vigorous price competition by the firms in the market and to encourage other kinds of conduct, such as use of inefficient methods of production or excessive promotional expenditures, of an economically undesirable nature

Accordingly, the Department's enforcement activity under Section 7 is directed primarily toward the identification and prevention of those mergers which alter market structure in ways likely now or eventually to encourage or permit non-competitive conduct.

U.S. DEP'T OF JUSTICE, 1968 MERGER GUIDELINES § 2, *available at* <http://www.justice.gov/atr/hmerger/11247.pdf>.

The 1968 Guidelines then defined a relevant market as:

a grouping of sales (or other commercial transactions) in which each of the firms whose sales are included enjoys some advantage in competing with those firms whose sales are not included. The advantage need not be great, for so long as it is significant it defines an area of effective competition among the included sellers in which the competition of the excluded sellers is, *ex hypothesi*, less effective.

Id. § 3.

⁴⁴ See Carl Shapiro, *The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, 77 ANTITRUST L.J. 701, 728 (2010); Gregory J. Werden & Luke M. Froeb, *Choosing Among Tools for Assessing Unilateral Merger Effects* (Vanderbilt L. & Econ. Research Paper, 2011), *available at* <http://www.ssrn.com/abstract=1804243>; Joseph Farrell & Carl Shapiro, *Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition*, B.E.J. THEORETICAL ECON., Jan. 2010, *available at* <http://www.bepress.com/bejte/vol10/iss1/art9>; Joseph J. Simons & Malcolm B. Coate, *Upward Pressure on Price Analysis: Issues and Implications for Merger Policy*, 6 EUR. COMPETITION REV. 377 (2010); Roy J. Epstein & Daniel L. Rubinfeld, *Understanding UPP*, B.E.J. THEORETICAL ECON., Jan. 2010, *available at* <http://www.bepress.com/bejte/vol10/iss1/art21>.

⁴⁵ E.g., James A. Keyte & Kenneth B. Schwartz, "*Tally Ho!*" *UPP and the 2010 Horizontal Merger Guidelines*, 77 ANTITRUST L.J. 587 (2011); Keith N. Hylton, *Brown Shoe Versus the Horizontal Merger Guidelines*, 39 REV. INDUS. ORG. 95 (2011).

One statement in *Brown Shoe* remains highly relevant—namely, its observation that Congress “neither adopted nor rejected specifically any particular tests for measuring relevant markets.”⁴⁶ Those challenging a merger need to be able to identify a grouping of sales in which the feared harm to competition is likely to occur. Nothing in *Brown Shoe* indicates that the “relevant market” query must show a threat to market-wide price increases. Indeed, the feared consequence in *Brown Shoe* was benefits for Brown Shoe and burdens for its rivals, all of whom were assumed to be in the same relevant market; indeed, the fact that they competed was the source of their injuries. The idea that the market analysis requires relatively homogeneous market-wide harm is largely an afterthought produced by the collusive group or hypothetical monopolist notions of markets that has been tacked on in subsequent analysis, whose approach to market definition is fundamentally at odds with the approach taken in *Brown Shoe*.

Given its conception of the goals of merger policy, *Brown Shoe* itself was all about “unilateral effects,” not about express or tacit collusion. That is to say, its concern was not with collusive price increases or some other impact that would be uniformly felt across the entire market. Rather, it was that Brown Shoe would be able to profit at the expense of other firms in the market. In a collusion-facilitating merger the price increases benefit all of the firms in the market and victimize consumers. By contrast, in a unilateral effects case the benefits are more heterogeneous, extending mainly or perhaps even exclusively to the postmerger firm.⁴⁷ In sum, *Brown Shoe* gives at least as much support for a unilateral effects theory of merger analysis as it does for the view that merger policy should be designed so as to minimize the risk of postmerger collusive practices.

III. THE PROBLEM OF MARKET HETEROGENEITY

It is well known that the relevant market estimates we use for evaluating mergers under traditional collusion-facilitating criteria are never “correct” in product differentiated markets or in those that have significant spatial dispersion and relatively high transportation costs.⁴⁸ Inclusion of an imperfect rival results in understatement of anticompetitive effects, while exclusion results in overstating them. Further, there are no good intermediate positions; firms are either “in” the market, which means that they are counted as perfect competitors, or else they are “out,” which means that they are not counted at all. Here, econometric measures of competition have a strong comparative advantage, assuming that the data needed to implement them are available.⁴⁹ Further, nearly all mergers subject to challenge occur in imperfectly competitive markets.

