

MARRYING NEO-CHICAGO WITH BEHAVIORAL ANTITRUST

MAX HUFFMAN*

Antitrust economics has the potential to accomplish what are fundamentally political ends, and the ebbs and flows in antitrust enforcement over the more than twelve decades since antitrust doctrine was reduced to federal statute frequently have been justified in economic terms.¹ The most prominent school of antitrust economics in the past half-century, the Chicago School, has experienced its share of criticism for advancing neutral-seeming policies for political ends.² Whether the criticism is warranted, it is clear that the Chicago School's reductionist enforcement philosophy has acquired tremendous sway over public opinion, legislators, enforcers, and, most notably, courts.³

* Associate Professor of Law and Dean's Fellow, Indiana University Robert H. McKinney School of Law. Ideas in this paper were discussed at the Fourth Antitrust Marathon, Fall 2009; the NYU Next Generation of Antitrust Scholars Workshop, January 2010; and the Loyola University Chicago Institute for Consumer Antitrust Spring Colloquium, 2010. Thanks to participants at those conferences, as well as Mark Anderson, Dan Cole, Roy Englert, Letha Flint, Ken Heyer, Sam Huffman, Kendall Millard, Antony Page, Spencer Waller, and Joshua Wright for insights, and to Catherine Lemmer of the Robert H. McKinney School library faculty for research assistance. Editing by Marc Winerman improved this article tremendously. Many thanks to Bill Page for including me in this Symposium.

¹ See Darren Bush, *Too Big to Bail: The Role of Antitrust in Distressed Industries*, 77 ANTITRUST L.J. 277, 281–96 (2010) [hereinafter *Too Big to Bail*] (describing the progression of antitrust economics through the 20th century).

² See *id.* at 291–96.

³ See, e.g., 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, 25 [hereinafter *The Roberts Court and the Chicago School*]. Although debates rage over the actual source of theories underlying modern legal rules, Chicago's non-interventionist posture certainly deserves some credit for laissez-faire attitudes reflected in legislation, such as the Foreign Trade Antitrust Improvements Act, 15 U.S.C. § 6a (see Max Huffman, *A Retrospective on Twenty-Five Years of the Foreign Trade Antitrust Improvements Act*, 44 HOUS. L. REV. 285 (2007)); reduced federal enforcement both at the Department of Justice and the Federal Trade Commission beginning in 1981 (see Daniel A. Crane, *Chicago, Post-Chicago, and Neo-Chicago*, 76 U. CHI. L. REV. 1911, 1912 (2009)) [hereinafter *Chicago, Post-Chicago, and Neo-Chicago*] (reviewing HOW CHICAGO OVERSHOT THE MARK: THE EFFECT OF CONSERVATIVE ECONOMIC ANALYSIS ON U.S. ANTITRUST POLICY (Robert Pitofsky ed., 2008) [hereinafter *HOW CHICAGO OVERSHOT THE MARK*]); and eighteen years of pro-defendant results in Supreme Court antitrust decisions, bookended by *East-*

The lesson of the power of economic arguments to achieve political ends has not been lost on members of the antitrust community seeking an alternative to the Chicago School. The Post-Chicago response in the 1980s and 1990s reflected both an academic debate over the robustness of the theories advanced by Chicago School thinkers and an effort to regain the enforcement ground that had been lost in the courts and in the agencies. The difference in the antitrust debate since Chicago is not that it has become more or less politically charged than it was before the 1970s.⁴ The difference is that this quintessentially political debate has in recent decades been conducted almost exclusively in economic terms.⁵

Behavioral Antitrust is a new area of scholarly inquiry that has garnered some attention in very recent years.⁶ The earliest article explicitly proposing a behavioral approach to antitrust was written in 2002.⁷ Proponents encourage courts and policymakers to import the study of behavioral law and economics into antitrust analysis, using empirical study better to understand the conduct of individuals in market settings. Like foregoing antitrust economics movements, Behavioral Antitrust is on its face result-neutral, but as it has been discussed to date, it has a political slant. Until very recently, all of the writing advocating Behavioral Antitrust favored increased antitrust enforcement. FTC Commissioner Thomas Rosch has characterized the views of detractors as being that behavioral economics is “liberalism masquerading as economic thinking.”⁸

Neo-Chicago Antitrust is the topic of this Symposium. Its adherents characterize it as a return to Chicago principles, informed by the developments in economic thinking over the past thirty-or-so years—notably, insights from

man Kodak Co. v. Image Technical Services, Inc., 504 U.S. 451 (1992), and *American Needle, Inc. v. National Football League*, 130 S. Ct. 2201 (2010).

⁴ The Chicago School gained ascendancy in the late 1970s with the publication of Richard Posner’s *Antitrust Law* (1976), Robert Bork’s *The Antitrust Paradox* (1978), and several Supreme Court decisions in 1977, though the school has its roots in earlier work. See generally Richard Posner, *The Chicago School of Antitrust Analysis*, 127 U. PA. L. REV. 925, 925–26 (1979) [hereinafter *Chicago School Analysis*].

⁵ See Robert Pitofsky, *The Political Content of Antitrust*, 127 U. PA. L. REV. 1051, 1051 (1979) [hereinafter *Political Content*] (“There probably has never been a period comparable to the last decade, however, when antitrust economists and lawyers have had such success in persuading the courts to adopt an *exclusively* economic approach to antitrust questions.”); see also Bush, *Too Big to Bail*, *supra* note 1, at 283–96 (discussing pre-Chicago attention to non-economic goals and the failure of the Post-Chicago School to refocus on such goals).

