



ABANDONING ANTITRUST'S CHICAGO OBSESSION: THE CASE FOR EVIDENCE-BASED ANTITRUST

**Joshua D. Wright,
George Mason University School of Law**

Antitrust Law Journal, Forthcoming

**George Mason University Law and
Economics Research Paper Series**

ABANDONING ANTITRUST'S CHICAGO OBSESSION: THE CASE FOR EVIDENCE-BASED ANTITRUST

JOSHUA D. WRIGHT*

George Stigler began his famous paper on the *Theory of Oligopoly* with the observation that “[n]o one has the right, and few the ability, to lure economists into reading another article on oligopoly theory without some advance indication of its alleged contribution.”¹ This observation applies twice over to attempts to lure antitrust lawyers and economists to read yet another article on the roles of the competing “schools” in antitrust theory. I begin with a clear statement of this article’s proposed contribution.

The first of my three goals in this article is to describe a fundamental challenge facing modern and future antitrust institutions: the “model selection problem.” This problem has grown in magnitude as the number of competing theoretical models in the industrial organization literature has proliferated over the past thirty years. The Post-Chicago School first challenged the Chicago School’s intellectual dominance of antitrust jurisprudence. Now, for each form of business arrangement, there exist an endless number of theoretical models of its causes and welfare consequences, each with different policy implications. While the ratio of theoretical models to empirical evidence has soared over the past thirty years, antitrust institutions lack decisionmaking protocols for choosing among competing models. Courts and enforcement agencies retain broad discretion in selecting theoretical models ad hoc, tailoring decisions to the arbiter’s relative economic sophistication, intellectual priors, or even desired result. A fundamental obstacle to the continued development of antitrust doctrine is that there are few institutional mechanisms capable of committing courts and enforcement agencies to rely upon the theoretical model best supported by empirical evidence. The model selection problem can cause a tribunal to select an inapplicable economic theory

* Professor of Law, George Mason University School of Law and Department of Economics. I thank Bruce Kobayashi, Timothy Muris, William Page, Steve Salop, and Judd Stone for valuable comments, and Lisa Madalone and Scott Hazelgrove for research assistance.

¹ George J. Stigler, *A Theory of Oligopoly*, 72 J. POL. ECON. 44, 44 (1964) [hereinafter *A Theory of Oligopoly*].

for a particular case and, consequently, to adopt inefficient substantive rules or presumptions, which can affect the economic model that courts are likely to apply in future cases involving similar business arrangements.

My second goal is to demonstrate that the intense focus upon so-called “schools” within the antitrust community, and especially the vaunted Chicago School, has exacerbated the model selection problem. Shorthand labels describing these schools of thought—the “Chicago School,” “Post-Chicago School,” “Neo-Chicago School,” and the emerging “Behavioral School”—while occasionally offering useful descriptions of general themes within antitrust thought, have themselves become barriers to the continued development of economically sound antitrust law and policy. These labels distract scholars and regulators alike from the ultimate substantive question in antitrust analysis: which model best explains the business conduct at issue in light of the available data. Similarly, these labels distract from the ultimate institutional challenge facing antitrust law and policy: how to ensure that the appropriate model, once identified, becomes the basis for antitrust decision-making in a given case. This criticism applies with equal force to virtually all recent discussions of antitrust schools of thought and their implications for identifying desirable competition policy. This is an unfortunate development because, as it is with many shorthand references, these labels are certainly capable of beneficial usage. Such informative usage may once have been the case; consistent misuse of these labels suggests such a time is long past.

The Neo-Chicago School, which is the subject of this symposium, does not escape this criticism. The Neo-Chicago School could be interpreted as arising largely as an exercise in marketing—rebranding the Chicago School in light of the criticisms (rightly or wrongly) it has received from the antitrust community, as the “softer, gentler, and new and improved” Chicago School, more friendly to incorporating Post-Chicago insights and with an even greater emphasis upon empirical evidence. As I will discuss below, if this is indeed the case, the marketing strategy stands upon inaccurate and misleading assumptions about the Chicago School. In the end, the Neo-Chicago School offers little if any true product differentiation from its predecessor. Moreover, it arises in the midst of a competition policy discourse in which the greatest value lies in solving institutional and methodological questions—a subject upon which the Neo-Chicago School has little new insight to offer.

My third goal is to offer a modest proposal to help solve the model selection problem outlined above. This proposal has two major components. First, scholars ought to abandon—immediately, and at every possible opportunity—the terms “Chicago School,” “Neo-Chicago School,” “Post-Chicago School,” and the like. I propose in its place a principle embraced by virtually all antitrust observers: a commitment to testing economic theories with economic knowledge and empirical data to support those theories with the best

predictive power. This general principle encompasses a commitment to abandon the presently intense reliance upon these labels as a useful consideration either in identifying the right theory to explain the conduct at issue in a particular case or in developing more general substantive rules and norms of competition policy. I call this approach “evidence-based antitrust.” The benefits of such a shift in focus are obvious: both regulators and scholars may emphasize the key issue of how well the data support competing theories that may be used to form the basis of judicial and regulatory decisionmaking.

Of course, replacing one set of slogans with another slogan is no solution in itself. A central theme of my article is that the antitrust community has proven that it cannot use these shorthand approaches in a productive manner. Any such proposal therefore must identify institutional commitments that would improve the status quo. I therefore also discuss several promising approaches to embedding an appreciation for empirical testing more deeply within antitrust institutions.

I. THE VARIOUS SCHOOLS OF ANTITRUST THOUGHT

A. DEFINING THE CHICAGO SCHOOL OF ANTITRUST²

The contributions of the Chicago School to antitrust economics, and their positive influence on the evolution of antitrust doctrine, are well known.³ Those contributions need not be reexamined in their entirety here. However, a working definition of the Chicago, Post-Chicago and Neo-Chicago Schools of antitrust thought are required to demonstrate how a disproportionate emphasis on these labels has distorted competition policy debates. It is fruitful first to discuss what the Chicago School is clearly *not*.

The Chicago School of antitrust economics is not merely a set of normative prescriptions about antitrust law, such as to “let the market solve it.”⁴ It is easily forgotten that Chicagoans provided the intellectual building blocks for

² See 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 25.

³ See generally Herbert H. Hovenkamp, *The Rationalization of Antitrust*, 116 HARV. L. REV. 917 (2003) (reviewing RICHARD A. POSNER, *ANTITRUST LAW* (2d ed. 2001)); 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 [hereinafter *Intellectual DNA*]; 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); Sam Peltzman, *Aaron Director's Influence on Antitrust Policy*, 48 J.L. & ECON. 313 (2005); Richard A. Posner, *The Chicago School of Antitrust Analysis*, 127 U. PA. L. REV. 925 (1979); *Id.*

⁴ See, e.g., Thomas J. Rosch, *The Redemption of a Republican* (June 1, 2009), available at <http://www.ftc.gov/speeches/rosch/090601redemption.pdf> (“I have questioned the basic tenets of orthodox Chicago School law and economics as those tenets were set forth by Judge Robert Bork in *The Antitrust Paradox*—that antitrust law is concerned with maximizing societal welfare; that markets are generally perfect.”).

the modern theory of oligopoly,⁵ have been among the staunchest supporters of criminal enforcement for price-fixing offenses,⁶ established the modern “raising rivals’ costs” theories,⁷ and offered the most well-known empirical evidence supporting rival-cost theories.⁸

Nor, despite characterizations to the contrary, does the Chicago School represent a monolithic entity.⁹ The mischaracterizations usually ignore the subtle variation in economic approaches within the Chicago School in favor of the view that the Chicago School amounts to carefully selected excerpts from Robert Bork’s *Antitrust Paradox*.¹⁰ The Chicago School enjoys considerable heterogeneity in both economic approaches and policy prescriptions. As discussed, Chicagoans have provided key intellectual contributions to our understanding of both the efficiencies and anticompetitive effects of business arrangements. But the heterogeneity within the Chicago School runs deeper than merely taking seriously the possibilities of anticompetitive conduct. Within the “Chicago” literature on vertical restraints alone, there is significant

⁵ See, e.g., Stigler, *A Theory of Oligopoly*, *supra* note 1.

⁶ See, e.g., ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 263 (1978) (observing that as a result of the per se prohibition against naked price-fixing “thousands of cartels have been made less effective and other thousands have never been broached because of the overhanging threat of this rule” and concluding that “[i]ts contributions to consumer welfare over the decades have been enormous”); see also Douglas H. Ginsburg & Joshua D. Wright, *Antitrust Sanctions*, COMPETITION POL’Y INT’L, Autumn 2010, at 3.

⁷ Indeed, the intellectual father of Post-Chicago antitrust, Steve Salop, appropriately credits the Chicago School. See Steven C. Salop, *Economic Analysis of Exclusionary Vertical Conduct: Where Chicago Has Overshot the Mark*, in HOW THE CHICAGO SCHOOL OVERSHOT THE MARK: THE EFFECT OF CONSERVATIVE ECONOMIC ANALYSIS ON U.S. ANTITRUST 141, 144 (Robert Pitofsky ed., 2008) [hereinafter OVERSHOT THE MARK] (claiming that “it is important to recognize that [the Post-Chicago] approach has its roots in the economic analysis of Chicago School commentators,” referring to the work of Aaron Director & Edward H. Levi, *Law and the Future: Trade Regulation*, 51 Nw. U. L. REV. 281 (1956)). See also Peter C. Carstensen, *Director and Levi After 40 Years: The Anti-Antitrust Agenda Revisited*, 17 Miss. C. L. REV. 37, 40 (1996) (positing that Director and Levi’s analysis was a precursor to the raising rivals’ costs hypothesis); Comment, *Vertical Forestalling Under the Antitrust Laws*, 19 U. CHI. L. REV. 583 (1952).

⁸ Elizabeth Granitz & Benjamin Klein, *Monopolization by “Raising Rivals’ Costs”*: The Standard Oil Case, 39 J.L. & ECON. 1 (1996).

⁹ A number of recent examples of this inaccurate description appear in *How the Chicago School Overshot the Mark*. See, e.g., Robert Pitofsky, *Introduction: Setting the Stage*, in OVERSHOT THE MARK, *supra* note 7, at 3, 4–5; Irwin M. Stelzer, *Some Practical Thoughts About Entry*, in OVERSHOT THE MARK, *supra*, at 24, 24, 28–29; Eleanor M. Fox, *The Efficiency Paradox*, in OVERSHOT THE MARK, *supra*, at 77, 82, 86, and 88; Marina Lao, *Free Riding: An Overstated, and Unconvincing, Explanation for Resale Price Maintenance*, in OVERSHOT THE MARK, *supra*, at 196, 199.

