

SUBMARKETS AND SUPERMARKETS:
*FTC V. WHOLE FOODS MARKET AND THE
RESURRECTION OF BROWN SHOE*

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INTRODUCTION

Foodies rejoice! You too deserve protection from monopoly power according to the D.C. Circuit's decision in *FTC v. Whole Foods Market, Inc.*¹ Without question, the U.S. antitrust laws protect foodies and all other consumers against anticompetitive behavior. However, whether or not foodies should be the focus of antitrust analysis is another question altogether. This issue, as well as others, caused some confusion and much disagreement among the three-judge panel on the D.C. Circuit.

In *Whole Foods*, the Federal Trade Commission ("FTC") sought a preliminary injunction to stop the proposed merger of two supermarkets, Whole Foods and Wild Oats.² The FTC argued that the two businesses were the largest "premium, natural, and organic supermarkets," and that their merger would harm consumers by reducing competition in this market.³ The district court denied the preliminary injunction, finding instead that Whole Foods and Wild Oats sufficiently competed with conventional supermarkets to make the merger benign.⁴ In a splintered decision with three opinions from three judges nearly a year after the two companies started implementing the merger, the D.C. Circuit surprised many by reversing the district court's decision to deny the preliminary injunction and remanding the case back to the district court.⁵

While the three opinions certainly muddy the waters of horizontal merger analysis, in some ways they also crystallize the ongoing debate over how much of a role economics should play in the enforcement of U.S. anti-

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¹ 548 F.3d 1028 (D.C. Cir. 2008).

² *Id.* at 1032.

³ *Id.*; Proof Brief for Appellant FTC at 5 n.4, *FTC v. Whole Foods Mkt., Inc.*, 548 F.3d 1028 (D.C. Cir. 2008) (No. 07-5276).

⁴ *Whole Foods*, 548 F.3d at 1033.

⁵ *Id.* at 1032-33.

trust laws.⁶ In his dissenting opinion, Judge Brett Kavanaugh appeared to advocate a view generally held by the Chicago School,⁷ that efficiency based on neoclassical economics should be the principal, if not sole, consideration in antitrust analysis, while Judges Janice Rogers Brown and David Tatel both considered evidence in addition to the economic arguments presented by the FTC and Whole Foods.⁸ In particular, Judge Tatel's opinion arguably reflects the so-called Post-Chicago School,⁹ which recognizes the imperfections of markets and looks to more advanced economic models, as well as other market characteristics, to ascertain the effects of a proposed merger.

The D.C. Circuit's decision unfortunately does little more than point out these different viewpoints. One thing that is certain after the decision is the continuing relevance of one of the most infamous cases in antitrust jurisprudence—the Supreme Court's decision in *Brown Shoe Co. v. United States*.¹⁰ The two judges concurring in the judgment in *Whole Foods* both relied heavily on *Brown Shoe*, although for very different reasons. Judge Brown focused on the problematic notion of “submarkets,” while Judge Tatel correctly emphasized the critical role of substitutability between products in defining relevant product markets for antitrust analysis.¹¹ Meanwhile, the dissenting opinion authored by Judge Kavanaugh admonished the others judges' resurrection of *Brown Shoe*—in his words, a “relic” whose reasoning “has not stood the test of time.”¹² The ability of the D.C. Circuit judges to derive such disparate ideas from a single Supreme Court opinion provides a glimpse at the criticisms of *Brown Shoe*. The different ideas within the *Brown Shoe* opinion have puzzled courts for decades, and the D.C. Circuit's decision in *Whole Foods* provides a prime example of that confusion.

The flexibility of *Brown Shoe* is both its strength and its weakness. Fortunately, because of the flexibility of the *Brown Shoe* standards, Judges

⁶ This debate will likely intensify with the impending invigoration of antitrust enforcement by the current Assistant Attorney General for the Antitrust Division of the Department of Justice, Christine A. Varney. In recent remarks before the United States Chamber of Commerce, she stated, “[w]e are faced with market conditions that force us to engage in a critical analysis of previous enforcement approaches. That analysis makes clear that passive monitoring of market participants is not an option.” Christine A. Varney, Assistant Att’y Gen., U.S. Dep’t of Justice, Vigorous Antitrust Enforcement in this Challenging Era, Remarks Before the United States Chamber of Commerce (May 12, 2009), available at <http://www.usdoj.gov/atr/public/speeches/245777.pdf>.

⁷ See *infra* Part II.B.

⁸ *Whole Foods*, 548 F.3d at 1037-41; *id.* at 1046 (Tatel, J., concurring); *id.* at 1051 (Kavanaugh, J., dissenting).

⁹ See *infra* Part II.C. Judge Brown's analysis is difficult to reconcile with modern economic principles, which is why her opinion most likely should not be referred to as an extension of the Post-Chicago School.

¹⁰ 370 U.S. 294 (1962).

¹¹ See *infra* Part III.

¹² *Whole Foods*, 548 F.3d at 1058.

Brown and Tatel were able to adopt a more refined economic analysis and consider evidence that served as proxies for interchangeability in *Whole Foods*. At the same time, Judge Brown's discussions of submarkets, core customers, and price discrimination present an example of the confusion that this flexibility can cause. To minimize this potential confusion, courts could either ignore *Brown Shoe*, as Judge Kavanaugh would prefer, or courts could more narrowly construe *Brown Shoe* so as to focus on substitutability, as emphasized by Judge Tatel. This narrow construction could harmonize *Brown Shoe* with modern economic principles and would be the most prudent course for courts to take, at least until the Supreme Court addresses the issue again.

Part I of this Note begins by examining the origins of *Brown Shoe* and the two seemingly divergent standards used by Judges Brown and Tatel in *Whole Foods*. The first standard (Judge Brown) utilizes seven "practical indicia," first announced in *Brown Shoe*, to determine whether or not a relevant submarket exists, while the other standard (Judge Tatel) focuses on the interchangeability of products to properly define the relevant product market for antitrust inquiries.¹³ Part II then introduces the evolving influence of economics on the administration of U.S. antitrust laws and briefly discusses the two dominant schools of thought in antitrust—the Chicago School and the Post-Chicago School. Part II concludes with a discussion of the economic analysis incorporated in the 1992 Horizontal Merger Guidelines ("Merger Guidelines") utilized by the Department of Justice ("DOJ") and the FTC. Part III then reviews the FTC's challenge of the merger between Whole Foods and Wild Oats and focuses on the three opinions issued by the D.C. Circuit.

Parts IV and V delve further into the judges' reliance on *Brown Shoe*. Part IV discusses the possible benefits of the flexibility of *Brown Shoe*, as indicated by the D.C. Circuit's ability to adopt a more refined economic approach and supplement that analysis with valuable non-economic evidence. Part V begins by examining the problem of *Brown Shoe*, as exemplified by Judge Brown's resurrection of submarkets, a concept that is incoherent in light of modern economic principles. Part V continues by contrasting the approaches of Judges Tatel and Kavanaugh, and concludes with a discussion as to why Judge Tatel's view should prevail. Unfortunately, because Judges Brown and Tatel only agreed on the final outcome, and not the reasoning to get there, the D.C. Circuit missed a rare opportunity to harmonize *Brown Shoe* with modern economic principles.

¹³ *Brown Shoe*, 370 U.S. at 325.

I. THE ORIGINS OF *BROWN SHOE*

It would be overhasty to say that the *Brown Shoe* opinion is the worst antitrust essay ever written Still, all things considered, *Brown Shoe* has considerable claim to the title.¹⁴

Despite its infamy, *Brown Shoe* continues to be the most cited Supreme Court case when it comes to defining product markets.¹⁵ Critics suggest that the decision's popularity largely has to do with the fact that the various standards provided in the case allow courts to engage in "result-oriented analysis."¹⁶ However, others argue that the flexibility built into the decision provides the legal authority to adopt more advanced economic concepts as they become available.¹⁷

In *Brown Shoe*, the Supreme Court determined that the proposed merger of two companies, both of which manufactured and sold shoes at retail stores, violated section 7 of the Clayton Act¹⁸ because the merger would likely reduce competition in the retail sale of men's, women's, and children's shoes.¹⁹ In defining the proper product market, the Supreme Court stated:

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. The boundaries of such a submarket may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors.²⁰

This paragraph introduced the concept of submarkets, as well as the often-quoted "practical indicia" used to determine relevant product markets for antitrust purposes.²¹ However, it also begins with the standard that product

¹⁴ *Whole Foods*, 548 F.3d at 1059 (D.C. Cir. 2008) (Kavanaugh, J., dissenting) (quoting ROBERT H. BORK, *THE ANTITRUST PARADOX* 210, 216 (1978)) (internal quotation marks omitted).

¹⁵ Gregory J. Werden, *The History of Antitrust Market Delineation*, 76 MARQ. L. REV. 123, 124 (1992).

¹⁶ James A. Keyte, *Market Definition and Differentiated Products: The Need for a Workable Standard*, 63 ANTITRUST L.J. 697, 699 (1995).

¹⁷ Jonathan B. Baker, *Stepping Out in an Old Brown Shoe: In Qualified Praise of Submarkets*, 68 ANTITRUST L.J. 203, 203 (2000).

¹⁸ Section 7 of the Clayton Act states, in pertinent part: "No person shall acquire, directly or indirectly, the whole or any part of the stock or other share capital . . . , the effect of such acquisition, of such stocks or assets, or of the use of such stock by the voting or granting of proxies or otherwise, may be substantially to lessen competition, or to tend to create a monopoly." 15 U.S.C. § 18 (2000).

¹⁹ *Brown Shoe Co. v. United States*, 370 U.S. 294, 297, 346 (1962).

²⁰ *Id.* at 325 (citations omitted).

²¹ Lawrence C. Maisel, *Submarkets in Merger and Monopolization Cases*, 72 GEO. L.J. 39, 39 (1983).

markets should be defined using “the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it.”²² While the two concepts are notably different, these two standards are based on two previous Supreme Court decisions.²³

The idea of a market within a market, or a submarket, was not well-received initially and continues to be widely criticized.²⁴ The basis of the criticism is that substitutability between products provides a principled way to evaluate and define product markets.²⁵ Substitutability, also called cross-elasticity of demand, focuses on the sensitivity of buyers to changes in price—the more buyers react to a small increase in price, the more elastic the demand. If a number of other products can sufficiently substitute for the product in question, then all of those products should be included in a relevant market for antitrust purposes because the price of the product in question is restrained by those substitutes.²⁶ So, if a buyer would switch to product Y rather than purchase product X after its price has increased, then product Y is a substitute and should be included in the relevant market. By accepting the notion of a submarket within the larger market of substitutable products, the new submarket by definition excludes some products that are reasonable substitutes.²⁷ This exclusion will lead to a narrower product market definition, which in turn will result in the finding of more antitrust violations, some of which may not be defensible on economic grounds.²⁸ The common phrase associated with this criticism is that “there are no submarkets, only markets.”²⁹ Despite this strong criticism, *Brown Shoe* remains the primary legal source for product market delineation.³⁰

While the word “submarket” never appeared in the Supreme Court’s decision in *United States v. E.I. du Pont de Nemours & Co. (du Pont-GM)*,³¹ the concept was introduced when the Supreme Court held that finishes and fabrics for automobiles constituted its own product market instead of the

²² *Brown Shoe*, 370 U.S. at 325.

²³ Maisel, *supra* note 21, at 42-43; *United States v. E.I. du Pont de Nemours & Co. (Cellophane)*, 351 U.S. 377 (1956); *United States v. E.I. du Pont de Nemours & Co. (du Pont-GM)*, 353 U.S. 586 (1957).

²⁴ See Werden, *supra* note 15, at 160 (citing George R. Hall & Charles F. Phillips, Jr., *Antimerger Criteria: Power, Concentration, Foreclosure and Size*, 9 VILL. L. REV. 211, 219-20 (1964) (calling *Brown Shoe* an “intellectual monstrosity” only two years after the decision)); Maisel, *supra* note 21, at 40 (stating that “the word ‘submarket’ should be banished from the antitrust lexicon”).

²⁵ This is the type of analysis called for by the Merger Guidelines, which uses substitutability to define product markets. See U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES § 0.1 (rev. 1997), *reprinted in* 4 Trade Reg. Rep. (CCH) ¶ 13,104, *available at* <http://www.usdoj.gov/atr/public/guidelines/hmg.pdf> [hereinafter MERGER GUIDELINES].

²⁶ Maisel, *supra* note 21, at 44.

²⁷ *Id.*

²⁸ *Id.* at 50.

²⁹ Baker, *supra* note 17, at 206.

³⁰ Keyte, *supra* note 16, at 703.

³¹ 353 U.S. 586 (1957).

proposed product market of all industrial finishes and fabrics.³² In essence, the Supreme Court held that any group of products that is distinguishable or separable from other products can be defined as a relevant product market for antitrust purposes.³³ This holding set the stage for the explicit introduction of a submarket as a relevant product market within a larger product market defined by interchangeability. The idea of interchangeability, or cross-elasticity of demand, as defining the larger product market came about from another Supreme Court decision involving the du Pont Company.

