

# CHICAGO, POST-CHICAGO, AND BEYOND: TIME TO LET GO OF THE 20TH CENTURY

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# CHICAGO, POST-CHICAGO, AND BEYOND: TIME TO LET GO OF THE 20TH CENTURY

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We come both to praise and bury the Chicago School of Antitrust. "Praise" is easy to understand. The Chicago School approach and its advocates are widely recognized as rescuing antitrust from its big is bad, competitor protection, per se illegality rule, government always wins obsessions.

"Bury" requires considerably more explanation. "Neo-Chicago" Antitrust Analysis, the subject of this symposium, describes an approach that is said to use both Chicago and Post-Chicago insights and the error cost framework pioneered by Judge Frank Easterbrook to design antitrust rules. According to the Oxford English Dictionary, the primary definition of the prefix "neo" is the description of a "new" form. But the error cost framework was already a staple of the normative policy analyses identified with the Chicago School. Thus, whether a Neo-Chicago School describes a new form of antitrust analysis depends significantly upon whether the Post-Chicago School that it hopes to transcend identifies useful analyses and insights not found in the Chicago School literature. Using an accurate definition of the Chicago School as a body of analysis that applies traditional economic theory to generate and test hypotheses about specific

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<sup>&</sup>lt;sup>1</sup> David S. Evans & A. Jorge Padilla, *Designing Antitrust Rules for Assessing Unilateral Practices: A Neo-Chicago Approach*, 72 U. CHI. L. REV. 73, 75 (2005) (citing Frank H. Easterbrook, *The Limits of Antitrust*, 63 Tx. L. REV. 1, 9–14 (1984)). *See also* Daniel A. Crane, *Chicago, Post-Chicago, and Neo-Chicago*, 76 U. CHI. L. REV. 1911 (2009) (reviewing How CHICAGO OVERSHOT THE MARK: THE EFFECT OF CONSERVATIVE ECONOMIC ANALYSIS ON U.S. ANTITRUST POLICY (Robert Pitofsky ed., 2008) [hereinafter How CHICAGO OVERSHOT THE MARK]).

<sup>&</sup>lt;sup>2</sup> Oxford English Dictionary, <a href="http://oxforddictionaries.com/definition/neo-">http://oxforddictionaries.com/definition/neo-</a>.

<sup>&</sup>lt;sup>3</sup> The use of the term Post-Chicago can be traced to an article by Herbert Hovenkamp, *Antitrust Policy After Chicago*, 84 MICH. L. REV. 213, 225 (1985) [hereinafter *Antitrust Policy After Chicago*].

practices,<sup>4</sup> we show that economists, lawyers, and judges associated with the Chicago School anticipated many of the "new" insights credited to the Post-Chicago School.

The Chicago School of Antitrust influenced the law and policy in large part because its application of price theory and economics produced empirical studies to support an inference that Chicago School-based explanations of a given practice were more plausible than alternative, usually anticompetitive, explanations.<sup>5</sup> In contrast to the Chicago School, Post-Chicago economics focuses on sophisticated, but stylized theoretical models, producing possibility theorems that largely eschew empirical testing. Because traditional Chicago School analyses recognized the potential for the anticompetitive behavior that is the subject of key Post-Chicago School possibility theorems, there is much less value associated with the most important claim of the benefits of the Post-Chicago School approach—that it reveals outcomes not considered by the Chicago School.

Alternatively, the Post-Chicago School approach could contribute new and more complex or sophisticated theories and analyses that serve to sharpen and refine the economic analysis of the Chicago School. While additional theoretical sophistication and complexity is useful, reliance on untested and in some cases untestable models can create indeterminacy, which can retard rather than advance knowledge. Moreover, the lack of empirical verification of these theories likely has limited the impact of Post-Chicago School economics on U.S. antitrust law.

We clarify and defend the Chicago School of antitrust against incorrect and uninformed claims that it represents a narrow set of inefficiency impossibility theorems based on free market

<sup>&</sup>lt;sup>4</sup> See Joshua D. Wright, Overshot the Mark? A Simple Explanation of the Chicago School's Influence on Antitrust, Competition Pol'y Int'l, Spring 2009, at 1 [hereinafter Overshot the Mark?] (reviewing How Chicago Overshot the Mark, supra note 1).

<sup>&</sup>lt;sup>5</sup> For an excellent and comprehensive discussion of recent U.S. Supreme Court case law, including evidence of the impact of Chicago scholars, see Leah Brannon & Douglas H. Ginsburg, *Antitrust Decisions of the U.S. Supreme Court, 1967 to 2007*, COMPETITION POL'Y INT'L, Autumn 2007, at 3.

<sup>&</sup>lt;sup>6</sup> See generally Herbert J. Hovenkamp, *Post-Chicago Antitrust: A Review and Critique*, 2001 COLUM. BUS. L. REV. 258, 271–72 (2001) [hereinafter *Post-Chicago Antitrust*] ("[A] constant complaint about post-Chicago economic theories is that they are not testable in the conventional positivist sense. That is, often all that economists can do is produce data that are minimally consistent with the theory, but often cannot rule out alternative explanations. Where this critique applies, it can prove fatal to the formation of antitrust policy based on post-Chicago rules."); Bruce H. Kobayashi, *Game Theory and Antitrust: A Post-Mortem*, 5 GEO. MASON L. REV. 411, 413 (1997) (discussing focus on proliferation of models as the central weakness of game theoretic approaches to antitrust, resulting in a "degenerat[e]" research program that is unable "to provide any powerful generalizations or lend itself to empirical testing."); Timothy J. Muris, *Improving the Economic Foundations of Competition Policy*, 12 GEO. MASON. L. REV. 1 (2003) [hereinafter *Improving the Economic Foundations*].

<sup>&</sup>lt;sup>7</sup> See Hovenkamp, Post-Chicago Antitrust, supra note 6, at 271 ("[T]he sad fact is that judges have not come close to developing antitrust rules that takes [sic] this messier, more complex economics into account."): Wright, Overshot the Mark?, supra note 4, at 209–10.

ideology. The Chicago School arose decades ago as a reaction to the then current antitrust policies summarized above. Chicago prevailed, both as a methodology and in changing antitrust law for the better. That triumph was based primarily on scholarship before 1980, work that focused largely on overthrowing the old order, not on the myriad details that are necessary to implement policy. Moreover, to the extent they addressed implementation issues, prominent Chicago scholars often disagreed.

We nevertheless argue for the term's demise. The current popular understanding of the Chicago School of Antitrust as a narrow and uniform ideological approach to antitrust is inaccurate. As a result, the term Chicago, as well as the derivative terms Post- and Neo-Chicago, add little value and are frequently misused to make normatively incorrect points. We therefore add our voices to those who doubt the continuing usefulness of such labels. We hope to hasten the demise of using labels like Chicago pejoratively and as a substitute for the economic analysis that has been at the core of the Chicago School of Antitrust.

#### I. THE CHICAGO SCHOOL OF ANTITRUST ECONOMICS

#### A. WHAT IS CHICAGO?

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<sup>&</sup>lt;sup>8</sup> There is a secondary definition of the prefix "neo," describing the "revival of an old form." OXFORD ENGLISH DICTIONARY, *supra* note 2. The fact that it is our view that the neo-Chicago approach fits the secondary and not the first definition supports the conclusion that all approaches, including the original Chicago School approach, are not really new. Of course, a revival of an old form can itself be useful. As Kitch notes, "The basic truths that were being taught at Chicago . . . were not really new truths. They were old truths. The principal effect of this work has been to return economics to its older traditions." *See* Edmund W. Kitch, *The Fire of Truth: A Remembrance of Law and Economics at Chicago*, *1932–1970*, 26 J.L. & ECON. 163, 231 (1983).

<sup>&</sup>lt;sup>9</sup> See, e.g., Wright, Overshot the Mark?, supra note 4; Joshua D. Wright, Neo-Chicago Meets Evidence-Based Antitrust, TRUTH ON THE MARKET (May 12, 2009), http://truthonthemarket.com/2009/05/12/neo-chicago-meets-evidence-based-antitrust/ [hereinafter Neo-Chicago Meets Evidence-Based Antitrust] (questioning whether there is anything "neo" about "Neo-Chicago" antitrust analysis, and suggesting the use of the term "evidence based antitrust" largely to avoid the entire Chicago versus Post-Chicago debate). Neo-Chicago could have utility using the secondary definition of "neo," describing the revival of an old form. In part because of the politicization of the term Chicago, we doubt that "neo" adds much light to modern antitrust policy. Finally, we do not deny that terms like Chicago and Harvard are useful for discussing antitrust's 20th century history, especially pre-1980. See, e.g., Herbert Hovenkamp, The Rationalization of Antitrust, 116 HARV. L. REV. 917 (2003) [hereinafter The Rationalization of Antitrust] (reviewing RICHARD A. POSNER, ANTITRUST LAW (2d ed. 2001) [hereinafter Antitrust Law]); 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 (2007); Richard A. Posner, The Chicago School of Antitrust Analysis, 127 U. PA. L. REV. 925, 925 (1979) [hereinafter The Chicago School of Antitrust Analysis (noting convergence of Harvard and Chicago Schools).

To define a Chicago School of Antitrust, one should differentiate the economic writings by scholars associated with the Chicago School from the normative antitrust prescriptions attributed, often erroneously, to it. As we demonstrate, the former is a broad and often diverse set of analyses that anticipated much of the theoretical work identified as Post-Chicago economics. While we approach this task of definition with some trepidation, we aim only to state a plausible and widely accepted description of the approach that characterizes the Chicago School of Antitrust. We do not attempt a precise definition of the bounds of the Chicago School or a comprehensive list of its contributions.

The Chicago School of Antitrust can be best described as a body of research developed within a single research community containing scholars at or associated with the Law and Economics movement at Chicago, which itself is part of the Chicago School of Economics. The historical accounts of the Chicago School of Antitrust uniformly agree on the central influence of Aaron Director and the Antitrust Law course he taught with Edward Levi at the University of Chicago. Developed in a single research community, the Chicago School approach nevertheless did not reflect a universal theory of antitrust. Rather, Director used a

<sup>10</sup> For a list of such statements, see Wright, *Overshot the Mark?*, *supra* note 4; Wright, *Neo-Chicago Meets Evidence-Based Antitrust*, *supra* note 9.