¹⁰ For discussions of Bork’s contributions to antitrust thought, see Frank H. Easterbrook, *The Chicago School and Exclusionary Conduct*, 31 HARV. J.L. & PUB. POL’Y 439 (2008); Douglas H. Ginsburg, *Judge Bork, Consumer Welfare, and Antitrust Law*, 31 HARV. J.L. & PUB. POL’Y 449 (2008); George L. Priest, *The Abiding Influence of The Antitrust Paradox*, 31 HARV. J.L. & PUB. POL’Y 455 (2008).

variation among, for example, the explanations and approaches of Benjamin Klein,¹¹ George Stigler,¹² and Lester Telser.¹³

Finally, the Chicago School of antitrust economics does not assume perfect markets.¹⁴ The Chicago School neither assumes nor requires conditions of perfect competition, perfect information, or the absence of transaction costs. The Chicago School accounts for real-world frictions. In light of Stigler's work on information and search costs, the work of Alchian, Coase, and Klein on transaction costs, and the Chicagoan antecedents to modern anticompetitive theories of exclusionary conduct, claims that the Chicago School of antitrust economics myopically focused upon perfect markets misstate economic history.¹⁵

Instead, the Chicago School is best viewed as a set of methodological commitments embedded into the research agenda of the set of scholars associated with the law and economics movement at the University of Chicago. Three commitments stand out as the defining characteristics of the Chicago School: (1) a rigorous application of price theory; (2) the centrality of empiricism; and (3) an emphasis on the social cost of legal errors in the design of antitrust rules.

1. Price Theory

The first defining characteristic of the Chicago School is a rigorous application of economic theory, especially neoclassical price theory, to problems of antitrust analysis.¹⁶ Richard Posner once stated that the key distinguishing attribute of the Chicago School of antitrust was that it “view[ed] antitrust policy

¹¹ Benjamin Klein & Kevin M. Murphy, *Vertical Restraints as Contract Enforcement Mechanisms*, 31 J.L. & ECON. 265 (1988); Benjamin Klein & Joshua D. Wright, *The Economics of Slotting Contracts*, 50 J.L. & ECON. 421 (2007); Benjamin Klein, *Competitive Resale Price Maintenance in the Absence of Free Riding*, 76 ANTITRUST L.J. 431 (2009).

¹² George J. Stigler, *United States v. Loew's Inc.: A Note on Block-Booking*, 1963 SUP. CT. REV. 152 (1963) [hereinafter *A Note on Block-Booking*].

¹³ Lester G. Telser, *Why Should Manufacturers Want Fair Trade?*, 3 J.L. & ECON. 86 (1960).

¹⁴ See J. Thomas Rosch, Antitrust Implications of the Supreme Court's 2009–2010 Docket (Mar. 31, 2010) [hereinafter Supreme Court's 2009–2010 Docket] (“[T]he Chicago School of economics, which is essentially what you learned in Economics 101 back in college”), available at <http://ftc.gov/speeches/rosch/100331accaspeech.pdf>.

¹⁵ See generally, Harold Demsetz, *Economics as a Guide to Antitrust Regulation*, 19 J.L. & ECON. 371 (1976); cf. Rosch, Supreme Court's 2009–2010 Docket, *supra* note 14.

¹⁶ Dennis W. Carlton & Jeffrey M. Perloff, MODERN INDUSTRIAL ORGANIZATION 3 (4th ed. 2004) (“Price theory models analyze the economic incentives facing individuals and firms to explain market power In recent years, three specific theoretical applications of price theory have won substantial support—transaction cost analysis, game theory, and contestable market analysis—and help to explain structure, conduct, and performance.”). This is not, of course, to imply that Chicagoans exclusively applied price theory in analyzing antitrust problems. See, e.g., George J. Stigler, *The Economics of Information*, 69 J. POL. ECON. 213 (1961) (analyzing the economics of information from a search cost perspective whereas search costs would not exist

through the lens of price theory.”¹⁷ Antitrust doctrine enjoyed great progress as the result of the application of price theory to the business arrangements within its domain.

Despite disagreements on many issues, antitrust commentators of all stripes agree that antitrust doctrine is economically rational on the whole, and, at a minimum, is more economically coherent than prior to the integration of the Chicago School’s price theory teachings. The Chicago School played a crucial role in constraining courts and enforcement agencies to harness the power of economics to orient the Sherman Act toward consumer welfare. It is thus with good reason that, as Judge Douglas Ginsburg and Derek Moore observe, “There is now broad and non-partisan agreement in academia, the bar, and the courts regarding the importance of price theory in antitrust decision-making.”¹⁸

2. *Empiricism*

The second defining feature of the Chicago School of antitrust is its commitment to empiricism. This commitment should surprise no one in light of Milton Friedman’s famous essay on positive economics. Friedman noted that the Chicago School’s commitment to scientific discourse in economics should inspire a focus on comparing competing models on the basis of their predictive power rather than the realism of their underlying assumptions.¹⁹ Following Friedman’s lead, Stigler vigorously applied empirical analysis to industrial organization, a field of economics he described as “microeconomics with evidence.”²⁰ Stigler declared in his 1964 Presidential Address to the American Economic Association with the declaration that the “age of quantification is now full upon us,” and optimistically observed that this age would likely be characterized by policy analysis informed by empirical evidence.²¹ We remain in such an age.

under perfect competition); Benjamin Klein, *Market Power in Aftermarkets*, 17 MANAGERIAL & DECISION ECON. 143 (1996); Klein & Murphy, *supra* note 11; Telser, *supra* note 13.

¹⁷ Richard A. Posner, *The Chicago School of Antitrust*, 127 U. PA. L. REV. 925, 928 (1979).

¹⁸ Douglas H. Ginsburg & Derek Moore, *The Future of Behavioral Economics in Antitrust Jurisprudence*, COMPETITION POL’Y INT’L, Spring 2010, at 89, 92. See also Leah Brannon & Douglas H. Ginsburg, *Antitrust Decisions of the Supreme Court: 1967 to 2007*, COMPETITION POL’Y INT’L, Autumn 2007, at 1, 4 (explaining that the consensus on price theory has “contributed to both the prevalence of supermajority and even unanimous antitrust decisions and to the improved success rate of the United States when it appears either as a party or as an amicus in Supreme Court antitrust cases” and facilitated a “rethinking of the plaintiff-friendly antitrust decisions of earlier decades”).

¹⁹ See, e.g., MILTON FRIEDMAN, *The Methodology of Positive Economics*, in ESSAYS IN POSITIVE ECONOMICS 3, 40–41 (1966).

²⁰ In an ironic twist, Stigler was initially rejected for a faculty position by the University of Chicago economics department for being “too empirical.” See generally GEORGE J. STIGLER, THE ORGANIZATION OF INDUSTRY (1968).

²¹ George J. Stigler, *The Economist and the State*, 55 AM. ECON. REV. 1, 16–17 (1965).

Stigler's body of work in industrial organization economics epitomizes the Chicago ethos of empiricism. Stigler used empirical analysis to examine the effects of the antitrust laws,²² to assess block booking practices,²³ and to study economies of scale, introducing the survivorship principle.²⁴ Perhaps the strongest evidence of Stigler's dedication to the role of empirical evidence in the development of antitrust policy was his change in position in favor of deconcentration policy in the early 1950s. This change was in response to empirical evidence that debunked the then-prevailing view concerning the positive relationship between concentration and profitability.²⁵

The Chicago School's empirical commitment to antitrust extended well beyond Stigler.²⁶ UCLA's Harold Demsetz pioneered the work that proved false the purported causal relationship between concentration and price underlying the structure-conduct-performance paradigm, one of the Chicago School's most widely recognized contributions. Demsetz also offered a superior explanation of the observed (non-causal) correlation—that firms with larger market shares earned higher profits as a result of greater efficiency.²⁷ Moreover, the case studies offered by many Chicagoans have played an important role in the development of sensible antitrust policy toward vertical restraints. Former Federal Trade Commission Chairman Timothy Muris has recognized the contributions of Benjamin Klein's case studies emphasizing the role of vertical restraints in facilitating dealer supply of promotional services, when performance is difficult to measure.²⁸

3. *The Error-Cost Framework*

The third defining feature of the Chicago School of antitrust analysis is its emphasis on the relationship among antitrust liability rules, judicial error, and the social costs of those errors. From an economic perspective, it is socially optimal to adopt the rule that minimizes the expected total cost of false acquittals, false convictions, and administrative costs. The error-cost approach within antitrust is distinctively Chicagoan because its introduction was pio-

²² George J. Stigler, *The Economic Effects of the Antitrust Laws*, 9 J.L. & ECON. 225 (1966).

²³ Stigler, *A Note on Block-Booking*, *supra* note 12.

²⁴ George J. Stigler, *The Economies of Scale*, 1 J.L. & ECON. 54 (1958).

²⁵ GEORGE J. STIGLER, *MEMOIRS OF AN UNREGULATED ECONOMIST* 97–100 (1988).

²⁶ The extension of the empirical antitrust research agenda also extended well beyond the University of Chicago. Indeed, the antitrust community has sometimes allowed the Chicago School to take credit for many of the contributions of UCLA economists such as Armen Alchian, Harold Demsetz, Benjamin Klein, and others.

²⁷ Harold Demsetz, *Two Systems of Belief About Monopoly*, in *INDUSTRIAL CONCENTRATION: THE NEW LEARNING* 164 (Harvey J. Goldschmid et. al. eds., 1974). The contributions of Demsetz and other participants in the famous Airlie House Conference are discussed in Timothy J. Muris, *Economics and Antitrust*, 5 GEO. MASON L. REV. 303 (1997).

²⁸ See Timothy J. Muris, *Improving the Economic Foundations of Competition Policy*, 12 GEO. MASON L. REV. 1 (2003) [hereinafter *Economic Foundations*].

neered by Judge Frank Easterbrook of the U.S. Court of Appeals for the Seventh Circuit, a prominent contributor to the Chicago School.²⁹ Subsequently, several commentators have adopted this framework as a useful tool for understanding the design of antitrust rules.³⁰

The error-cost framework begins with the presumption that the costs of false convictions in the antitrust context are likely to be significantly larger than the costs of false acquittals, since judicial errors that wrongly excuse an anticompetitive practice may eventually be undone by competitive forces attracted by the presence of monopoly rents. Conversely, judicial errors that wrongly condemn a procompetitive practice are likely to have more significant social costs because such beneficial practices are abandoned by firms and not offset by equilibrating market forces tending to mitigate their impact.³¹ Despite the centrality of this presumption to the Chicago School approach, unfortunately, reliable estimation of the relative costs of false acquittals and false condemnations has proven elusive.³² In the absence of conclusive information on these relative costs, the error-cost framework counsels towards caution in condemning business practices through the antitrust laws. This framework, when combined with the insights of price theory and commitment to empirical evidence, has proven a powerful tool for improving antitrust policy. For example, David S. Evans and Jorge Padilla demonstrate that such an approach to tying favors a modified per se legality standard, in which tying is deemed procompetitive unless the plaintiff presents strong evidence that the tie was anticompetitive.³³

This is not to say that the Chicago School possesses an exclusive claim on the placing of significant weight on error and administrative costs in the design of antitrust standards. Indeed, Federal Trade Commissioner William Kovacic has persuasively demonstrated that the Harvard School has played an integral role in promoting the administrability of antitrust rules, which is a

²⁹ Frank H. Easterbrook, *The Limits of Antitrust*, 63 TEX. L. REV. 1 (1984) [hereinafter *The Limits of Antitrust*].