In *United States v. E.I. du Pont de Nemours & Co. (Cellophane)*,³⁴ the Supreme Court determined that cellophane did not qualify as its own product market, instead finding that the broader category of “flexible packaging materials” constituted the proper product market because a slight change in the price of cellophane caused a “considerable” number of customers to switch to other flexible packaging materials.³⁵ The Court found that “reasonable interchangeability” should guide product market definition, stating that “[i]n considering what is the relevant market for determining the control of price and competition, no more definite rule can be declared than that commodities reasonably interchangeable by consumers for the same purposes make up that ‘part of trade or commerce,’ monopolization of which may be illegal.”³⁶ The Court later expounded on this idea that cross-elasticity of demand should be used to define product markets:

An element for consideration as to cross-elasticity of demand between products is the responsiveness of the sales of one product to price changes of the other. If a slight decrease in the price of cellophane causes a considerable number of customers of other flexible wrappings to switch to cellophane, it would be an indication that a high cross-elasticity of demand exists between them; that the products compete in the same market.³⁷

This language explains the first standard stated in the *Brown Shoe* passage quoted above regarding “the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it.”³⁸

However, critics argue that *Cellophane* was wrongly decided because the Supreme Court failed to take into consideration that du Pont enjoyed considerable profits of 15.9 percent and that du Pont controlled 75 percent of the market for cellophane.³⁹ Du Pont wanted to merge with Sylvania,

³² *Id.* at 593-95.

³³ Maisel, *supra* note 21, at 42-43.

³⁴ 351 U.S. 377 (1956).

³⁵ *Id.* at 400-04.

³⁶ *Id.* at 395, 404.

³⁷ *Id.* at 400.

³⁸ *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962).

³⁹ *Cellophane*, 351 U.S. at 379, 404.

which controlled the remaining market for cellophane.⁴⁰ Du Pont's substantial profits provided direct and reliable evidence that the company controlled market power prior to the merger, and market power is "fundamental to the determination of whether the conduct in question can harm competition and consumers."⁴¹

The problem with evaluating cross-elasticity of demand at a monopoly price is that a monopolist will increase prices above a competitive level to the point at which other substitutes become available, because at that point it becomes unprofitable to continue raising price.⁴² So, if a firm has monopoly power prior to a proposed merger, then that firm alone already has market power by definition.⁴³ By allowing a firm with existing monopoly power to acquire the only other producer of cellophane, it appears as though the Supreme Court allowed du Pont to increase its market power. This oversight has come to be known as the "*Cellophane* fallacy."⁴⁴ Instead of evaluating cross-elasticity of demand at the prevailing monopolistic price, critics argue that cross-elasticity of demand should be evaluated from the product's competitive price.⁴⁵ However, this suggestion is not without its critics as well. For example, Judge Richard Posner has argued that the issue in merger cases is whether the merger will increase or enhance market power, not whether the entities have market power to begin with.⁴⁶

Regardless of the "*Cellophane* fallacy," these two Supreme Court cases clearly create the framework for the Supreme Court's decision in *Brown Shoe*, with *Cellophane* providing the foundation in cross-elasticity of demand and interchangeability, and *du Pont-GM* providing the foundation for acknowledging submarkets.⁴⁷ The relevance of this distinction for the purposes of analyzing the D.C. Circuit's opinion in *Whole Foods* is that Judge Brown's opinion focuses on the submarkets prong of *Brown Shoe*, while Judge Tatel's opinion focuses on the substitutability prong. But before this Note addresses the D.C. Circuit's application of *Brown Shoe*, a brief history of the role of economics in antitrust analysis will shed valuable light on why the decision has fallen out of favor.

⁴⁰ *Id.* at 384.

⁴¹ Keyte, *supra* note 16, at 697; *see also* Robert Pitofsky, *New Definitions of Relevant Market and the Assault on Antitrust*, 90 COLUM. L. REV. 1805, 1814 (1990).

⁴² Werden, *supra* note 15, at 139.

⁴³ *Id.*

⁴⁴ *Id.*; Pitofsky, *supra* note 41, at 1813-14.

⁴⁵ Pitofsky, *supra* note 41, at 1845-48; *see also* Werden, *supra* note 15, at 139.

⁴⁶ Werden, *supra* note 15, at 202 (quoting RICHARD A. POSNER, *ANTITRUST LAW: AN ECONOMIC PERSPECTIVE* 128-30 (1976)).

⁴⁷ Maisel, *supra* note 21, at 42-43; *see also* Keyte, *supra* note 16, at 703-04.

II. THE EVOLUTION OF ECONOMICS IN ANTITRUST LAW

This Part begins with a brief history of the role economics has played since the beginning of the antitrust laws. It then highlights the dominant schools of thought with respect to antitrust analysis and concludes with a discussion of the economics used in the current Merger Guidelines.

A. *A Brief History*

Despite public perception, economics has always played a role in the implementation of U.S. antitrust laws.⁴⁸ The field of economics has simply evolved since the enactment of the first antitrust statute in 1890⁴⁹ and continues to evolve today.⁵⁰ This natural evolution of economics caused the infusion of various models and methodologies into antitrust jurisprudence over the years, which helps to explain the seemingly incoherent results in antitrust cases.⁵¹ The large role that economics plays with respect to the antitrust laws is due in part to the generalized language of the antitrust statutes, which some refer to as simply a “congressional mandate to develop a federal common law of competition.”⁵² The courts have taken this idea to heart over the years, adopting different economic theories as they develop.⁵³

The vigor with which the government enforced the antitrust laws waxed and waned throughout the twentieth century. From roughly 1940 through the mid-1970s, the federal agencies enforced the antitrust laws with great zeal based on the Harvard School’s theories of industrial organization

⁴⁸ Herbert Hovenkamp, *Post-Chicago Antitrust: A Review and Critique*, 2001 COLUM. BUS. L. REV. 257, 259; Michael S. Jacobs, *An Essay on the Normative Foundations of Antitrust Economics*, 74 N.C. L. REV. 219, 226 (1995).

⁴⁹ Section 1 of the Sherman Act states: “Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal.” 15 U.S.C. § 1 (2004). Notably, “[w]hen the Sherman Act was first passed in 1890, most (but not all) economists condemned it as at best irrelevant to the problem of the trusts and at worst as harmful to the economy because the statute would prohibit firms from combining to take advantage of economies of scale made possible by recent technological development.” Herbert Hovenkamp, *Antitrust Policy After Chicago*, 84 MICH. L. REV. 213, 220 (1985) (footnote omitted). Perhaps this is an indication that Congress did not necessarily have economics in mind when it passed the statute, instead accepting the notion that concentration harmed competition as a political consensus at the time. Eleanor M. Fox & Lawrence A. Sullivan, *Antitrust-Retrospective and Prospective: Where Are We Coming From? Where Are We Going?*, 62 N.Y.U. L. REV. 936, 942 (1987); see also Reza Dibadj, *Saving Antitrust*, 75 U. COLO. L. REV. 745, 750-56 (2004).

⁵⁰ Fox & Sullivan, *supra* note 49, at 936.

⁵¹ *Id.*; cf. Thomas M. Melsheimer, *Economics and Ideology: Antitrust in the 1980s*, 42 STAN. L. REV. 1319, 1322 (1990).

⁵² Jacobs, *supra* note 48, at 234 (quoting Rudolph J. Peritz, *A Counter-History of Antitrust Law*, 1990 DUKE L.J. 263, 269); see also Melsheimer, *supra* note 51, at 1319.

⁵³ Fox & Sullivan, *supra* note 49, at 936.

economics.⁵⁴ Notably, the Supreme Court decided *Brown Shoe* during this period in 1962.⁵⁵ Industrial organization economics focused on the structure of the market and whether a firm had the power to engage in anticompetitive conduct, rather than whether it had the incentive to do so.⁵⁶ In other words, the Harvard School viewed large firms and concentrated markets with great skepticism.⁵⁷ The Chicago School, however, did not necessarily share this skepticism.⁵⁸

B. *The Ascendancy of the Chicago School*

The Chicago School gained popularity in the late 1960s and emphasized the ability of markets to reach competitive outcomes often without government intervention; essentially, the school questioned government's ability to intervene effectively.⁵⁹ Rather than rely on a large number of competitors, the Chicago School also believed that robust competition required as few as three firms in most markets.⁶⁰ While some commentators believe that the Chicago School introduced economics to antitrust law, in reality, the Chicago School simply introduced a new economic model—price theory.⁶¹ What is more interesting about the Chicago School paradigm is that it contends that maximizing efficiency should be the only concern of the antitrust laws, whereas other schools generally thought that economics should inform, but not dictate, antitrust analysis.⁶² While the elegance and simplicity of its models have an intuitive appeal that helped the Chicago

⁵⁴ William E. Kovacic, *The Intellectual DNA of Modern U.S. Competition Law for Dominant Firm Conduct: The Chicago/Harvard Double Helix*, 2007 COLUM. BUS. L. REV. 1, 17; see also Jacobs, *supra* note 48, at 227. This school of thought is sometimes referred to as the “pre-Chicago approach.” David S. Evans & A. Jorge Padilla, *Designing Antitrust Rules for Assessing Unilateral Practices: A Neo-Chicago Approach*, 72 U. CHI. L. REV. 73, 76 (2005).

⁵⁵ 370 U.S. 294 (1962).

⁵⁶ Evans & Padilla, *supra* note 54, at 76.

⁵⁷ Jacobs, *supra* note 48, at 227.

⁵⁸ *Id.* at 226-27. FTC Commissioner Kovacic suggests that the Harvard and Chicago Schools had some common concerns and that modern antitrust law is more appropriately viewed as the result of a “double helix that consists of two intertwined chains of ideas, one drawn from the Chicago School of Robert Bork, Richard Posner, and Frank Easterbrook, and the other drawn from the Harvard School (HS) of Phillip Areeda, Donald Turner, and [Justice] Stephen Breyer.” Kovacic, *supra* note 54, at 14-15, 33-37.

⁵⁹ Hovenkamp, *supra* note 48, at 266-67; Jacobs, *supra* note 48, at 227; Kovacic, *supra* note 54, at 21-22.

⁶⁰ Hovenkamp, *supra* note 48, at 266.

⁶¹ *Id.* at 265; Evans & Padilla, *supra* note 54, at 77; Hovenkamp, *supra* note 49, at 218.

⁶² Hovenkamp, *supra* note 49, at 283-84; Jacobs, *supra* note 48, at 220; Kovacic, *supra* note 54, at 22. Another way of stating the Chicago School's goal is to maximize total, or aggregate, welfare, which under neoclassical theory means maximizing the sum of consumer and producer surplus. Dibadj, *supra* note 49, at 751. The Chicago School can make this argument because the antitrust statutes are at least somewhat ambiguous. *Id.* at 749-51.

School dominate the late 1970s and 1980s, other scholars have argued that markets might not be so perfect.⁶³ These scholars comprise the Post-Chicago School.⁶⁴

C. *The Evolution Continues—The Post-Chicago School*

The Post-Chicago School is sometimes viewed as a refinement of the Chicago School in that it also generally focuses on maximizing the efficient allocation of resources.⁶⁵ However, Post-Chicago School adherents recognize that markets are often incredibly complex and susceptible to imperfections.⁶⁶ These scholars argue that government intervention can at times promote greater efficiency than an imperfect market and use complicated economic models to determine when government intervention would actually increase efficiency.⁶⁷ The influence of the Post-Chicago School can be seen in the 1992 amendments to the Merger Guidelines currently used by the DOJ and the FTC.⁶⁸

⁶³ Jonathan B. Baker, *Competition Policy as a Political Bargain*, 73 ANTITRUST L.J. 483, 505-06 (2006); Hovenkamp, *supra* note 49, at 284 (pointing out that the neoclassical market efficiency model is “naïve” and “too simple to account for or to predict business firm behavior in the real world”); Kovacic, *supra* note 54, at 25-26. The height of the Chicago School coincided with President Reagan’s appointment of William Baxter as Assistant Attorney General of the Antitrust Division at the Department of Justice in 1981. Fox & Sullivan, *supra* note 49, at 944-45. Baxter embraced both the Reagan Administration’s promise to reduce government intervention with business and the non-interventionist approach associated with the Chicago School. *Id.* at 945. As a result, enforcement actions dropped significantly amidst an increasing number of mergers. Baker, *supra*, at 506-07; Melsheimer, *supra* note 51, at 1328-29 (noting that “[u]nder the Reagan administration, Department of Justice and Federal Trade Commission challenges to mergers dropped by 50 percent in comparison to average challenges in the years 1960 through 1980” despite the “merger mania” throughout the Reagan years). Baxter’s influence can also be seen with the 1982 and 1984 Horizontal Merger Guidelines, which embraced the Chicago School point of view. Fox & Sullivan, *supra* note 49, at 953; See ANDREW I. GAVIL, WILLIAM E. KOVACIC & JONATHAN B. BAKER, ANTITRUST LAW IN PERSPECTIVE: CASES, CONCEPTS AND PROBLEMS IN COMPETITION POLICY 67 (2008).

⁶⁴ See Hovenkamp, *supra* note 48, at 258, 267-68.

⁶⁵ Baker, *supra* note 63, at 511-12; Jacobs, *supra* note 48, at 224-25; Kovacic, *supra* note 54, at 23-24. However, some Post-Chicago School commentators advocate the use of antitrust policy for other distributional objectives, which could not be considered a refinement of the Chicago School. Kovacic, *supra* note 54, at 24.

⁶⁶ Hovenkamp, *supra* note 48, at 258, 267-68.

⁶⁷ Dibadj, *supra* note 49, at 748, 763-64; Evans & Padilla, *supra* note 54, at 80. The Post-Chicago School favors individualized determinations under the rule of reason instead of per se legality rules asserted by the Chicago School. Evans & Padilla, *supra* note 54, at 80. However, as Professor Hovenkamp stated, “once the model becomes more complex, the policymaker necessarily relies on values that lie outside the model. The result is an antitrust policy that will always have a noneconomic, or political, content.” Hovenkamp, *supra* note 49, at 284.