⁴⁶ *Brown Shoe Co. v. United States*, 370 U.S. 294, 320–21 (1962). The full passage is quoted *supra* note 30.

⁴⁷ See discussion *infra* text at notes.

⁴⁸ Making this point very forcefully is Louis Kaplow, *Why (Ever) Define Markets?*, 124 HARV. L. REV. 437 (2010). See also HOVENKAMP, *supra* note 39, § 3.6a.

⁴⁹ See 2010 GUIDELINES, *supra* note 1, § 4.1.3 (“When the necessary data are available, the Agencies also may consider a ‘critical loss analysis’ to assess the extent to which it corroborates inferences drawn from the evidence noted above.”). See also Dennis W. Carlton, *Revising the Horizontal Merger Guidelines*, 6 J. COMPETITION L. & ECON. 619, 643 (2010) (noting some of the difficulties in obtaining and interpreting data); and Malcolm B. Coate, *Unilateral Effects*

The approaches that the government Agencies currently use have considerable value when a merger occurs between an acquiring firm and another firm that is not its closest substitute. To illustrate, direct empirical estimates of demand responses might indicate that a price increase will cost premerger firm *Alpha* 100 units of output. Further, these diverted units will go, respectively, 40 units to *Beta*, 30 units to *Gamma*, 20 units to *Delta*, and the remaining 10 units to a number of more remote firms. This conclusion suggests that *Beta* is the closest to *Alpha* in product or geographic space, *Gamma* is second closest and so on. To say that two firms are “closer” means that customers are likely to find them to be closer substitutes. If the output of two firms is perfectly competitive, then customers are completely indifferent between the two and will switch entirely to one firm in response to the other firm’s unmatched price increase. In the example, a merger between *Alpha* and *Beta* might raise the postmerger firm’s profit-maximizing price by a specified amount, a merger between *Alpha* and *Gamma* by a somewhat smaller amount, and so on.⁵⁰ Significantly, however, analysis of pricing responses might show that both the *Beta* and *Gamma* mergers will produce price increases that are unacceptably high.⁵¹ Further, in response to an *Alpha-Gamma* merger, *Beta* might raise its price, lower it, or do nothing at all.

Note that this approach identifies a “grouping of sales” in which the feared price increase would occur—namely *Alpha* and *Gamma*. It does not produce a conclusion that the effects will be more or less the same on all firms in the market. As noted above, however, *Brown Shoe* never assessed that requirement either. Rather, it required only that there be a showing of a “line of commerce” in which the feared effect would occur. *Brown Shoe* assumed that some sellers in the market would benefit, namely the postmerger firm, while rivals within the market would be injured.

The 2010 Guidelines’ approach to market definition is both clear and fully defensible under *Brown Shoe* standards:

When the Agencies identify a potential competitive concern with a horizontal merger, market definition plays two roles. First, market definition helps specify the line of commerce and section of the country in which the competitive concern arises Second, market definition allows the Agencies to identify market participants and measure market shares and market concentration The measurement of market shares and market concentration is not an end in itself, but is useful to the extent it illuminates the merger’s likely competitive effects.

The Agencies’ analysis need not start with market definition. Some of the analytical tools used by the Agencies to assess competitive effects do not rely on market

Analysis and the Upward Pricing Pressure Model: Evidence from the Federal Trade Commission (June 1, 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1837645 (analyzing enforcement data at FTC).

⁵⁰ Whether the *Beta* acquisition produces a larger price increase than the *Gamma* acquisition also depends on the acquired firms margins. See discussion *infra* text at notes.

⁵¹ See discussion *infra* text at notes __.

definition, although evaluation of competitive alternatives available to customers is always necessary at some point in the analysis.

Evidence of competitive effects can inform market definition, just as market definition can be informative regarding competitive effects. For example, evidence that a reduction in the number of significant rivals offering a group of products causes prices for those products to rise significantly can itself establish that those products form a relevant market. Such evidence also may more directly predict the competitive effects of a merger, reducing the role of inferences from market definition and market shares. Where analysis suggests alternative and reasonably plausible candidate markets, and where the resulting market shares lead to very different inferences regarding competitive effects, it is particularly valuable to examine more direct forms of evidence concerning those effects.⁵²

This language is absolutely consistent with *Brown Shoe*'s requirement that a market definition is essential for identifying the appropriate line of commerce and section of the country in which competition is threatened, but that the government has discretion about its choice of methodology for producing that conclusion. Most importantly, a showing that a merger may "substantially lessen competition" drives the market analysis, and not the other way around.