³⁰ See, e.g., C. Frederick Beckner, III & Steven C. Salop, *Decision Theory and Antitrust Rules*, 67 ANTITRUST L.J. 41 (1999); James C. Cooper et al., *Vertical Antitrust Policy as a Problem of Inference*, 23 INT'L J. INDUS. ORG. 639 (2005); David S. Evans & A. Jorge Padilla, *Designing Antitrust Rules for Assessing Unilateral Practices: A Neo-Chicago Approach*, 72 U. CHI. L. REV. 73, 98 (2005) [hereinafter *Designing Antitrust Rules*]; Keith N. Hylton & Michael Salinger, *Tying Law and Policy: A Decision-Theoretic Approach*, 69 ANTITRUST L.J. 469 (2001); Geoffrey A. Manne & Joshua D. Wright, *Innovation and the Limits of Antitrust*, 6 J. COMPETITION L. & ECON. 153 (2010).

³¹ See Fred S. McChesney, *Easterbrook on Errors*, 6 J. COMPETITION L. & ECON. 11 (2010).

³² Michael Salinger, *Section 2 Symposium: Michael Salinger on Framing the Debate*, TRUTH ON THE MARKET (May 4, 2009), <http://truthonthemarket.com/2009/05/04/section-2-symposium-michael-salinger-on-framing-the-debate/>.

³³ Evans & Padilla, *Designing Antitrust Rules*, *supra* note 30.

predecessor of the error-cost framework.³⁴ Perhaps the most well-known proponents of this position are Phillip Areeda and Donald Turner, who consistently argued that antitrust rules should be administrable. The powerful intellectual foundations for the error-cost framework extend through many of the now-identified antitrust schools. The framework is widely recognized as an indispensable element of modern competition policy.

B. THE POST-CHICAGO SCHOOL

The Post-Chicago School is the most prominent alternative to the Chicago School approach.³⁵ Post-Chicago economists produced a series of models, which demonstrate that, under some assumptions, business arrangements viewed by the Chicago School as generally or always efficient may be anticompetitive. For example, a monopolist in one market can have an incentive to monopolize an adjacent product market under some conditions.³⁶

Post-Chicago economists also have created literature focusing on the possibility of vertical foreclosure resulting from business arrangements that raise rivals' costs (RRC) and ultimately reduce competition and harm consumers. The RRC strand of literature has become the most influential Post-Chicago contribution and has provided a robust theoretical framework for a number of theories that demonstrate the possibility of anticompetitive effects of various exclusionary business practices.³⁷ These theoretical contributions demonstrate that it is possible for tying, exclusive dealing, and predatory pricing to generate anticompetitive effects under certain conditions, including an assumed absence of any procompetitive justifications for the conduct examined.³⁸ While the Post-Chicago School has enjoyed meteoric success via several meaningful

³⁴ See Kovacic, *Intellectual DNA*, *supra* note 3; see also Einer Elhauge, *Harvard, Not Chicago: Which Antitrust School Drives Recent U.S. Supreme Court Decisions?*, COMPETITION POL'Y INT'L, Autumn 2007, at 59.

³⁵ On the Post-Chicago approach to antitrust, see Jonathan B. Baker, *A Preface to Post-Chicago Antitrust*, in POST-CHICAGO DEVELOPMENTS IN ANTITRUST LAW 60 (Antonio Cucinotta et al. eds., 2002).

³⁶ A seminal paper in this literature is Michael D. Whinston, *Tying, Foreclosure, and Exclusion*, 80 AM. ECON. REV. 837 (1990).

³⁷ See, e.g., Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price*, 96 YALE L.J. 209 (1986).

³⁸ See, e.g., Dennis W. Carlton & Michael Waldman, *The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries*, 33 RAND J. ECON. 194 (2002); Whinston, *supra* note 36; see also B. Douglas Bernheim & Michael D. Whinston, *Exclusive Dealing*, 106 J. POL. ECON. 64 (1998); Patrick Bolton et al., *Predatory Pricing: Strategic Theory and Legal Policy*, 88 GEO. L.J. 2239 (2000); Bruce H. Kobayashi, *Does Economics Provide A Reliable Guide to Regulating Commodity Bundling By Firms? A Survey of the Economic Literature*, 1 J. COMPETITION L. & ECON. 707 (2005) (surveying the bundling literature); Eric B. Rasmusen et al., *Naked Exclusion*, 81 AM. ECON. REV. 1137 (1991); John Simpson & Abraham L. Wickelgren, *Naked Exclusion, Efficient Breach, and Downstream Competition*, 97 AM. ECON. REV. 1305 (2007).

scholarly benchmarks, including publications in top journals, substantial influence on antitrust policy in the European Union, and dominance within modern economics departments, it has had only modest impact in American courts, especially the Supreme Court.³⁹

C. THE NEO-CHICAGO SCHOOL

The introduction of the prefix “Neo” to the Chicago School implicitly begs the question whether the Neo-Chicago School represents a compromise between the Chicago School and Post-Chicago School. But that assumes substantial difference between Chicago and Neo-Chicago in the first place. The Neo-Chicago School has been defined as (1) combining use of both Chicago and Post-Chicago insights, and (2) adopting the “error-cost framework pioneered by Judge Frank Easterbrook” to design antitrust rules.⁴⁰ Dan Crane describes the Neo-Chicago approach as one that “accepts Chicago’s basic premises as refined by the emerging body of criticism.”⁴¹ On these terms, it is unclear what, if anything, differentiates the Neo-Chicago School from the original Chicago School. As discussed above, with respective to substantive economics and commitments to empirical evidence, the Neo-Chicago School appears to offer little, if any, product differentiation.

The first apparent distinction is the Neo-Chicago School’s acceptance of Post-Chicago insights. But as discussed above, not only do economists agree that the Post-Chicago insights build upon the work of Aaron Director, but Chicagoans themselves have offered theoretical and empirical contributions to the Post-Chicago literature, especially on the seminal Post-Chicago RRC theories. To the extent that some elements of the antitrust community adopt the view that the Chicago School facially rejects anticompetitive theories, that understanding is simply mistaken, both as a matter of economic history and present fact.

³⁹ The Supreme Court’s decision in *Kodak* was the zenith of the Post-Chicago School’s influence over antitrust law in the United States. However, that influence was short-lived. See *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451 (1992). In aftermarket “lock-in” cases most closely resembling the Post-Chicago theories in *Kodak*, lower courts have “bent over backwards to construe *Kodak* as narrowly as possible.” See Herbert Hovenkamp, *The Reckoning of Post-Chicago Antitrust*, in *POST-CHICAGO DEVELOPMENTS IN ANTITRUST LAW*, *supra* note 35, at 1, 8; see also David A.J. Goldfine & Kenneth M. Vorrasi, *The Fall of the Kodak Aftermarket Doctrine: Dying A Slow Death in the Lower Courts*, 72 ANTITRUST L.J. 209 (2004); Bruce H. Kobayashi & Joshua D. Wright, *Federalism, Substantive Preemption, and Limits on Antitrust: An Application to Patent Holdup*, 5 J. COMPETITION L. & ECON. 469 (2009) (extending Goldfine and Vorrasi’s analysis through 2007 and confirming their results).

⁴⁰ Evans & Padilla, *Designing Antitrust Rules*, *supra* note 30 (citing Easterbrook, *The Limits of Antitrust*, *supra* note 29). See also Daniel A. Crane, *Chicago, Post-Chicago, and Neo-Chicago*, 76 U. CHI. L. REV. 1911 (2009).

⁴¹ Crane, *supra* note 40, at 1929.

The second claimed distinction is application of decision-theory to antitrust analysis. However, the error-cost framework does not distinguish Neo-Chicago analysis. Judge Easterbrook is the intellectual originator of the application of the error-cost framework to antitrust rules,⁴² and he is properly considered a bulwark of the Chicago School. One might conclude from these attempted distinctions the Neo-Chicago School is simply a “double dose” of old Chicago School.⁴³ A handful of scholars rely upon the Neo-Chicago label to evoke the possibility of an ever-elusive middle ground for antitrust enforcement. Softer—and less falsifiable—descriptions of the Neo-Chicago School as a more “open-minded” version of the Chicago School instead mischaracterize both the Chicago School’s contributions to antitrust and its openness to new ideas.⁴⁴ Most, importantly, such semantic distinctions do not provide regulators with guidance in approaching novel or complex challenged business practices, and the prevalence of theoretical models only complicates the problem.

D. A NEW ENTRANT INTO THE ANTITRUST DEBATE: BEHAVIORAL ANTITRUST⁴⁵

Dissatisfied with the mainstream antitrust jurisprudence that has emerged over the past several decades, some competition policy scholars and regulators have turned to behavioral economics to provide the intellectual foundation for a new, “behaviorally informed” approach to competition policy. This has been deemed the “Behavioral School” of antitrust economics, or simply “behavioral antitrust.”

Behaviorists claim to provide more accurate models of both firm and consumer behavior than neoclassical economic models based upon the assumption

⁴² See Easterbrook, *The Limits of Antitrust*, *supra* note 29.

⁴³ See 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/>. If one begins with the definition that the Neo-Chicago School is the old Chicago School along with the error-cost framework, it follows that:

NEO-CHICAGO = CHICAGO SCHOOL + ERROR COST FRAMEWORK

NEO-CHICAGO = CHICAGO SCHOOL + INTELLECTUAL CREATION OF FRANK EASTERBROOK

NEO-CHICAGO = CHICAGO SCHOOL + CHICAGO SCHOOL

NEO-CHICAGO = DOUBLE CHICAGO

Q.E.D.

BUT SEE David S. Evans & Jorge Padilla, *Chicago, Neo-Chicago and Chicago Squared: A Comment from David Evans and Jorge Padilla*, TRUTH ON THE MARKET (July 27, 2009), <http://truthonthemarket.com/2009/07/27/chicago-neo-chicago-and-chicago-squared-a-comment-from-david-evans-and-jorge-padilla/>.

⁴⁴ 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).