⁶⁸ GAVIL ET AL., *supra* note 63, at 71.

D. *The 1992 Horizontal Merger Guidelines and Critical Loss Analysis*

The Department of Justice first issued the Horizontal Merger Guidelines in 1968 to help explain how the agency would evaluate mergers under the antitrust laws.⁶⁹ Since 1968, the Merger Guidelines have been amended three times, in 1982, 1984, and 1992.⁷⁰ While the 1982 Merger Guidelines incorporated the economic thinking of the Chicago School, the 1992 amendments included elements of the Post-Chicago School.⁷¹

The current Merger Guidelines emphasize the idea that “mergers should not be permitted to create or enhance market power or to facilitate its exercise.”⁷² Market power, unfortunately, is a remarkably difficult thing to measure.⁷³ To grapple with this measurement, the Merger Guidelines call for a five-step analytical process.⁷⁴ First, the agency should define the relevant product market and determine whether the proposed merger would significantly increase the concentration of that market.⁷⁵ Next, the agency should consider whether the merger might foster potentially adverse competitive effects, such as the unilateral effects of the merged firm or the increased likelihood of coordination among competitors.⁷⁶ Third, the agency should assess the possibility and likelihood that new competitors would enter the market to counteract any potentially anticompetitive behavior.⁷⁷ Fourth, the agency should consider any efficiency gains from the merger that could not otherwise be achieved.⁷⁸ Finally, the agency should take into account any possibility that one of the merging parties would imminently fail without the merger, in which case allowing the merger might not harm competition any more than blocking it.⁷⁹

The Merger Guidelines call for the agencies to “first define the relevant product market with respect to each of the products of each of the merging firms.”⁸⁰ As such, market definitions play a critical role in the agencies’ decisions to challenge mergers.⁸¹ In defining the relevant product

⁶⁹ *Id.* at 472.

⁷⁰ *Id.*

⁷¹ *Id.* at 71, 472. The 1984 amendments primarily dealt with geographic markets and foreign competition, which are topics outside of the scope of this Note.

⁷² MERGER GUIDELINES, *supra* note 25, § 0.1.

⁷³ See Pitofsky, *supra* note 41, at 1810 (noting that measuring market power is based on economic concepts that are “virtually unknowable”).

⁷⁴ See MERGER GUIDELINES, *supra* note 25, § 0.2.

⁷⁵ *Id.* § 1.

⁷⁶ *Id.* § 2; see, e.g., *id.* § 2.1.

⁷⁷ *Id.* § 3.

⁷⁸ *Id.* § 4.

⁷⁹ *Id.* § 5.

⁸⁰ MERGER GUIDELINES, *supra* note 25, § 1.1.

⁸¹ Michael L. Katz & Carl Shapiro, *Critical Loss: Let’s Tell the Whole Story*, 17 ANTITRUST 49, 49 (2003).

market, the agencies ask whether a hypothetical monopolist with control over a group of products would find it profitable to impose a “small but significant and nontransitory increase in price”—generally 5 percent.⁸² If enough consumers would substitute another product in response to such an increase in price so that it would be unprofitable for the hypothetical monopolist to raise prices, then the product market is too narrow and the next-best substitute should be added to the product market.⁸³ Although the Merger Guidelines did not exist in 1962, courts and commentators, including the *Brown Shoe* Court, already understood the importance of substitutability in defining product markets. But the Merger Guidelines go further. By focusing on marginal consumers who would substitute in response to an increase in price, the Merger Guidelines suggest the use of a type of critical loss analysis to define the relevant product market.⁸⁴

When applied to merging firms, critical loss analysis estimates the losses in sales that would result from an increase in price and determines the point at which the gains from the higher price no longer offset any lost sales.⁸⁵ Applying critical loss analysis requires three steps.⁸⁶ First, the analyst must estimate the “actual loss,” which estimates the loss in gross profit margin (i.e., price minus marginal cost) associated with an increase in price for the post-merger firm.⁸⁷ In other words, for each increase in price that results in fewer sales, how much profit is being lost?⁸⁸ The next step is to determine the “critical loss,” which is simply the point at which it would no longer be profitable for the merged firm to increase prices because the loss in sales outweighs the gains from the higher price.⁸⁹ Finally, given a “small but significant nontransitory” increase in price, for example, 5 percent, does the actual loss exceed the critical loss at that increase in price?⁹⁰ If so, then the merged firm will not increase prices that much because it would be unprofitable to do so.⁹¹ On the other hand, if the actual loss does not exceed the critical loss at the given price increase, then the merged firm would find it profitable to increase prices, which would harm consumers.⁹²

⁸² MERGER GUIDELINES, *supra* note 25, § 1.11 (internal quotation marks omitted).

⁸³ *Id.*

⁸⁴ See James Langenfeld & Wenqing Li, *Critical Loss Analysis in Evaluating Mergers*, 46 ANTITRUST BULL. 299, 299-301 (2001).

⁸⁵ *Id.*; Daniel P. O'Brien & Abraham L. Wickelgren, *A Critical Analysis of Critical Loss Analysis*, 71 ANTITRUST L.J. 161, 161 (2003).

⁸⁶ Langenfeld & Li, *supra* note 84, at 302-03; see also *FTC v. Whole Foods Mkt., Inc.*, 502 F. Supp. 2d 1, 18 (D.D.C. 2007), *rev'd*, 548 F.3d 1028 (D.C. Cir. 2008); Katz & Shapiro, *supra* note 81, at 49.

⁸⁷ Langenfeld & Li, *supra* note 84, at 303-06; see also Katz & Shapiro, *supra* note 81, at 49.

⁸⁸ See Langenfeld & Li, *supra* note 84, at 303-06; see also Katz & Shapiro, *supra* note 81, at 49.

⁸⁹ Katz & Shapiro, *supra* note 81, at 49.

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.*

As Judge Kavanaugh stated in *Whole Foods*, “in many antitrust cases, the analysis comes down to one issue: market definition.”⁹³ The relevant product market for antitrust purposes is in large part defined through critical loss analysis.⁹⁴ As such, the critical loss analyses conducted by the FTC and Whole Foods, specifically the calculation of actual loss, would have a profound effect on the outcome in *Whole Foods*.

In 2006, the DOJ and the FTC released the Commentary on the Horizontal Merger Guidelines (“Commentary”) that in part helped to explain the potentially adverse consequences of unilateral action by a merged firm.⁹⁵ In its discussion of unilateral effects, the Commentary explains the importance of “diversion ratios,” a calculation that would also impact the D.C. Circuit’s decision in *Whole Foods*.⁹⁶ When two firms with differentiated products merge, the merged firm then owns both products.⁹⁷ If consumers consider one of those products the next best substitute for the other product, then the merged firm may be able to raise the price of one product and still keep the customers that switch to the other product because the merged firm now owns both products.⁹⁸ The diversion ratio simply incorporates the number of people that would switch to a product owned by the merged firm in response to an increase in the price of the other product also owned by the merged firm.⁹⁹ In general, the higher the diversion ratio, the more likely the merger will harm competition.¹⁰⁰

Courts and agencies have relied on economics since the enactment of the antitrust laws, and the inclusion of diversion ratios is an example of the continuing evolution of economics. Professor Herbert Hovenkamp described the evolution as such:

The life of a school of antitrust policy is like the life of a scientific model. First the model experiences a period when only one or a few people dare to propose it. These people may be treated as charlatans by those who work within the consensus model. Later a breakthrough or discovery, or perhaps a series of discoveries, occurs that both discredits the accepted model and makes the new model seem far more palatable. Then the new model achieves consensus, and most people in the scholarly community try to jump on the wagon—to do research that will validate the model, or that is guided by the framework established by the model.¹⁰¹

⁹³ 548 F.3d 1028, 1051 (D.C. Cir. 2008) (Kavanaugh, J., dissenting).

⁹⁴ Langenfeld & Li, *supra* note 84, at 302-03.

⁹⁵ U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, COMMENTARY ON THE HORIZONTAL MERGER GUIDELINES (2006), available at <http://www.usdoj.gov/atr/public/guidelines/215247.pdf> [hereinafter GUIDELINES COMMENTARY].

⁹⁶ *Id.* § 2 (*Unilateral Effects Relating to the Pricing of Differentiated Products*); *Whole Foods*, 548 F.3d at 1044 (Tatel, J., concurring).

⁹⁷ GUIDELINES COMMENTARY, *supra* note 95, § 2.

⁹⁸ *Id.*

⁹⁹ *See id.*

¹⁰⁰ *Id.*

¹⁰¹ Hovenkamp, *supra* note 49, at 215 (footnotes omitted).

The amendments to the Merger Guidelines indicate this evolution, as does the Commentary that describes the concept of diversion ratios. The evolution of antitrust law is intimately tied to the evolution of economics, and *Whole Foods* indicates the tension that such an evolution can create.

III. *FTC v. WHOLE FOODS MARKET, INC.*

A. *Background*

There are roughly 34,000 supermarkets in the United States, and their individual success rests largely on their ability to differentiate themselves from one another.¹⁰² Whole Foods and Wild Oats both sought to differentiate themselves from other supermarkets in part by emphasizing premium natural and organic products, and their similar focus created a natural rivalry between the two companies.¹⁰³ As a result, when Whole Foods announced on February 21, 2007, that it would acquire Wild Oats in a \$565 million merger, it caught the FTC's attention.¹⁰⁴

On June 6, 2007, the FTC filed a motion for a preliminary injunction in the United States District Court for the District of Columbia to prevent the consummation of the merger.¹⁰⁵ The FTC argued that Whole Foods and Wild Oats were the two largest operators of "premium natural and organic supermarkets" in the United States, and that a merger of the two companies would reduce competition and harm consumers because Wild Oats was Whole Foods' closest competitor.¹⁰⁶ To support its allegation, the FTC offered direct evidence of the likely anticompetitive effects, such as statements by the Chief Executive Officers ("CEOs") of both companies,¹⁰⁷ as

¹⁰² Corrected Brief for Appellee Whole Foods Market, Inc. at 5, *FTC v. Whole Foods Mkt., Inc.*, 548 F.3d 1028 (D.C. Cir. 2008) (No. 07-5276); Proof Brief for Appellant FTC, *supra* note 3, at 6-7 n.5. Notably, Whole Foods and Wild Oats operate 194 and 110 stores, respectively. *Whole Foods*, 548 F.3d at 1032.

¹⁰³ Proof Brief for Appellant FTC, *supra* note 3, at 5-6.

¹⁰⁴ *Id.* at 6; *Whole Foods*, 548 F.3d at 1032.

¹⁰⁵ *FTC v. Whole Foods Mkt., Inc.*, 502 F. Supp. 2d 1, 3 (D.D.C. 2007), *rev'd*, 548 F.3d 1028 (D.C. Cir. 2008). The FTC also filed an administrative complaint to determine whether to permanently block the merger under section 7 of the Clayton Act. *See Whole Foods*, 548 F.3d at 1032; Proof Brief for Appellant FTC, *supra* note 3, at 6.

¹⁰⁶ 502 F. Supp. 2d at 5 (internal quotation marks omitted); *see also* Proof Brief for Appellant FTC, *supra* note 3, at 6.

¹⁰⁷ Proof Brief for Appellant FTC, *supra* note 3, at 7-11. For example, the former CEO of Wild Oats stated that "[t]here's really only two players . . . of any substance in the organic and all natural [market], and that's Whole Foods and Wild Oats." *Id.* at 8. Meanwhile, the CEO of Whole Foods stated that "[b]uying [Wild Oats] we will . . . avoid nasty price wars . . ." *Id.* at 11.

well as expert testimony by an economist who found that the merger would allow the merged firm to either increase prices or reduce quality.¹⁰⁸

The district court dismissed the FTC's evidence and denied the motion for a preliminary injunction, instead finding that Whole Foods and Wild Oats sufficiently competed with conventional supermarkets.¹⁰⁹ Less than two weeks after the district court's decision, Whole Foods and Wild Oats consummated the merger.¹¹⁰ Whole Foods began selling, closing, or renovating the old Wild Oats stores soon thereafter.¹¹¹ But all of those plans would come to a screeching halt less than a year later.¹¹²

B. *The D.C. Circuit's Opinions in FTC v. Whole Foods Market, Inc.*

In a splintered decision with no majority opinion, the D.C. Circuit reversed and remanded the district court's decision to deny the FTC's motion for a preliminary injunction.¹¹³ Judge Tatel concurred with the judgment, but not the opinion of Judge Brown, creating a situation where the decision's precedential value must be inferred based on common principles of agreement between the two judges.¹¹⁴ Meanwhile, Judge Kavanaugh deliv-

¹⁰⁸ *Id.* at 6-21.

¹⁰⁹ *Whole Foods*, 502 F. Supp. 2d at 34, 50. The district court emphasized the idea that differentiation is the way in which companies compete and does not necessarily delineate the relevant product market for antitrust analysis. *See id.* at 26, 32. Also worth mentioning is the incredible pace at which this case was litigated. The financing arrangements for the merger were set to expire on August 31, 2007, so the merging parties requested an expedited review. *Id.* at 4. In an attempt to meet the parties' request, the district court held a two-day trial six days after receiving the final briefs. *Id.* The district court even went so far as to note that it had to "act under severe time constraints . . . in evaluating the evidence and arguments . . ." *Id.*

¹¹⁰ *Whole Foods*, 548 F.3d at 1033; Corrected Brief for Appellee Whole Foods Market, Inc., *supra* note 102, at 30.