<sup>&</sup>lt;sup>11</sup> Kitch, *supra* note 8, at 163–64; William H. Page, *The Chicago School and the Evolution of Antitrust: Characterization, Antitrust Injury, and Evidentiary Sufficiency*, 75 VA. L. REV. 1221, 1229–31 (1989).

<sup>&</sup>lt;sup>12</sup> Sam Peltzman, Aaron Director's Influence on Antitrust Policy, 48 J.L. & ECON. 313 (2005). See also Page, supra note 11, at 1229–30 (noting multiple testimonials to the influence of Director). In the foreword to their ANTITRUST LAW casebook, Posner and Easterbrook note that their casebook "is a (now rather distant) successor to mimeographed materials first prepared by Edward H. Levi and used by him and Aaron Director in the course on antitrust law that they taught jointly at the University of Chicago for many years. On the last class of each week of the course, Professor Director would present an economist's comments on the cases discussed during the week. The economic notes scattered throughout this casebook attempt to do what Professor Director did: expound the relevant economic concepts against the background of particular cases that illustrate the relevance of the concepts to antitrust law. Much of the economic analysis expounded in these notes is based on ideas first proposed by Director. A number of these ideas were later developed and published by other economists whose work we do cite, but these citations conceal Director's seminal role in the development of the economics of competition and monopoly presented in this book." RICHARD A. POSNER & FRANK H. EASTERBROOK, POSNER AND EASTERBROOK'S ANTITRUST: CASES, ECONOMIC NOTES AND OTHER MATERIALS XVI (2d ed. 1981); see also Kitch, supra note 8.

<sup>&</sup>lt;sup>13</sup> See Hovenkamp, Antitrust Policy After Chicago, supra note 3, at 226–33; Page, supra note 11, at 1229–31; see also Posner, The Chicago School of Antitrust Analysis, supra note 9, at 926 (1979) (basic ideas associated with the Chicago School of Antitrust did not "emerge from a full-blown philosophy of antitrust. Rather, they were the product of pondering specific questions raised by antitrust cases, and only in retrospect did it become clear that they constituted the basis of a general theory of the proper scope of antitrust policy.").

"bottom-up" approach focused on analysis of specific practices under the conventional assumptions of economics. <sup>14</sup> Director's and Levi's written contributions are limited, but their influence on several generations of antitrust scholars is well documented. <sup>15</sup>

The first generation of these scholars include John McGee, Lester Telser, Ward Bowman, and Robert Bork. Specific practices they examined included predatory pricing, resale price maintenance, tying, exclusive dealing, and both vertical and horizontal mergers. The case-by-case application of economics to existing antitrust doctrine cast considerable doubt on existing monopoly explanations of business practices, resulting in skepticism of the validity of these theories. Prominently, this skepticism led to the widespread application of the one-monopoly theory, which was used to illustrate the fallacy of then traditional antitrust theories of anticompetitive harm based on leverage theories.

<sup>&</sup>lt;sup>14</sup> Page, *supra* note 11, at 1228 (citing H. PACKER, THE STATE OF RESEARCH IN ANTITRUST LAW 55–56 (1963)).

<sup>&</sup>lt;sup>15</sup> Peltzman, *supra* note 12; Kitch, *supra* note 8. The lone published antitrust article under Director's name is a co-authored article with Levi. *See* Aaron Director & Edward H. Levi, *Law and the Future: Trade Regulation*, 51 Nw. U. L. REV. 281 (1956).

<sup>&</sup>lt;sup>16</sup> Page, *supra* note 11.

<sup>&</sup>lt;sup>17</sup> John S. McGee, *Predatory Price Cutting: The* Standard Oil (N.J.) *Case*, 1 J.L. & ECON. 137 (1958).

<sup>&</sup>lt;sup>18</sup> Ward S. Bowman, Jr., *The Prerequisites and Effects of Resale Price Maintenance*, 22 U. CHI. L. REV. 825 (1955); Lester G. Telser, *Why Should Manufacturers Want Fair Trade?* 3 J.L. & ECON. 86 (1960) [hereinafter *Fair Trade?*].

<sup>&</sup>lt;sup>19</sup> Ward S. Bowman, Jr., *Tying Arrangements and the Leverage Problem*, 67 YALE L.J. 19 (1957).

<sup>&</sup>lt;sup>20</sup> Director & Levi, *supra* note 15.

<sup>&</sup>lt;sup>21</sup> Robert Bork, *Vertical Integration and the Sherman Act: The Legal History of an Economic Misconception*, 22 U. Chi. L. Rev. 157 (1954).

<sup>&</sup>lt;sup>22</sup> See ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 217–24 (1978) [hereinafter The Antitrust Paradox].

<sup>&</sup>lt;sup>23</sup> Page, *supra* note 11, at 1231–33.

<sup>&</sup>lt;sup>24</sup> See Louis Kaplow, Extension of Monopoly Power Through Leverage, 85 COLUM. L. REV. 515, 516–20 (1985) (discussing the prevalence of the traditional view on leveraging and reviewing the critique). Recent academics have criticized the one-monopoly theory, noting its limitation to a narrow set of circumstances. See Einer Elhauge, Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory, 123 HARV. L. REV. 397 (2009). Chicago School analysis certainly recognized many of the limitations noted by critics, such as Elhauge. Indeed, Elhauge

Development of empirically testable hypotheses and the application of data to test such hypotheses were at the core of the Chicago School of Economics. This approach leaned heavily on neoclassical price theory, 25 but also relied upon the economics of information, 64 the economics of price discrimination, 75 the theory of the firm, 78 the theory of public goods, 79 the theory of natural monopoly, 30 and even game theory. The Chicago School approach relied

focuses much of his article on price discrimination explanations for tying, which were often used in Chicago antitrust analyses generally, and in analyses of tying specifically. The early analyses also recognized the differences between the fixed and variable proportion cases in tying, and recognized the potential validity of a leverage theory when there were complementary goods. See Bowman, supra note 19; see also Daniel A. Crane & Joshua D. Wright, Can Bundled Discounting Increase Consumer Prices Without Excluding Rivals?, Competition Pol'y Int'l, Autumn 2009, at 209, 210 (Commentary on Einer Elhauge, Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory, 123 HARV. L. REV. 397 (2009)) (arguing that "[t]he conditions necessary for monopoly leveraging through tying are narrow and rarely exhibited in real markets and, thus, we should continue to be presumptively skeptical about leverage claims," and that "Elhauge's 'power effects' thesis as to bundled discounts rests on a faulty premise—that the monopolist is free to threaten an unlimited price on the monopoly item in the bundle and. consequently, can charge a higher price for the bundle than it could for sales of the goods individually."); Daniel A. Crane, Mixed Bundling, Profit Sacrifice, and Consumer Welfare, 55 EMORY L.J. 423, 464 (2006) (criticizing Elhauge's approach of condemning conduct that furthers monopoly power by impairing rivals' efficiency irrespective of monopolist efficiencies: "[w]hether practices facilitating product branding or price discrimination are efficient in this sense raises questions that are fact-dependent at best and virtually always unanswerable in litigation."); Erik Hovenkamp & Herbert Hovenkamp, Tying Arrangements and Antitrust Harm, 52 ARIZ. L. REV. 925, 937–38 (2010) (criticizing Elhauge's analysis of price discrimination).

<sup>&</sup>lt;sup>25</sup> See, e.g., Posner, *The Chicago School of Antitrust Analysis*, *supra* note 9, at 928 (Chicago School antitrust analyses were not based on "antipathy to government intervention." Rather, the conclusions of the Chicago School analyses "resulted simply from viewing antitrust policy through the lens of price theory.").

<sup>&</sup>lt;sup>26</sup> George J. Stigler, *The Economics of Information*, 69 J. Pol. Econ. 213 (1961).

<sup>&</sup>lt;sup>27</sup> Bowman, *supra* note 19; George J. Stigler, *A Note on Block Booking*, *in* George J. Stigler, THE ORGANIZATION OF INDUSTRY 165 (1968) [hereinafter *A Note on Block-Booking*].

<sup>&</sup>lt;sup>28</sup> R.H. Coase, *The Nature of the Firm*, 4 ECONOMICA 386 (1937).

<sup>&</sup>lt;sup>29</sup> Telser, *Fair Trade?*, *supra* note 18.

<sup>&</sup>lt;sup>30</sup> Harold Demsetz, Why Regulate Utilities?, 11 J.L. & ECON. 55 (1968).

<sup>&</sup>lt;sup>31</sup> George J. Stigler, *A Theory of Oligopoly*, 72 J. Pol. Econ. 44 (1964) [hereinafter *A Theory of Oligopoly*].

heavily upon empirical work studying the use and effect of the practices analyzed.<sup>32</sup> The combination of both theoretical and empirical economics as the primary mode of analysis is recognized widely as one of the quintessential features and primary achievements of the Chicago School.<sup>33</sup>

Antitrust courts have largely followed this analytical approach.<sup>34</sup> One result of the incorporation of economics into antitrust law has been the widespread rejection of broad rules of per-se illegality.<sup>35</sup> Over three decades, the Supreme Court abandoned most per se rules,<sup>36</sup> leaving only naked horizontal price fixing and market division, plus a modified per se rule for tie-ins, under per se treatment.<sup>37</sup> During this time, the Court also established higher evidentiary

<sup>&</sup>lt;sup>32</sup> See generally GEORGE J. STIGLER, *The Economist and the State*, in THE CITIZEN AND THE STATE: ESSAYS ON REGULATION 38, 51 (1975) (noting that "[t]heories present general relationships, and which part of a theory is decisive in a particular context is a matter of empirical evidence.").

<sup>&</sup>lt;sup>33</sup> See Timothy J. Muris, Economics and Antitrust, 5 GEO. MASON L. REV. 303, 304–05 (1997) [hereinafter Economics and Antitrust]; Wright, Overshot the Mark?, supra note 4. We discuss in part III below the inaccuracy of characterizing Chicago as a political ideology devoid of empirical content.

<sup>&</sup>lt;sup>34</sup> See Brannon & Ginsburg, supra note 5, at 14–15 (noting the influence of economic analysis on the Courts, and listing a remarkable string of 18 cases between 1993 and 2007 in which the antitrust defendant prevailed). This trend continued through the 2008–09 term (Pac. Bell Telephone Co. v. Linkline Commc'ns, Inc., 555 U.S. 438 (2009)), but was interrupted by the Court's 2010 decision in *American Needle v. National Football League*, 130 S. Ct. 2201 (2010).