⁴⁵ This section relies upon Joshua D. Wright & Judd E. Stone, *Misbehavioral Economics: The Case Against Behavioral Antitrust*, CARDOZO L. REV. (forthcoming), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1686389.

tion of rational behavior.⁴⁶ These behaviorist claims have found a receptive audience in at least one member of the Federal Trade Commission.⁴⁷ While admitting that “behavioral economics” might “leave us without an ‘organizing principle’” in applying antitrust standards,⁴⁸ Federal Trade Commissioner J. Thomas Rosch has endorsed a behaviorally informed approach to antitrust on at least anecdotally empirical grounds.⁴⁹ This behavioral approach to antitrust “ring[s] true because, however rational we may all try to be, we have all taken actions—often consciously—that we know are not in our ‘wealth-maximizing self-interest,’ but which we pursue anyway.”⁵⁰ Commissioner Rosch thereby calls into question all antitrust approaches grounded in the rationality assumption—including both the “Chicago School” and the game-theoretic Post-Chicago School.⁵¹

Commissioner Rosch is not alone in making these claims. Maurice Stucke, for example, argues that “[i]t appears anecdotally that some corporate behavior is (or is not) occurring that is not readily explainable under antitrust’s rational choice theories.”⁵² The implication is that antitrust regulators should focus upon this loose amalgamation of biases catalogued together so as to

⁴⁶ Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471 (1998).

⁴⁷ See J. Thomas Rosch, Behavioral Economics: Observations Regarding Issues That Lie Ahead, Remarks at the Vienna Competition Conference (June 9, 2010), available at <http://www.ftc.gov/speeches/rosch/100609viennaremarks.pdf> [hereinafter Behavioral Economics 2010] (“[W]hile behavioral economics is still relatively young, it has already provided important insights that should give us pause at the very least before we accept the rule that humans always behave rationally.”); see also J. Thomas Rosch, Antitrust Law Enforcement: What to Do About the Current Economics Cacophony? Remarks at the Bates White Antitrust Conference (June 1, 2009), available at <http://www.ftc.gov/speeches/rosch/090601bateswhite.pdf> [hereinafter Current Economics Cacophony 2009] (claiming that “one of the most significant insights from the behavioral economics literature is the suggestion that, because consumers will behave irrationally—which is to say that they will make decisions based on factors other than price and quality—when there is a situation with less or imperfect competition, the government should engage in consumer protection efforts in those cases rather than sitting back and waiting for a market to heal itself.”).

⁴⁸ J. Thomas Rosch, Managing Irrationality: Some Observations on Behavioral Economics and the Creation of the Consumer Financial Protection Agency, Remarks at the Conference on the Regulation of Consumer Financial Products 8 (Jan. 6, 2010), available at <http://ftc.gov/speeches/rosch/100106financial-products.pdf>.

⁴⁹ *Id.*

⁵⁰ *Id.* at 3–4.

⁵¹ *Id.*

⁵² See, e.g., Amanda P. Reeves & Maurice E. Stucke, *Behavioral Antitrust*, 86 IND. L.J. 1527 (2011); Maurice E. Stucke, *Behavioral Economists at the Gate: Antitrust in the Twenty-First Century*, 38 LOY. U. CHI. L.J. 513, 517 (2007) [hereinafter *Behavioral Economists at the Gate*]; Maurice E. Stucke, *New Antitrust Realism*, GLOBAL COMPETITION POL’Y, Jan. 20, 2009; see also Avishalom Tor, *The Fable of Entry: Bounded Rationality, Market Discipline, and Legal Policy*, 101 MICH. L. REV. 482 (2002).

constitute systematic irrationality and should build upon this collection to establish competition policy implications.⁵³

Proponents of behaviorally informed antitrust policy claim that behavioral economics provides a superior understanding of *both* firm and consumer behavior. As an initial observation, this is a claim that could, and should, be subjected to empirical testing. Accordingly, the burden of proof for demonstrating this greater understanding remains on behaviorist advocates, and there is little empirical support for that proposition in the behavioral economics literature as it exists.⁵⁴ That evidence is least persuasive with respect to the demonstration that firm decisionmaking is predictably irrational.⁵⁵ Further, many of the behavioral antitrust proposals are based on unrealistic models that assume permanent irrationality on the part of incumbents but rationality by entrants,⁵⁶ or conversely, irrational entrants and rational incumbents. Assuming *arguendo* the robustness of behavioral findings as applied to firms, and even ignoring the ever-vexing question for the behaviorist—"if firms act irrationally, why not regulators?"—updating behavioral models to attribute to both incumbents and entrants the same biases strips the models of clear policy implications.⁵⁷

II. THE MODEL SELECTION PROBLEM IN ANTITRUST

The proliferation of models has led to difficulty in convincing courts or agencies to adopt a novel approach. The Chicago School significantly improved the economic foundations of competition policy and encouraged the further integration of economic theory and antitrust law. Success is, as ever, not without costs of its own. Modern antitrust is now overwhelmed with models of "possible" conduct: rational choice models, game theory models, price-theoretic models, and behaviorist models. Re-labeling and re-branding schools of antitrust thought does little to help antitrust institutions to implement appropriate antitrust policy. Instead, what is needed is a more serious updating of antitrust institutions to ensure that the power of economics continues to be

⁵³ See, e.g., Stucke, *Behavioral Economists at the Gate*, *supra* note 52.

⁵⁴ See, e.g., Gregory Mitchell, *Taking Behavioralism Too Seriously? The Unwarranted Pessimism of the New Behavioral Analysis of Law*, 43 WM. & MARY L. REV. 1907, 1945 (2002) ("In fact, when one examines the actual data gathered by decision researchers rather than just summary presentations of the data, one finds that at least a significant minority and often a significant majority of the subjects provided the 'right,' or rational, answer to the judgment or decision problem under consideration.").

⁵⁵ For a survey of the sparse behavioral economic literature on firms, see Michael A. Salinger, *Behavioral Economics, Consumer Protection, and Antitrust*, COMPETITION POL'Y INT'L, Spring 2010, 65.

⁵⁶ Avishalom Tor & William J. Rinner, *Behavioral Antitrust: A New Approach to the Rule of Reason After Leegin*, 2011 U. ILL. L. REV. 805; Reeves & Stucke, *supra* note 52; Tor, *supra* note 52, at 487; Wright & Stone, *supra* note 45 (discussing these models).

⁵⁷ Wright & Stone, *supra* note 45.

harnessed to guide the evolution of antitrust toward a consumer-welfare maximizing body of law and away from its paradoxical, anti-consumer, anti-economics, pre-Chicago state.

It is difficult to appreciate the magnitude of the threat the model selection problem poses for contemporary antitrust law, save by reference to past antitrust jurisprudence. Unlike modern statutes, the Sherman Act issued broad commands, forbidding “contract[s], combination[s] . . . or conspirac[ies] . . . in restraint of trade” as well as “monopoli[zing], or attempt[ing] to monopolize . . . any part of the trade or commerce” in interstate commerce.⁵⁸ Rarely has legislation commended such interpretative and wide-ranging discretion to the courts; rarely have the courts so inauspiciously wielded this discretion as in the first antitrust decisions. Early antitrust jurisprudence emphasized the “big is bad” philosophy, following Justice Peckham’s belief that the antitrust laws protected “small dealers and worthy men.”⁵⁹ These early decisions led to myriad confusing and overbroad rules. Early courts applying the antitrust laws categorically forbade horizontal information-sharing agreements and vertical resale price maintenance. Tying jurisprudence struggled to discern standard ties from “forcing” arrangements, a distinction with which antitrust regulators still wrestle. Merger law presented the starkest demonstration of this undisciplined antitrust philosophy: “[T]he sole consistency,” Justice Stewart wrote in dissent in *Von’s Grocery*, “is that in litigation under Section 7, the Government always wins.”⁶⁰

The Chicago School arose to curb this ideological incoherence. Justice Peckham’s defense of “worthy men” proved unruly in practice, providing neither courts nor regulators with predictable standards to guide future determinations of antitrust liability. Businesses in turn labored beneath this substantial uncertainty. Worse still, such a criterion was entirely subjective and thus non-falsifiable: the antitrust laws protected “worthy men,” and worthy men were those who earned the ad hoc protection of the antitrust laws. The Supreme Court applied antitrust law broadly at first in part because no principle, theoretical or otherwise, cautioned against it. Justice Peckham was not only not right—he was not even wrong.⁶¹ The first Chicago School articles solved this conundrum through the rigorous application of price theory to business arrangements. Price theory predicted that some arrangements would lead to greater total surplus, regardless of losses to competitors. Other practices reduced total surplus, transferring welfare from consumers in general to one

⁵⁸ Sherman Antitrust Act, 15 U.S.C. §§ 1–2.

⁵⁹ *United States v. Trans-Missouri Freight Ass’n*, 166 U.S. 290, 323 (1897) (Peckham, J.).

⁶⁰ *United States v. Von’s Grocery Co.*, 384 U.S. 270, 301 (1966) (Stewart, J., dissenting).

⁶¹ With acknowledgement to the physicist Wolfgang Pauli. See Michael Shermer, *Wronger than Wrong: Not All Wrong Theories Are Equal*, Sci. Am., Nov. 2006, at 40, available at <http://www.scientificamerican.com/article.cfm?id=wronger-than-wrong>.

or more producers at the cost of substantial dead weight loss. The Chicago School derived a principled distinction between the two: the antitrust laws should preserve as many of the first as possible while condemning the second.

With this clear theoretical distinction, Chicago School scholars could generate testable implications to confirm competitive benefit or competitive harm. This both inspired and necessitated the Chicago School commitment to empirically grounded antitrust jurisprudence: the Chicago School arose to provide a unifying principle in the application of antitrust law, and intellectual consistency demanded that its theories be subjected to the same rigor. Early Chicago School scholarship thereby provided the necessary and sufficient conditions under which judges and regulators would expect conduct to violate the antitrust laws.⁶² More importantly, the Chicago School provided a clear, testable metric by which the effects of any proposed antitrust rule or any antitrust decision could be judged: maximizing consumer welfare. Both courts and agencies soon embraced the Chicago School logic. Many of the earliest antitrust decisions are consigned to irrelevance; merger law, originally perhaps the worst of a particularly bad lot, now regularly embraces economic theory and empirical analysis at each stage of review.⁶³

Yet the clarity of a uniformly understood goal that persuaded courts to embrace the Chicago School metric also enabled the rise of alternative hypotheses. The Chicago School provided an accepted standard by which to judge antitrust propositions, enabling various competing theoretical antitrust schools to offer alternative methods to maximize consumer welfare. Several have done so in turn. The Chicago School, Post-Chicago School, the Behavioral School, and others offer different theoretical frameworks and presumptions, engaging one another in Stiglerian theoretical combat to maximize the goal *established by the Chicago School*. Each of these theoretical families seeks to explain the necessary and sufficient conditions for anticompetitive conduct in various contexts. Each does so to greater and lesser degrees. Standing alone, however, a proliferation of models is an embarrassment of riches. Many antitrust regulators have a relatively basic level of economic training. Jurists tend to be generalists by profession. A proliferation of models with indeterminate predictions—especially in Post-Chicago and Behaviorist School theories—calls for generalist judges to select amongst competing and increasingly sophisticated economic theories in resolving any given case. Antitrust de-

⁶² See, e.g., BORK, ANTITRUST PARADOX, *supra* note 6.