¹¹¹ Corrected Brief for Appellee Whole Foods Market, Inc., *supra* note 102, at 30-31.

¹¹² After the D.C. Circuit reversed and remanded the district court's denial of the preliminary injunction, the FTC and Whole Foods reached a settlement agreement on March 6, 2009. Press Release, Fed. Trade Comm'n, FTC Consent Order Settles Charges that Whole Foods' Acquisition of Rival Wild Oats was Anticompetitive (Mar. 6, 2009), *available at* <http://www.ftc.gov/opa/2009/03/wholefoods.shtm>. In exchange for the resolution of the FTC's charges, Whole Foods agreed to divest thirty-two stores, some related assets, and the Wild Oats brand name. *Id.*

¹¹³ *Whole Foods*, 548 F.3d at 1041. Notably, Judge Tatel originally joined Judge Brown's opinion so that the case had a majority opinion. *See* *FTC v. Whole Foods Mkt., Inc.*, 533 F.3d 869, 882 (D.C. Cir. 2008) (Tatel, J., concurring). However, in response to the petition for a rehearing en banc, all three judges amended their opinions. *See Whole Foods*, 548 F.3d at 1051 (Kavanaugh, J., dissenting). The petition to have the case heard en banc was subsequently denied. *Id.* at 1063. The most significant change to the opinions was that Judge Tatel no longer joined Judge Brown's opinion and simply concurred in the judgment. *Id.* at 1051 n.1.

¹¹⁴ *Whole Foods*, 548 F.3d at 1061 (Kavanaugh, J., dissenting). Cases without majority opinions can still present binding holdings based on any common ground among the concurring opinions, although those holdings may be difficult to discern at times. *See* *Marks v. United States*, 430 U.S. 188,

ered a dissenting opinion, noting the uncertain precedent created by the fractured decision.¹¹⁵ This section begins by reviewing Judge Brown's opinion, followed by a review of Judge Tatel's decision. It then identifies the common principles of the two opinions to understand the binding precedent of the decision. Finally, the section concludes with a review of Judge Kavanaugh's dissenting opinion.

1. Judge Brown's Opinion

Judge Brown began by finding that the case was not moot despite the fact that Whole Foods and Wild Oats consummated the merger approximately one year before the D.C. Circuit heard the case.¹¹⁶ Judge Brown noted that "the courts are 'clothed with large discretion' to create remedies 'effective to redress [antitrust] violations and to restore competition.'"¹¹⁷ Despite the fact that Whole Foods already sold or closed some Wild Oats stores, Judge Brown stated that further action would be appropriate as long as one of the eighteen markets addressed by the FTC could still be preserved.¹¹⁸ Judge Brown then alluded to her view of preliminary injunctions as necessary to "avoid the need for intrusive relief later, since even with the considerable flexibility of equitable relief, the difficulty of 'unscrambl[ing] merged assets' often precludes 'an effective order of divestiture.'"¹¹⁹

While the district court announced the correct standard for granting a preliminary injunction, Judge Brown found that the district court incorrectly applied the standard.¹²⁰ The FTC sought a preliminary injunction under 15 U.S.C. § 53(b), which allows a district court to grant a preliminary injunction "[u]pon a proper showing that, weighing the equities and considering the Commission's likelihood of ultimate success, such action would be in the public interest."¹²¹ Accordingly, a district court must "balance the likelihood of the FTC's success against the equities, under a sliding scale."¹²² This balancing test will often weigh in favor of the FTC because "the public interest in effective enforcement of the antitrust laws' was Congress's

193 (1977). For example, the Supreme Court has often recognized that the vast majority of cases without a majority opinion still provide precedential value. *See id.*

¹¹⁵ *Whole Foods*, 548 F.3d at 1063 (Kavanaugh, J., dissenting).

¹¹⁶ *Id.* at 1034 (majority opinion). *See also id.* at 1033 (noting that the merger closed on August 28, 2007, approximately nine months before the case was heard by the D.C. Circuit).

¹¹⁷ *Id.* at 1033 (quoting *Ford Motor Co. v. United States*, 405 U.S. 562, 573 (1972)).

¹¹⁸ *Id.* at 1033-34.

¹¹⁹ *Id.* at 1034 (quoting *FTC v. Dean Foods Co.*, 384 U.S. 597, 607 n.5 (1966)).

¹²⁰ *Id.* at 1034-36 (noting that the district court applied the correct legal standard, but reached an erroneous conclusion by failing to correctly analyze the product market as required by that standard).

¹²¹ *Whole Foods*, 548 F.3d at 1034 (internal quotation marks omitted).

¹²² *Id.* at 1035.

specific ‘public equity consideration’ in enacting the provision.”¹²³ As a result, the FTC enjoys a presumption in its favor and can generally attain a preliminary injunction by “rais[ing] questions going to the merits so serious, substantial, difficult and doubtful as to make them fair ground for thorough investigation.”¹²⁴

Judge Brown asserted that the district court did not appropriately apply the standard because it incorrectly found that the FTC absolutely failed to present evidence of a likelihood of success and therefore never weighed the equities.¹²⁵ Instead, Judge Brown found that the FTC did present a sufficient likelihood of success.¹²⁶

Despite the district court’s incorrect application of the preliminary injunction standard, Judge Brown noted that the standard of review for a district court’s denial of a preliminary injunction is for abuse of discretion.¹²⁷ However, the standard of review becomes *de novo* if the district court’s decision “rests on an erroneous premise as to the pertinent law.”¹²⁸ Judge Brown found that the district court’s decision did rest on an erroneous principle—that “the ‘marginal’ consumer, not the so-called ‘core’ or ‘committed’ consumer, must be the focus of any antitrust analysis.”¹²⁹ Instead, Judge Brown asserted that “core consumers can, in appropriate circumstances, be worthy of antitrust protection.”¹³⁰

To support her idea of core consumers, Judge Brown relied on *Brown Shoe Co. v. United States*.¹³¹ In *Brown Shoe*, the Supreme Court introduced the idea of submarkets that may “constitute product markets for antitrust purposes” within broader markets.¹³² In a frequently cited passage for its “practical indicia,” the Supreme Court stated that “[t]he boundaries of such a submarket may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product’s peculiar characteristics and uses, unique production facilities,

¹²³ *Id.* (quoting *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 726 (D.C. Cir. 2001)).

¹²⁴ *Id.* (quoting *Heinz*, 246 F.3d at 714-15).

¹²⁵ *Id.* at 1035-36.

¹²⁶ *Id.* at 1036 (stating that the district court’s conclusion on the issue was erroneous).

¹²⁷ *Whole Foods*, 548 F.3d at 1034 (citing *Heinz*, 246 F.3d at 713).

¹²⁸ *Id.* (quoting *Heinz*, 246 F.3d at 713). This difference in standard of review is integral to Judge Brown’s opinion because the District Court’s decision most likely would not constitute an abuse of discretion. *Id.*

¹²⁹ *Id.* at 1037 (quoting *FTC v. Whole Foods Mkt., Inc.*, 502 F. Supp. 2d 1, 17 (D.D.C. 2007) (citing MERGER GUIDELINES, *supra* note 25)).

¹³⁰ *Id.* Judge Brown cited the section of the Merger Guidelines dealing with price discrimination to support this assertion; however, citation to this section is erroneous because it confuses the concept of core consumers with targeted buyers in price discrimination situations. *See infra* Part V.A.

¹³¹ *Whole Foods*, 548 F.3d at 1037-38 (citing *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962)).

¹³² *Brown Shoe*, 370 U.S. at 325.

distinct customers, distinct prices, sensitivity to price changes, and specialized vendors.”¹³³

In turn, Judge Brown found that the FTC provided sufficient evidence that “premium, natural, and organic supermarkets” constituted a submarket, which catered to “a core group of customers who ‘have decided that natural and organic is important, [and that a] lifestyle of health and ecological sustainability is important.’”¹³⁴ Additionally, she stated that the FTC documented “exactly the kind of price discrimination that enables a firm to profit from core customers for whom it is the sole supplier.”¹³⁵ Judge Brown alluded to the idea that Whole Foods’ comparison of prices with conventional supermarkets on non-perishable items somehow constituted price discrimination because high-quality perishables make up 70 percent of Whole Foods’ business.¹³⁶ While these assertions are questionable under modern economic principles, Judge Brown did correctly affirm a more sophisticated method of economic analysis promoted by the FTC.¹³⁷

Whole Foods utilized a method of economic analysis called critical loss analysis, explained above in Part II.D, which led its expert to conclude that Whole Foods would not find it profitable to raise prices after the merger because enough customers would switch to a conventional supermarket in response to the higher prices.¹³⁸ The FTC criticized the critical loss analysis performed by Whole Foods and instead used an economic analysis called critical diversion, which examines “how many customers would be diverted to Whole Foods and how many to conventional supermarkets if a nearby Wild Oats closed.”¹³⁹ Whole Foods’ own documents found that the majority of Wild Oats customers would switch to Whole Foods instead of a conventional supermarket, leading the FTC’s expert to conclude that Whole Foods could find it profitable to raise prices after the merger.¹⁴⁰

Judge Brown found that the district court’s decision rested on the erroneous principle that only marginal consumers should be the focus of anti-trust analysis, which allowed for de novo review of the district court’s deci-

¹³³ *Id.*

¹³⁴ *Whole Foods*, 548 F.3d at 1039 (citation omitted).

¹³⁵ *Id.* This statement is curious since the FTC never mentions the idea of price discrimination in any of its briefs. See Brief of Appellant, *supra* note 3; Brief of Appellee, *supra* note 102.

¹³⁶ *Whole Foods*, 548 F.3d at 1039. Again, this assertion confuses the meaning of price discrimination. See *infra* Part V.A. Judge Brown also noted several of the FTC’s findings that support the FTC’s assertion that a “premium, natural, and organic supermarket” is at least a probable product market. *Whole Foods*, 548 F.3d at 1039-40. This evidence is also included in Judge Tatel’s opinion and will be discussed more thoroughly in that section. See *infra* Part III.B.2.

¹³⁷ See *Whole Foods*, 548 F.3d at 1038 (affirming the “small but significant non-transitory increase in price” (“SSNIP”) test).

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ *Id.*

sion.¹⁴¹ Upon such review, Judge Brown held that the FTC met its burden for a preliminary injunction standard and sufficiently showed a likelihood of success by raising serious questions about the merger.¹⁴² While Judge Tatel also reached the same conclusion, the two opinions are far from identical.

2. Judge Tatel's Concurring Opinion

Judge Tatel's opinion focused more on the evidence that the district court allegedly overlooked or at least failed to include in its opinion.¹⁴³ He addressed the mootness question only in passing, simply agreeing with Judge Brown and saying that this case "presents a live controversy."¹⁴⁴ He also used the same preliminary injunction standard proposed by Judge Brown—that the FTC had met its burden of showing a likelihood of success if it had "raise[d] questions going to the merits so serious, substantial, difficult and doubtful as to make them fair ground for thorough investigation."¹⁴⁵ This standard is less stringent than the traditional equity standard, which requires a finding of irreparable harm, because Congress determined that the FTC should be able to obtain a preliminary injunction more easily than a private individual since the FTC acts on behalf of the public.¹⁴⁶ Similar to Judge Brown, Judge Tatel also relied on the Supreme Court's *Brown Shoe* decision, although he focused on a notably different aspect of the decision than Judge Brown.¹⁴⁷

Rather than relying on core consumers and submarkets, Judge Tatel focused more on interchangeability and the "practical indicia" of *Brown Shoe*, quoting its language that "[t]he 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."¹⁴⁸ The remainder of Judge Tatel's opinion is based on the idea that the "practical indicia" in *Brown Shoe* act as proxies for interchangeability and cross-elasticity of demand, and Judge Tatel proceeded to categorize the evidence provided by the FTC into the "practical indicia."¹⁴⁹

¹⁴¹ *Id.* at 1037, 1041.

¹⁴² *Id.* at 1041.

¹⁴³ *Whole Foods*, 548 F.3d at 1042 (Tatel, J., concurring) ("[T]he district court overlooked or mistakenly rejected evidence supporting the FTC's view that Whole Foods and Wild Oats occupy a separate market of 'premium natural and organic supermarkets.'").

¹⁴⁴ *Id.* at 1041.

¹⁴⁵ *Id.* (quoting *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 714-15 (D.C. Cir. 2001)).

¹⁴⁶ *Id.* at 1042.

¹⁴⁷ *See id.* at 1043.

¹⁴⁸ *Id.* (quoting *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962)).