⁶ See generally Amanda P. Reeves & Maurice E. Stucke, *Behavioral Antitrust*, 86 IND. L.J. 1527 (2011) [hereinafter *Behavioral Antitrust*] (canvassing the literature).

⁷ See Avishalom Tor, *The Fable of Entry: Bounded Rationality, Market Discipline, and Legal Policy*, 101 MICH. L. REV. 482 (2002) [hereinafter *The Fable of Entry*].

⁸ J. Thomas Rosch, Comm’r, Fed. Trade Comm’n, Behavioral Economics: Observations Regarding Issues that Lie Ahead, Remarks Before the Vienna Competition Conference 12 (June 9, 2010), available at <http://www.ftc.gov/speeches/rosch/100609viennaremarks.pdf>.

both the Chicago and Post-Chicago schools.⁹ Its most visible contribution is a formal adoption of the error-cost framework from then-Professor Easterbrook's influential 1984 article, *The Limits of Antitrust*.¹⁰ The error-cost framework is viewed by many as a politically charged rule of decision, which almost always includes a deregulatory preference for false negative error (equating to less enforcement than the optimal level) over false positive error (equating to an excess of enforcement).¹¹

But there is more to Neo-Chicago than the mere formal adoption of the error-cost framework. Daniel Crane has criticized both the Chicago School and the leading reaction, Post-Chicago, for their disinclination to engage seriously in empirical work.¹² Crane argues that Neo-Chicago antitrust can succeed, in part, by "providing empirical support for Chicago School theories."¹³ David Evans and Jorge Padilla's 2005 foundational article on Neo-Chicago concludes with the suggestion that empirical study would be a welcome contribution to a literature on Neo-Chicago antitrust.¹⁴ If devotion to empirical study is seen as a fundamental part of Neo-Chicago, it is consistent with, rather than hostile to, Behavioral Antitrust.

Neo-Chicago and Behavioral Antitrust came along at about the same time, and a marriage of the two might temper any respective tendencies of either toward predetermined political ends. The combination might produce a more result-neutral enterprise of "economically informed antitrust." Neo-Chicago promises an improvement over Chicago's simplification of facts in pursuit of

⁹ See David S. Evans & A. Jorge Padilla, *Designing Antitrust Rules for Assessing Unilateral Practices: A Neo-Chicago Approach*, 72 U. CHI. L. REV. 73, 74–75 (2005) [hereinafter *A Neo-Chicago Approach*].

¹⁰ Frank H. Easterbrook, 63 TEX. L. REV. 1 (1984) [hereinafter *Limits*]; see Thomas A. Lambert & Joshua D. Wright, *Antitrust (Over-?) Confidence*, 20 LOY. CONSUMER L. REV. 219, 225–26 (2008) [hereinafter *(Over?) Confidence*] (error-cost framework is the basis of responsible enforcement policy). Many who do not formally associate themselves with Neo-Chicago regularly employ the error-cost framework in antitrust analysis. See, e.g., Mark Anderson & Max Huffman, Iqbal, Twombly, and the Expected Cost of False Positive Error, 20 CORNELL J.L. & PUB. POL'Y 1 (2010); Ken Heyer, *A World of Uncertainty: Economics and the Globalization of Antitrust*, 72 ANTITRUST L.J. 375 (2005); Michael L. Katz & Howard A. Shelanski, *Merger Analysis and the Treatment of Uncertainty: Should We Expect Better?*, 74 ANTITRUST L.J. 537 (2007).

¹¹ The justification for this preference is that firms, once stung by regulatory interference, are unlikely to return to what may be efficient conduct. Easterbrook, *Limits*, *supra* note 10, at 15; Evans & Padilla, *A Neo-Chicago Approach*, *supra* note 9, at 84 ("[M]arket forces play little corrective role for procompetitive business practices deemed anticompetitive.").

¹² Crane, *Chicago, Post-Chicago, and Neo-Chicago*, *supra* note 3, at 1931. Not all agree. See Joshua Wright, *Overshot the Mark? A Simple Explanation of the Chicago School's Influence on Antitrust*, COMPETITION POL'Y INT'L, Spring 2009, at 1, 10–11 [hereinafter *Overshot the Mark?*] (noting "the centrality of empiricism to the research agenda of Chicago antitrust analysis") (reviewing HOW CHICAGO OVERSHOT THE MARK, *supra* note 3).

¹³ Crane, *supra* note 3, at 1929.

¹⁴ Evans & Padilla, *A Neo-Chicago Approach*, *supra* note 9, at 98.

tractability, which Chicago's advocates applaud but critics argue has gone so far as to produce false understandings of marketplace conduct and effects.¹⁵ That suggests adherents might be receptive to efforts of Behavioral Antitrust scholars in critiquing antitrust rules in the light of empirical studies of individual economic actors. Behavioral Antitrust, in turn, has the goal of informing the assumptions underlying established economic theory through empirical study of the behavior of individual economic actors. That goal might be advanced by looking to Neo-Chicago's combination of theories from the Chicago and Post-Chicago Schools for a comprehensive theoretical framework for analysis.

I suggest here a possible synthesis of Neo-Chicago with Behavioral Antitrust into an enterprise of "economically informed antitrust." Because Neo-Chicago is at bottom about overcoming the shortcomings of Chicago School antitrust, which built theories on deliberately simplified assumptions, Behavioral Antitrust naturally complements the theoretical framework by providing an understanding of the realities of individual market actors.¹⁶ This article thus proposes that Behavioral Antitrust informs intuitions about the conduct of individual economic actors. When incorporated into a developed theoretical framework those intuitions may support results that theory would otherwise reject. I apply my arguments specifically to the leading Post-Chicago authority, *Eastman Kodak Co. v. Image Technical Services, Inc.*,¹⁷ and suggest that lessons from empirical study support the result in a way some have argued theory does not.