⁶³ Judge Posner, for example, describes *FTC v. Staples, Inc.*, 970 F. Supp. 1066 (D.D.C. 1997), as a demonstration that “[e]conomic analysis of mergers had come of age.” RICHARD A. POSNER, ANTITRUST LAW 158 (2d ed. 2001); see also U.S. Dep’t of Justice & Fed. Trade Comm’n, Horizontal Merger Guidelines (2010), available at <http://www.ftc.gov/os/2010/08/100819hmg.pdf>.

mands sophisticated economic analysis from individuals who are broadly lacking in economic training.⁶⁴

Herein lies the core of the model selection problem. The ever-broadening menu of potential models presents an increasingly unreasonable task to faithful regulators and judges already facing a daunting one. Simultaneously, the existence of many models provides increasingly plausible cover for regulators to import their intellectual prior assumptions into any given antitrust case.⁶⁵ Regulators must apply one of multiple models with possible, if not necessarily plausible, equilibria; the application of a given model often determines the potential viability of an antitrust action. Taken to the extreme, and without an institutional mechanism to guide model selection based upon scientific merit, outcomes may instead become heavily influenced by subjective considerations, prior beliefs, and ideology, a process conceptually indistinguishable from determining the contours of Justice Peckham's "worthy men." When antitrust liability depends upon the application of a favorable model as opposed to an unfavorable model, entities cannot predict with certainty which model will prevail, and when there are not firm institutional and methodological commitments to the model selection process, the mooring of antitrust law to economics is seriously undermined.

The scientific method provides the answer to this problem. The Chicago School not only advanced theories of competitive conditions, it constantly revised and updated those theories in light of observed data. Formulating testable hypotheses, testing them with available data, and updating our understanding of the competitive implications of business practices subject to antitrust scrutiny in a manner consistent with new information is necessary for the development of evidence-based antitrust. Fortunately, most conceptual rivals to the Chicago School agree to this method, as the scientific approach to economics generally, and as applied within antitrust, operated as a necessary precondition to their existence. The scientific method rests upon three propositions: (1) that any theory ought be judged by its ability to accurately predict phenomena; (2) that iterative testing can refine any theory to increase its predictive power over time; and (3) that a theory must be retained until another theory demonstrates greater predictive power. As discussed above, the

⁶⁴ Michael R. Baye & Joshua D. Wright, *Is ANTITRUST Too Complicated for Generalist Judges? The Impact of Economic Complexity and Judicial Training on Appeals*, 54 J.L. ECON. 1 (2011).

⁶⁵ See Daniel P. O'Brien, *The Antitrust Treatment of Vertical Restraints: Beyond the Possibility Theorems*, in THE PROS AND CONS OF VERTICAL RESTRAINTS 40–41 (Arvid Fredenberg ed., 2008) ("Without this discussion, practitioners motivated by private or political objectives can select from a long menu of economic models the one that supports their position, and these positions may or may not be consistent with social objectives. The applicability vacuum also leaves well-intentioned practitioners little basis for determining how and when to intervene to achieve their objectives.").

term “Chicago School” acted as a heuristic for both the consistent application of price theory to antitrust doctrine as well as the faithful revision of theories via the scientific method.

As alternative theories have blossomed, the term “Chicago School” has become a heuristic for the first—but not the second—of these core principles. This association is both inaccurate as well as historically unfair. Yet as antitrust observers have increasingly concerned themselves with dividing up antitrust theories into various schools, many have apparently lost sight of the value of consistent adherence to the scientific process and the value of empirical testing. The Behavioral School and the Chicago School hardly agree upon the breadth of Section 2 or the meaning of Section 5; nonetheless, the foremost behavioral law and economics scholars describe the behaviorist project as law and economics “with a higher R-squared.”⁶⁶ The increasing intellectual tribalism, however, overshadows this deep common agreement and threatens to implacably entrench the model selection problem.

III. HOW MISUSE OF THE “CHICAGO” LABELS HAS EXACERBATED THE MODEL SELECTION PROBLEM

Antitrust institutions must ensure that decisionmaking begins with the best available antitrust economics and must validate that theoretical foundation with empirical evidence.⁶⁷ These institutional constraints must nevertheless leave decisionmaking flexible enough to adapt to additional data—or a theory that better fits the data. The increasingly common abuse of the term “Chicago School” has harmed the quality of antitrust discourse by distracting the antitrust community from serious discussion of solutions to the model selection problem. Additional schools with additional theories—be they Neo-Chicago, Behavioral, or otherwise—will only exacerbate this problem. As antitrust analysts well know, it is not the number of competitors but the quality of competition that predicts outcomes. Modern antitrust theoretical battles increasingly feature greater and greater numbers of competitors with weaker and weaker competition.

⁶⁶ See Jolls et al., *supra* note 46, at 1487.

⁶⁷ See Muris, *Economic Foundations*, *supra* note 28, at 3 (“The soundness of doctrine and enforcement policy over time depends heavily on the strength of empirical research that evaluates the economic effects of judicial rulings and enforcement decisions.”); William E. Kovacic, *The Modern Evolution of U.S. Competition Policy Enforcement Norms*, 71 ANTITRUST L.J. 377, 392 (2003) [hereinafter *Modern Evolution*] (discussing the “pendulum narrative” of federal antitrust enforcement over the past few decades and arguing that “[b]y themselves, the pendulum narrative’s empirical failings and unacceptably selective chronology of enforcement activity deny its interpretative validity.”). See also D. Daniel Sokol, *Antitrust, Institutions, and Merger Control*, 17 GEO. MASON L. REV. 1055, 1140 (2010) (“More theoretical work on comparative institutional analysis in antitrust needs to be undertaken, as well as more empirical work to test these assumptions.”).

If one relied upon only interventionist-leaning antitrust scholars, one might conclude that the Chicago School of antitrust was not an intellectually accomplished branch of both economic and legal thought associated with two Nobel Laureates in economics (Ronald Coase and George Stigler) and was responsible for a dramatic shift in doctrine and enforcement that resulted in significant consumer welfare gains, but rather a pro-business conspiracy devoid of scientific content.⁶⁸ The legal academy has proven to be a nearly unending source of these mischaracterizations. Former Federal Trade Commission Chairman Robert Pitofsky concludes his introduction to *Overshot the Mark* with the observation 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.”⁶⁹ It is perhaps no surprise that the scholars invited to contribute to a conference about how the Chicago School *Overshot the Mark* largely agreed with this assessment. Many of the book’s chapters focused upon assertions that courts’ reliance on the Chicago School’s economic contributions resulted in a variety of erroneous decisions, but they presented virtually no empirical evidence along these lines.⁷⁰

⁶⁸ For example, in her essay in *Overshot the Mark*, Eleanor Fox accepts that the Court was initially headed in the right direction but asserts that for the past several decades, “a conservative Court swung the pendulum from one inefficient position (too much antitrust because it disregarded incentives and efficiencies of dominant firms) to another (too little antitrust because it disregards incentives and efficiencies of firms without power).” Fox, *supra* note 9, at 81.

⁶⁹ Pitofsky, *supra* note 9, at 6.

⁷⁰ For claims that Chicago School economics caused courts to adopt erroneous economic principles and get specific cases wrong, see Harvey J. Goldschmid, *Comment on Herbert Hovenkamp and the Dominant Firm: The Chicago School Has Made Us Too Cautious About False Positives and the Use of Section 2 of the Sherman Act*, in *OVERSHOT THE MARK*, *supra* note 7, at 123, 126; Warren S. Grimes, *The Sylvania Free Rider Justification for Downstream-Power Vertical Restraints: Truth or Invitation for Pretext?*, in *OVERSHOT THE MARK*, *supra* note 7, at 181, 191; Herbert Hovenkamp, *The Harvard and Chicago Schools and the Dominant Firm*, in *OVERSHOT THE MARK*, *supra* note 7, at 109, 113; Thomas E. Kauper, *Influence of Conservative Economic Analysis on the Development of the Law of Antitrust*, in *OVERSHOT THE MARK*, *supra* note 7, at 40, 44; Lao, *supra* note 9, at 201; Richard Schmalensee, *Thoughts on the Chicago Legacy in U.S. Antitrust*, in *OVERSHOT THE MARK*, *supra* note 7, at 11, 19, 20. For claims that the Chicago School caused courts to develop sub-optimal legal rules, see Fox, *supra* note 9, at 79–80; Hovenkamp, *supra*, at 111; Kauper, *supra*, at 42; John B. Kirkwood & Robert H. Lande, *The Chicago School’s Foundation is Flawed: Antitrust Protects Consumers, Not Efficiency*, in *OVERSHOT THE MARK*, *supra* note 7, at 89, 89–90; Schmalensee, *supra*, at 19. For claims that the Chicago School influenced antitrust policy in the wrong direction, see, e.g., Fox, *supra*, at 81; Hovenkamp, *supra*, at 111; Kirkwood & Lande, *supra*, at 90; Daniel L. Rubinfeld, *On the Foundations of Antitrust Law and Economics*, in *OVERSHOT THE MARK*, *supra* note 7, at 51, 57–58; F.M. Scherer, *Conservative Economics and Antitrust: A Variety of Influences*, in *OVERSHOT THE MARK*, *supra* note 7, at 30, 36–37; see also Reeves & Stucke, *supra* note 52, at 1577 (arguing that “[l]ife is messier than the Chicago School’s unifying vision of self-correcting markets filled with rational profit-maximizing agents that pursue their economic self-interest. Relying on market fundamentalism only will lead to future market crises and government bailouts. . . . Behavioral economics can better explain behavior that the Chicago School ignores

It may appear peculiar to argue that the mistaken and misleading descriptions of a school of economic thought by the legal academy could have much lasting influence on the development of antitrust policy discourse and ultimately, its institutions. However, it is not peculiar at all in modern antitrust, where, as Ginsburg and Brannon observe:

Another result of the new learning has been a change in the nature of the dialogue in Supreme Court antitrust cases. Today, as, for example, in *Leegin*, it is not uncommon to see briefs on both sides of a case making arguments based on sophisticated economic literature. In a few cases, such as *Illinois Tool Works, Inc. v. Independent Ink*, groups of economists have filed amicus briefs taking opposing positions on the question presented. Even in such cases where there is no consensus among economists, there is, nevertheless, virtually universal agreement among antitrust economists and lawyers alike, that the Court should answer questions of antitrust law with reference to economic competition—matters of consumer welfare and economic efficiency—rather than make political judgments about such economically irrelevant matters as the “freedom of traders,” or “the desirability of retaining ‘local control’ over industry and the protection of small businesses.”⁷¹

Unfortunately, competition agencies themselves have occasionally reiterated this rhetoric. For example, consider Commissioner Rosch’s assertion that the Chicago School is “essentially what you learned in Economics 101 back in college,”⁷² and that the tenets of the Chicago School of antitrust are undermined by the financial crisis,⁷³ that alternative approaches (and in particular, the Behavioral approach) offer greater predictive power,⁷⁴ and that “the orthodox and unvarnished Chicago School of economic theory is on life support, if it is not dead.”⁷⁵ These statements—largely factual assertions—can accordingly be disproven.⁷⁶

or marginalizes. . . . [E]ven without additional empirical work, behavioral economics may play a role in the agencies’ analysis” in several areas) (emphasis added).