<sup>&</sup>lt;sup>35</sup> Richard A. Posner, *The Rule of Reason and the Economic Approach: Reflections on the* Sylvania *Decision*, 45 U. Chi. L. Rev. 1 (1977). *See also* Robert H. Bork, *The Rule of Reason and the Per Se Concept: Price Fixing and Market Division*, 75 Yale L.J. 373 (1966).

Leegin Creative Leather Prods., Inc. v PSKS, Inc., 551 U.S. 877, 900 (2007) (minimum resale price maintenance subject to the rule of reason); Illinois Tool Works Inc. v. Indep. Ink, Inc., 547 U.S. 28, 42–43 (2006) (no presumption of market power or rule of per se illegality for patent tieins); State Oil Co. v. Kahn, 522 U.S. 3, 17 (1997) (maximum resale price maintenance subject not per se illegal and subject to the rule of reason); Cont'l T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36, 58 (1977) (territorial restrictions subject to the rule of reason). The Court also developed truncated forms of analysis, under which even practices that resemble per se offenses are tested for possible efficiencies. This development is summarized in the FTC's 2003 PolyGram opinion. *See* PolyGram Holding, Inc., FTC Dkt. No. 9298, 2003 WL 21770765 (July 28, 2003) (Commission Opinion), *petition for review denied*, PolyGram Holding Inc. v. FTC, 416 F.3d 29 (2005).

<sup>&</sup>lt;sup>37</sup> Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2 (1984).

standards in resale price maintenance cases<sup>38</sup> and a hard to satisfy two-part test for plaintiffs in predatory pricing cases.<sup>39</sup> The Court has also expanded the use of procedural mechanisms, such as summary judgment<sup>40</sup> and motions to dismiss,<sup>41</sup> to screen out antitrust cases.

The Courts have not, however, adopted rules of per se legality or broad safe harbors, as some associated with the Chicago School have advocated. The absence of broad safe harbors or the outright repeal of much of the antitrust laws does not represent a rejection of the Chicago School unless one defines the Chicago School of Antitrust as a narrow brand of conservative economics mandating pro-defendant rules. Such a description stands the approach of the Chicago School of Antitrust, properly understood, on its head. The bottom-up application of price theory and other economics to the problems of antitrust, the hallmark of Chicago School/Aaron Director analysis, simply does not yield uniform conclusions regarding antitrust policy. The early Chicago School analyses did produce nearly uniform results in rejecting the existing, non-economic-based antitrust doctrine of the 1960s. But agreement on what not to do does not mean agreement on what to do. The continued application of economics to antitrust policy necessarily will yield indeterminate answers regarding what cases to bring. Fact-intensive determinations often will be required to distinguish between competing pro- and anticompetitive hypotheses in a given case.

This bottom-up, fact-intensive approach led to many disagreements regarding the appropriate scope of policy among Chicago School scholars. Indeed, unless ideology drives a particular "School," disagreements over questions of the application of broad policy are

<sup>&</sup>lt;sup>38</sup> Bus. Elecs. Corp. v. Sharp Elecs. Corp., 485 U.S. 717 (1988), Monsanto Co. v. Spray-Rite Serv. Corp., 465 U.S. 752 (1984). Of course, the Court eventually overturned the per se rule against retail price maintenance in its entirety.

<sup>&</sup>lt;sup>39</sup> Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 222–23 (1993); Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586–87 (1986) .

<sup>&</sup>lt;sup>40</sup> *Matsushita*, 475 U.S. 574. For an economic analysis of summary judgment as a screening device, see C. Frederick Beckner, III & Steven C. Salop, *Decision Theory and Antitrust Rules*, 67 Antitrust L.J. 41 (1999).

<sup>&</sup>lt;sup>41</sup> Bell Atl. Corp. v. Twombly, 550 U.S. 544 (2007). For an economic analysis of *Twombly*, see Keith N. Hylton, *When Should a Case Be Dismissed? The Economics of Pleading and Summary Judgment Standards*, 16 Sup. Ct. Econ. Rev. 39 (2008).

<sup>&</sup>lt;sup>42</sup> See Frank H. Easterbrook, Workable Antitrust Policy, 84 MICH. L. REV. 1696 (1986) [hereinafter Workable Antitrust Policy]; Richard A. Posner, The Next Step in the Antitrust Treatment of Restricted Distribution: Per Se Legality, 48 U. CHI. L. REV. 6 (1981).

<sup>&</sup>lt;sup>43</sup> See, e.g., Einer R. Elhauge, *Harvard, Not Chicago: Which Antitrust School Drives Recent Supreme Court Decisions?*, COMPETITION POL'Y INT'L, Autumn 2007, at 59 (characterizing the Chicago School of antitrust as "highly conservative."); see also Crane, supra note 1; Joshua D. Wright, *The Roberts Court and the Chicago School of Antitrust: The 2006 Term and Beyond*, COMPETITION POL'Y INT'L, Autumn 2007, at 24 (2007); Wright, *Overshot the Mark?*, supra note 4.

unsurprising, as resolution of these issues must proceed without precise estimates of the costs and benefits of a particular approach. Examples of disagreements include alternative interpretations of seminal antitrust cases, as well as disagreements over various policy approaches. For example, Posner and Easterbrook, two of the most prominent jurists in the Chicago School, differ on the appropriate treatment of predatory pricing. While Easterbrook would apply a broad rule of per se legality, Posner has criticized the Areeda/Turner cost rule as too permissive and would apply an equally efficient competitor standard.

#### B. CHICAGO IN PRACTICE

The preceding discussion suggests the futility and costs of defining the Chicago School based upon uniform proposals for antitrust policy. Instead, the appropriate focus to define the

<sup>44</sup> See generally Harold Demsetz, *Economics as a Guide to Antitrust Regulation*, 19 J.L. & ECON. 371 (1976).

<sup>&</sup>lt;sup>45</sup> See, e.g., the discussion of the Standard Oil and Standard Fashion cases, infra notes 61-65 and notes 73-76 respectively. Other examples include explanations for the Paramount and Loews block booking cases. United States v. Paramount Pictures, Inc., 334 U.S. 131 (1948); United States v. Loew's Inc., 371 U.S. 38 (1962). Compare Stigler, A Note on Block Booking, supra note 27 (rejecting anticompetitive leverage hypothesis used by the Court in favor of a price discrimination hypothesis) with Roy W. Kenney & Benjamin Klein, The Economics of Block Booking, 26 J.L. &. Econ. 497 (1983) (rejecting price discrimination hypothesis in favor of a hypothesis in which block booking was used efficiently to price a standardized package of films).

<sup>&</sup>lt;sup>46</sup> For example, consider how the understanding of resale price maintenance has also evolved. *Compare* Telser, *Fair Trade?*, *supra* note 18 (discussing free rider hypothesis) *with* Benjamin Klein & Kevin M. Murphy, *Vertical Restraints as Contract Enforcement Mechanisms*, 31 J.L. & ECON. 265 (1988) (examining how vertical restraints serve to provide incentives for the provision of dealer services). *See also* Benjamin Klein & Andres V. Lerner, *The Expanded Economics of Free-Riding: How Exclusive Dealing Prevents Free-Riding and Creates Undivided Loyalty*, 74 Antitrust L.J. 473 (2007); Howard P. Marvel, *Exclusive Dealing*, 25 J.L. & ECON. 1 (1982).

<sup>&</sup>lt;sup>47</sup> See, e.g., Frank H. Easterbrook, *Predatory Strategies and Counterstrategies*, 48 U. CHI. L. REV. 263 (1981) [hereinafter *Predatory Strategies and Counterstrategies*] (advocating per se legality for predatory pricing).

<sup>&</sup>lt;sup>48</sup> Phillip Areeda & Donald F. Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697 (1975).

<sup>&</sup>lt;sup>49</sup> Posner, *The Chicago School of Antitrust Analysis*, *supra* note 9 (criticizing Areeda/Turner test for predatory pricing as too permissive). *See also* POSNER, ANTITRUST LAW, *supra* note 9 at 217–19 (same). In Part IV, we discuss one of the most important disagreements among Chicago scholars—what are the appropriate standards for horizontal merger policy.

Chicago approach is one based on the common methodology used: (1) examination of a practice through the lens of economics; (2) application of empirical evidence and facts to test the hypotheses as applied to a specific case; and (3) application of error cost analysis to the theory and facts to minimize the sum of error costs and direct costs. We note that there is substantial and perhaps complete overlap between this methodological description of the Chicago School and the common description of the Neo-Chicago School. 51

The quintessential features of what we have identified as the Chicago approach illuminates the Court's recently announced plausibility standard in *Bell Atlantic Corp. v. Twombly*. <sup>52</sup> Under this approach, discrete hypotheses, formulated through the lens of economics, are compared. <sup>53</sup> In *Twombly*, the two hypotheses are the existence of an anticompetitive price fixing agreement on the one hand and legal parallel conduct on the other. The two columns of Table 1 show these two hypotheses.

The second prong of the analysis is the application of facts and other empirical evidence. To survive a motion to dismiss under the *Twombly* plausibility standard, the plaintiff must allege non-conclusory facts that make the anticompetitive hypothesis at least as compelling as the opposing inference of legal parallel behavior. Thinly pled cases that do not allege facts that would allow the court to distinguish between the two hypotheses fail under such a standard. The third prong of the Chicago School approach applies the error cost analysis to conclude that thinly pled cases should be dismissed. Table 1 shows the four possible outcomes associated with

<sup>&</sup>lt;sup>50</sup> See Easterbrook, supra note 1; Isaac Erlich & Richard A. Posner, An Economic Analysis of Legal Rulemaking, 3 J. LEGAL STUD. 257 (1974) (setting out the general approach); Richard A. Posner, An Economic Approach to Legal Procedure and Judicial Administration, 2 J. LEGAL STUD. 399 (1973).

<sup>&</sup>lt;sup>51</sup> Evans & Padilla, *supra* note 1.

<sup>&</sup>lt;sup>52</sup> 550 U.S. 544 (2007).

<sup>&</sup>lt;sup>53</sup> See Ronald J. Allen & Alan E. Guy, Conley as a Special Case of Twombly and Iqbal: Exploring the Intersection of Evidence and Procedure and the Nature of Rules, 115 Penn St. L. Rev. 1 (2010).