I. A BRIEF TAXONOMY OF ANTITRUST ECONOMICS

Serious debate ended long ago whether U.S. antitrust policy should be informed by economics—scholars of otherwise massively divergent views appear to agree on that proposition.¹⁸ There is also broad agreement that the

¹⁵ For a Chicago advocate, see Posner, *Chicago School Analysis*, *supra* note 4, at 931 (contrasting the Chicago School with the Harvard School by reference to the latter's rejection of simplifying assumptions "in favor of microscopic examination of the idiosyncrasies of particular markets"). For criticisms, see, for example, Thomas E. Kauper, *Influence of Conservative Economic Analysis on the Development of the Law of Antitrust*, in HOW CHICAGO OVERSHOT THE MARK, *supra* note 3, at 42 (oversimplification is a "familiar" criticism of Chicago).

¹⁶ Cf. Evans & Padilla, *A Neo-Chicago Approach*, *supra* note 9, at 75 (error costs should be analyzed in the light of "current economic knowledge and experience").

¹⁷ 504 U.S. 451 (1992).

¹⁸ See ROBERT A. BORK, *THE ANTITRUST PARADOX* (2d ed. 1993) [hereinafter PARADOX]; Pitofsky, *Political Content*, *supra* note 5; see also HERBERT HOVENKAMP, *THE ANTITRUST ENTERPRISE: PRINCIPLE AND EXECUTION* 10 (2005) [hereinafter ANTITRUST ENTERPRISE] ("Antitrust is an economic, not a moral, enterprise."). Some argue that non-economic considerations should be part of antitrust policy. See, e.g., Bush, *Too Big to Bail*, *supra* note 1, at 281–85; Maurice E. Stucke & Allen P. Grunes, *Toward a Better Competition Policy for the Media: The Challenge of Developing Antitrust Policies that Support the Media Sector's Unique Role in Our Democracy*,

purpose of antitrust is to protect consumers.¹⁹ The modern debate in antitrust economics centers on how economics is best deployed to accomplish that purpose.

A. THE LAST FOUR DECADES

In a genre of antitrust scholarship perhaps traceable to then-Professor Richard Posner's article, *The Chicago School of Antitrust Analysis*,²⁰ scholars have analyzed the changing nature of antitrust economics over decades of enforcement. Darren Bush's recent article in this Journal detailed the treatments of firm size across schools of antitrust economics from Brandeis to Behavioral Antitrust.²¹ Then-Commissioner William Kovacic's broadly cited *Double Helix* article focused on the Chicago, Post-Chicago, and Harvard Schools with regard to the development of modern standards for dominant firm conduct.²² Joshua Wright and Einer Elhauge debated in the pages of the journal *Competition Policy International* whether the Chicago School or Harvard School has had a more profound impact on the Supreme Court's recent antitrust jurisprudence.²³

It is a popular exercise to label commentators, enforcers, and judges as adherents to one or another school of thought. Like political party affiliations, brands given to a particular ideology operate as shorthand for a line of thinking that may, or may not, be cohesive. It is more convenient to apply the label than it is formally to adopt all the arguments that the label encompasses. This labeling may create a tendency to accept wholesale or to reject wholesale a type of antitrust analysis because one thinker is associated with that brand, or to accept or to reject the views of a thinker because of the brand with which she or he is associated.²⁴ It threatens stagnation of thought as adherents to one ideology reject good ideas from another.

42 CONN. L. REV. 103, 103 (2009) (noting the media-specific non-economic concern regarding public access to varied sources of information and viewpoints).

¹⁹ See Max Huffman, *Bridging the Divide? Theories for Integrating Competition Law and Consumer Protection*, 6 EUR. COMPETITION J. 7, 7 (2010) [hereinafter *Bridging the Divide*].

²⁰ Posner, *Chicago School Analysis*, *supra* note 4.

²¹ Bush, *Too Big to Bail*, *supra* note 1, at 281–96.

²² 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*].

²³ See Wright, *The Roberts Court and the Chicago School*, *supra* note 3, at 25, 39–54; Einer Elhauge, *Harvard, Not Chicago: Which Antitrust School Drives Recent U.S. Supreme Court Decisions?*, COMPETITION POL'Y INT'L, Autumn 2007, at 59.

²⁴ Labels sometimes seem to proliferate like submarkets, and perhaps as unjustifiably. It is unclear, for example, whether Justice Breyer would consider himself a "New-Harvard Schooler," but he recently has been so labeled. See Lambert & Wright, *(Over?) Confidence*, *supra* note 10, at 221.