¹⁴⁹ *Whole Foods*, 548 F.3d at 1043-47. For reference, the "practical indicia" from *Brown Shoe* are "industry or public recognition of the submarket as a separate economic entity, the product's peculiar

For example, the FTC cited a number of industry studies that found that Whole Foods and Wild Oats “never truly competed with conventional supermarkets.”¹⁵⁰ This evidence supports the “practical indicia” of industry recognition that can help delineate a relevant product market.¹⁵¹ Additionally, the former CEO of Wild Oats explained why conventional supermarkets could not readily compete with stores like Whole Foods or Wild Oats: “[I]f conventional stores offer a lot of organic products, they don’t sell enough to their existing customer base, leaving the stores with spoiled products and reduced profits.”¹⁵² Judge Tatel also pointed to several statements by the CEOs of both Whole Foods and Wild Oats that affirmed the notion that the two companies largely competed only with one another.¹⁵³

Additionally, Judge Tatel noted that Whole Foods and Wild Oats both sold only natural and organic foods, while conventional supermarkets might only sell a selection of natural and organic foods. He found this distinction to be a “peculiar characteristic,” another one of the “practical indicia.”¹⁵⁴ Finally, Judge Tatel addressed the pricing evidence provided by the FTC that supported the FTC’s motion for a preliminary injunction.¹⁵⁵ For example, when a Whole Foods store opened near a Wild Oats store, it caused the Wild Oats store to lower its prices.¹⁵⁶ Additionally, when a similar grocery store selling only natural and organic products called Earth Fare opened near a Whole Foods, that Whole Foods lowered its prices.¹⁵⁷

While the Merger Guidelines adopted by the FTC and the DOJ indicate that the ability for the post-merger business to raise prices by 5 percent is the relevant issue in defining the product market, Judge Tatel made clear that the Merger Guidelines “are by no means to be considered binding on the court” and that the ability to raise prices is not the only way to prove a product market.¹⁵⁸ He stated that “*Brown Shoe* lists ‘distinct prices’ as only one of a non-exhaustive list of seven ‘practical indicia’ that may be examined to determine whether a separate market exists.”¹⁵⁹ Judge Tatel ulti-

characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors.” *Brown Shoe*, 370 U.S. at 325.

¹⁵⁰ *Whole Foods*, 548 F.3d at 1044 (Tatel, J., concurring).

¹⁵¹ *Id.* at 1044-45.

¹⁵² *Id.* at 1044.

¹⁵³ *Id.* at 1045.

¹⁵⁴ *Id.*

¹⁵⁵ *Id.* at 1046-48.

¹⁵⁶ *Whole Foods*, 548 F.3d at 1047.

¹⁵⁷ *Id.* at 1046-47.

¹⁵⁸ *Id.* at 1046 (quoting *FTC v. PPG Indus.*, 798 F.2d 1500, 1503 n.4 (D.C. Cir. 1986)). Interestingly, Judge Tatel relied heavily on the “practical indicia” of *Brown Shoe* and denigrated the Merger Guidelines, while Judge Kavanaugh focused on the Merger Guidelines and pointed out the modern infamy of *Brown Shoe* in his dissent. *See id.* at 1052, 1058 (Kavanaugh, J., dissenting).

¹⁵⁹ *Id.* at 1046 (Tatel, J., concurring) (citing *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962)).

mately found that the FTC provided enough “practical indicia” to satisfy its burden for a preliminary injunction.¹⁶⁰

In addition to the “practical indicia,” Judge Tatel also discussed the economic models used by both the FTC and Whole Foods.¹⁶¹ Similar to Judge Brown, Judge Tatel recognized that the analysis used by Whole Foods “embodied a widely recognized flaw in critical loss analysis, namely that such analysis often overestimates actual loss when a company has high margins—which Whole Foods does.”¹⁶² Whole Foods also failed to calculate, or even to propose, a methodology for calculating an actual loss, a key component of critical loss analysis.¹⁶³ The FTC instead used critical diversion analysis and found that the diversion ratio “is at least *four times* the diversion ratio[] needed to make a price increase of 5% profitable for a joint owner of the two stores.”¹⁶⁴ Just as Judge Brown did, Judge Tatel affirmed the use of a more complete economic analysis by citing the fallacy of the critical loss analysis conducted by Whole Foods.¹⁶⁵

3. Common Principles from Judges Brown and Tatel

To discern the precedential holding of this decision by the D.C. Circuit, the common principles between Judge Brown’s and Judge Tatel’s opinions must be uncovered.¹⁶⁶ These two judges generally agreed on the following four principles: (1) the consummation of a merger after the FTC’s initial failure to obtain a preliminary injunction does not make the case moot;¹⁶⁷ (2) the FTC must raise “serious questions” to be granted a preliminary injunction; (3) the Supreme Court’s decision in *Brown Shoe* continues to be good law; and (4) critical loss analysis should not solely be relied on in situations where the merging entities have high margins prior to the merger.

After pointing out that the case was not moot, both Judges Brown and Tatel recognized that the FTC enjoys a less stringent standard than a private

¹⁶⁰ *Id.* at 1049.

¹⁶¹ *Id.* at 1047-48.

¹⁶² *Whole Foods*, 548 F.3d at 1048.

¹⁶³ *Id.* at 1048.

¹⁶⁴ *Id.* at 1044 (quoting Rebuttal Expert Report of Kevin M. Murphy, ¶ 32, *FTC v. Whole Foods Mkt., Inc.*, No. 1:07-CV-01021 (D.D.C. July 13, 2007)).

¹⁶⁵ *Id.* at 1048.

¹⁶⁶ *See Marks v. United States*, 430 U.S. 188, 193 (1977) (stating that when a court reaches a decision based on a fragmented rationale, its holding must be taken as the holding of those justices who concurred on the narrowest grounds).

¹⁶⁷ This Note does not focus on the mootness question because the issue was clearly decided based on precedent, and the dissent did not question that the case provided a live controversy.

individual in securing a preliminary injunction.¹⁶⁸ They both adopted the standard outlined in the D.C. Circuit's previous opinion, *FTC v. H.J. Heinz Co.*,¹⁶⁹ where the court explained:

[T]he standard for likelihood of success on the merits is met if the FTC "has raised questions going to the merits so serious, substantial, difficult and doubtful as to make them fair ground for thorough investigation, study, deliberation and determination by the FTC in the first instance and ultimately by the Court of Appeals."¹⁷⁰

The more lenient standard for the FTC to obtain a preliminary injunction results from the public interest language Congress used in 15 U.S.C. § 53(b).¹⁷¹

In addition to the FTC's preliminary injunction standard, Judges Brown and Tatel also relied heavily on the Supreme Court's decision in *Brown Shoe*.¹⁷² However, the two judges emphasized different aspects of the Supreme Court's decision such that the only common principle between the two opinions is that *Brown Shoe* continues to be relevant for defining product markets.¹⁷³ For example, Judge Brown focused on the idea that the "practical indicia" represent the existence of a submarket that alone can constitute a relevant product market for antitrust purposes.¹⁷⁴ Judge Brown then used this idea of a submarket to segue into her questionable discussion of core consumers and price discrimination.¹⁷⁵ However, Judge Tatel only mentioned the word submarket in passing, instead choosing to emphasize that the "practical indicia" demarcate the boundaries of a "distinct market" and that these boundaries are defined by the "interchangeability of use or

¹⁶⁸ *Whole Foods*, 548 F.3d at 1034-35 (noting that the FTC enjoys a rebuttable presumption favoring injunctive relief); *id.* at 1042 (Tatel, J., concurring) (noting that Congress adopted a more lenient "public interest" standard, rather than the "traditional equity standard" for injunctive relief).

¹⁶⁹ 246 F.3d 708 (D.C. Cir. 2001).

¹⁷⁰ *Id.* at 714-15 (quoting *FTC v. Beatrice Foods Co.*, 587 F.2d 1225, 1229 (D.C. Cir. 1978)).

¹⁷¹ *Whole Foods*, 548 F.3d at 1042 (Tatel, J., concurring). 15 U.S.C. § 53(b) provides that "[u]pon a proper showing that, weighing the equities and considering the Commission's likelihood of ultimate success, such action would be in the public interest." In his dissent, Judge Kavanaugh argued that this "serious questions" standard is somehow less stringent than the "likelihood of success" standard that should control in light of the Supreme Court's decision in *Munaf v. Geren*, 128 S. Ct. 2207 (2008). *Id.* at 1060-61 (Kavanaugh, J., dissenting).

¹⁷² *Id.* at 1037-40 (majority opinion), 1043-46 (Tatel, J., concurring).

¹⁷³ *See id.* at 1037-40, 1043-46. Again, the "practical indicia" from *Brown Shoe* are "industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors." *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962).

¹⁷⁴ *Whole Foods*, 548 F.3d at 1037.

¹⁷⁵ *Id.* at 1037-40; *see also infra* Part V.A.

the cross-elasticity of demand between the product itself and substitutes for it.”¹⁷⁶

Finally, Judges Brown and Tatel both adopted the FTC’s criticism of Whole Foods’s use of critical loss analysis in situations where the merging parties have high margins prior to the merger.¹⁷⁷ Instead of using critical loss analysis, the FTC used a method called critical diversion analysis, which takes into account where Wild Oats customers would go if their Wild Oats store closed.¹⁷⁸ This economic methodology, as well as the preliminary injunction standard and the *Brown Shoe* standards used by Judges Brown and Judge Tatel, is addressed by Judge Kavanaugh in his dissent, which is briefly discussed next.¹⁷⁹

4. Judge Kavanaugh’s Dissent

Judge Kavanaugh substantially altered his opinion in response to the changes made by Judges Brown and Tatel following the petition for rehearing.¹⁸⁰ His dissent began by discrediting the evidence presented by the FTC, and then, more importantly, he tackled two legal points relied on by both Judge Brown and Judge Tatel—the preliminary injunction standard and their reliance on *Brown Shoe*.¹⁸¹ This section first discusses Judge Kavanaugh’s concern with the preliminary injunction standard used by Judges Brown and Tatel. His unease with resuscitating the Supreme Court’s decision in *Brown Shoe* is discussed next, and finally, his interpretation of the economic models used by the parties is reviewed.

In his dissent, Judge Kavanaugh argued that the “serious questions” standard for the FTC to obtain a preliminary injunction “dilute[s] the standard for preliminary injunction relief in antitrust merger cases, such that the FTC apparently need not establish a ‘likelihood of success on the merits.’”¹⁸² Oddly, Judge Kavanaugh cited both the same case and the same “likelihood of success” language as Judges Brown and Tatel.¹⁸³ His concern with the “serious questions” standard seems to result from the Supreme

¹⁷⁶ *Whole Foods*, 548 F.3d at 1043-44 (Tatel, J., concurring) (quoting *Brown Shoe*, 370 U.S. at 325).

¹⁷⁷ *Id.* at 1038 (majority opinion), 1048 (Tatel, J., concurring).

¹⁷⁸ *Id.* at 1038 (majority opinion).

¹⁷⁹ *See id.* at 1051-63 (Kavanaugh, J., dissenting).

¹⁸⁰ *Id.* at 1051 n.1 (Kavanaugh, J., dissenting). For example, Judge Kavanaugh added an entire section to his dissenting opinion regarding Judge Brown’s discussion of price discrimination. *See id.* at 1062-63.

¹⁸¹ *Id.* at 1058-59.

¹⁸² *Whole Foods*, 548 F.3d at 1059 (quoting *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 714-15 (D.C. Cir. 2001)).

¹⁸³ *Id.* at 1034-35 (majority opinion), 1042 (Tatel, J., dissenting), 1052 (Kavanaugh, J., dissenting) (quoting *Heinz*, 246 F.3d at 714-15).

Court's recent decision in *Munaf v. Geren*.¹⁸⁴ However, that case does not involve the FTC, nor the statute the FTC used to seek the preliminary injunction, 15 U.S.C. § 53(b), which creates a different standard than the traditional standard for private parties.¹⁸⁵

Judge Kavanaugh also criticized the use of the Supreme Court's decision in *Brown Shoe* because that decision represents the "brand of free-wheeling antitrust analysis [that] has not stood the test of time."¹⁸⁶ He pointed out that the decision does not incorporate the economic principles that have largely shaped antitrust analysis for the last thirty years, and that by relying on this decision, Judges Brown and Tatel will "upend modern merger practice."¹⁸⁷

Lastly, Judge Kavanaugh briefly addressed the critical diversion methodology used by the FTC.¹⁸⁸ He noted that while Whole Foods' documents showed that most Wild Oats customers would switch to Whole Foods rather than a conventional supermarket if a Wild Oats closed, that trend did not matter unless Whole Foods could raise prices by 5 percent after the merger.¹⁸⁹ This view strictly adopts the suggestion of 5 percent outlined in the Merger Guidelines.¹⁹⁰

Judge Kavanaugh was most likely right when he said that "[t]he splintered panel opinions will create enormous uncertainty, debate, and litigation over the meaning and effect of this decision."¹⁹¹ While the D.C. Circuit's decision in *Whole Foods* probably raises more questions than it answers, one thing is for certain—*Brown Shoe* remains an important part of antitrust jurisprudence, for better or for worse.

IV. THE REDEEMING QUALITIES OF *BROWN SHOE*

Despite its shortcomings, exemplified by the splintered decision in *Whole Foods*, *Brown Shoe* does provide a flexibility that can at times be

¹⁸⁴ *Id.* at 1060-61 (Kavanaugh, J., dissenting) (citing *Munaf v. Geren*, 128 S. Ct. 2207, 2219 (2008)).

¹⁸⁵ Instead, *Munaf* dealt with the availability of habeas corpus relief for American citizens in Iraq who have allegedly committed crimes in Iraq. *Munaf*, 128 S. Ct. at 2213.

¹⁸⁶ *Whole Foods*, 548 F.3d at 1058 (Kavanaugh, J., dissenting).

¹⁸⁷ *Id.* at 1058-59. Judge Kavanaugh also rightfully critiqued Judge Brown's references to price discrimination and "core consumers" since the concepts did not appear anywhere in the FTC's briefs. *Id.* at 1062. Not only was the FTC silent on these ideas, but Judge Brown's references to them are questionable at best. *See infra* Part V.A.

¹⁸⁸ *Whole Foods*, 548 F.3d at 1056 (Kavanaugh, J., dissenting).