<sup>&</sup>lt;sup>54</sup> In *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, 324 (2007), the Supreme Court announced a similar comparative standard to be used in determining whether a complaint survives the heightened pleading standard under the Private Securities Litigation Reform Act, Pub. L. 104-67, 109 Stat. 737 (1995) (codified as amended at scattered Sections of 15 U.S.C.) (PSLRA). To survive a motion to dismiss under the PSLRA, a plaintiff must allege facts from which "a reasonable person would deem the inference of scienter cogent and at least as compelling as any opposing inference one could draw from the facts alleged."

<sup>&</sup>lt;sup>55</sup> For a similar description of the Court's *Matsushita* standard for summary judgment, see Hovenkamp, *The Rationalization of Antitrust, supra* note 9, at 925 (noting that "*Matsushita* never insisted that any particular kind of evidence of collusion was necessary, but only that the evidence be of such a quality that it makes collusion a likely explanation of the activity before the court.").

this two hypotheses, two outcomes, screening test.<sup>56</sup> There are two correct outcomes, correctly allowing discovery in the presence of illegal conduct and correctly dismissing the claim when there was legal parallel conduct. The sensitivity of a test is the rate at which the test correctly identifies anticompetitive behavior and allows discovery to proceed. The specificity of a test is the rate at which the test correctly dismisses cases of legal conduct. There are also two errors—a false positive or type II error, when the test incorrectly dismisses cases of illegal conduct, and a false negative or type I error, when discovery of legal parallel conduct is allowed.

TABLE 1
ERROR COST ANALYSIS AND THE PLAUSIBILITY STANDARD IN
BELL ATLANTIC V. TWOMBLY

	AGREEMENT TO FIX PRICES/ALLOCATE MARKETS	LEGAL PARALLEL CONDUCT
(+) Allow Discovery	Correct Positive (Sensitivity) Allow discovery when there was an agreement to fix prices	False Positive (Type I Error Rate) Erroneously impose costs on firm when there was legal parallel conduct
(-) Dismiss	False Negative (Type II Error Rate) Dismiss action when there was an agreement to fix prices	Correct Negative (Specificity)  Dismiss antitrust claim when there was legal parallel conduct

A rule that increases the rate at which thinly pled cases are dismissed increases the specificity of the test and reduces the costs of type I errors associated with allowing cases involving legal parallel conduct to survive a motion to dismiss and proceed to discovery.<sup>57</sup>

 $<sup>^{56}</sup>$  See generally Michael O. Finkelstein & Bruce Levin, Statistics for Lawyers 82 (2d ed. 2001).

These costs include the potentially large costs of discovery and the in terrorem effect these costs have on potential settlements. Post-Twombly studies have found that dismissal rates have increased. See Kendall W. Hannon, Note, Much Ado About Twombly? A Study on the Impact of Bell Atlantic Corp. v. Twombly on 12(b)(6) Motions, 83 NOTRE DAME L. REV. 1811 (2008); Patricia W. Hatamyar, The Tao of Pleading: Do Twombly and Iqbal Matter Empirically? 59 Am. U. L. Rev. 553 (2010); Joseph A. Seiner, The Trouble with Twombly: A Proposed Pleading Standard for Employment Discrimination Cases, 2009 U. ILL. L. REV. 1011 (2009). Nevertheless, it is unclear what inferences can be made from studies based on litigated cases. See Kevin M. Clermont & Stephen C. Yeazell, Inventing Tests, Destabilizing Systems, 95 IOWA L. REV. 821 (2010); Jonah B. Gelbach, Locking the Doors to Discovery? Conceptual Challenges in and Empirical Results for Assessing the Effects of Twombly and Iqbal on Access to Discovery, 121 YALE L.J. (forthcoming 2012), available at http://ssrn.com/abstract=1957363.

Increased dismissals, however, increase the number of type II errors.<sup>58</sup> To be effective, the *Twombly* screen's increase in the number of type II errors should be smaller than the decrease in type I error.<sup>59</sup> This result should occur for at least two reasons. First, under the *Twombly* standard, when the anticompetitive hypothesis is less plausible than the hypothesis of parallel conduct, the probability of a type II error if the case is dismissed should be lower than the probability of a type I error if it is not. Second, the rule incentivizes plaintiffs to change thinly pled cases into pleadings with specific facts to survive a motion to dismiss. Pleading with specific facts in turn narrows the scope of discovery, reducing the costs associated with those cases that are not dismissed.<sup>60</sup>

The same analysis can be applied to an early Chicago School analysis contained in John McGee's seminal 1958 article on the *Standard Oil* case.<sup>61</sup> While some cite McGee's work as standing for a "predatory pricing impossibility theorem," McGee's primary focus was to examine the court record to see if the facts supported the claim that Standard Oil used predatory

<sup>58</sup> See Alexander A. Reinert, *The Costs of Heightened Pleading*, 86 IND. L.J. 119 (2011) (applying *Twombly* standard to pre-*Twombly* cases and showing significant deterrence of cases that resulted in subsequent settlements or stipulated dismissals). For evidence of type II errors resulting from the PSLRA heightened pleading standard, see Stephen J. Choi, Karen K. Nelson & A.C. Pritchard, *The Screening Effect of the Private Securities Litigation Reform Act*, 6 J. EMPIRICAL LEGAL STUD. 35 (2009); *see also* Herbert J. Hovenkamp, *The Pleading Problem in Antitrust Cases and Beyond*, 95 IOWA L. REV. BULL. 55, 57–58 (2010) (arguing that the inherent secrecy in naked market-division conspiracies, which *Twombly* did not discuss, is problematic for plaintiffs under a strict, fact-specificity pleading standard, for "such secrecy can close the door to prosecution in cases where the defendant's behavior demonstrates a possible or likely conspiracy, but all specific supporting evidence has not already been uncovered by other means.").

<sup>&</sup>lt;sup>59</sup> Note that under this analysis, one does not have to weigh or otherwise assume that the costs of type I errors are greater than the costs of type II errors. For a discussion of the relative magnitude of these costs, see Easterbrook, *Workable Antitrust Policy, supra* note 42, at 1711–12. One of the authors of this article questions the broad utility of the Easterbrook argument regarding the differential costs of type I and type II errors. Timothy J. Muris, *The Federal Trade Commission and the Rule of Reason: In Defense of* Massachusetts Board, 66 ANTITRUST L.J. 773, 776–77 (1998).

<sup>&</sup>lt;sup>60</sup> See Hylton, supra note 41, at 51 (noting that "[p]leading stage dismissals are socially desirable . . . because they enable courts to reduce overall social costs without having to further increase the merit threshold. In plain terms, they permit courts to throw out some bad claims early in order to permit more good claims to survive the end-stage dismissal test."). But see Hovenkamp, The Pleading Problem, supra note 58, at 57 (lamenting Twombly's inadequacy in reforming pleading standards: "[w]hat pleading reform requires is not so much an increase in 'factual matter' as much as a closer correlation between the legal elements that plaintiffs must prove and the allegations in a complaint.").

<sup>&</sup>lt;sup>61</sup> McGee, *supra* note 17, at 144–57.

price cutting to monopolize oil refining.<sup>62</sup> The alternative hypothesis is that price differentials in local markets were the product of differing competitive conditions and any monopoly of the refining market was achieved through voluntary merger, not through coercive predatory price discrimination. The two columns of Table 2 list these two hypotheses.

TABLE 2
McGee and Standard Oil

	USE OF PREDATORY PRICE DISCRIMINATION TO MONOPOLIZE OIL REFINING	Acquisition of Rivals Through Voluntary Merger; Differentials in Local Prices due to Differences in the Levels of Local Competition
(+) Antitrust Liability Based on Predatory Pricing	Correct positive—(predatory pricing liability)	Type I Error (false positive— predatory pricing liability)
(-) No Antitrust Liability Based on Predatory Pricing	Type II Error (failure to address predatory pricing)	Correct Negative (no predatory pricing liability)

In the court records, McGee found little evidence that local predatory price cutting played any part in Standard Oil's many refinery acquisitions;<sup>63</sup> to the extent that differential prices did exist, they resulted from greater local competition.<sup>64</sup> In terms of Table 2, McGee's analysis of the

<sup>&</sup>lt;sup>62</sup> See Peltzman, supra note 12, at 318 (noting interpretation of McGee's work as an impossibility theorem "is wrong"); see also BORK, THE ANTITRUST PARADOX, supra note 22, at 145 ("there seems nothing inherently impossible in the theory [of predation]. The issue is the probability of the occurrence of predation and the means available for detecting it.").

<sup>&</sup>lt;sup>63</sup> McGee. *supra* note 17. at 144–57.

<sup>&</sup>lt;sup>64</sup> *Id.* at 161. In a recent article, Dalton & Esposito re-examine the record in the Standard Oil case and conclude that it contains considerable evidence of predatory pricing. James A. Dalton & Louis Esposito, *Predatory Price Cutting and* Standard Oil: *A Re-Examination of the Trial Record*, 22 RESEARCH IN L. & ECON. 155 (2007). Dalton & Esposito use a broad definition of predatory pricing that is neither cost nor welfare based and instead focuses on the effect of short-run price cutting on the long-run viability of competitors and prices. *Id.* at 164. Dalton & Esposito examine four cases involving the marketing and or distribution of refined products in which McGee included more than one-half of a page of discussion of the case. They do not discuss a fifth case discussed in detail by McGee, involving the Cleveland refinery acquisitions, which was the subject of the detailed analysis by Granitz & Klein discussed below. *See* Elizabeth Granitz & Benjamin Klein, *Monopolization by "Raising Rivals' Costs": The* Standard Oil *Case*, 39 J.L. & ECON. 1 (1996).

Standard Oil facts suggests that the economic hypothesis in the right-hand column is more plausible than the then traditional hypothesis in the left-hand column of predatory price discrimination.

Applied to the case of *Standard Oil*, McGee's analysis implies that the Court and antitrust law's focus on predatory pricing was misplaced. Thus, based on a plausibility analysis, the facts do not support a theory of antitrust harm based on predatory price discrimination. Importantly, McGee's 1958 analysis does not suggest that Standard Oil's conduct in the refinery market was efficient. His point was that the traditional explanation of how Standard Oil monopolized the market for refining was incorrect, as was the use of the *Standard Oil* case as an influential example of the importance of predatory price discrimination as a monopolization technique. If Standard Oil engaged in anticompetitive monopolization, then the relevant antitrust policy concern was to find the actual practice used to facilitate monopolization rather than to focus erroneously upon predatory price discrimination.