Further, labels can obscure the extent to which individual adherents to a school can deviate from that school's orthodoxy (as Richard Posner sometimes deviates from Chicago "orthodoxy"),²⁵ or to which the views of important antitrust thinker like Donald Turner evolve over time.²⁶ Also, well-informed commentators may adopt their own shorthand that deviates from accepted definitions of the schools of antitrust thought. Alan Devlin and Michael Jacobs recently defined "Chicago" to include "Chicago and post-Chicago"—an approach that threatens to give purists of either school fits, but is readily defensible in light of both schools' reliance on price theory and recognition of the centrality of economic efficiency.²⁷ Neo-Chicago, the topic of this Symposium, has yet to acquire epithet status and thus seems to be easier to define. Behavioral Antitrust may be the most charged and least well understood. For some, it is a seven-syllable epithet meaning liberal antitrust. For others, it may be a panacea for decades of under-enforcement.²⁸

It is equally hard to define the ideologies in relation to one another. Hovenkamp has described a loose continuum with the Chicago School at one end and the Harvard-labeled Structure-Conduct-Performance paradigm at the other, with Post-Chicago, Neo-Harvard, and now Neo-Chicago lying in some order of intervention-mindedness between them.²⁹ (Behavioral Antitrust, to those who fear it, might lie somewhere outside of that range.) FTC Commissioner William Kovacic has described the relationship among antitrust ideologies with regard to dominant firm conduct as a double helix, a more nuanced

²⁵ Though Posner's name is synonymous to some with "conservative"—i.e., non-interventionist—antitrust, that understanding elides the realities of his views on predatory pricing (more interventionist than the modern rule) and oligopoly conduct (more interventionist than the modern rule, which was established in 1954 and survived the Warren Court). Predatory pricing: *Compare* Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 223 & n.1, 224 (1992) (holding that prices must be below some appropriate "measure of cost," and citing Phillip Areeda & Donald F. Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697 (1975) (proposing a below-average-variable-cost rule)), with RICHARD A. POSNER, ANTITRUST LAW 217–19 (2d ed. 2001) [hereinafter ANTITRUST LAW] (criticizing the below-average-variable-cost rule as under-enforcing). Oligopoly conduct: *Compare* Bell Atl. Corp. v. Twombly, 550 U.S. 544 (2007) (holding interdependent pricing does not satisfy the agreement element of Section 1), with Richard A. Posner, *Oligopoly and the Antitrust Laws: A Suggested Approach*, 21 STAN. L. REV. 1562, 1562 (1969) [hereinafter *Oligopoly*] (interdependent pricing is synonymous with agreement and can be challenged under Sherman Act Section 1).

²⁶ See Herbert Hovenkamp, *Harvard, Chicago, and Transaction Cost Economics in Antitrust Analysis*, 55 ANTITRUST BULL. 613, 618 (2010) [hereinafter *Transaction Cost Economics*].

²⁷ Alan Devlin & Michael Jacobs, *Antitrust Divergence and the Limits of Economics*, 104 NW. U. L. REV. 253, 266 (2010).

²⁸ Cf. J. Thomas Rosch, Comm'r, Fed. Trade Comm'n, Remarks at the NERA 2010 Antitrust & Trade Regulation Seminar: The Next Challenges for Antitrust Economists 17 (July 8, 2010), available at <http://ftc.gov/speeches/rosch/100708neraspeech.pdf> (noting and responding to the belief that Behavioral Antitrust necessarily favored interventionist regulation).

²⁹ Herbert Hovenkamp, *Antitrust and the Costs of Movement*, *supra* this issue, 78 ANTITRUST L.J. 67 (2012) [hereinafter *Costs of Movement*].

assessment.³⁰ He sees a spiraling of economic thinking, presumably oriented upward, which gathers elements from different ideologies as it climbs. Kovacic's double helix is ecumenical in nature: if Neo-Chicago or Behavioral Antitrust has valuable insights, those should be drawn into the helix as well.

1. Chicago

There appears to be a loose consensus that Chicago School antitrust flows from the work of Judges Bork, Posner, and Easterbrook.³¹ Adopting that consensus view, I note that it is difficult to articulate a unitary philosophy that describes those thinkers' views. Certainly all three share preferences for economic goals over other justifications for antitrust enforcement, for simplicity over complexity in economic analysis, and for less antitrust intervention than was favored in the decades before they made their primary contributions.³² But there are areas of profound non-uniformity as well.³³

2. Post-Chicago

If Chicagoans are Catholics, Post-Chicagoans are Lutherans. This ideology represents a reaction to excesses of under-enforcement, primarily due to simplifying assumptions that, while intended to make economics easier to apply,

³⁰ See Kovacic, *Intellectual DNA*, *supra* note 22; cf. Kauper, *supra* note 15, at 42 (modern dominant ideology is "a collective" of Chicago, Harvard, and others "whose views are not easily pigeonholed").

³¹ See Andrew I. Gavil, *A First Look at the Powell Papers: Sylvania and the Process of Change in the Supreme Court*, ANTITRUST, Fall 2002, at 8, 11 (discussing Bork and Posner); Kovacic, *Intellectual DNA*, *supra* note 22, at 34 (discussing Bork, Posner, and Easterbrook); Robert Pitofsky, *Introduction*, in HOW CHICAGO OVERSHOT THE MARK, *supra* note 3, at 3, 4 (discussing Bork and Posner). The intellectual underpinnings of the Chicago School are of course both deeper and broader than simply the work of those three. See generally Spencer Weber Waller, *The Law and Economics Virus*, 31 CARDOZO L. REV. 367, 379–81 (2009) [hereinafter *Virus*].

³² See BORK, PARADOX, *supra* note 18, at 7, 405–07; POSNER, ANTITRUST LAW, *supra* note 25, at 2; Easterbrook, *Limits*, *supra* note 10, at 15–16.