IV. THE CONCERNS OF MERGER POLICY: CONCENTRATION OR PRICES?

Today there is little dispute about the proposition that the central concern of merger policy is to protect consumers from high prices that result from reduced output. As Lou Kaplow suggests, a useful set of Merger Guidelines consistent with current merger policy would relate illegality to price increases.⁵³ For example, we might condemn a merger that threatens *any* price increase at all—a proposition that is suggested by the 2010 Guidelines' efficiency defense statement that such defenses will be accepted only if they are sufficient to reduce the expected price to the premerger level.⁵⁴ However, in its general analysis of collusion-facilitating mergers the 2010 Guidelines tag illegality to various concentration levels measured by the Herfindahl-Hirschman index (HHI) and not to presumptive price increases. Increases in HHI correlate with price increases only in the grossest sense.⁵⁵ This seems peculiar to say the least.

There are several explanations for this disconnect between merger analysis and articulated merger goals. First, the reigning Supreme Court analysis of horizontal mergers has

⁵² 2010 GUIDELINES *supra* note 1, § 4.0.

⁵³ See Louis Kaplow, *Market Definition and the Merger Guidelines*, 39 REV. INDUS. ORG. 107, 122–23 (2011).

⁵⁴ See 2010 GUIDELINES, *supra* note 1, § 10 ("The Agencies will not challenge a merger if cognizable efficiencies are of a character and magnitude such that the merger is not likely to be anticompetitive in any relevant market. To make the requisite determination, the Agencies consider whether cognizable efficiencies likely would be sufficient to reverse the merger's potential to harm customers in the relevant market, e.g., by preventing price increases in that market.").

⁵⁵ See discussion *infra* text at notes.

focused heavily on concentration and market shares, largely to the exclusion of all other measures of competitive harm, including price increases. This is true in large measure because the Supreme Court has never articulated a coherent conception of the “may substantially lessen competition” standard. *Philadelphia National Bank* made market concentration statistics largely decisive,⁵⁶ and *General Dynamics* qualified that only to the extent of stating that market share numbers can be misleading when markets are not well defined or a market share statistic is an unrealistic indicator of a firm’s competitive significance.⁵⁷ However, even the *General Dynamics* concern was not stated in terms of *prices*. Rather, it was that current market shares might exaggerate future market shares when a firm’s reserves are largely depleted. Merger *price* effects was not an important part of the discussion in any of these cases, except for the suggestions in *Brown Shoe* that low prices injuring smaller rivals were the evil to be avoided.⁵⁸

A second problem is that the Supreme Court has largely abandoned the field of horizontal merger analysis, leaving us with a set of decisions that have never been overruled but whose fundamental ideology has been broadly ignored or discredited. *General Dynamics*, its most recent decision reaching the merits, was decided in 1974, approaching forty years ago. The unsatisfactory result leaves both courts and enforcers in the position of having a set of merger concerns that claim broad assent—namely, to prevent consumer harm through higher prices—but that must constantly be “managed” so as to make them fit into a wholly inconsistent framework commanded by these outdated Supreme Court decisions.

Third, only within the last generation or so has econometrics developed useful techniques for estimating the price impact of specific mergers in differentiated markets. The HHI as used in the Merger Guidelines was the predominant tool for assessing anticompetitive effects from the 1970s through the early 1990s. The orthodox conception of the HHI related market structure to a Cournot theory of oligopoly on the assumptions (1) that the firms were engaging in persistent Cournot behavior (that is, reacting against rivals by setting output rather than price), and (2) that the output of the firms in the market was undifferentiated.⁵⁹ Both of those assumptions were heroic to say the least. In 1964, George J. Stigler usefully recast the HHI as a device for predicting cartel stability, which arguably made the index useful across a wider range of behavioral assumptions but also reduced its usefulness as a meter of price increases.⁶⁰

⁵⁶United States v. Phila. Nat’l Bank, 374 U.S. 321, 364 (1963) (postmerger market share of thirty percent and an increase in the share of the two largest banks from forty-four percent to fifty-nine percent “raise an inference” of competitive harm).