# II. APPLICATION OF POST-CHICAGO ANALYSES AND THE CHICAGO SCHOOL

If reliance on economics is the sine qua non of the Chicago School, then there is certainly nothing new about either post-Chicago or neo-Chicago antitrust analyses. Both embrace economics as the mode of analysis. Thus, to the extent that the three schools differ, the differences would have to lie in differences in the underlying subdisciplines used by the different schools. Two related candidates emerge. The first is the reliance of the Post-Chicago School on new, more sophisticated forms of analysis, including game theoretic models of firm behavior that facilitate identification of anticompetitive behavior otherwise allegedly missed by Chicago. While the use of game theory and the study of strategic interaction are not new and have been used in Chicago School antitrust analyses, <sup>66</sup> the Post-Chicago School certainly emphasizes game theory. A corollary of this heavy emphasis on sophisticated theory is that the Post-Chicago School has largely eschewed generation of specific testable hypotheses and empirical testing of these models.

Examined against this backdrop, we suggest that the contributions of the "Post-Chicago" school to antitrust doctrine and policy are limited. It is far from clear that Post-Chicago School contributions have facilitated the search for relevant new theories of antitrust harm not considered by the Chicago School. Nor have Post-Chicago authors brought convincing evidence to bear on their "rediscovered" theories.<sup>67</sup> Importantly and ironically, as discussed next, Chicago economists have performed some of the strongest specific tests of Post-Chicago School models, including those supporting Post-Chicago School theories.

<sup>&</sup>lt;sup>65</sup> See McGee, supra note 17, at 168–69 (noting that it "should be quite clear that this is not a verdict of acquittal for the Standard Oil Company; the issue of monopoly remains. What this study says is that Standard did not achieve or maintain a monopoly position through price discrimination. The issue of whether the monopoly should have been dissolved is quite separate.").

<sup>&</sup>lt;sup>66</sup> See, e.g., Stigler, A Theory of Oligopoly, supra note 31.

<sup>&</sup>lt;sup>67</sup> See Muris, Improving the Economic Foundations, supra note 6, at 17–18.

In the remainder of this section, we build on our model of the Chicago analysis of *Standard Oil* and predatory pricing as an example of the contributions of the Post-Chicago School. As discussed above, McGee's analysis of *Standard Oil* concluded that it was not discriminatory price discrimination that led to Standard's refinery monopoly, but left the reader with a challenge to determine the true source of *Standard Oil*'s successful monopolization of the refining industry. In 1996, Professors Elizabeth Granitz & Benjamin Klein published such an analysis. They challenged the notion that voluntary merger, McGee's preferred alternative hypothesis, allowed Standard Oil to monopolize the refinery market. They noted that under the voluntary merger hypothesis, individual refiners would have little incentive to sell to Standard Oil once Standard Oil's intent to monopolize became clear. Instead, potential sellers would be better off remaining independent and free riding on the expected higher prices that would result from Standard Oil's monopolistic restriction of output.

Using the standard Chicago approach of a fact intensive analysis, Granitz & Klein focused on Standard Oil's role in cartelizing the railroad's transportation of oil. They argue that Standard Oil acted as a "cartel ringmaster" for the railroads. Standard Oil enforced the shipping cartel by shifting refining output geographically to reduce shipments of oil on any cheating railroad, thus reducing the incentives for a railroad to cheat on the cartel agreement by cutting prices unilaterally. Standard benefited from the cartelization of the railroads though shipping rebates given only to Standard. These discriminatory rebates disadvantaged Standard Oil's rivals. Though prices of refined petroleum products rose, costs to Standard Oil's rivals rose even more. Thus, Standard Oil's competitors did not reap net gains from the higher gross prices of refinery products. This scheme incentivized Standard Oil's rivals to be more receptive to merger offers by Standard. This plan also increased the effectiveness of Standard Oil as an enforcer, as it acquired a significant share of the refining market in each of the three oil regions served by the three railroads in the cartel.

This fact intensive review of the *Standard Oil* case led Granitz/Klein to a Raising Rivals' Cost (RRC)<sup>69</sup> explanation for Standard Oil's conduct. Their finding is relevant to the Chicago School/Post-Chicago School/Neo-Chicago School debate for several reasons. First, RRC is perhaps the most influential Post-Chicago School contribution to antitrust economics. Theories of RRC are not subject to the logical criticisms aimed at predatory pricing strategies: RRC strategies do not require that the predator incur disproportionate losses relative to its prey, nor do they require subsequent recoupment. In addition, RRC behavior can be implemented in numerous ways, including vertical integration or contractually through tying or exclusive dealing. Thus, RRC theory cuts a broad swath through antitrust law and is widely thought to be the quintessential example of the difference between Chicago School and Post-Chicago School antitrust economics.<sup>70</sup>

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<sup>&</sup>lt;sup>68</sup> Granitz & Klein, *supra* note 64.

<sup>&</sup>lt;sup>69</sup> See Steven C. Salop & David T. Scheffman, Raising Rivals' Costs, 73 AM. ECON. REV. 267 (1983); Thomas G. Krattenmaker & Steven C. Salop, Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price, 96 YALE L.J. 209 (1986); Steven C. Salop & David T. Scheffman, Cost-Raising Strategies, 36 J. INDUS. ECON 19 (1987).

<sup>&</sup>lt;sup>70</sup> See Herbert Hovenkamp, Exclusion and the Sherman Act, 72 U. CHI. L. REV. 147, 158–59 (2005) (describing RRC as one of the "foundations of the so-called post-Chicago revolution."); Steven C. Salop, Economic Analysis of Exclusionary Vertical Conduct: Where Chicago Has

Yet, Chicago did *not* ignore RRC.<sup>71</sup> This claim is not in any way a simple trick generated by expanding the scope of economists associated with the Chicago School. One need go no further than Director and Levi's seminal 1956 *Northwestern Law Review* Article to find an *explicit* recognition of RRC.<sup>72</sup> Although not using the term RRC, Director and Levi explained that the RRC theory could be used to analyze the Supreme Court's decision in *Standard Fashion Co. v. Magrane-Houston Co.*<sup>73</sup>

In the exclusive arrangement cases, the firm which is assumed to have some monopoly power imposes a cost upon itself in order to obtain the restriction forbidding its customer from handling the goods of others. There is an obvious monopoly problem if control over all the possible outlets were thus obtained, but most of the cases do not involve such control, nor would it be clear that a firm with a monopoly over the supply would wish to obtain a monopoly over the outlets. Its monopoly over the supplies is not increased through its monopoly over the outlets, unless it can be said that the restrictions on the outlets impose greater costs on potential competitors than they do on the monopoly company itself. This may have been the situation in the Standard Fashion case. There a firm with widespread control over a variety of patterns for garments entered into exclusive arrangements with a multitude of outlets. A competitor with less control over the variety of patterns might, through this arrangement, have a greater cost imposed upon it to secure outlets. The reason for this is that there may well be economies for an outlet in

Overshot the Mark, in HOW CHICAGO OVERSHOT THE MARK, supra note 1, at 141 [hererinafter Exclusionary Vertical Conduct] (describing central importance of RRC theory); Wright, Overshot the Mark?, supra note 4, at 18–21.

<sup>71</sup> See John E. Lopatka, Exclusion Now and in the Future: Examining Chicago School Orthodoxy, 17 MISS. L. REV. 27, 29–30 (1996). Both Steven Salop and David Scheffman acknowledge in recent articles that the RRC theory was anticipated by Director and Levi. Salop notes that it is "important to recognize that this approach has its roots in the economic analysis of Chicago School commentators. Aaron Director and Edward Levi, the founders of the Chicago School approach, recognized the potential anticompetitive effects of exclusive dealing in Standard Fashions. ... Thus, when conservative jurists equate predatory pricing and RRC, or treat RRC theories as outside the mainstream, they are deviating from the learning that originated with the Chicago School." Salop, Exclusionary Vertical Conduct, supra note 70, at 144. Scheffman has a more grudging recognition of the anticipation of RRC theory by Director and Levi. See David T. Scheffman & Richard S. Higgins, Twenty Years of Raising Rivals' Costs: History, Assessment, and Future, 12 GEO. MASON. L. REV. 371, 375 (2003) (noting that "[n]one of the earlier work really laid out the model and results."). Nevertheless, none of the seminal papers on RRC, supra note 69, cited the Director & Levi article, supra note 15.

<sup>&</sup>lt;sup>72</sup> Director & Levi, *supra* note 15, at 293.

<sup>&</sup>lt;sup>73</sup> 258 U.S. 346 (1922).

## handling a variety of patterns.<sup>74</sup>

This analysis is perhaps the most relevant example of a Chicago anticipation of an idea claimed as a Post-Chicago School innovation, but not the only one. In any case, it clearly exposes the fallacy of those who argue that Chicago conveniently ignored relevant theories on ideological grounds.

Director and Levi's anticipatory application of RRC to the *Standard Fashion* case also illustrates a more likely explanation why RRC theory, as well as other Post-Chicago School theories, are not more influential outside the pages of academic journals. As with almost all monopolization strategies, one cannot distinguish an anticompetitive use of RRC from competition on the merits, absent a detailed factual inquiry. Indeed, there is evidence that *Standard Fashion* is not a case of anticompetitive RRC but rather illustrates the effects of procompetitive competition for distribution resources. Similar in-depth studies of other cases cited as involving RRC have resulted in similar conclusions. Thus, there is very little empirical evidence based on in-depth industry studies that RRC is a significant antitrust problem. The exception is the Granitz/Klein study and cases in which government is used to raise the costs of

<sup>&</sup>lt;sup>74</sup> Director & Levi, *supra* note 15, at 293.

<sup>&</sup>lt;sup>75</sup> See supra note 24 (leverage and variable proportions) and note 46 (RPM).

<sup>&</sup>lt;sup>76</sup> See Benjamin Klein, Exclusive Dealing as Competition for Distribution "On the Merits," 12 GEO. MASON L. REV. 119, 146–49 (2003) (explaining the use of exclusive dealing and minimum resale price maintenance as a means to compensate and incentivize optimal levels of retailer promotional activities); Howard P. Marvel, Exclusive Dealing, 25 J. L. & ECON. 1, 11–18 (1982) (exclusive dealing used to prevent free riding); see also BORK, THE ANTITRUST PARADOX, supra note 22, at 305–09 (criticizing the Court's anticompetitive hypothesis); Posner, ANTITRUST LAW, supra note 9, at 253 (criticizing Bork's analysis of the case).