³³ These include disagreement on the appropriate treatment of unilateral predatory conduct (compare BORK, PARADOX, *supra* note 18, at 144–55 (discussion of predatory pricing theory concluding "attempts to outlaw it are likely to harm consumers more than would abandoning the effort"); Frank H. Easterbrook, *Predatory Strategies and Counterstrategies*, 48 U. CHI. L. REV. 263, 337 (1981) ("The antitrust offense of predation should be forgotten."), with POSNER, ANTITRUST LAW, *supra* note 25, at 211 (proposing a theory under which predation is rational and may explain pricing strategies by Standard Oil prior to 1911)); and vertical agreements (compare Easterbrook, *Limits*, *supra* note 10, at 13–14 (expressing doubt that legal remedies are appropriate for reductions in intrabrand competition); Frank H. Easterbrook, *Vertical Arrangements and the Rule of Reason*, 53 ANTITRUST L.J. 135, 135 (1984) ("No practice a manufacturer uses to distribute its products should be a subject of serious antitrust attention."), with POSNER, ANTITRUST LAW, *supra* note 25, at 172 ("Economics suggests several reasons why manufacturers nonetheless often restrict competition in the distribution of their goods when the law permit them to do so.")). Posner's economic realities approach to oligopoly conduct, favoring more intervention, appears to be unique among the three. See Richard A. Posner, *Oligopoly*, *supra* note 24; see also *supra* note 25.

also bring about wrong results. Bruce Abramson defines Post-Chicago anti-trust generally as “advocat[ing] delving into case-specific facts and then refining theories as necessary.”³⁴ That definition captures well the view that various simplifying assumptions to which the leading Chicagoans subscribed produced a false understanding of market realities.³⁵ A strong cohort of Post-Chicagoans would go further and argue that the false understanding of market realities led to dramatic under-enforcement of the antitrust laws.

Robert Lande’s colorfully titled comment, *Chicago Takes It on the Chin*, published in this Journal shortly after the Supreme Court’s decision in *Eastman Kodak Corp. v. Image Technical Services, Inc.*,³⁶ defined the Post-Chicago line of thinking as distinct from the Chicago School based on “the degree to which information is believed to be imperfect.”³⁷ The study of information economics, the basis for the 2001 Nobel Prize awarded to George Akerloff, Michael Spence, and Joseph Stiglitz,³⁸ indeed throws a wrench in the gears of a system built implicitly on the assumption that all market actors are equally prepared to optimize their choices in bargaining.³⁹

³⁴ Bruce Abramson, *Intellectual Property and the Alleged Collapsing of Aftermarkets*, 38 RUTGERS L.J. 399, 465 (2007).

³⁵ HOVENKAMP, ANTITRUST ENTERPRISE, *supra* note 25, at 38.

³⁶ 504 U.S. 451 (1992). *Kodak* is often cited as the leading example of Post-Chicago finding purchase in the courts. *See, e.g.*, Abramson, *supra* note 34, at 465.

³⁷ Robert H. Lande, *Chicago Takes It on the Chin: Imperfect Information Could Play a Crucial Role in the Post-Kodak World*, 62 ANTITRUST L.J. 193, 193 (1993). In hindsight, Lande was premature in celebrating the death of the Chicago School, as *Kodak* was followed by a line of pro-defendant decisions from the Supreme Court that lasted for seventeen cases over eighteen years, based on conservative economic, if not technically Chicago School, ideology.

³⁸ *See* Press Release, The Royal Swedish Academy of Sciences (Oct. 10, 2001) (announcing the recipients of the 2001 Nobel Prize for Economics as Akerloff, Spence, and Stiglitz), http://nobelprize.org/nobel_prizes/economics/laureates/2001/press.html; *see also* George A. Akerloff, *The Market for “Lemons”: Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970); Michael Spence, *Job Market Signaling*, 87 Q.J. ECON. 355 (1973); Joseph E. Stiglitz, *The Theory of “Screening,” Education, and the Distribution of Income*, 65 AM. ECON. REV. 283 (1975).

³⁹ It is perhaps surprising that the Chicago School orthodoxy was not better refined with an appreciation for information asymmetries. Information economics and the theory of the “lemons equilibrium” that it produced, explaining why low quality products predominate in a market characterized by asymmetric information, were well established by the late 1970s. *See* George Stigler, *The Economics of Information*, 69 J. POL. ECON. 213 (1961); *see also* Michael R. Darby & Edi Karni, *Free Competition and the Optimal Amount of Fraud*, 16 J.L. & ECON. 67 (1973) (demonstrating the capacity of informed sellers to defeat uninformed purchasers in competitions for surplus welfare). This reality has been further explored and is well understood. *See, e.g.*, JAMES M. LACKO, PRODUCT QUALITY AND INFORMATION IN THE USED CAR MARKET (FTC Bureau of Econ. Staff Report, Apr. 1986) (analyzing information asymmetry and the consequent “lemons equilibrium”), available at <http://www.ftc.gov/be/econrpt/231975.pdf>. Posner himself wrote a monograph discussing the market distortions caused by information asymmetries. RICHARD A. POSNER, REGULATION OF ADVERTISING BY THE FTC (1973) [hereinafter REGULATION]. The Chicago School’s ignoring those lessons is evidence of a preference for simplicity over realism, though Richard Posner’s involvement in this conversation may explain his more nuanced appreciation of ideas like the role of reputation in predation. Lande recognized this,

Its detractors have characterized the Post-Chicago reaction as encompassing a series of so-called possibility theorems that challenge Chicago tenets by showing stylized circumstances in which they do not hold, rather than announcing its own general theory.⁴⁰ That criticism is overstated. If a theory justifies policy prescriptions on the basis of assertions about market phenomena, disproving those assertions by showing even one set of circumstances in which they fail is a start. Few complain about a vigorous enforcement program aimed at price-fixing cartels, although many have argued cartels are fragile and will disintegrate on their own.⁴¹ And general theories find their support in individual theorems.⁴² Indeed, Posner recognized in the introduction to his 1979 article on the Chicago School that:

[T]he key ideas of the [Chicago] school . . . did not . . . emerge from a full-blown philosophy of antitrust. Rather, they were the product of pondering specific questions raised by antitrust cases, and only in retrospect did it become clear that they constituted the basis of a general theory of the proper scope of antitrust policy.⁴³

Reduced to its core, the dominant criticism of Post-Chicago is that it has not yet produced a sufficiently large set of individual theorems to support a general theory.⁴⁴ That same criticism is now being leveled at those seeking to import behavioralist insights into antitrust analysis.