⁵⁷United States v. Gen. Dynamics Corp., 415 U.S. 486, 497–98 (1974).

⁵⁸ See discussion *supra* text at notes ____.

⁵⁹ See HOVENKAMP, *supra* note 39, § 12.4a2.

⁶⁰ See George J. Stigler, *A Theory of Oligopoly*, 72 J. POL. ECON. 44 (1964), reprinted in GEORGE J. STIGLER, *THE ORGANIZATION OF INDUSTRY* (1968) (showing both how the HHI is derived from a pure Cournot theory of oligopoly and how the HHI might be useful even on relaxed Cournot assumptions as a device for predicting cartel stability). For refinements, see Edward J. Green & Robert H. Porter, *Noncooperative Collusion Under Imperfect Price Information*, 52 ECONOMETRICA 87 (1984); Jonathan B. Baker, *Market Concentration in the Antitrust Analysis of Horizontal Mergers*, in ANTITRUST LAW AND ECONOMICS 234, 252 & nn.20–21 (Keith N.

At best a poor correlation exists between concentration, changes in concentration in a defined market, and price increases from Cournot oligopoly or more explicit forms of collusion. The market definition approach that use of the HHI entails forces analysts to place firms either inside or outside the market, recognizing no intermediate degrees of competitiveness. Second, once such markets are defined they tend to be treated alike, even though the price impact of a merger can vary enormously among different markets with exactly the same HHI numbers depending on variations in elasticity of demand—an observation that Landes and Posner made thirty years ago.⁶¹ And this is true even if the product is completely homogeneous.⁶²

Finally, the realism of our fears of express or tacit collusion depends greatly on the degree of product differentiation in a market. The great majority of instances of market-wide collusion occur in markets for commodities or relatively undifferentiated products.⁶³ As has been well known for decades, market-wide collusion is much more difficult to pull off as markets become more differentiated, and tacit collusion is more difficult still.⁶⁴ The sad truth is that applying the HHI in a product differentiated market to test the threat of express or tacit collusion is doubly wrong. First our HHI number will always be inaccurate in such a market; second, even if it were accurate, it would not be helpful in predicting collusion.

V. PREDICTING PRICE EFFECTS IN DIFFERENTIATED MARKETS

The more novel portions of the 2010 Guidelines, which are a major revision of the predecessor Guidelines issued in 1992, deal with unilateral effects in differentiated markets. The methodologies that the Agencies use in such cases are said to be “direct” because they do not depend on the use of the crude surrogates for price effects that market definition and market concentration numbers provide. Rather, approaches such as upward pricing pressure, assess the effects of a merger on the postmerger firm’s profit-maximizing price largely by reference to three numbers: the diversion ratio, price-cost margins of the acquired firm, and variable cost

Hylton, ed. 2010); and Andrew R. Dick, *When Are Cartels Stable Contracts?*, 39 J. L. & ECON. 241 (1996).

⁶¹ William M. Landes & Richard A. Posner, *Market Power in Antitrust Cases*, 94 HARV. L. REV. 937, 955, 958 (1981) (showing extreme sensitivity of a firm’s price-cost ratios depending on firm elasticities of supply and demand within a given market, even when the product is fungible). See also Kaplow, note ___, 125 Harv.L.Rev. at 456-459.

⁶² On the range of variations, see KAI HÜSCHEL RATH, COMPETITION POLICY ANALYSIS 100–01 (2009) (showing range of price increases corresponding to a given HHI increase in markets for homogeneous products).

⁶³ See Kaplow, *supra* note 53; John M. Connor, *Price-fixing Overcharges: Legal and Economic Evidence*, 22 RES. L. & ECON. 59, 136–53 (2007); JOSEPH E. HARRINGTON, JR., HOW DO CARTELS OPERATE?, 1 (2006).

⁶⁴ See F.M. SCHERER & DAVID ROSS, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 279 (3d ed. 1990) (“When products are heterogeneously differentiated, the terms of rivalry become multidimensional, and the coordination problem grows in complexity by leaps and bounds.”).

reductions attained through efficiencies.⁶⁵ Importantly, as the 2010 Guidelines make clear, these methodologies are only one of the tools that the Agencies use to evaluate mergers and not necessarily the principal one.