Andrew N. Kleit, Exclusion, Collusion or Confusion? The Underpinnings of Raising Rivals' Costs, 16 Research in L. & Econ. 73 (1994)); Hovenkamp, Post-Chicago Antitrust, supra note 6; John E. Lopatka & Paul E. Godek, Another Look at Alcoa: Raising Rivals' Costs Does Not Improve the View, 35 J.L. & Econ. 311 (1992); John E. Lopatka & Andrew N. Kleit, The Mystery of Lorain Journal and the Quest for Foreclosure in Antitrust, 73 Tex. L. Rev. 1255 (1995); Scott E. Masten & Edward A. Snyder, The United States versus United Shoe Machinery Corporation: On the Merits, 36 J.L. & Econ. 33 (1993); Timothy J. Muris, The FTC and the Law of Monopolization, 67 Antitrust L.J. 693 (2000); David Reiffen & Andrew N. Kleit, Terminal Railroad Revisited: Foreclosure of an Essential Facility or Simple Horizontal Monopoly, 33 J.L. & Econ. 419 (1990).

<sup>&</sup>lt;sup>78</sup> Scheffman & Higgins, *supra* note 71, at 380 (reviewing case studies of cases hypothesized to be RRC cases and concluding that "a fair assessment of the debate has been that for most of the cases they discuss, Krattenmaker and Salop's interpretations are not proved.").

competitors. Of course, the concept of using government as an anticompetitive tool owes much of its origins to Chicago Scholars.<sup>79</sup>

Moreover, the *Standard Oil* RRC involves conduct that does not require the invention of RRC to identify it as an anticompetitive. Rather, the cartelization of the railroads can be addressed as a traditional horizontal cartel case.<sup>80</sup> Thus, the absence of a specific RRC cause of action will not necessarily result in a type II error, as the anticompetitive behavior can be addressed through other means under the antitrust laws.

The Chicago model presented in the prior section can be used to illustrate the issues involved in RRC cases, such as *Standard Fashion*. The columns of Table 3 present the two discrete hypotheses, the RRC theory and the alternative of competition for distribution on the merits.

TABLE 3
EXCLUSIVE DEALING AND RRC

	Exclusive Dealing to Raise Rivals' Costs through foreclosure of efficient distribution	Exclusive dealing as efficient competition for distribution
(+) Antitrust Liability for exclusive dealing	Correct Positive (antitrust liability for anticompetitive exclusive dealing)	Type I Error (false positive— antitrust liability for efficient distribution practice)
(-) No Antitrust Liability Based on exclusive dealing	Type II Error (false negative— failure to address anticompetitive exclusive dealing)	Correct Negative (no antitrust liability for efficient distribution practice)

The primary issue involves two questions, the resolution of a particular case and the extent to which a more general inference regarding a particular practice can be made and implemented into a workable antitrust rule. The current problem with RRC theory is that in-

<sup>&</sup>lt;sup>79</sup> Bork devotes an entire chapter of his book to the use of government to subvert competition. BORK, THE ANTITRUST PARADOX, *supra* note 22, at 347–64. *See also* Scheffman & Higgins, *supra* note 71 (suggesting heightened relevance of government-based RRC activity). See Union Oil Co. of Cal., 138 F.T.C. 1 (2004), for a recent case involving an RRC strategy of misusing the government.

<sup>&</sup>lt;sup>80</sup> Tim Brennan suggests non-government anticompetitive RRC theories necessarily involve horizontal monopolization that can be addressed through conventional antitrust analytical techniques. *See* Timothy J. Brennan, *Understanding Raising Rivals' Costs*, 33 ANTITRUST BULL. 95 (1988).

depth case studies have concluded that the procompetitive hypothesis in the right hand column is at least as plausible as the anticompetitive RRC theory. Thus, absent specific evidence to the contrary, outside the government context, RRC theories of anticompetitive harm lack general empirical support that such theories are a plausible theory of harm with any empirical regularity. Like the thinly pled complaint in *Twombly*, RRC, without quite specific evidence, should be ignored.

A similar point can be made regarding the absence of influence of Post-Chicago School treatments of predatory pricing. McGee's 1958 article as well as other studies of predatory pricing cases questioned the logic of predatory pricing applied to specific cases such as *Standard Oil*. Although many have interpreted McGee's research as stating a predatory pricing impossibility theorem, <sup>83</sup> neither McGee's 1958 article nor accounts of Aaron Director's approach to this issue support this inference. <sup>84</sup> Nevertheless, just as the contemporary accounts of

<sup>&</sup>lt;sup>81</sup> See Scheffman & Higgins, supra note 71, at 379.

<sup>&</sup>lt;sup>82</sup> See Director & Levi, supra note 15, at 294 ("The important point . . . is that the restrictions or abuses," including RRC as well as vertical integration, "will not in most cases carry with them the normal incidents of monopoly . . . . In the language of the Robinson-Patman Act and of the Clayton Act, the abuses do not in most cases either tend to substantially lessen competition or tend to create a monopoly.").

<sup>&</sup>lt;sup>83</sup> See Posner, Antitrust Law, supra note 9, at 208 (noting that the early literature was "excessively influenced" by McGee's article).

<sup>&</sup>lt;sup>84</sup> McGee did not refute the possibility of predatory pricing but simply found that, contrary to popular opinion, it was not employed by Standard Oil. Indeed, McGee concluded that his "limited study suggests that what businessmen do to one another is much less significant to monopoly than what they find it useful to do together to serve their common interest." See McGee, *supra* note 17, at 169. Moreover, post-McGee Chicago scholars entertained approaches to predatory pricing inconsistent with the popular interpretation of McGee's research. See, e.g., BORK, THE ANTITRUST PARADOX, *supra* note 22, at 145 ("[T]here seems nothing inherently impossible in the theory [of predatory pricing]. The issue is the probability of the occurrence of predation and the means available for detecting it."); RICHARD POSNER, ANTITRUST LAW: AN ECONOMIC PERSPECTIVE 186 (1st ed. 1976) [hereinafter Posner, Antitrust Law: An ECONOMIC PERSPECTIVE] (concluding that "predatory pricing cannot be dismissed as inevitably an irrational practice," and that it "at most is likely to delay, rather than prevent, the entry of new competitors."); Posner, Antitrust Law, supra note 9 at 210–11 (establishing conditions under which predatory pricing is likely to be profitable); Easterbrook, Predatory Strategies and Counterstrategies, supra note 47, at 268 ("[I]t is conceivable that predation could be profitable. Short-run sacrifice for later reward often is a rational way to maximize profits . . . . The question. though, is whether profitable predation is probable."); see also 3A PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 736 at 136–37 (3d ed. 2008) (noting that the reasons cost-based tests for predatory pricing were adopted was "not based on any a priori or empirical judgment that long-run strategies are implausible, that they never occur, or that they are never anticompetitive. . . . Rather, our conclusion is based on the observation that the adjudication process is currently not competent to deal with such claims without penalizing aggressive competitive behavior that antitrust should encourage."); Areeda & Turner, supra note 48, at 699

Standard Oil's use of predatory price discrimination shaped early rules regarding antitrust policy against alleged discriminatory predatory pricing, McGee's challenge to the traditional analysis in *Standard Oil* was similarly influential. Thus, the Supreme Court's predatory pricing decisions in *Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*<sup>85</sup> and *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, octed the theoretical and empirical literature on predatory pricing. The history and detrimental effect of the Court's early decisions on predatory pricing plaintiffs are well documented.

Again, the McGee case study of *Standard Oil* and similar studies of other industries do not directly address the issue of how antitrust law should treat predatory pricing generally. Using the error cost analysis, general rules relating to the treatment of predatory pricing under the antitrust laws will depend upon the relative frequency and cost of the type I and type II errors that result from a particular antitrust policy. Answering the more general question requires

(finding McGee's and Telser's arguments "unpersuasive" when merger and collusion are illegal); see also McGee, supra note 17; Lester G. Telser, Cutthroat Competition and the Long Purse, 9 J.L. & Econ. 259 (1966)).

<sup>85</sup> Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574 (1986).

<sup>&</sup>lt;sup>86</sup> Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209 (1993).

<sup>&</sup>lt;sup>87</sup> In *Matsushita*, the Court noted that predatory pricing was "rarely tried, and even more rarely successful." 475 U.S. at 589 (citing BORK, THE ANTITRUST PARADOX, *supra* note 22; Areeda & Turner, *supra* note 48; Easterbrook, *Predatory Strategies and Counterstrategies*, *supra* note 47); Ronald H. Koller, II, *The Myth of Predatory Pricing: An Empirical Study*, 4 ANTITRUST L. & ECON. REV. 105 (1971); McGee, *supra* note 17.

<sup>&</sup>lt;sup>88</sup> For a recent survey of these issues, *see* Bruce H. Kobayashi, *The Law and Economics of Predatory Pricing, in* Antitrust Law and Economics 116 (Keith N. Hylton ed., 2010). *See also* Patrick Bolton, Joseph F. Brodley & Michael H. Riordan, *Predatory Pricing: Strategic Theory and Legal Policy,* 88 Geo. L.J. 2239 (2000); Michael L. Denger & John A. Herfort, *Predatory Pricing Claims After* Brooke Group, 62 Antitrust L.J. 541 (1994); C. Scott Hemphill, *The Role of Recoupment in Predatory Pricing Analyses,* 53 Stan. L. Rev. 1581 (2001) (noting low plaintiff success rate prior to Court's *Brooke Group* decision, and near zero after); Richard O. Zerbe, Jr. & Michael T. Mumford, *Does Predatory Pricing Exist? Economic Theory and the Courts After* Brooke Group, 41 Antitrust Bull. 949 (1996).