⁷¹ Brannon & Ginsburg, *supra* note 18, at 22 (citations omitted).

⁷² See Rosch, Supreme Court’s 2009–2010 Docket, *supra* note 14.

⁷³ Rosch, Current Economics Cacophony 2009, *supra* note 47 (“With the recent financial crisis . . . one has to wonder if the Chicago School’s fundamental presumptions are still tenable.”).

⁷⁴ *Id.* See also Rosch, Behavioral Economics 2010, *supra* note 47 (“[W]hile behavioral economics is still relatively young, it has already provided important insights that should give us pause at the very least before we accept the rule that humans always behave rationally”).

⁷⁵ J. Thomas Rosch, Implications of the Financial Meltdown for the FTC, Remarks at the New York Bar Ass’n Annual Dinner (Jan. 29, 2009), available at <http://ftc.gov/speeches/rosch/090129financialcrisisnybarspeech.pdf>.

⁷⁶ See Joshua D. Wright, *Commissioner Rosch, Rhetoric, and the Relationship Between Economics and Antitrust*, TRUTH ON THE MARKET (June 12, 2009), <http://truthonthemarket.com/2009/06/12/commissioner-rosch-rhetoric-and-the-relationship-between-economics-and-antitrust/>; Joshua D. Wright, *Nudging Antitrust? Commissioner Rosch’s Weak Case for “Behavioral Antitrust” (Part 1)*, TRUTH ON THE MARKET (July 12, 2010), <http://truthonthemarket.com/2010/07/12/nudging-antitrust-commissioner-roschs-weak-case-for-behavioral-antitrust-part-1/>; Joshua D. Wright, *Nudging Antitrust (Part 2): Do Critiques of Behavioral Antitrust Have Any Bite?*, TRUTH

Commissioner Rosch uses the word, “orthodox,” which implies a static, non-scientific, and monolithic body of economic knowledge; the development of Post-Chicago School literature on RRC, developed in part by Chicagoans, defies Rosch’s classification. The negative colloquial connotation of “orthodoxy” glosses over important differences among the economic contributions of, for example, Alchian, Klein, and Oliver Williamson in understanding how asset specificity and opportunism influence firm behavior, or among Klein, Stigler, Telser, and Marvel on vertical restraints, or between Demsetz and Coase on the theory of the firm. The label simultaneously misleads, errs as a matter of economic history, and elevates ideology and shorthand labels over substance. None of these defects are new to political rhetoric.

The Department of Justice has also engaged in some of the same oversimplifying rhetoric. Then Assistant Attorney General Christine Varney’s closing remarks at the 2010 Horizontal Merger Guidelines workshop included the observation that:

The evolution of antitrust law needs to keep pace with the advancement of economic thinking. Judge Posner convincingly made this case for reassessing economic beliefs in his recent, thought-provoking piece entitled “How I Became a Keynesian: Second Thoughts in a Recession,” wherein he questioned some of the theoretical assumptions that had previously guided his work. IN AN EVEN MORE RECENT INTERVIEW, HE IS QUOTED TO SAY THAT “‘THE TERM ‘CHICAGO SCHOOL’ SHOULD BE RETIRED.’” THEORETICAL ASSUMPTIONS THAT MARKET FORCES NATURALLY AND INEVITABLY CORRECT FOR MARKET FAILURES CLEARLY NEED TO BE RECONSIDERED. In the context of the Horizontal Merger Guidelines, the most relevant aspect of this reassessment involves explicit or implicit assumptions that entry will erode market power otherwise enhanced by a merger.⁷⁷

Other than demonstrating long-awaited convergence between the antitrust agencies, Varney’s speech attempts to use Posner’s quote about the retirement of the Chicago School to support a completely unrelated proposition. That is, the rejection of the “Chicago School” justifies—to Varney—a new, substantive approach to antitrust analysis of mergers.

ON THE MARKET (July 14, 2010), <http://truthtonthemarket.com/2010/07/14/nudging-antitrust-part-2-do-critiques-of-behavioral-antitrust-have-any-bite/>; Joshua D. Wright, *Who Are You Calling a Price Theorist Anyway?: Commissioner Rosch Takes on the HMGs Economist “Architects,”* TRUTH ON THE MARKET (Aug. 19, 2010), <http://truthtonthemarket.com/2010/08/19/who-are-you-calling-a-price-theorist-anyway-commissioner-rosch-takes-on-the-hmgs-economist-architects/>; Joshua D. Wright, “*One thing is clear to me: the orthodox and unvarnished Chicago School of economic theory is on life support, if it is not dead,*” TRUTH ON THE MARKET (Feb. 5, 2009), <http://truthtonthemarket.com/2009/02/05/one-thing-is-clear-to-me-the-orthodox-and-unvarnished-chicago-school-of-economic-theory-is-on-life-support-it-it-is-not-dead/>.

⁷⁷ Christine A. Varney, An Update on the Review of the Horizontal Merger Guidelines, Remarks at the Horizontal Merger Guidelines Review Project’s Final Workshop (Jan. 26, 2010), available at <http://www.justice.gov/atr/public/speeches/254577.htm> (emphasis added).

In fact, Judge Posner was making a point that directly contradicts Varney's assertion:

Ronald (Coase) is alive, but he's very, very old. He's not active. Stigler is dead. Friedman is dead. There's Gary (Becker) of course. But I'm not sure there's a distinctive Chicago School anymore. Except there are probably a higher percentage of conservative people here, but not all. Jim Heckman—not particularly conservative at all. He's very distinguished. Steve Levitt—he's very famous. I don't think he's conservative. You've got people like (Richard) Thaler. *So probably the term "Chicago School" should be retired.*

There were people—people like Stigler and Coase, Harold Demsetz, Reuben Kessel, and people at other schools like Armen Alchian. They were people rebelling against the very liberal economics of the nineteen-fifties—very Keynesian, very regulatory, very aggressive anti-trust, little faith in the self-regulating nature of markets. Francis Bator, who's a very distinguished Harvard economist, he wrote a famous essay entitled “The Anatomy of Market Failure.” And he gave so many examples of market failure that you couldn't believe a market could exist. You have to have an infinite number of competitors, full information, you can't have any economies of scale, and so on. It was too austere. That was what the Chicago people, with their more informal approach, rebelled against. So we had our moment in the sun, *but by the nineteen-eighties the basic insights of the Chicago School had been accepted pretty much worldwide.*⁷⁸

Posner was not arguing that the Chicago School should be retired because its ideas were defunct, dead, or even on life support; to the contrary, Posner correctly pointed out that the value of the Chicago School label was overstated because its views had been “accepted pretty much worldwide.”

These various misuses of the term “Chicago School” are not harmless error. They come at the expense of serious scientific analysis of the right question and communicate to courts and agencies abroad that the relationship between economics and domestic antitrust policy is superficial. The issue is not whether the Chicago School is alive, dead, or on life support; nor is the issue whether Judge Posner has abandoned the Chicago School when it comes to antitrust. Antitrust decision-making either will proceed upon the basis of economics or it will not. Given the successful development of antitrust doctrine

⁷⁸ John Cassidy, *Interview with Richard Posner*, RATIONAL IRRATIONALITY, NEWYORKER.COM (Jan. 13, 2010) (emphasis added), <http://www.newyorker.com/online/blogs/johncassidy/2010/01/interview-with-richard-posner.html>. Indeed, as Judge Posner subsequently reiterated in a letter to the editor at the Wall Street Journal in response to an article asserting that his views on macroeconomics in light of the financial crisis indicated he would become more interventionist in his antitrust views. Judge Posner remarked that “my views on antitrust have not changed. I believe that Keynes has much to teach us about the role of government in digging an economy out of a depression or a recession. But that has absolutely nothing to do with antitrust.” See Richard A. Posner, Letter to the Editor, *Antitrust Vetoed Market Decisions*, WALL ST. J., Feb. 5, 2010, at A16, available at <http://online.wsj.com/article/SB10001424052748704022804575041082240514048.html>.

from its Pre-Chicago days, there appears to be universal agreement (at least domestically and in many jurisdictions around the world) that economic analysis is and should continue to be the lodestar of antitrust analysis.

The critical question, then, is how to develop successful antitrust institutions to ensure that antitrust decisionmaking by courts and agencies proceeds on the basis of the best possible economic analysis. The scientific method already supplies the criteria for determining which competing models “wins” when the issue is contested: the model with the greatest predictive power. Antitrust must develop institutions that encourage those criteria to play a greater role in the integration of economics and competition law and policy. The misleading rhetoric described above deflects the focus from a sound scientific approach that considers all economic theories in light of their empirically supported predictive power. Progress in the United States will not be made in solving the model selection problem without finding ways to adopt these methodological commitments within our agencies and the antitrust community more broadly. Indeed, our agencies can play a critical role in creating the institutional solutions and methodological commitments required to solve the model selection problem, and in turn, toward the adoption of efficient competition policy norms in other jurisdictions.

IV. EVIDENCE-BASED ANTITRUST AS THE SOLUTION TO THE MODEL SELECTION PROBLEM

The modern meme pits Chicago School economists against Post-Chicago theoreticians for antitrust dominance. As discussed above, these debates misguidedly focus upon slogans and labels rather than the relevant economic questions.⁷⁹ The meme has aggressive and interventionist antitrust programs attaching themselves to the Post-Chicago economics movement, while those that are skeptical of such intervention attaching themselves to the Chicago School. The finer details of economics and evidence play only a complementary role to the application of antitrust doctrines rather than take center stage. Antitrust debates thereby become increasingly ideological and insensitive to empirical evidence.