¹⁸⁹ *Id.*

¹⁹⁰ In addition to suggesting 5 percent, the Merger Guidelines also explicitly state that an agency "at times may use a price increase that is larger or smaller than five percent." MERGER GUIDELINES, *supra* note 25, § 1.11.

¹⁹¹ *Whole Foods*, 548 F.3d at 1063 (Kavanaugh, J., dissenting).

helpful in advancing antitrust analysis. Not only does this flexibility allow courts to adopt refinements in economic analysis, but perhaps more importantly, it also allows courts to supplement those models with other types of evidence when only incomplete or imperfect data are available. This section discusses these two redeeming qualities of *Brown Shoe* in more detail.

A. *The Ability to Adopt Refinements of Economic Modeling*

1. High Margins: A Problem with Critical Loss Analysis

The Merger Guidelines call for a form of critical loss analysis to properly define the relevant product market for antitrust purposes.¹⁹² Admittedly, the straightforward logic of critical loss analysis has a certain appeal.¹⁹³ However, the problem with this simplicity becomes apparent in situations where the merging firms have relatively high profit margins prior to the merger.¹⁹⁴ High profit margins indicate that any lost sale greatly affects profitability, which means that the critical loss for the merged firm will be low.¹⁹⁵ In other words, each unit sold has a high profit margin, so even the loss of a few units would make an increase in price unprofitable.¹⁹⁶ This interpretation tends to support a narrower product definition.¹⁹⁷ However, high margins also imply a small actual loss, a point that is frequently overlooked.¹⁹⁸

This oversight fails to recognize that the firms' high margins provide valuable information about the amount of sales the firms will lose for an increase in price.¹⁹⁹ High margins generally result from the ability of a firm to differentiate itself from its competitors.²⁰⁰ By differentiating itself, the firm attains market power because consumers are willing to pay a premium

¹⁹² Langenfeld & Li, *supra* note 84, at 299-302.

¹⁹³ See *infra* Part II.D.; see also O'Brien & Wickelgren, *supra* note 85, at 162.

¹⁹⁴ See generally Kenneth L. Danger & H.E. Frech III, *Critical Thinking about "Critical Loss" in Antitrust*, 46 ANTITRUST BULL. 339 (2001); Katz & Shapiro, *supra* note 81; Langenfeld & Li, *supra* note 84; O'Brien & Wickelgren, *supra* note 85.

¹⁹⁵ See Danger & Frech, *supra* note 194, at 347-51; Katz & Shapiro, *supra* note 81, at 50; Langenfeld & Li, *supra* note 84, at 307-09.

¹⁹⁶ See Danger & Frech, *supra* note 194, at 347-51; Katz & Shapiro, *supra* note 81, at 50; Langenfeld & Li, *supra* note 84, at 307-09.

¹⁹⁷ Katz & Shapiro, *supra* note 81, at 50.

¹⁹⁸ For example, Whole Foods' economist failed even to calculate actual loss because critical loss was deemed to be so low. *Whole Foods*, 548 F.3d at 1048 (Tatel, J., concurring). See Danger & Frech, *supra* note 194, at 347-51; Katz & Shapiro, *supra* note 81, at 50; Langenfeld & Li, *supra* note 84, at 309; O'Brien & Wickelgren, *supra* note 85, at 162.

¹⁹⁹ O'Brien & Wickelgren, *supra* note 85, at 161-63.

²⁰⁰ Katz & Shapiro, *supra* note 81, at 51 (indicating branding as an example of differentiation); Langenfeld & Li, *supra* note 84, at 300.

for its goods or services.²⁰¹ This willingness to pay more indicates that those consumers are less sensitive to a change in price, which means that relatively fewer people will switch to another product in response to an increase in price.²⁰² Fewer people switching because of an increase in price means that the actual loss for an increase in price is low.²⁰³ In turn, the low actual loss makes an increase in price more likely to be profitable, which is the exact opposite of the conclusion reached before.²⁰⁴ This tension—between high margins indicating a particular increase in price to be simultaneously unprofitable and profitable—points out the internal inconsistency with standard critical loss analysis.²⁰⁵

The FTC's expert made this precise argument in his critique of the analysis performed by Whole Foods' expert.²⁰⁶ Additionally, he pointed out that Whole Foods' expert failed to calculate, or even provide a methodology to calculate, actual loss, which plays a crucial role in critical loss analysis.²⁰⁷ The Whole Foods' expert estimated the actual loss using market research that showed: (1) grocery shoppers are highly price sensitive; (2) customers shift purchases between Whole Foods and other supermarkets and do so without cost; (3) most Whole Foods shoppers also frequently shop at other supermarkets; (4) supermarkets compete for Whole Foods' customers; and (5) Whole Foods checks the prices of other supermarkets.²⁰⁸ Based on these observations, Whole Foods' expert simply concluded that the actual loss would "far exceed" the thresholds that would make an increase in price profitable.²⁰⁹ While imperfect data often call for estimations, this type of

²⁰¹ Langenfeld & Li, *supra* note 84, at 300.

²⁰² *Id.*

²⁰³ Katz & Shapiro, *supra* note 81, at 50; Langenfeld & Li, *supra* note 84, at 308-23; O'Brien & Wickelgren, *supra* note 85, at 168-72.

²⁰⁴ Katz & Shapiro, *supra* note 81, at 50; Langenfeld & Li, *supra* note 84, at 308-23; O'Brien & Wickelgren, *supra* note 85, at 168-72.

²⁰⁵ O'Brien & Wickelgren, *supra* note 85, at 168-72. There are some situations where critical loss analysis is useful—in cases where there is price coordination before the merger, a kinked demand curve, or capacity constraints. *Id.* Also, there are several cases indicating the misuse and ramifications of misapplied critical loss analysis. *See, e.g.,* California v. Sutter Health Sys., 84 F. Supp. 2d 1057, 1076-81 (N.D. Cal. 2000), *aff'd*, 217 F.3d 846 (9th Cir. 2000); FTC v. Swedish Match, 131 F. Supp. 2d 151, 160-61 (D.D.C. 2000); FTC v. Tenet Healthcare Corp., 17 F. Supp. 2d 937, 944-45 (E.D. Mo. 1998), *rev'd*, 186 F.3d 1045 (8th Cir. 1999).

²⁰⁶ Rebuttal Expert Report of Kevin M. Murphy ¶¶ 6-8, FTC v. Whole Foods Mkt., Inc., 548 F.3d 1028 (D.C. Cir. 2008) (No. 1:07-CV-01021). Judge Tatel pointed out in his opinion that Whole Foods enjoys high margins, the veritable Achilles' heel of critical loss analysis. *Whole Foods*, 548 F.3d at 1048 (Tatel, J., concurring).

²⁰⁷ Rebuttal Expert Report of Kevin M. Murphy, *supra* note 206, ¶ 11; *see also* Proof Brief for Appellant FTC, *supra* note 3, at 19.

²⁰⁸ FTC v. Whole Foods Mkt., Inc., 502 F. Supp. 2d 1, 18-19 (2007); *see also* Corrected Brief for Appellee Whole Foods Market, Inc., *supra* note 102, at 29.

²⁰⁹ Rebuttal Expert Report of Kevin M. Murphy, *supra* note 206, ¶11 (quoting Expert Report of David Scheffman, ¶ 117).

assumption coupled with the high margin problem associated with critical loss analysis makes the credibility of such a calculation questionable. In response, the FTC's expert offered a refinement using critical diversion analysis.

2. Critical Diversion Analysis

In critical diversion analysis, the diversion ratio looks at where consumers would go to buy a product in response to an increase in price.²¹⁰ In the case of Firm A merging with Firm B, it asks the question: how many consumers would go to Firm B if Firm A raised its prices?²¹¹ A high diversion ratio indicates that the majority of Firm A's customers would go to Firm B if Firm A raised its prices.²¹² This trend indicates that if firms A and B were to merge, then the post-merger entity can potentially recover some of those customers who would have gone to Firm B in the event of higher prices.²¹³ By regaining some of those lost sales, the merged firm may find an increase in price to be profitable now because the critical loss is larger.²¹⁴ In other words, a price increase that would have been unprofitable without recapturing those lost customers is now profitable for the merged firm.²¹⁵ The larger Firm B's high pre-merger margin and the higher the diversion ratio between firms A and B, the larger the critical loss will be, indicating the merged firm's ability to raise prices profitably.²¹⁶

According to Whole Foods' own documentation called "Project Goldmine," at least a majority of Wild Oats customers would switch to Whole Foods upon the closing of a Wild Oats.²¹⁷ This high diversion ratio meant that "the average Whole Foods store would capture most of the revenue from the closed Wild Oats store."²¹⁸ The FTC's expert even calculated that this diversion ratio is "at least *four times* the diversion ratio[] needed to make a price increase of 5% profitable for a joint owner of the two stores."²¹⁹ The FTC's expert further refined his calculations using average

²¹⁰ Katz & Shapiro, *supra* note 81, at 50; Langenfeld & Li, *supra* note 84, at 314-17.

²¹¹ Katz & Shapiro, *supra* note 81, at 53; Langenfeld & Li, *supra* note 84, at 314-17; *see also* Charles E. Biggio, Whole Foods' *Impact on Unilateral Effects*, ONLINE MAG. FOR GLOBAL COMPETITION POL'Y, Sept. 1, 2008, at 1, 3; *see also* MERGER GUIDELINES, *supra* note 25, § 2.2.

²¹² *See* Katz & Shapiro, *supra* note 81, at 50-53; Langenfeld & Li, *supra* note 84, at 317.

²¹³ Langenfeld & Li, *supra* note 84, at 317.

²¹⁴ Katz & Shapiro, *supra* note 81, at 53; Langenfeld & Li, *supra* note 84, at 317.

²¹⁵ Katz & Shapiro, *supra* note 81, at 53; Langenfeld & Li, *supra* note 84, at 317.

²¹⁶ Katz & Shapiro, *supra* note 81, at 53; Langenfeld & Li, *supra* note 84, at 317.

²¹⁷ FTC v. Whole Foods Mkt., Inc., 548 F.3d 1028, 1038 (D.C. Cir. 2008).

²¹⁸ *Id.* at 1044 (Tatel, J., concurring).

²¹⁹ *Id.* (quoting Rebuttal Expert Report of Kevin M. Murphy, *supra* note 206, ¶ 32). As noted previously, the Merger Guidelines generally suggest that the ability to raise prices 5 percent indicates

diversion ratios instead of marginal diversion ratios, because Whole Foods clearly intended to close Wild Oats stores.²²⁰ Again, this small refinement provides an example of the myriad manipulations used to attempt to accurately define the relevant product market and assess market power. As such, the FTC's expert concluded that Whole Foods had incentives both to close Wild Oats stores and to raise prices after doing so.²²¹

In summary, critical loss analysis indicates that merging firms with high margins prior to the merger will most likely find it unprofitable to raise prices because each lost sale greatly affects profitability.²²² However, high margins fundamentally support the exact opposite conclusion.²²³ They demonstrate that consumers are less sensitive to price so that, while each lost sale is substantial, relatively few consumers will actually switch.²²⁴ If only a few customers switch, then the actual loss will be low, and the merged firm will most likely find it profitable to raise prices.²²⁵ As a result, critical loss analysis should not be relied upon in mergers involving firms with high margins.²²⁶ To do so would result in an overly broad market definition where the merged firm would be able to profitably raise prices more than anticipated.²²⁷ Instead, refinements of critical loss analysis should be performed, such as the FTC's expert's use of critical diversion ratios.²²⁸

This type of refinement provides an example of the courts' need for a flexible legal standard that can adopt newly-developed economic methodologies that more accurately define product markets and assess market power—a flexible legal standard like that found in *Brown Shoe*. Not only does *Brown Shoe* allow courts to adopt new methodologies, it also allows courts to supplement those models when adequate data is unavailable.

the relevant product market, although an agency may use a smaller or larger percentage depending on the industry. See MERGER GUIDELINES, *supra* note 25, § 1.11.

²²⁰ Rebuttal Expert Report of Kevin M. Murphy, *supra* note 206, ¶ 37.

²²¹ Proof Brief for Appellant FTC, *supra* note 3, at 21.

²²² Katz & Shapiro, *supra* note 81, at 50; Langenfeld & Li, *supra* note 84, at 308-09.

²²³ Katz & Shapiro, *supra* note 81, at 50; Langenfeld & Li, *supra* note 84, at 308-09; O'Brien & Wickelgren, *supra* note 85, at 168-72.

²²⁴ Langenfeld & Li, *supra* note 84, at 308-09.

²²⁵ Danger & Frech, *supra* note 194, at 41-42; Katz & Shapiro, *supra* note 81, at 50; Langenfeld & Li, *supra* note 84, at 308-09.

²²⁶ Katz & Shapiro, *supra* note 81, at 52; O'Brien, & Wickelgren, *supra* note 85, at 177-79.

²²⁷ Danger & Frech, *supra* note 194, at 348-51; Katz & Shapiro, *supra* note 81, at 52; Langenfeld & Li, *supra* note 84, at 311.

²²⁸ Rebuttal Expert Report of Kevin M. Murphy, *supra* note 206, at ¶ 37.