Note that all of the major approaches to antitrust policy for predatory pricing, despite yielding different conclusions on the appropriate specific approach to policy, agree on the use of the error cost framework, as well as the high cost of type I errors in the predatory pricing setting. The courts have also used this approach, recognizing both the high costs of administering the antitrust laws and the high costs of type I error in this setting. *See, e.g., Brooke Group*, 509 U.S. at 226 (noting that "the costs of an erroneous finding of liability are high."); *Matsushita*, 475 U.S. at 594; Cargill, Inc. v. Monfort of Colo., Inc., 479 U.S. 104, 122 n.17 (1986) (quoting *Matsushita*, 475 U.S. at 594) (noting that "the mechanism by which a firm engages in predatory pricing—lowering prices—is the same mechanism by which a firm stimulates competition; because 'cutting prices in order to increase business often is the very essence of competition . . . mistaken

data regarding the relative frequency and cost of type I and type II errors. Here McGee's analysis, as well as similar case studies of alleged predatory pricing episodes<sup>90</sup> provide examples of type I and type II errors but do not allow strong inferences regarding overall error rates.<sup>91</sup> Broader studies, such as the Koller study and those that have critiqued his methodology, are often based on methodology and evidence that does not allow one to make strong inferences regarding the nature and frequency of anticompetitive predatory pricing episodes.<sup>92</sup> Given the state of empirical knowledge, broad policy questions necessarily rely upon imprecisely estimated factors. As a result, a wide range of policy approaches based on the same error cost methodology is possible.

For over thirty years, the economics profession has produced numerous models of rational predation. Despite these models and some case evidence consistent with episodes of predation, little of this Post-Chicago School learning has been incorporated into antitrust law. <sup>93</sup> Application of the model discussed above helps explain why this literature has had little influence. While the Post-Chicago School literature on predatory pricing may suggest that rational predatory pricing is theoretically possible, such theories do not show that predatory

inferences . . . are especially costly because they chill the very conduct the antitrust laws are designed to protect.' "). The courts have also recognized how costs of administering rules affect antitrust rules. *See, e.g.*, Barry Wright Corp. v. ITT Grinnell Corp., 724 F.2d. 227, 234 (1st Cir. 1983) ("[U]nlike economics, law is an administrative system the effects of which depend upon the content of rules and precedents only as they are applied by judges and juries in courts and by lawyers advising their clients. Rules that seek to embody every economic complexity and qualification may well, through the vagaries of administration, prove counterproductive, undercutting the very economic ends they seek to serve."). The primary academic approaches to the issue also explicitly adopt the error cost approach stressing the high cost of type I error. *See* POSNER, Antitrust Law, *supra* note 9 at 214–15; Areeda & Turner, *supra* note 48; Easterbrook, *supra* note 1 and 47.

<sup>&</sup>lt;sup>90</sup> See Bork, The Antitrust Paradox, *supra* note 22, at 145–55 (discussing M.A. Adelman, A&P: A Study in Price-Cost Behavior and Public Policy (1966); Kenneth G. Elzinga, *Predatory Pricing: The Case of the Gunpowder Trust*, 13 J.L. & Econ. 223 (1970); and Koller, *supra* note 87).

<sup>&</sup>lt;sup>91</sup> In discussing McGee and other scholars' analyses of predatory pricing, Bork notes that "[t]hese considerations do not demonstrate that price cutting could never under any circumstances be a successful method of predation. We need more studies as those by McGee, Adelman, and Elzinga of cases in which predation is said to have occurred. But the analysis does demonstrate that predation by such techniques is very improbable." BORK, THE ANTITRUST PARADOX, *supra* note 22, at 154.

<sup>&</sup>lt;sup>92</sup> See Kobayashi, supra note 88, for a recent survey of the empirical literature on predation (discussing empirical studies re-analyzing predation cases that suggest that the evidence is consistent with predatory pricing but noting that, in many of these studies, the evidence is also consistent with pro-competitive price competition).

<sup>93</sup> See, e.g, Bolton et al., supra note 88; Kobayashi, supra note 88.

pricing is a more compelling explanation than the alternative hypothesis of competition on the merits. Because of this literature's focus on theoretical possibility theorems, little evidence exists regarding the empirical relevance of these theories. Absent specific evidence regarding the plausibility of these theories, the courts, similar to their disregard of the thinly plead complaint in *Twombly*, properly ignore such theories.

### III. THE GROWING MEANINGLESSNESS OF "CHICAGO"

The Chicago School of Antitrust arose as a reaction to the prevailing orthodoxy. Certainly there was much against which to react. Unlike today, economics was not widely accepted as fundamental to sound antitrust policy, and many sought to protect competitors for their own sake. Those who did use economics often relied on analysis that Chicago showed to be fundamentally flawed. Perhaps most important, the then widespread calls for deconcentration relied on the simple market concentration doctrine, finding a close, inverse correlation between the number of firms in an industry and the strength of competition. Chicago overthrew that doctrine in dramatic fashion, with the 1974 publication of *Industrial Concentration: The New Learning*, reflecting a conference held the previous year. Chicago also reacted strongly to the Warren Court's penchant for per se rules and a merger policy whose sole foundation seemed to be that the government always won.

There was a revolution in antitrust: Chicago prevailed. But that revolution is now decades old. Director began his work over fifty-five years ago, the initial wave of Chicago scholarship cited in this paper is fifty years or older, Robert Bork's seminal articles on the rule of reason appeared over forty years ago, and Richard Posner's first edition of *Antitrust Law* is thirty-five years old. The unifying strands of Chicago analyses were a reaction to the prevailing regime and the combination of economic theory and empirical evidence discussed in Part II above. There was no widespread agreement among those associated with Chicago on a positive agenda for antitrust enforcement beyond a call for expanded attacks on naked price-

<sup>&</sup>lt;sup>94</sup> To the extent that evidence testing these theories has been generated, they have suggested a focus on government-assisted predation. *See* JOHN R. LOTT, JR., ARE PREDATORY COMMITMENTS CREDIBLE? WHO SHOULD THE COURTS BELIEVE? (1999).

<sup>&</sup>lt;sup>95</sup> See, e.g., Symposium on Antitrust Law and Economics, 127 U. PA. L. REV. 918 (1979). Occurring under the auspices of the Center for the Study of Organizational Innovation at the University of Pennsylvania in November 1978, the Symposium was one of the last major anti-Chicago reactions to placing economics at the center of the antitrust universe.

<sup>&</sup>lt;sup>96</sup> HARVEY J. GOLDSCHMID, H. MICHAEL MANN, & J. FRED WESTON, INDUSTRIAL CONCENTRATION: THE NEW LEARNING (1974). For a brief history of the fall of the simple market concentration doctrine, see Muris, *Economics and Antitrust*, *supra* note 33.

<sup>&</sup>lt;sup>97</sup> Famously, Justice Potter Stewart complained that the sole consistency in litigation under Section 7 was that "the government always wins." United States v. Von's Grocery Co., 384 U.S. 270, 301 (1966) (Stewart, J., dissenting).

<sup>98</sup> POSNER, ANTITRUST LAW: AN ECONOMIC PERSPECTIVE, supra note 84.

fixing. The details of a positive agenda simply were not a prominent focus of the Chicago scholars.

Consider one of the most important issues for antitrust policy, the appropriate initial market power screens for scrutinizing horizontal mergers. Two of the Chicago giants, Bork and Posner, proposed radically different rules. Bork believed that mergers should be broadly permissible as long as an industry contained three viable competitors; Posner would have presumed illegality either when four firm concentration levels exceeded 60 percent or when a merger significantly increased concentration in a market predisposed to collusive pricing. Neither author presented the necessary detail for drafting merger guidelines. That task fell on another Chicago giant, William Baxter. His 1982 Guidelines provided much of the structure still reflected in the 2010 revisions, including a specific approach to market definition, reliance on the insights of George Stigler's 1964 article *A Theory of Oligopoly* to articulate principles for coordinated effects cases, and concentration-based screens.

Baxter used screens much closer to Posner than to Bork. Mergers above an HHI of 1800 were presumed illegal, which translates to concern over the reduction of six equally sized competitors to five. This still-heavy reliance on concentration in 1982 has disappeared. The 1992 revisions <sup>103</sup>deemphasized the importance of concentration-based assumptions, a deemphasis accelerated in the most recent changes. Thus, the 2010 revisions dramatically raise the concentration screens: the marginal merger is no longer 6-5, but 4-3. <sup>104</sup> In other words, the

<sup>&</sup>lt;sup>99</sup> See Bork, The Antitrust Paradox, supra note 22, at 221–22 ("Competition in the sense of consumer welfare would be adequately protected and the mandate of Section 7 satisfactorily served if the statute were interpreted as making presumptively lawful all horizontal mergers up to market shares that would allow for other mergers of a similar size in the industry and still leave three significant companies."); Posner, Antitrust Law: An Economic Perspective, supra note 84, at 112 ("There is little basis in current thinking for automatic intervention in markets in which the four largest firms have a combined market share of less than 60 percent. But in my opinion at least, mergers that either (1) carry a market across that threshold, or (2) significantly increase concentration in a market that exhibits other predisposing characteristics to collusive pricing . . . should be presumed to be illegal."); see also Posner, Antitrust Law, supra note 9, at 132–33 (discussing the 60 percent rule contained in earlier edition and its relation to the current structural thresholds).

<sup>&</sup>lt;sup>100</sup> U.S. Dep't of Justice, Merger Guidelines, 47 Fed. Reg. 28,493 (June 30, 1982). *See also* Frank H. Easterbrook, *Allocating Antitrust Decisionmaking Tasks*, 76 GEO. L.J. 305 (1987).

<sup>&</sup>lt;sup>101</sup> U.S Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines, issued August 19, 2010, available at http://www.justice.gov/atr/public/guidelines/hmg-2010.html.

<sup>&</sup>lt;sup>102</sup> Stigler, A Theory of Oligopoly, supra note 31.

<sup>&</sup>lt;sup>103</sup> U.S Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines, 57 Fed. Reg. 41,552 (Sept. 10, 1992).

<sup>&</sup>lt;sup>104</sup> The revised Guidelines reserve the highest scrutiny for mergers above an HHI of 2500. The traditional HHI test considered an HHI of less than 1000 to be a competitive marketplace; a result of 1000–1800 to be a moderately concentrated marketplace; and a result of 1800 or more

Obama administration, containing many self-proclaimed Chicago critics, <sup>105</sup> has adopted positions much more conservative than those of Chicago giants Baxter and Posner.