3. Harvard

There is disagreement about who defines the Harvard School, and what the school stands for is less clear than in the case of Chicago. Kovacic sees its leading thinkers as being Donald Turner, Phillip Areeda, and Justice (formerly Professor) Breyer.⁴⁵ Others refer to a “Neo-Harvard School” as including

arguing that Chicagoans are not naïve about the role of imperfect information, but do not spin out its consequences to their logical conclusions. See Lande, *supra* note 37, at 193.

⁴⁰ See Gregory T. Gundlach & Joan M. Phillips, *Contributions and Challenges of Marketing to Antitrust*, 47 N.Y.L. SCH. L. REV. 51, 65 (2003).

⁴¹ See POSNER, *ANTITRUST LAW*, *supra* note 25, at 67–68 & nn.26–27 (explaining the theory of cartel fragility and citing sources); see also, e.g., Julia Schiller et al., *Toward Convergence: The Volume of “Affected” Commerce Under the U.S. Sentencing Guidelines and “Impact” Analysis Under the Clayton Act*, 18 GEO. MASON L. REV. 987, 998–99 & nn.98–99 (2011) (citing 2B PHILLIP E. AREEDA ET AL., *ANTITRUST LAW* 405b2, at 29 (3d ed. 2007); *id.* at 405b; *United States v. Hayter Oil Co.*, 51 F.3d 1265, 1267 (6th Cir. 1995)).

⁴² Albert Einstein published his special theory of relativity in 1905. The general theory of relativity had to wait a decade. See *Biography: Albert Einstein*, NOBELPRIZE.ORG, http://www.nobelprize.org/nobel_prizes/physics/laureates/1921/einstein.html.

⁴³ Posner, *Chicago School Analysis*, *supra* note 4, at 926.

⁴⁴ It may be that not every observer accepts the view that Post-Chicago is lacking a theory. See Crane, *Chicago, Post-Chicago, and Neo-Chicago*, *supra* note 3, at 1927 (“[P]ost-Chicago offers a countermodel that is just as elegant . . .”).

⁴⁵ Kovacic, *Intellectual DNA*, *supra* note 22, at 34.

Hovenkamp and Breyer.⁴⁶ Casual analysis tends to view Harvard as the intellectual counterweight to Chicago. Posner once described Harvard and Chicago in an essay targeted to non-antitrust-specialists as “warring camps” with Harvard “prone to find monopolistic practices” and Chicago “believ[ing] the same practices to be for the most part procompetitive.”⁴⁷ Hovenkamp “oversimplif[ied]” the comparison thusly: “while the Chicago School emphasized the ways that firms would continue to compete notwithstanding imperfect structures, the Harvard School emphasized the ways that firms could avoid competing.”⁴⁸ On further reading Hovenkamp shows that this simplified description relies on an archaic definition of Harvard, what is commonly called the structure-conduct-performance paradigm, which due to the involvement of thinkers like Donald Turner and Joe Bain frequently has been associated with Harvard.⁴⁹

4. *Neo-Chicago*

Neo-Chicago is easier to peg, perhaps because it has only recently been self-defined. Neo-Chicago was first discussed in a 2005 article by Evans and Padilla proposing an approach to the law of product tying.⁵⁰ They defined their approach as improving on the Chicago School theories by incorporating the error-cost framework drawn from Easterbrook’s *Limits of Antitrust* and emphasizing empirical study to support the theory.⁵¹ Other commentators have aligned themselves with this camp as well.⁵²

⁴⁶ See, e.g., Daniel A. Crane, *Antitrust Modesty*, 105 U. MICH. L. REV. 1193, 1194 (2007) (reviewing HOVENKAMP, *ANTITRUST ENTERPRISE*, *supra* note 18).

⁴⁷ Richard A. Posner, *Will the Federal Court of Appeals Survive Until 1984? An Essay on Delegation and Specialization of the Judicial Function*, 56 S. CAL. L. REV. 761, 781 (1983).

⁴⁸ HOVENKAMP, *ANTITRUST ENTERPRISE*, *supra* note 18, at 35. Consistent with the oversimplified view, as a law student in the 1990s I was taught that antitrust policy reflected a tension between Chicago and the “Ivy League.”

⁴⁹ Hovenkamp would draw a distinction between structure-conduct-performance and the modern Harvard School. Hovenkamp, *Costs of Movement*, *supra* note 29, at 74–76; HOVENKAMP, *ANTITRUST ENTERPRISE*, *supra* note 18, at 36–37 (relating the Harvard School’s “significant transformation” in the late 1970s); see also Spencer Weber Waller, *The Language of Law and the Language of Business*, 52 CASE W. RES. L. REV. 283, 297 & n.65 (2001) (listing leading works in the structure-conduct-performance paradigm).