B. *The Ability to Supplement Imperfect Data*

One of the frequent criticisms of the Chicago School and neoclassical economics is its oversimplification of complex market interactions.²²⁹ The Post-Chicago School sought to correct this shortcoming by adopting more advanced economic models, but as Professor Herbert Hovenkamp noted,

[u]nder more complex models information becomes more ambiguous and more difficult to interpret. When that happens, the value of economic models begins to diminish in relative importance. In short, once the model becomes more complex, the policymaker necessarily relies on values that lie outside the model. The result is an antitrust policy that will always have a noneconomic, or political, content.²³⁰

Economic theory still provides helpful guidance in applying the antitrust laws in a principled manner.²³¹ However, the analytical models used to help guide determinations of market power often suffer from incomplete information.²³² Relying on economic concepts that are “virtually unknowable,” such as elasticity of demand, creates problems with measuring market power with absolute certainty.²³³

This is not to say that economic principles should not be used in antitrust analysis, but rather is an acknowledgement of the uncertainty regarding market power calculations. The analytical framework provided by the Merger Guidelines represents the most accurate method available for evaluating the intricate and complex machinations of the economy, but the Merger Guidelines recognize the method’s limitations and calls for its standards to be applied “reasonably and flexibly to the particular facts and circumstances of each proposed merger.”²³⁴ As such, economic analysis should only be used to the extent that it provides insight as to the effects

²²⁹ See, e.g., Hovenkamp, *supra* note 49, at 284.

²³⁰ *Id.*

²³¹ See generally MERGER GUIDELINES, *supra* note 25.

²³² Maisel, *supra* note 21, at 46; see also MERGER GUIDELINES, *supra* note 25, § 0. This was the case in *Whole Foods*, where the data proved difficult to work with. See Proof Brief for Appellant FTC, *supra* note 3, at 15 n.12, 16, 18 n.16; Corrected Brief for Appellee Whole Foods Market, Inc., *supra* note 102, at 29-30.

²³³ Pitofsky, *supra* note 41, at 1810.

²³⁴ MERGER GUIDELINES, *supra* note 25, § 0. This recognition sheds some light on the interaction between Judges Tatel and Kavanaugh regarding the status of the Merger Guidelines as being binding on the courts. See *FTC v. Whole Foods Mkt., Inc.*, 548 F.3d 1028, 1046 (D.C. Cir. 2008) (Tatel, J., concurring); see *id.* at 1052-53 (Kavanaugh, J., dissenting). Judge Tatel emphasized that the Merger Guidelines are not binding and that to force the FTC to prove the ability of the post-merger entity to raise prices by 5 percent or more would actually prove a violation of the Clayton Act. *Id.* at 1046-47 (Tatel, J., concurring). However, to obtain a preliminary injunction standard, the FTC does not have to prove a violation, but rather present a likelihood of success. *Id.*

merging entities have on competition.²³⁵ Fortunately, there is often additional evidence, perhaps even “practical indicia,” that can provide helpful guidance in understanding substitutability and defining the relevant product market.

While some commentators have criticized the “practical indicia” of *Brown Shoe* for giving courts exceptional leeway in defining relevant product markets,²³⁶ others have pointed out that these characteristics can serve as “evidentiary proxies for direct proof of substitutability.”²³⁷ The problem with relying solely on “practical indicia” is that all but one of the seven indicators deal with some sort of differentiation among products.²³⁸ For example, the First Circuit has stated:

[D]ifferences in cost and quality between products create the possibility of separate markets, not the certainty. A car with more features and a higher price is, within some range, in the same market as one with less features and a lower price. The issue is sometimes described as one of interchangeability of products or services . . . although this formula is itself only an aid in trying to infer the shape of the invisible demand curve facing the accused monopolist.²³⁹

While differentiation among products can indicate the existence of some degree of market power, it overlooks the possibility that differentiated products may still have substitutes.²⁴⁰ Others, including Judge Robert Bork, have acknowledged that some of the “practical indicia,” such as evidence of “‘industry or public recognition of the submarket as a separate economic’ unit, matter[] because we assume that economic actors usually have accurate perceptions of economic realities.”²⁴¹ Judge Bork continued to describe the “practical indicia” as “evidentiary proxies for direct proof of substitutability.”²⁴² While the appearance of “practical indicia” alone should not determine relevant product markets due to the inherent possibility of overstating market power, the fact that they can serve as proxies for the more

²³⁵ For example, “[s]ection 7 of the Clayton Act prohibits acquisitions, including mergers, ‘where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.’” *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 713 (D.C. Cir. 2001) (quoting 15 U.S.C. § 18 (2000)).

²³⁶ Maisel, *supra* note 21, at 41.

²³⁷ Baker, *supra* note 17, at 206 (quoting *Rothery Storage & Van Co. v. Atlas Van Lines, Inc.*, 792 F.2d 210, 218 (D.C. Cir. 1986)).

²³⁸ See Maisel, *supra* note 21, at 59. Of the seven “practical indicia,” only “sensitivity to price changes” does not indicate product differentiation. *Id.*

²³⁹ Keyte, *supra* note 16, at 714 (quoting *U.S. Healthcare, Inc. v. Healthsource, Inc.*, 986 F.2d 589, 598-99 (1st Cir. 1993)).

²⁴⁰ Maisel, *supra* note 21, at 41, 49.

²⁴¹ *FTC v. Whole Foods Mkt., Inc.*, 548 F.3d 1028, 1045 (D.C. Cir. 2008) (Tatel, J., concurring) (quoting *Rothery Storage*, 792 F.2d at 218 n.4, 219). Notably, this quotation is the only time that Judge Tatel mentioned submarkets. *Id.*

²⁴² *Rothery*, 792 F.2d at 218.

relevant determination of product substitutability can assist in the enforcement of the antitrust laws because market power is virtually impossible to calculate accurately at this point in time.²⁴³

In *Whole Foods*, the FTC described the price data provided by Whole Foods and Wild Oats as “inadequate”²⁴⁴ and “difficult to use.”²⁴⁵ Accordingly, Judge Tatel used the FTC’s evidence of “practical indicia” as a proxy for reasonable interchangeability in his delineation of the relevant product market.²⁴⁶ For example, the FTC presented evidence that supported the finding that Whole Foods and Wild Oats had “peculiar characteristics” that separated them from conventional supermarkets.²⁴⁷ Such characteristics include the fact that Whole Foods and Wild Oats sold only natural or organic products, while conventional supermarkets may only sell a small assortment of these products, if any at all.²⁴⁸ Additionally, Judge Tatel mentioned evidence of “industry or public recognition” that “premium, natural, and organic supermarkets” constitute their own relevant product market, including “dozens” of industry studies separating them from conventional supermarkets and several statements made by the CEOs and staff of both Whole Foods and Wild Oats.²⁴⁹

The D.C. Circuit’s decision on the one hand shows the redeeming qualities of the flexibility of *Brown Shoe* because the court could adopt a more refined economic analysis in light of inadequate data and could further supplement that data with evidentiary proxies for reasonable interchangeability. Ultimately, these considerations made the difference for Judges Brown and Tatel. However, the flexibility that allowed these valuable considerations also led to conclusions that simply cannot be squared with modern economics.

V. THE SHORTCOMINGS OF *BROWN SHOE* AND THE NEED FOR HARMONIZATION

While the flexibility of the standards in *Brown Shoe* has some advantages, that flexibility can also lead to questionable results in light of the discoveries of modern economics. Unfortunately, Judge Brown’s opinion indicates the possible confusion that can result from *Brown Shoe*’s amorphous standards. This problematic conclusion presents an example of the

²⁴³ See Pitofsky, *supra* note 41, at 1810; see also Baker, *supra* note 17, at 217-18.

²⁴⁴ Proof Brief for Appellant FTC, *supra* note 3, at 15 n.12.

²⁴⁵ *Id.* at 18 n.16.

²⁴⁶ *Whole Foods*, 548 F.3d at 1045 (Tatel, J., concurring).

²⁴⁷ *Id.* (quoting *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962)).

²⁴⁸ *Id.*

²⁴⁹ *Id.* (quoting *Brown Shoe*, 370 U.S. at 325). For example, Judge Tatel quotes the CEO of Wild Oats as saying, “there’s really only two players of any substance in the organic and all natural [market], and that’s Whole Foods and Wild Oats.” *Id.*

need to reconcile *Brown Shoe* with the understanding gained from modern economics. Judge Kavanaugh's idea of reconciliation would be to forget *Brown Shoe* entirely, while Judge Tatel at least attempted to harmonize the case with modern economics by construing the opinion narrowly and focusing on its interchangeability aspects. This section begins by discussing an example of the problems that *Brown Shoe* can cause, followed by a discussion of the options to reconcile the case with modern economic principles.

A. *The Problems of Submarkets and Core Customers: Judge Brown's Take on Brown Shoe*

In her opinion, Judge Brown quoted *Brown Shoe* extensively, but notably left out any reference to the first prong of the decision's standard for defining markets, which refers to reasonable interchangeability or cross-elasticity of demand.²⁵⁰ Instead, Judge Brown quoted the D.C. Circuit's decision in *United States v. Microsoft Corp.*²⁵¹ for the rule that a product market "must include all products reasonably interchangeable by consumers for the same purposes," and cited *Brown Shoe* solely for its language regarding submarkets and "practical indicia."²⁵² This emphasis on the submarket prong of *Brown Shoe* taken from *United States v. E.I. du Pont de Nemours & Co. (du Pont-GM)*²⁵³ is only the beginning of a slippery slope for Judge Brown.

Judge Brown then took this heavily criticized concept of submarkets and used it to justify specific antitrust protection for core customers.²⁵⁴ She stated that

a core group of particularly dedicated, "distinct customers," paying "distinct prices," may constitute a recognizable submarket, whether they are dedicated because they need a complete "cluster of products," because their particular circumstances dictate that a product "is the only realistic choice," or because they find a particular product "uniquely attractive"²⁵⁵

The FTC provided evidence that Whole Foods and Wild Oats catered to a group of customers who "have decided that natural and organic is impor-

²⁵⁰ *Id.* at 1037-38.

²⁵¹ 253 F.3d 34 (D.C. Cir. 2001).

²⁵² *Whole Foods*, 548 F.3d at 1037 (quoting *Microsoft*, 253 F.3d at 52). Notably, Judge Brown's opinion fails to cite the quotation within the quotation from *Microsoft*, which just so happens to refer to *United States v. E.I. du Pont de Nemours & Co. (Cellophane)*, 351 U.S. 377, 395 (1956). Judge Brown could have simply added the sentence preceding her quotation from *Brown Shoe* for the exact same principle, but instead she singled out the decision in support of the concept of submarkets.

²⁵³ 353 U.S. 586 (1957).

²⁵⁴ *Whole Foods*, 548 F.3d at 1038-39.

²⁵⁵ *Id.* at 1039 (citations omitted).

tant, [and that a] lifestyle of health and ecological sustainability is important.”²⁵⁶ Judge Brown took this evidence to indicate that these customers constituted a group of core customers, and that these customers indicated that “premium, natural, and organic supermarkets” must be a submarket of conventional supermarkets.

In this context, the idea of a core customer is inherently flawed. Just because a group of customers has a strong preference for a distinguishable good, for example, natural and organic foods in the case of *Whole Foods*, such a preference does not necessarily lead to the delineation of a relevant product market.²⁵⁷ To reach such a conclusion would be to overstate the market power of the firms supplying the product in question.²⁵⁸ More importantly, looking beyond a group’s preference for natural and organic goods does not mean that the antitrust laws do not provide the group protection. Instead, the more relevant question in defining a product market and ensuring antitrust protection for all consumers is how marginal customers react, because they are more sensitive to increases in price and potentially make it unprofitable for a company to raise its price.²⁵⁹

For example, if enough marginal customers would switch to another product in response to an increase in price so that the increase in price would not be profitable, then the post-merger firm simply will not increase its price.²⁶⁰ Because the post-merger firm will not increase its price, both marginal consumers and so-called core customers win by continuing to pay the same price.²⁶¹ However, if only a few marginal customers would switch to another product in response to an increase in price so that such an increase in price would be profitable for the post-merger firm, then the post-merger firm will increase its price.²⁶² In this scenario, however, the post-merger firm constitutes a relevant product market because it can raise prices profitably.²⁶³ As a result, the merger would most likely be challenged, in which case both marginal customers and so-called core customers are protected by the antitrust laws.²⁶⁴ In other words, core customers are always protected under the antitrust laws, but in order to understand how best to protect them, analysts need to look at the behavior of marginal customers.²⁶⁵ To better understand marginal customers, the Merger Guidelines fittingly provide guidance.²⁶⁶

²⁵⁶ *Id.* at 1039 (quoting *FTC v. Whole Foods Mkt.*, 502 F. Supp. 2d 1, 23 (D.D.C. 2007)).

²⁵⁷ Maisel, *supra* note 21, at 63-64; Pitofsky, *supra* note 41, at 1816-17.

²⁵⁸ Maisel, *supra* note 21, at 63-64; Pitofsky, *supra* note 41, at 1816-17.

²⁵⁹ Maisel, *supra* note 21, at 63-64; Pitofsky, *supra* note 41, at 1816-17.

²⁶⁰ See Maisel, *supra* note 21, at 63-64; Pitofsky, *supra* note 41, at 1816-17.

²⁶¹ See Maisel, *supra* note 21, at 63-64; Pitofsky, *supra* note 41, at 1816-17.

²⁶² See Maisel, *supra* note 21, at 63-64; Pitofsky, *supra* note 41, at 1816-17.

²⁶³ See Maisel, *supra* note 21, at 63-64; Pitofsky, *supra* note 41, at 1816-17.

²⁶⁴ Maisel, *supra* note 21, at 63-64; Pitofsky, *supra* note 41, at 1816-17.

²⁶⁵ Maisel, *supra* note 21, at 63-64; Pitofsky, *supra* note 41, at 1816-17.