Given this background, it seems pointless to discuss the pros and cons of the Chicago school when debating the appropriateness of the current merger guidelines. Chicago scholars not only disagreed about the appropriate screens, but both the Clinton and Obama administrations use standards significantly more conservative than those of well-known Chicagoans. When one recognizes that it has been decades since the major contributions that formed the basis of the Chicago Revolution were published, and those publications were largely a reaction to the prevailing orthodoxy, we should not be surprised at this irrelevance of Chicago scholarship to today's debate. Nevertheless, those on opposing sides of many antitrust controversies, including mergers, continue to damn, or praise, Chicago in defense of their position.

Further evidence of the difficulty of discussing Chicago in 2012 is knowing who speaks for Chicago. The leaders of the Chicago Revolution are mostly dead or no longer active scholars. The many disagreements among Chicago advocates, discussed above, illustrate the difficulties in characterizing Chicago in today's antitrust landscape. Some commentators have responded to the non-uniformity of the positions of Chicago School scholars by differentiating those with "moderate" views from the "more orthodox members." Thus, in reviewing the second edition of Posner's *Antitrust Law*, Herbert Hovenkamp, author of the leading antitrust treatise, argued that Posner is "far less doctrinaire and more moderate than some of his Chicago school

to be a highly concentrated marketplace. The revised Guidelines change 1000 to 1500 and 1800 to 2500. The new guidelines also emphasize that the HHI is just one of many tools for identifying potentially anticompetitive mergers and that it is not even a decision tool so much as an initial indication that a merger may merit further scrutiny.

<sup>105</sup> See. e.g., Jon Leibowitz, Chairman, Fed. Trade Comm'n, Remarks Before 36th Annual Conference on International Antitrust Law & Policy, Fordham Competition Law Institute (Sept.r 24, 2009 ("As many of you know, I've been a critic of the extent to which the Chicago School's optimism about efficiencies and about oligopoly conduct has affected merger reviews—as well as antitrust law more generally."). Ironically, leading Chicago advocates opposed an efficiency defense in merger cases. See POSNER, ANTITRUST LAW, supra note 9, at 133 ("I said back then that there should be no general defense of efficiency, I still think this is right. It is rarely feasible to determine by the methods of litigation the effect of a merger on the costs of the firm created by the merger. If the merger has not yet been consummated, the realization of cost savings lies in the future and is thus a matter of speculation flavored by hope. If the merger had been consummated, disentangling its effect from other influences on the firm's costs is likely to be intractable."); BORK, THE ANTITRUST PARADOX, supra note 22, at 219 (arguing that "Williamson was wrong in proposing an efficiency defense in merger cases, since the elements of the trade-off between output restriction and efficiency gain cannot be studied directly."). Baxter's 1982 Guidelines did not allow for an efficiency defense. Today, even mergers and joint ventures reducing significant competitors from 3 to 2 are sometimes allowed. See Fed. Trade Comm'n & U.S. Dep't of Justice, Merger Challenges Data, Fiscal Years 1999–2003 (Dec. 18, 2003), available at http://www.justice.gov/atr/public/201898.pdf; Statement of the Department of Justice Antitrust Division on Its Decision to Close Its Investigation of the Internet Search and Paid Search Advertising Agreement Between Microsoft Corporation and Yahoo! Inc. (2009), available at http://www.justice.gov/opa/pr/2010/February/10-at-163.html.

colleagues and predecessors."  $^{106}$  If Posner does not represent Chicago, the term has much less utility than its users seem to believe. Others simply ignore or misrepresent the positions of Chicago School scholars when it does not fit the uniform Chicago position used as a straw man.  $^{107}$ 

The recent book, *How the Chicago School Overshot the Mark: The Effect of Conservative Economic Analysis on U.S. Antitrust*, reveals extensive use of the term Chicago as a political football. Chicago often is mentioned in a way inconsistent with the approach and analyses that underlie any sensible definition of the Chicago School. Thus, for example, the introduction to the book concedes the universally accepted contributions of the Chicago School in introducing economic analysis to antitrust, but then proceeds to equate Chicago with "conservative economic analysis" asserting that "[b]ecause extreme interpretations and misinterpretations of conservative economic theory (and constant disregard of facts) have come to dominate antitrust, there is reason to believe that the United States is headed in a profoundly wrong direction." To the contrary, as we have shown, Chicago economics was a bottom-up approach based primarily on fact-intensive, case-by-case analysis, not a universal conservative ideology of antitrust minimalism with a preference for "economic models over facts."

<sup>&</sup>lt;sup>106</sup> See, e.g., Hovenkamp, The Rationalization of Antitrust, supra note 9, at 944.

<sup>&</sup>lt;sup>107</sup> See POSNER, ANTITRUST LAW, supra note 9, at 194 n.2 (noting his position with respect to exclusionary practices "has been frequently mischaracterized.").

<sup>&</sup>lt;sup>108</sup> How Chicago Overshot the Mark, *supra* note 1.

<sup>&</sup>lt;sup>109</sup> Robert Pitofsky, *Conservative Economic Analysis and Its Effects, in* How CHICAGO OVERSHOT THE MARK, *supra* note 1, at 7.

<sup>110</sup> Ironically, much of Professor Pitofsky's strongest invective reflects his views on distributional restraints, views which find very little support in any economic literature, be it Chicago, post-Chicago, or elsewhere. Pitofsky chose lawyers, including himself, not economists, to write the parts of the book discussing vertical distributional restraints. Pitofsky fought a long, losing battle to preserve the per se rule against resale price maintenance. *See* Robert Pitofsky, *In Defense of Discounters: The No-Frills Case for a Per Se Rule Against Vertical Price Fixing,* 71 GEO. L.J. 1487 (1983). He even reacted harshly to the Supreme Court's overruling of the per se rule against non-price distributional restraints, calling unsuccessfully on the courts to limit severely the Court's holding in *GTE/Sylvania. See* Robert Pitofsky, *The* Sylvania *Case: Antitrust Analysis of Non-Price Vertical Restrictions,* 78 COLUM. L. REV. 1 (1978). Fortunately, as FTC Chairman, Pitofsky did not attempt to implement much of the agenda reflected in OVERSHOT THE MARK. His chairmanship was widely praised, including by one of the authors of this paper, who co-authored an article with Pitofsky regarding a shared agenda for the Federal Trade Commission. *See More than Law Enforcement: The FTC's Many Tools—A Conversation with Tim Muris and Bob Pitofsky,* 72 Antitrust L.J. 773 (2005).

<sup>&</sup>lt;sup>111</sup> Robert Pitofsky, *Introduction: Setting the Stage*, *in* HOW CHICAGO OVERSHOT THE MARK, *supra* note 1, at 3, 5. Similar inaccurate descriptions of Chicago that stand the term on its head are invoked throughout the book. For example, the introduction to Section 5 of the book treats the defense of RPM as frozen in Telser's 1960 article, *supra* note 18, without acknowledging or

#### IV. CONCLUSION

In the second decade of the 21st century, we question whether most current uses of the label Chicago are meaningful. Chicago as a methodology describes a bottom-up, fact-based form of analysis, one that remains relevant today. Our discussion of *Standard Fashion, Standard Oil*, and *Twombly* illustrate the continuing utility of the Chicago methodology. Moreover, Chicago scholars anticipated what are thought to be important contributions of post-Chicago, such as RRC and leverage theories in complementary goods, although the Chicago school doubted the empirical significance of such theories.

Alternatively, Chicago as a set of antitrust policy prescriptions describes results that this methodology produced. As it began in the 1950s, and through the evolution of the major Chicago texts in the 1960s and 1970s, Chicago had a clear, shared normative agenda, namely rejection of the prevailing orthodoxy. The initial Chicago results, produced primarily through a case-by-case analysis, as well as broad empirical studies on issues such as the deconcentration debate, uniformly challenged the existing pro-plaintiff orthodoxy of antitrust policy.

The Revolution succeeded; one only has to read the numerous Supreme Court decisions rejecting the *ancien regime* to understand the triumph of Chicago. But Chicago had not focused on the many details for antitrust policy that would be necessary once the old order was overthrown. There was simply no shared, agreed-upon view regarding the myriad aspects of appropriate doctrine. Moreover, as the continued application of the Chicago methodology moved beyond the initial results, it produced more diverse analyses not easily described or categorized. To list five prominent Chicagoans alphabetically—Baxter, Bork, Bowman, Posner, and Stigler—they disagreed among themselves, or had not addressed fully, the appropriate policies toward mergers, predatory pricing, tying, rule of reason analysis, and other important issues.

Having spent parts of our formative years as young academics who had occasional conversations with these scholars, disagreement was normal. Constant questioning and skepticism were hallmarks of the Chicago scholars in action. Like 1776, Chicago had its revolutionary band of brothers. As the American revolutionaries diverged politically when actually running a government, the Chicago scholars hardly agreed regarding the details of operational antitrust policy, as our merger example above perhaps best illustrates. Moreover, when devising rules for antitrust, rules that necessarily have to be enforceable, disagreements

discussing the substantial alternative view of other Chicago scholars discussed in note 46, *supra*. See Wright, *Overshot the Mark?*, *supra* note 4 (reviewing empirical literature on vertical restraints and RPM and noting that the authors in *Overshot the Mark* "do not confront this literature.").

We do not contend that each chapter in Overshot the Mark reflects the political position of the book's title. Some treat Chicago in a manner consistent with our approach. For example, Professor Salop notes quite correctly that when "conservative jurists . . . treat RRC theories as outside the mainstream, they are deviating from the learning that originated with the Chicago School." Moreover, as Crane notes in his book review, there is "a significant tension within How Chicago between the editor's apparent goal--of providing a systematic, ideological case against radical Chicago overreaching—and what his authors are actually willing to say . . . . "Crane, *supra* note 1, at 1920–21.

about application of the error cost framework are inevitable, especially in the presence of often weak empirical evidence about the presence and/or magnitude of type I and type II errors.

The use of the term Chicago as a methodology can be safely retired in favor of terms that better describe applications of the scientific methodology to problems of antitrust law. The use of Chicago normatively should be retired as well, outside of discussions of antitrust history, because there is no shared meaning of Chicago for so many of today's controversies. Instead, the term is often used pejoratively to describe a relentless anti-enforcement ideology, a description inconsistent with any sensible description of the Chicago school.

Chicago was essential to the 20th century development of sound antitrust principles. Invoking Chicago, either pro or con, in most arguments about antitrust policy today is frequently meaningless or, worse, a wasteful distraction.