⁵⁰ See Evans & Padilla, *A Neo-Chicago Approach*, *supra* note 9, at 75.

⁵¹ *Id.* at 74–75 (citing Easterbrook, *Limits*, *supra* note 10, at 9–14); *id.* at 80, 98 (criticizing Post-Chicago for its lack of reliance on data and expressing a need for empirical study of the cost of errors in enforcement).

⁵² See Lambert & Wright, *(Over?) Confidence*, *supra* note 10, at 225–26. Wright suggests in a 2009 blog post that Neo-Chicago is not new. Joshua Wright, *Neo-Chicago Meets Evidence-Based Antitrust*, TRUTH ON THE MARKET (May 12, 2009, 1:37 PM), truthonthemarket.com/2009/05/12/neo-chicago-meets-evidence-based-antitrust. This position is consistent with Wright’s definitions elsewhere of Chicago School antitrust as being defined by three features, including “the centrality of empiricism” and “adoption of the error-cost framework.” Wright, *Overshot the Mark?*, *supra* note 12, at 10–12.

What, at bottom, is Neo-Chicago then doing? Daniel Crane describes Neo-Chicago as an alternative to Chicago and Post-Chicago ideologies.⁵³ In his view Neo-Chicago “accepts Chicago’s basic premises as refined by the emerging body of criticism,” and its success will turn on, among other things, its “providing empirical support for Chicago School theories.”⁵⁴ In part, he sees this as a contest between Chicago and Post-Chicago ideologies:

Sooner or later, post-Chicago will have to supply the empirical evidence that is assumed in, but largely absent from, its attacks on Chicago. For the reasons previously identified, post-Chicago will continue to make only minor dents in Chicagoan dogma so long as it continues to engage Chicago in a theoretical tit-for-tat. When post-Chicago begins to put more muscle into an empirical attack, Chicago will need to respond in kind.⁵⁵

Crane’s description suggests that the progress of Neo-Chicago will be through empirical testing of theories from both the Chicago and Post-Chicago Schools. Theories that cannot be supported empirically will fall by the wayside, while those that can be will survive. Under this view there is a natural place for the empirical methods of behavioral economists to be imported into antitrust law through the burgeoning field of Behavioral Antitrust.

B. BEHAVIORAL ECONOMICS

Behavioral economics is a parallel branch of economic thought that presents a challenge to neo-classical theories.⁵⁶ Combining the study of psychology with economic tools, “behavioralists” have challenged the assumptions about individual conduct that underlie the economic proofs of neo-classical economics, themselves justifications for legal rules of decision. In 1998 three legal scholars demonstrated that “‘real people’ differ from *homo economicus*” by displaying “three important ‘bounds’ on human behavior, bounds that draw into question the central ideas of utility maximization, stable preferences, rational expectations, and optimal processing of information” underlying neo-classical economics.⁵⁷ Behavioral law and economics is the application of the principles of behavioral economics to legal analysis. It has become mainstream over the past ten years.⁵⁸

⁵³ See Crane, *Chicago, Post-Chicago, and Neo-Chicago*, *supra* note 3, at 1930–32.

⁵⁴ *Id.* at 1931.

⁵⁵ *Id.*

⁵⁶ See Richard A. Epstein, *The Neoclassical Economics of Consumer Contracts*, 92 MINN. L. REV. 803, 803 (2008) (“There is little doubt that the major new theoretical approach to law and economics in the past two decades . . . comes from the adjacent discipline of cognitive psychology, which has now morphed into behavioral economics.”).

⁵⁷ Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1476 (1998).

⁵⁸ The economic theories that underlie the modern behavioral law and economics movement are decades old. See, e.g., Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q.J. ECON. 99 (1955).

At bottom, behavioral economics is about sequencing the human psychological genome. When imported into legal analysis, it can assist in guiding the development of legal rules by recognizing the realities of individual human behavior, as opposed to an idealized state (which neo-classical economics assumes) that lacks any bounds on rationality, self-interest and willpower. The intentions of that enterprise are difficult to criticize. We are accustomed to regulation accounting for real *physical* traits. Building codes are based on actual physical proportions, rather than the proportions of some definition of the ideal human body. Economic regulation is rooted in contracting conduct, which is a product of psychological, not physical, human characteristics. The law should likewise account for real psychological traits.

Behavioral economics begins with the unremarkable recognition that, contrary to the core assumptions of neo-classical economics, individuals are limited in their abilities to reason, to resist temptation, and to act in their own self-interest. Taken together, those bounds render it likely that individuals will not optimize their own economic self-interest in contracting. That may be because they are actually incapable of reaching the optimal decision under the circumstances (bounded rationality), or because they are prevented from reaching the optimal decision because of a fleeting short-term fancy (bounded willpower) or an altruistic bent (bounded self-interest). People are known to rely on “decisionmaking heuristics” to short-cut complex reasoning⁵⁹ and to act pursuant to “cognitive biases” that favor, among other things, short-term over long-term benefits and salient over inconspicuous information.⁶⁰

In their book *Nudge*, Cass Sunstein and Richard Thaler offer the example of retirement savings.⁶¹ Rational choice theory suggests that an individual will calculate how much he or she needs in retirement, save that much, and thereby optimize present and future savings versus expenditures. Because that does not happen across a large swath of the populace, we know that some combination of factors may be at play, such as inability to calculate retirement needs in advance, disinclination to forgo short-term pleasure for long-term benefit, and perhaps desire to share their wealth with others.⁶²

⁵⁹ Nobel Laureate Daniel Kahneman labels the heuristic “System 1” and the complex reasoning “System 2.” System 1 processes occur “automatically and quickly, with little or no effort,” while System 2 processes “require attention and are disrupted when attention is drawn away.” DANIEL KAHNEMAN, *THINKING, FAST AND SLOW* 20–22 (2011).