The logic of this approach is straightforward. The constraints on a firm's prices are the pressures posed by competitive alternatives and the costs that it faces. As competition is decreased the firm's profit-maximizing price rises; as a firm's costs go down its profit-maximizing price declines. In a market that is differentiated by product variety or geography, a firm faces competition from a variety of other firms, but the amount of competitive pressure that each firm provides can vary from quite considerable to negligible. This observation is itself as old as the literature on product differentiation and variegated markets,⁶⁶ but it does not fit well into our conception of market definition, which requires that firms be considered either as inside or outside the market, with no variation in between.

The diversion ratio expresses the competitive relationship between specific pairs of firms much better. When a firm increases its price but others do not, it loses sales to rivals, but it loses different amounts to different rivals depending on their proximity in product or geographic space. For example, firm *A* might lose 1000 units in response to a given price increase. Four hundred of these units might go to firm *B*, 300 might go to firm *C*, 200 to firm *D*, and the remaining 100 units might go to several smaller firms. This observation enables us to say that firm *A*'s principal competitors are *B*, *C* & *D*, but that *B* is a much closer competitors than the others. If firm *A* were to merge with one of these firms it would "recapture" the lost diversion because the diverted sales would be going to its own subsidiary or division rather than to someone else. The recaptured diversion would not then be a competitive pressure on the firm's pricing, and it could raise the price without losing those sales. With given costs, a firm's profit-maximizing price is always a tradeoff between the additional revenue per unit that a price increase produces and the loss of units.

Assume that a firm with zero costs predicts that a price increase from \$10.00 to \$11.00 would reduce output from 100 units to 90 units. Total revenue (and profit) would be \$1000 prior to the increase and \$990 after, so the price increase would be unprofitable. But suppose that the firm predicted that the same price increase would yield lost sales from 100 units to 92 units. Now total revenue and profit after the price increase would be \$1012, and the price increase would be profitable. In this case the recapture is of two units. It would not matter that a different merger would have permitted recapture of, say, three or four units. A merger of either of these two firms would change the contemplated price increase from profitable to unprofitable. That is to say, information about diversion ratios permits the analyst to assess the price effects of alternative mergers. In general, a merger with firms that are more adjacent will facilitate a larger price increase.

⁶⁵See Farrell & Shapiro, *supra* note 44; Joseph Farrell & Carl Shapiro, *Recapture, Pass-Through, and Market Definition*, 76 ANTITRUST L.J. 585 (2010).

⁶⁶See, e.g., EDWARD CHAMBERLAIN, *THE THEORY OF MONOPOLISTIC COMPETITION* (1933); Harold Hotelling, *Stability in Competition*, 39 ECON. J. 41 (1929).

The relevance of price-cost margins is mainly that they reflect the intensity of competition that is already in the market and thus the gains that can accrue from recapture of otherwise diverted output. For example, under perfect competition margins are zero, and any price increase yields a 100% diversion. As price-cost margins are higher, reflecting a lesser degree of competition, the incentive to increase prices becomes larger as well. For example, if the acquired firm is earning only a tiny return on the diverted product, recapturing those gains will not be worth much to the acquirer. However, if the acquired firm is earning large margins, the recaptured diversion will be worth more and a larger price increase would result.

Offsetting all of this would be any merger specific efficiencies that serve to reduce the variable costs of the postmerger firm. These cost reductions will decrease the profit-maximizing price of the postmerger firm and thus pull pricing in the opposite direction.

Note that one might define a relevant market in this case by identifying the group of firms for which the diversion ratios are fairly high. But doing this would not contribute anything to the analysis of pricing impact, and it could be misleading. Under traditional formulations the merger analysis examines all of the firms that are thought to be “in” the market and ignores all the others. Then it ranks alternative acquisitions in terms of their *size* rather than their proximity. For example, using the HHI and concentration-increasing methodology, we measure market concentration as the sum of the squares of the market shares of all firms in the market. The HHI *increase* brought about by the merger is equal to double their product. So a merger of a 30% firm and a 20% firm increases the HHI by 1200, while a merger of a 30% firm and a 10% firm increases the HHI by 600.⁶⁷ That is to say, no matter how differentiated the market, the traditional formulation ranks mergers by size rather than proximity and does not include firms considered to be outside the market at all.