²⁶⁶ See generally MERGER GUIDELINES, *supra* note 25.

Market power is the ability of a firm to harm competition and consumers by raising prices or restricting output.²⁶⁷ As such, antitrust analysis attempts to assess market power as accurately as possible in order to protect competition, which is a daunting task given that measuring market power relies on economic concepts that are “virtually unknowable.”²⁶⁸ The first step in attempting to understand market power is to define the relevant product market.²⁶⁹ This step is the point at which the marginal customer makes his or her debut. The Merger Guidelines suggest using a method where a product market consists of a product or group of products such that a hypothetical monopolist could profitably impose a “small but significant and nontransitory” increase in price.²⁷⁰ To identify the product market, the FTC or the DOJ will begin with a product and determine whether the price of that product could be increased without losing enough customers to make the increase in price unprofitable.²⁷¹ This step is premised on the idea that customers will react to an increase in the price of one product by switching to a substitute product. This sensitivity to price is known as demand elasticity, and the customer that switches to the substitute product is known as the marginal customer. The FTC or the DOJ will then include that substitute in their definition of product market until no reasonable substitutes remain, at which point the market is properly defined.²⁷² Once the market is defined, the FTC or the DOJ can determine whether a post-merger firm could exercise market power and harm consumers and competition.²⁷³

Distinguishing between core and marginal customers draws an arbitrary line along what in reality is generally a spectrum of individual preferences.²⁷⁴ Each individual has a threshold at which point an increase in price will lead him or her to choose to switch to a substitute good. As the price of a product gradually increases, the individuals switching to a substitute at each increase of price are the marginal customers. Marginal customers are simply people who are relatively more sensitive to price than core customers. In other words, core customers *are* marginal customers; the only difference between the two is that one is more or less sensitive to price than the other. The customers who are more sensitive to price can make it unprofitable for the post-merger firm to raise prices because they will substitute another product for the post-merger firm’s product.²⁷⁵ If enough people will substitute another product, then the post-merger firm does not have market

²⁶⁷ See Keyte, *supra* note 16, at 697.

²⁶⁸ Pitofsky, *supra* note 41, at 1810.

²⁶⁹ MERGER GUIDELINES, *supra* note 25, § 1.1.

²⁷⁰ *Id.* § 1.11.

²⁷¹ *Id.*

²⁷² *Id.*

²⁷³ *Id.*

²⁷⁴ See Maisel, *supra* note 21, at 63-64.

²⁷⁵ See Pitofsky, *supra* note 41, at 1814.

power to increase prices and the customers who are less sensitive to price, so-called core customers, have nothing to fear.²⁷⁶ If enough people do not switch and the post-merger firm can raise prices, then the merger should be blocked as anticompetitive and again, core customers have nothing to fear.²⁷⁷ So, in this regard, the district court correctly focused its attention on marginal consumers.²⁷⁸ Judge Brown's focus on core customers, however, is misplaced. Unfortunately, Judge Brown's notion of core customers led to a more fundamental problem regarding the meaning of price discrimination.

One set of circumstances exists where a specific group of consumers may qualify for their own antitrust protection—situations of price discrimination.²⁷⁹ The Merger Guidelines define price discrimination as “charging different buyers different prices for the same product.”²⁸⁰ In order to price discriminate among its customers, a firm must be able to do two things: (1) identify which customers are willing to pay more; and (2) prevent customers who purchased the product at the lower price from reselling it to those customers willing to pay more.²⁸¹ In these situations, both the Merger Guidelines and the case law recognize that these “captive” customers can constitute their own relevant product market for antitrust purposes.²⁸²

Judge Brown suggested that Whole Foods and Wild Oats engaged in price discrimination in an apparent confusion between so-called “core” customers and “captive” customers.²⁸³ In her opinion, Judge Brown noted that “the FTC documented exactly the kind of price discrimination that enables a firm to profit from core customers for whom it is the sole supplier.”²⁸⁴ However, as Judge Kavanaugh correctly pointed out in his dissent, the FTC never makes any mention of price discrimination in its briefs, assumingly because Whole Foods and Wild Oats do not engage in price discrimination.²⁸⁵

Judge Brown mistakenly inferred that Whole Foods and Wild Oats were somehow price discriminating by comparing their prices on non-perishable dry goods to the prices of similar goods at conventional super-

²⁷⁶ *See id.*

²⁷⁷ *See id.*

²⁷⁸ *FTC v. Whole Foods Mkt., Inc.*, 502 F. Supp. 2d 1, 17 (D.D.C. 2007). In support of her argument for “core customers,” Judge Brown also cited *United States v. Grinnell Corp.*, 384 U.S. 563 (1966). That decision has also come under wide criticism for ignoring findings that customers of the alarm service offered by Grinnell switched to other substitutes because of price. *See Pitofsky, supra* note 41, at 1816; *see also Maisel, supra* note 21, at 63-64.

²⁷⁹ MERGER GUIDELINES, *supra* note 25, § 1.12; Pitofsky, *supra* note 41, at 1848; Maisel, *supra* note 21, at 55-57.

²⁸⁰ MERGER GUIDELINES, *supra* note 25, § 1.12.

²⁸¹ Maisel, *supra* note 21, at 56.

²⁸² Pitofsky, *supra* note 41, at 1848.

²⁸³ *See FTC v. Whole Foods Mkt., Inc.*, 548 F.3d 1028, 1039-40 (D.C. Cir. 2008).

²⁸⁴ *Id.* at 1039.

²⁸⁵ *Id.* at 1062-63 (Kavanaugh, J., dissenting).

markets.²⁸⁶ While checking prices on some goods and not others may indicate the possibility of market power in certain items, it has nothing to do with price discrimination because all customers are paying the same prices. If price discrimination were present, then those captive customers would potentially constitute a relevant product market for antitrust purposes.²⁸⁷ By invoking price discrimination in this case, Judge Brown fundamentally misinterprets this concept.

Judge Brown's reliance on *Brown Shoe* provides an example of the problems associated with its flexible standards. For example, the concept of submarkets can create a slippery slope that can lead to erroneous conclusions based on misinterpretations of economic principles. These problematic conclusions indicate the need to address *Brown Shoe* so as to avoid absurd results in light of the principles of modern economics. It can be addressed either by simply ignoring the opinion, as Judge Kavanaugh would prefer, or, as Judge Tatel advocated, harmonizing the opinion with modern economics by construing it narrowly and focusing on its discussion of interchangeability.

B. *The Ways to Reconcile Brown Shoe with Modern Economics*

Fundamentally, the dispute between Judge Kavanaugh and Judge Tatel regarding how to address *Brown Shoe* presents the larger question of what role economic analysis should play in the enforcement of the antitrust laws. In his dissenting opinion, Judge Kavanaugh advocated for a strict application of the economic principles presented in the Merger Guidelines and seemed to resent the “resuscitat[ion]” of *Brown Shoe*.²⁸⁸ This focus on economics as the foundation of antitrust analysis closely resembles the Chicago School's exclusive focus on efficiency.²⁸⁹ While Judge Tatel took economic analysis into account, he also applied *Brown Shoe* by considering some “practical indicia” that acted as evidentiary proxies for reasonable interchangeability.²⁹⁰ This comprehensive approach more closely resembles the Post-Chicago School.²⁹¹ Because the D.C. Circuit failed to decisively answer the question by issuing a fractured decision, the remainder of this Part attempts to distill the better method for reconciling *Brown Shoe*.

²⁸⁶ *Id.* at 1040 (majority opinion). These dry goods constitute roughly 30 percent of Whole Foods' business, while high-quality perishables constitute the vast majority of its business. *Id.*

²⁸⁷ Maisel, *supra* note 21, at 55-57; Pitofsky, *supra* note 41, at 1848.

²⁸⁸ *Whole Foods*, 548 F.3d at 1058.

²⁸⁹ Hovenkamp, *supra* note 49, at 283-84; Kovacic, *supra* note 54, at 22.

²⁹⁰ *Whole Foods*, 548 F.3d at 1043, 1045.

²⁹¹ *See supra* Part II.C.

1. Forget It: Judge Kavanaugh's Take on *Brown Shoe*

If not already apparent, Judge Kavanaugh viewed *Brown Shoe* with disdain in his dissenting opinion, stating that its “free-wheeling antitrust analysis has not stood the test of time,”²⁹² and that “[t]he Court’s revival of the loose *Brown Shoe* standard threatens to . . . upend modern merger practice.”²⁹³ Instead, Judge Kavanaugh focused his attention on the available pricing data from the critical loss analyses conducted with respect to the Merger Guidelines.²⁹⁴ Without strong pricing data, Judge Kavanaugh dismissed the rest of the FTC’s evidence.²⁹⁵ It is safe to say that Judge Kavanaugh would have preferred to remove any mention of *Brown Shoe* and its “practical indicia” from the D.C. Circuit’s decision.

2. Harmonize It: Judge Tatel's Take on *Brown Shoe*

Judge Tatel harmonized *Brown Shoe* with modern economics by focusing on its first prong, which emphasizes “reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it,” to define the relevant product market.²⁹⁶ He then utilized *Brown Shoe*’s “practical indicia” to serve as proxies for reasonable interchangeability without focusing on submarkets or core customers as Judge Brown did.²⁹⁷ While the Supreme Court’s decision in *Brown Shoe* calls for “practical indicia” to be analyzed in order to determine the existence of the disparaged concept of submarkets, in *Whole Foods* Judge Tatel interpreted the “practical indicia” as simply delineating the boundaries of a “distinct market.”²⁹⁸ This narrow interpretation of the case allowed Judge Tatel to acknowledge the Supreme Court precedent, while harmonizing it with modern economics so as to avoid an absurd result.

3. Harmony over Forgetfulness: Why Judge Tatel Got It Right

Judge Tatel’s reconciliation of *Brown Shoe* with modern economics provides a more comprehensive approach to antitrust analysis than Judge Kavanaugh’s preferred method. Not only does Judge Tatel’s approach of using both economics and evidentiary proxies for interchangeability ac-

²⁹² *Whole Foods*, 548 F.3d at 1058.

²⁹³ *Id.* at 1059.

²⁹⁴ *Id.* at 1053-54.

²⁹⁵ *Id.* at 1052-58.

²⁹⁶ *Id.* at 1043 (quoting *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962)).

²⁹⁷ *See id.* at 1043-44.

²⁹⁸ *Whole Foods*, 548 F.3d at 1045 (Tatel, J., concurring).

knowledge one of the primary Supreme Court precedents on the topic of horizontal mergers, it also addresses some of the limitations found in both the Merger Guidelines and use of a purely economic approach.

For example, economic models can provide unreliable results when proper data are unavailable.²⁹⁹ Unfortunately, data are often imperfect, which was the case in *Whole Foods*.³⁰⁰ At the very least, proxies for interchangeability should supplement economic modeling whenever the model is based on imperfect data. To exclude such evidence would be to simply accept one estimate without considering another. This approach by no means rejects economic analysis, and in fact provides the flexibility to adopt new economic models as they become viable.³⁰¹

Additionally, while the Merger Guidelines provide valuable insight into the enforcement of the antitrust laws, the D.C. Circuit is not bound by them.³⁰² The D.C. Circuit is, however, bound by Supreme Court precedent, and *Brown Shoe* remains as such. As a result, Judge Tatel's approach better reconciles *Brown Shoe* with the advances of modern economics.

CONCLUSION

Since the enactment of the first antitrust statute, scholars and commentators have debated the proper role of economics in antitrust analysis. The D.C. Circuit's decision in *Whole Foods* is in part simply the latest iteration of this debate. At the heart of the debate lies one of the most infamous cases in antitrust jurisprudence—*Brown Shoe*. The opinion's amorphous standards create a flexibility that is both its greatest strength and weakness. On one hand, this flexibility allows courts to adopt new economic models as they develop and to supplement those models with evidentiary proxies for interchangeability, such as previous statements made by the merging parties. On the other hand, *Brown Shoe*'s loose standards and references to concepts like submarkets can lead to conclusions that are irreconcilable with modern economics. As such, *Whole Foods* presents an example of the need to reconcile *Brown Shoe* with modern economics so as to avoid questionable outcomes. To do so, one judge recommended simply forgetting about the case, while another judge recommended harmonizing the case with modern economics by narrowly interpreting it so as to focus on interchangeability.

²⁹⁹ See Maisel, *supra* note 21, at 46; see also MERGER GUIDELINES, *supra* note 25, § 0 n.4.

³⁰⁰ See Proof Brief for Appellant FTC, *supra* note 3, at 15 n.12, 16, 18 n.16; Corrected Brief for Appellee Whole Foods Market, Inc., *supra* note 102, at 30.

³⁰¹ See *supra* Part IV.A.

³⁰² *Whole Foods*, 548 F.3d at 1046 (Tatel, J., concurring) (“[T]he Merger Guidelines . . . ‘are by no means to be considered binding on the court’” (quoting *FTC v. PPG Indus., Inc.*, 798 F.2d 1500, 1503 n.4 (D.C. Cir. 1986))).

While economic modeling can be instructive, it often suffers from imperfect data that reduce results to mere estimations. These estimates should in turn be supplemented with the “practical indicia” that serve as proxies for interchangeability when available. So, rather than simply forgetting *Brown Shoe*, courts should harmonize the opinion with modern economic principles by focusing on its language regarding interchangeability. This focus will allow courts to continue adopting economic models as they evolve and address some of the shortcomings of antitrust analysis focused solely on economic modeling.