The model selection problem is exacerbated by these misstatements. The number of competing economic theories explaining business conduct within the domain of antitrust is ever expanding, and the ratio of theories-to-empirical evidence remains exceedingly high. An evidence-based approach is faithful neither to the Chicago or Post-Chicago theories; indeed, it is faithful to no specific model or theory. Evidence-based antitrust instead takes seriously the

⁷⁹ For an excellent example of this phenomenon, see Kovacic, *Intellectual DNA*, *supra* note 3 (demonstrating the Chicago versus Post-Chicago form of the modern narrative of antitrust as applied to dominant firms obfuscates the intellectual contributions of the Harvard School).

methodological commitments shared by economic science generally. Evidence-based antitrust seeks to identify the best possible set of antitrust liability rules and enforcement policies conditional on our existing set of theoretical and empirical knowledge.

Evidence-based antitrust ought to: (1) reflect a commitment to a reliance on the economic theories that provide the strongest foundation for predicting how specific business practices will impact competitive outcomes; (2) use predictive power, as determined by the best available empirical evidence, as the selection criteria applied to identify the appropriate economic theories to inform policy and judicial decisionmaking; and (3) apply the tools of decision theory with the goal of producing liability rules that minimize the social and administrative costs of erroneous decisions. Neither subjecting economic theories to empirical testing to assess their validity and policy relevance nor the application of decision theory to assist in updating our prior beliefs about the likelihood of competitive harm flowing from a particular business practice should be controversial.

Evidence-based antitrust policies should derive theoretical insights from the Chicago School, the Post-Chicago School, and elsewhere—as long as such insights have empirical support. For example, there would be no principled objection to such a program recommending a Post-Chicago School approach to predatory pricing and a Chicago School approach to exclusive dealing—provided each approach best fit the available evidence. Neither one size nor one school need fit all. The determinative criteria would be to select the theoretical foundation with the greatest predictive power, as determined by credible and reliable empirical evidence.

Such a program allows for change over time as new evidence may lead to an updating of prior beliefs concerning either the likelihood that any given business practice is anticompetitive or the net magnitude of social benefits and harms arising out of a practice. This is consistent with the scientific method. To be sure, many antitrust commentators have applied this approach to specific business practices by evaluating competing theories against the available evidence through the lens of the error-cost approach. However, a more broadly based shift in the policy debate from theoretical allegiance toward a scientific approach which takes seriously the existing empirical evidence is to resolve the important debates in antitrust law that exist both within the United States and between the United States and Europe (or other enforcers).

V. INSTITUTIONAL COMMITMENTS TO EVIDENCE-BASED ANTITRUST

While many economists and antitrust lawyers no doubt agree with the concept of evidence-based antitrust, recent history suggests there is good reason to doubt the continued evolution of efficient competition norms and “best practices” concerning economic theory and evidence. The difficult task faced by competition agencies and courts is to encourage the development of efficient competition norms, that is, institutions that overcome the model selection problem by creating credible, methodological, evidence-based commitments for antitrust decisionmaking.⁸⁰

A. STRENGTHENING THE ECONOMIC FOUNDATIONS OF COMPETITION POLICY AT THE ANTITRUST AGENCIES

In an important policy speech, former Federal Trade Commission Chairman Muris observed that the question is not whether antitrust agencies should guide antitrust policy, but how. Chairman Muris described the mission of improving the economic foundations of competition policy as “vital to the success of antitrust enforcement,” observing that “if the economic foundations of antitrust analysis are infirm, competition law topples.”⁸¹ Chairman Muris advocated a role for the agencies, and the Federal Trade Commission in particular, that is consistent with the view that the primary challenge for antitrust is how to increase focus upon the question of which economic theories will guide antitrust decisionmaking.⁸² The core role of agencies in this regard, Chairman Muris argues, is ensuring that there is constant reassessment and empirical testing of the economic theories providing the intellectual foundation of competition policy. There are several ways in which agencies can and do play a role in promoting evidence-based antitrust institutions.

Perhaps the most important role of the Federal Trade Commission in contributing to the development of quality competition norms is competition policy research and development.⁸³ Policy research and development includes

⁸⁰ See Kovacic, *Intellectual DNA*, *supra* note 3.

⁸¹ See Muris, *Economic Foundations*, *supra* note 28, at 1.

⁸² *Id.* at 1 (identifying as the most pressing questions facing modern antitrust determining “[w]hich theories from the vast, diverse body of industrial organization economics should courts and enforcement agencies use to address antitrust problems? What hypotheses best explain business behavior in an increasingly complex and fast-changing business environment? How are economic ideas to be translated into operational rules?”).

⁸³ *Id.* at 24–28; William E. Kovacic, The Federal Trade Commission at 100: Into Our Second Century, Remarks at the 21st Annual Western Conference of the Rutgers University Center for Research in Regulated Industries (June 18, 2008), available at <http://www.ftc.gov/speeches/kovacic/080618ftcat100.pdf> (“From the start, the Commission was intended to undertake studies, to supplement and undergird its enforcement efforts with a broad research agenda. Today, in a world of multiple competition and consumer protection decision makers, intellectual leadership

both academic research and policy application of potential economic insights to “bring together elements from business, government, consumer representatives, and the bar”⁸⁴ to improve agency decisionmaking in specific competition law areas. These conferences and projects in turn prepare the Commission to issue policy recommendations to Congress and states with competition law questions, especially on novel and controversial topics. During the Federal Trade Commission at 100 conference, a variety of economists testified as to the efficacy and value of the Commission’s research and development efforts.⁸⁵

These efforts have not met with uniform success. The Section 2 Hearings, subsequent report, and its ultimate withdrawal provide a cautionary example.⁸⁶ A major goal of the Section 2 Hearings was, as then-Assistant Attorney General Barnett described it, to help the Antitrust Division “incorporate the latest scholarship and economic thinking into its enforcement decisions,” and for the Hearings to “help us meet that goal by providing a forum for experts to review the literature, the business practices, and the law and to speak directly to each other and to us.”⁸⁷ A major component of the Hearings sought to

assumes an ever increasing role in determining the ability of an individual agency to shape policy developments. Identifying the best possible form and application of our research activities is indispensable to the FTC’s ability to exercise intellectual leadership.”).

⁸⁴ William E. Kovacic, The Federal Trade Commission at 100: Into Our 2nd Century, A Report on the Continuing Pursuit of Better Practices (January 2009), available at www.ftc.gov/os/2009/01/ftc100rpt.pdf.

⁸⁵ David Scheffman, Remarks at Fordham University School of Law, The Federal Trade Commission at 100: Into Our Second Century 78 (Oct. 24, 2008), available at <http://www.ftc.gov/ftc/workshops/ftc100/transcripts/nytranscript.pdf> (declaring that “retrospectives, I think, are the most important things that can be done.”); *Id.* at 82 (“The government agencies, they have to provide a GPRA report [of] . . . metrics that they claim [are] consistent with goals that they are going to achieve and whether they have achieved it. There is some use to that, I think, and the FTC has that.”); Joseph Kattan, Remarks at FTC Conference Center, The Federal Trade Commission at 100: Into Our 2nd Century 144 (July 29, 2008), available at <http://www.ftc.gov/ftc/workshops/ftc100/transcripts/080729dctranscript.pdf> (“One of the great innovations of the last five or six years has been these statements that are issued from time to time in connection with cases that are not brought I think the reaction to that has been this is wonderful. We are learning something. It has not been . . . this thing could be a lot more useful if it went into these issues in more depth.”); *Id.* at 151 (“To me, the best example of [research and development] being done very effectively is . . . the Commission’s effort in the area of prescription glasses where it did the studies that supported the policy of loosening entry requirements into the business of dispensing prescription glasses. I think it did a pretty effective job advocating that policy.”).

⁸⁶ U.S. DEP’T OF JUSTICE REPORT, COMPETITION & MONOPOLY: SINGLE FIRM CONDUCT UNDER SECTION 2 OF THE SHERMAN ACT (2008), www.justice.gov/atr/public/reports/236681.htm. The Department of Justice ultimately withdrew the September 2008 Report on May 11, 2009. Press Release, U.S. Dep’t of Justice, Justice Department Withdraws Report on Antitrust Monopoly Law (May 11, 2009), http://www.justice.gov/atr/public/press_releases/2009/245710.htm.

⁸⁷ Thomas O. Barnett, The Gales of Creative Destruction: The Need for Clear and Objective Standards for Enforcing Section 2 of the Sherman Act, Remarks at the Antitrust Division and

describe—rather than shape—the state of monopolization law and economics. The majority of the report established the current state of monopolization law and doctrine, describing the state of economic theory, and summarizing existing evidence.⁸⁸ Substantial policy disagreements arose (and were documented accordingly) as a consequence of these observations. Nevertheless, I am unaware of any criticism leveled at the descriptive portion of the report, either with respect to monopolization doctrine or the state of the relevant economic literatures, which would support jettisoning the report as a whole.

Abandoning the report, unfortunately, squandered a valuable opportunity to collect areas of economic and legal consensus on Section 2 due to ostensible discomfort with disfavored policy implications. A clearer example of how the model selection problem can lead to poor outcomes can hardly be imagined. Indeed, rather than using the Section 2 Hearings as an opportunity to focus upon improving our theoretical and empirical understanding of business conduct potentially actionable under Section 2 as contemplated when the Hearing was announced,⁸⁹ the debate quickly descended into an exchange largely devoid of empirical data but full of heated rhetoric concerning the presumptions at work in the report.⁹⁰ Sadly, the agencies have failed to propose new Section 2 Hearings to correct any apparent flaws with the first event, or a feasible alternative to improving the latent and sporadic economic incoherence in Section 2 law.

Beyond conducting its own direct research, the Commission can help to identify optimal areas for private empirical research and shape policy-relevant

Federal Trade Commission Hearings Regarding Section 2 of the Sherman Act (June 20, 2006), available at <http://www.justice.gov/atr/public/speeches/216738.htm>.

⁸⁸ See Aruna Viswanatha, *Former Antitrust Chief Barnett Rates His Successor*, MAIN JUSTICE: POLITICS, POLICY, AND LAW (Feb. 10, 2010, 2:30 PM), <http://www.mainjustice.com/2010/02/10/former-antitrust-chief-barnett-rates-his-successor/>. Former Assistant Attorney General Barnett observed:

I was disappointed that the report was withdrawn in its entirety. I've drawn this distinction between the prescriptive side and the descriptive side. I mean that is still out there, and people can still reference it. But one could have at least considered in being more selective about what was withdrawn. I really do think the staff did a tremendous job in pulling all that together.

⁸⁹ Consumer Benefits and Harms: How Best to Distinguish Aggressive, Pro-Consumer Competition from Business Conduct to Attain or Maintain a Monopoly, 71 Fed. Reg. 17,872, 17,872 (Apr. 7, 2006) ("With respect to the Agencies' request for examples of real-world conduct, the Agencies are soliciting discussions of the business reasons for, and the actual or likely competitive effects of, such conduct, including actual or likely efficiencies and the theoretical underpinnings that inform the decision of whether the conduct had or has pro-[] or anticompetitive effects.").