To illustrate, Hyundai makes about four times as many automobiles per year as BMW.⁶⁸ If Mercedes and Hyundai were to merge, the HHI would indicate that the merger is much more threatening than if Mercedes and BMW were to merge because the HHI is extremely sensitive to the size of any acquired firm found to be inside the market, but not sensitive at all to the degree of substitution that might occur between any two particular firms that are both in the market. However, further inspection might reveal that in response to a price increase by Mercedes, enormous numbers of customers would switch to BMWs, a comparable luxury car, while few would switch to economy-priced Hyundai.

One limitation on the use of direct measures such as upward pricing pressure is that the data for estimating substitution ratios and price cost margins must be available. They typically are for mergers with large numbers of sales whose terms can be observed. They may not be

⁶⁷ Prior to the merger the markets shares of A and B would be expressed in the HHI as $A^2 + B^2$. After the merger it would be expressed as $(A + B)^2$, which is $A^2 + 2AB + B^2$. The difference is $2AB$. See HOVENKAMP, *supra* note 39, § 12.4a2.

⁶⁸ INT’L ORG. OF MOTOR VEHICLE MANUFACTURERS, WORLD MOTOR VEHICLE PRODUCTION (2010), available at <http://oica.net/wp-content/uploads/ranking-2010.pdf>.

when the market is more idiosyncratic or lumpy or sales data are not systemically collected.⁶⁹ In those cases the analyst may have to fill in some gaps, but there is no reason to think that even crude estimates are less reliable than the concentration-increasing methodologies employed in the HHI. Indeed, as Kaplow observes, the concept of market definition has virtually no presence in the theoretical or empirical literature of industrial organization today.⁷⁰ However, it continued to play a significant role in the 1970s and 1980s. For example, the third edition of Frederic M. Scherer's very influential *Industrial Market Structure and Economic Performance*, co-authored with David Ross and published in 1990, was fairly dominated by issues of market definition and market structure.⁷¹ As a result Scherer and Ross continue to be cited regularly in the legal literature on antitrust even though they have largely been forgotten in the current industrial organization literature.⁷²

Finally, approaches such as upward pricing pressure are not myopically intended to query whether a merger "eliminates competition" *between* the merging firms—every merger does that.⁷³ Rather, they are intended to determine whether a merger will likely permit a *price increase* among two firms—precisely the purpose of market analysis in merger cases. That other nearby competitors may benefit from this price increase by raising their own prices is relevant to our analysis of merger harm, but one certainly cannot cite *Brown Shoe* for the proposition that only mergers that cause market wide price increases fall within section 7. The harm that the Supreme Court found in that case was that the merger benefited the postmerger firm by harming nonmerging rivals in the same market.

VI. MARKETS AND FIRMS IN MOTION

Market definition approaches are always inaccurate, but they have been tweaked in ways that permit them to take different types of supply responses into account. For example, in considering collusion-facilitating markets under traditional market structure analysis, we examine not only current shares but also such things as excess capacity, barriers to entry or mobility or other types of "supply responses" that affect the ability of firms that are not party to the merger to reposition their offerings. If such repositioning is costless and quick, then the postmerger firm will be unable to increase its price even though "current" market shares indicate otherwise. All versions of the Merger Guidelines since 1982 have been sensitive to this problem of supply response.

⁶⁹ See Farrell & Shapiro, *supra* note 44, who observe that both price-cost margins and diversion ratios can typically be estimated from information disclosed during premerger reporting or litigation-related discovery.

⁷⁰ Kaplow, *supra* note 44, at 458. See also Franklin M. Fisher, *Economic Analysis and "Bright-Line" Tests*, 4 J. COMPETITION L. & ECON. 129, 132 (2008); Louis Kaplow & Carl Shapiro, *Antitrust*, in 2 HANDBOOK OF LAW AND ECONOMICS 1073, 1080 (A. Mitchell Polinsky & Steven Shavell eds., 2007).

⁷¹ SCHERER & ROSS, *supra* note 64, at chs. 3–11.

⁷² A Westlaw search of legal journal articles published since 2000 reveals some 250 articles that cite Scherer and Ross. JLR database, search conducted Oct. 15, 2011).

⁷³ See Keyte & Schwartz, *supra* note 45, at 589 (making this argument).