⁹⁰ Pamela Jones Harbour, Jon Leibowitz & J. Thomas Rosch, Statement of Commissioners Harbour, Leibowitz, and Rosch on the Issuance of the Section 2 Report by the Department of Justice (Sept. 8, 2008) ("At almost every turn, the Department would place a thumb on the scales in favor of firms with monopoly or near-monopoly power and against other equally significant stakeholders."), available at <http://www.ftc.gov/os/2008/09/080908section2stmt.pdf>.

economic research agendas. The Commission may thereafter make use of cutting edge theoretical and empirical economic research in its own decisionmaking. Recently, along these lines, the Commission enjoyed some success in a joint microeconomics conference with the Economics Department of Northwestern University.⁹¹ The conference offered both Commission staff and outside economists opportunities to share theories and observations with each other. The joint conference helped bridge the gap between academic economics departments and theory as applied in practice at the Commission, as well as provide academic economists an opportunity to learn about important issues and problems facing economists at the Commission.

Similarly, closer interaction between the Commission and law and economics scholars may further improve integration of economic observations into policy recommendations. Harnessing the insights of the law and economics literature focusing on the design of legal rules and presumptions may improve antitrust standards. The two groups share significant complementarities. A Law and Economics conference might beneficially bring together antitrust agency and scholarly perspectives on critical issues, such as optimal design of competition enforcement agencies, approaches to integrating economic insights into administrable rules, interpreting economic evidence, optimal antitrust sanctions, and perhaps most importantly, the role of economics and economists in enforcement agencies.

The Commission must thoroughly integrate both economics and economists into its organizational structure to harness the benefits of tethering antitrust doctrine to the discipline of economic science. Luke M. Froeb, Paul A. Pautler, and Lars-Hendrik Röller have examined the effects of economists on competition authorities and conclude that the horizontal integration of economics into all levels of competition law decisionmaking increases the consistency and quality of analysis. They also highlight the importance of managers conversant in both economics and law.⁹² Their conclusion matches intuition, given the economic complexity of many antitrust claims as well as the growth of the model selection problem. The benefits of the economic approach to antitrust law have only increased. To the extent that agencies have become the major enforcers of antitrust law, and especially in light of the fact that at least some international enforcement agencies can be expected to take the lead of the Commission on such matters, the Commission should work in earnest towards solving the model selection problem.⁹³

⁹¹ See Federal Trade Commission Microeconomics Conference (Nov. 3–4, 2011), <http://www.ftc.gov/be/workshops/microeconomics/index.shtm>.

⁹² Luke M. Froeb, Paul A. Pautler & Lars-Hendrik Röller, *The Economics of Organizing Economists*, 76 ANTITRUST L.J. 569 (2009).

⁹³ But see J. Thomas Rosch, Litigating Merger Challenges: Lessons Learned, Remarks at the Bates White Fifth Annual Antitrust Conference (June 2, 2008), available at <http://ftc.gov/>

B. EVIDENCE-BASED ANTITRUST IN THE COURTS

Solving the model selection problem at the agencies is only half the battle. If evidence-based antitrust is going to solve the model selection problem, the approach must reach the judges deciding antitrust cases and not just the decisionmakers within the agencies. Whereas competition policy research and development investments may improve agency decisionmaking and may also have an indirect effect on judicial decisionmaking through the production or dissemination of research, there are a number of proposals that would constrain the number of possible outcomes in a given case supported by some economic theory.

Basic economic theory would predict that generalist judges would benefit the most from an initial increment of economics training. One empirical study examines the implications of economics training for judges and finds that, in at least some antitrust cases, both an educational background in economics as well as professional economics training correlate with more accurate and consistent antitrust jurisprudence.⁹⁴ Basic economics training can enable judges to identify economically irrelevant arguments, to distinguish between harm to competitors and harm to competition, and to understand when a claim contradicts basic economic sense.

An alternative approach to ex post judicial evaluation of antitrust claims under the rule of reason is to establish legal “filters” that minimize the sum of error and administrative costs.⁹⁵ For example, the monopoly power requirement in Section 2 cases minimizes the potential for socially costly false positives because conduct by firms without monopoly power are highly unlikely, as a matter of economic theory and evidence, to harm consumers.

The efficacy of filters that litigants can use to discipline opponents’ reliance on arguments or analysis that do not satisfy the “evidence-based” standard, however, is less established. Adversaries may draw upon at least two major precedents to undermine an opponent’s case for insufficient economic grounding: *Daubert* and *Twombly*.⁹⁶ *Daubert* allows a litigant to disqualify an expert on a variety of grounds, including insufficient expertise in economics. *Daubert* remains of limited utility, however, because it is less applicable in administrative proceedings and within agency actions. Further, whether and to what extent *Daubert* improves the quality of antitrust economics in court re-

speeches/rosch/080602litigatingmerger.pdf (espousing a smaller role for economists and economics in antitrust enforcement).

⁹⁴ See Baye & Wright, *supra* note 64.

⁹⁵ Easterbrook, *The Limits of Antitrust*, *supra* note 29.

⁹⁶ See Bell Atl. Corp. v. Twombly, 550 U.S. 544 (2007); Daubert v. Merrell Dow Pharm., Inc., 43 F.3d 1311 (9th Cir. 1995).

main empirical questions.⁹⁷ *Twombly* invites a litigant to challenge a claim prior to discovery—under a motion to dismiss—as lacking in “economic sense.”⁹⁸ This filter naturally complements research and development within agencies as well as basic economic training for judges. Economic training and *Twombly* pleadings provide litigants with both a forum and a vehicle to test the economic coherence of antitrust claims at comparatively little expense, preserving the consumer welfare gains from appropriate antitrust enforcement.

VI. CONCLUSION

The antitrust community retains something of an inconsistent attitude towards evidence-based analysis. Commentators, judges, and scholars remain supportive of evidence-based antitrust, even vocally so; nevertheless, antitrust scholarship and policy discourse continues to press forward advocating the use of one theory over another as applied in a specific case, or one school over another with respect to the class of models that should inform the structure of antitrust’s rules and presumptions, without tethering those questions to an empirical benchmark. It is not that antitrust should brook no new theories—it is that it should brook no new theories *without supporting data* suggesting the theory to be applied is the best tool for predicting the competitive effects of the business arrangement at issue.

There remain myriad potential institutions, which can, or may, alleviate this problem. Commissioner Kovacic ably compiled a variety of antitrust “best practices” that collectively highlight the importance of basing antitrust actions upon inferences from observable data.⁹⁹ Indeed, antitrust enforcement agencies play a particularly large role in any evidence-based antitrust schema. The Commission as a whole should follow former Chairman Muris’ mantra of “continuing reassessment and adjustment” when it comes to its role in solving the model section problem and ensuring solid economic foundations for the future of antitrust rather than returning to the period in which sound economics placed no constraints at all on decisionmaking by courts and agencies.¹⁰⁰

Outside of obvious differences in the legislative mandates of the two agencies and the Commission’s comparative advantages in competition policy, research and development, and policy studies, the Department of Justice can

⁹⁷ See, e.g., Eric Helland & Jonathan Klick, *Does Anyone Get Stopped at the Gate? An Empirical Assessment of the Daubert Trilogy in the States*, SUP. CT. ECON. REV. (forthcoming).

⁹⁸ See also Herbert Hovenkamp, *The Pleading Problem in Antitrust Cases and Beyond*, 95 IOWA L. REV. BULL. 55, 57–58 (2010); Keith N. Hylton, *When Should a Case Be Dismissed? The Economics of Pleading and Summary Judgment Standards*, 16 SUP. CT. ECON. REV. 39 (2008).

⁹⁹ Kovacic, *Modern Evolution*, *supra* note 67.

¹⁰⁰ Muris, *Economic Foundations*, *supra* note 28, at 3.

and should also play an important role in refocusing priority on these issues. In the short term, the agencies taking a central role in shaping the evidence-based antitrust research agenda and making a concerted effort to halt anti-economics rhetoric would immediately increase both the prospects of improving substantive policy and the message being sent abroad to nascent competition regimes. In the medium to longer term, aligning enforcement priorities with evidence-based antitrust and a redoubling of institutional efforts to ensure that decisionmaking at the agencies remains consistent with this principle are desirable goals.

In addition to a more serious methodological commitment, evidence-based antitrust also raises a number of open questions that begin to frame the research agenda. The evidence-based approach begs for a sharper focus on generating empirical evidence in areas where current doctrine is based on strong theoretical presumptions that have only limited empirical support. For example, does modern merger enforcement improve consumer welfare? Can incumbent firms exclude rivals and harm competition with short term, terminable-at-will distribution contracts? What are the relative social costs of Type 1 and Type 2 errors? Are current antitrust sanctions optimally deterrent? Each are examples of the myriad questions that have been the subject of at least some empirical inquiry, but for which the current stock of knowledge could be improved in a manner generating significant policy improvements.

The evidence-based approach and model selection problem also imply a number of research questions focusing upon antitrust institutions and their design rather than a more narrow focus on the competitive effects of certain business arrangements. In addition to further research on the costs and benefits of economic training for judges relative to such alternatives as specialized courts, does the Commission's expertise manifest itself in superior decision-making in antitrust cases? Does the Commission have a comparative advantage in antitrust fact-finding? What are the appropriate roles of *Twombly* and *Daubert* in overcoming the model selection problem and limiting the influence of economically deficient experts and claims?

Real or imagined theoretical wars among the Chicago School, the Post-Chicago School, and the Neo-Chicago School miss a larger conceptual point. The Chicago School advanced evidence-based antitrust as a necessary condition to welfare-maximizing interventions into markets in light of error costs. The gains from this evolution were enjoyed by consumers and represent a great success for the antitrust enterprise. Now, however, the excessive focus upon antitrust "schools" and classification of theories rather than testing their *viability* according to the scientific method threatens to undermine the successful evolution of antitrust from an incoherent to economically respectable doctrine. To borrow a line, the time has come to both "praise and bury the

'Chicago School.' "¹⁰¹ An excessive focus on the label 'Chicago School' and its various iterations now threatens to undermine the empirical rigor Chicago School economists pioneered. With nothing but the greatest respect intended, the antitrust community of scholars, regulators, and practitioners should retire these distinctions as a component of policy discourse, adopting instead a more serious commitment to evidence-based antitrust that made such theories, and theoretical disagreements, possible.

¹⁰¹ Bruce H. Kobayashi & Timothy J. Muris, *Chicago, Post-Chicago, and Beyond: Time to Let Go of the 20th Century*, *supra* this issue, 78 ANTITRUST L.J. __ (2012).