In contrast, the direct measurement formulas for product diversion present short-run “snapshots,” that gauge immediate pricing pressures much more accurately than traditional structural analysis does. However, when used myopically they exaggerate the impact of a merger to the extent that they ignore or underestimate the extent to which nonmerging firms can reposition themselves in order to profit from the postmerger firm’s output reduction.

The result can be adjusted, however, to take into account situations in which such repositioning is likely to occur. The 2010 Guidelines acknowledge precisely that, stating:

A merger is unlikely to generate substantial unilateral price increases if non-merging parties offer very close substitutes for the products offered by the merging firms. In some cases, non-merging firms may be able to reposition their products to offer close substitutes for the products offered by the merging firms. Repositioning is a supply-side response that is evaluated much like entry, with consideration given to timeliness, likelihood, and sufficiency.⁷⁴

Merger analysis under such an approach is fundamentally a two-stage inquiry. First one looks at the expected price impact of the proposed merger based on present product and geographic conditions. Second, one must consider the likelihood and effect of the responses that nonmerging firms are likely to make, with the likelihood question determined by profitability. The repositioning analysis becomes more important as the postmerger price increase is larger or the costs of repositioning are lower. If firms share common technologies, intellectual property protection for particular product configurations is not substantial, and other asset-specific investments to reconfiguration are not too large, repositioning is more likely to occur. In that case the nonmerging rival must be able to predict that it can recover the costs of such reconfiguration in a reasonable length of time. As the 2010 Guidelines indicate, however, all of these issues are within the range of queries that is well established in the analysis of postmerger entry or product reconfiguration by existing firms. The analysis requires the Agency to place itself in the position of manager of a rival to the merging firms, querying whether a product redesign or deployment of a new product would be profitable given the price increase exacted by the postmerger firm.

This analysis need not be either as speculative or as detailed as the analysis of new entry, particularly when the technological “base” is similar. For example, to borrow some facts from the *du Pont* cellophane case,⁷⁵ if a merger were to occur between cellophane and glassine, which

⁷⁴ 2010 GUIDELINES, *supra* note 1, § 6.0 & ex. 19. The 1992 Guidelines provided less detail but said largely the same thing:

Substantial unilateral price elevation in a market for differentiated products requires that there be a significant share of sales in the market accounted for by consumers who regard the products of the merging firms as their first and second choices, *and that repositioning of the non-parties' product lines to replace the localized competition lost through the merger be unlikely.*

U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES §2.21 (1992) (emphasis added).

⁷⁵United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377 (1956).

are quite similar products using equivalent technologies, the producer of an alternative flexible wrapping material such as aluminum foil might contemplate repositioning itself. But to the extent that the raw materials and technology needed to produce aluminum foil differ a great deal from those used to produce cellophane or glassine, the reconfiguration query would come closer to resembling a query about new entry rather than a minor product variation.⁷⁶ By contrast, if the cellophane producer acquired the aluminum foil producer and the feared price increase was in cellophane, then the glassine company might be able to reposition itself into the cellophane market much more cheaply and with fewer asset-specific investments. As in the case of traditional entry barrier analysis, these are largely questions about engineering, asset specificity, and the cost of developing new productive assets, and the extent to which intellectual property rights might limit the ability of a firm to reconfigure part of its production into different space.

VII. Conclusion

The 2010 Guidelines represent a pronounced improvement in our ability to predict the consequences of mergers on the one thing that antitrust policy cares about most, namely, consumer welfare as measured by price and output. That has required the development of new methodologies, which is something that the Supreme Court expressly contemplated in *Brown Shoe*.⁷⁷ While the 2010 Guidelines have not been very explicit about the technical methodologies that will be employed, the lack of specificity is probably a good thing. First, it means that the 2010 Guidelines will be much less likely to be wed to a methodology that may soon become obsolete. Second, lack of guidance is not a problem because government and academic economists write heavily in the area, and both sides in the typical challenged merger case have the resources to engage expert analysts. Ultimately, however, prediction of harmful price increases is the dog, and market definition but the tail.

⁷⁶ Not quite perhaps, because the firm is already there and at least some of the equipment and employees could be used in both.

⁷⁷ *Brown Shoe Co. v. United States*, 370 U.S. 294, 320–21 (1962). See discussion *supra* text at note ____.