⁶⁰ See generally Reeves & Stucke, *Behavioral Antitrust*, *supra* note 6, at 1532–38 (discussing empirically demonstrated cognitive biases and citing authorities).

⁶¹ RICHARD H. THALER & CASS R. SUNSTEIN, *NUDGE*, ch. 6 (2008).

⁶² *Id.* (discussing bounds on rationality and willpower as explanations); see Anuj C. Desai, *Libertarian Paternalism, Externalities, and the “Spirit of Liberty”*: How Thaler and Sunstein Are Nudging Us Toward an Overlapping Consensus, 36 *LAW & SOC. INQUIRY* 263, 268 (2011) (reviewing THALER & SUNSTEIN, *NUDGE*, *supra* note 60) (citing THALER & SUNSTEIN, *NUDGE*,

Behavioral economics seeks rigorously to explain the deviations from the theoretical assumptions.⁶³ That process is critically important. A conclusion that conduct is truly irrational would undermine any efforts at meaningful policy analysis or the development of generally applicable rules of law tailored to that conduct. One might conclude instead that a legal rule designed with one instance of conduct in mind will be misguided when applied to any other instance of conduct.⁶⁴ And tailoring regulation to a model built on rational choice assumptions will be no less legitimate than will tailoring regulation to any other, equally non-descriptive model.⁶⁵

Recognizing instead that deviations from rational choice theory are non-random and thus predictable, the supposed limitation on the value of behavioral insights disappears. Non-random deviations permit the drawing of expectations about human behavior that more accurately model real human conduct than do the rational choice assumptions.⁶⁶ With those more accurate expectations in place, scholars, policymakers, legislators, and courts can study and implement rules of law based on those expectations.⁶⁷ And rules of law

supra note 60, at 104; Albert Ando & Franco Modigliani, *The "Life Cycle" Hypothesis of Saving: Aggregate Implications and Tests*, 45 AM. ECON. REV. 55 (1963)).

⁶³ See Richard A. Epstein, *Behavioral Economics: Human Errors and Market Corrections*, 73 U. CHI. L. REV. 111, 111 (2006); Cass R. Sunstein, *Introduction*, in BEHAVIORAL LAW AND ECONOMICS 1, 1–7 (Cass R. Sunstein ed., 2000) [hereinafter *Introduction*].

⁶⁴ See Joshua D. Wright & Judd E. Stone II, *Misbehavioral Economics: The Case Against Behavioral Antitrust*, 33 CARDOZO L. REV. 1517, 1523, 1534 (2012).

⁶⁵ Critics of behavioralist arguments may object primarily to the terminology, inferring from the word "irrational" that conduct is either unpredictable or contrary to natural norms. In fact, there is nothing rational about conduct that is inconsistent with demonstrable norms of behavior, or irrational about conduct that hews to those norms. "Rational choice," then, is simply a brand that scholars have applied to idealized conduct. Definitions of rationality incorporate a preference for self-interested, profit-maximizing conduct that appears systematically to be inconsistent with real-life human behavior. Only by first accepting that normative preference can we apply the pejorative sobriquet "irrational" to conduct in which nearly all persons actually engage. See Maurice E. Stucke, *Behavioral Economists at the Gate: Antitrust in the Twenty-First Century*, 38 LOY. U. CHI. L.J. 513, 522 (2007) [hereinafter *Behavioral Economists at the Gate*]; Claire Hill, *The Promise of Behavioral Law and Economics*, TRUTH ON THE MARKET (Dec. 7, 2010, 5:00 AM) ("mistake" may mean "'weakness of the will' . . . since a person really does want both cake and good health"), <http://truthonthemarket.com/2010/12/07/claire-hill-on-the-promise-of-behavioral-law-and-economics/>. Many scholars understandably prefer to speak of "boundedly rational" conduct. Tor, *The Fable of Entry*, *supra* note 7, at 484.

⁶⁶ Cf. DAN ARIELY, PREDICTABLY IRRATIONAL: THE HIDDEN FORCES THAT SHAPE OUR DECISIONS, at xx (2008) (cite to introduction) ("Whether we are acting as consumers, businesspeople, or policymakers, understanding how we are predictably irrational provides a starting point for improving our decisionmaking and changing the way we live for the better.").

⁶⁷ Complaints that behavioral law and economics is targeted toward the conduct of a handful of individuals whose true behavior has been demonstrated empirically ignore that the empirical studies serve to demonstrate true norms of behavior. Just as regulation based on the norm of rational choice was only intended to be a perfect fit for the average, regulation based on an empirically established norm that deviates from rational choice will only be a perfect fit for the average. The difference is that the empirically established norm actually represents the average, while regulating for the rational choice assumption is regulating on the basis of an outlier.

built on assumptions of conduct following rational choice theory will be fundamentally flawed.

Behavioral economics operates by collecting data, whether from experiments conducted in the laboratory or from the real world, and testing the axioms of economics against that data.⁶⁸ Laboratory experiments have become increasingly sophisticated and present increasingly useful proxies for real-world conduct.⁶⁹ Frequently the data demonstrates that axioms on which the Chicago School relies are wrong. Individual economic actors respond differently to stimuli than leading theories had predicted they would respond. Empirical data provides new intuition, or confirms old intuition, regarding human behavior. With that new or confirmed intuition, economic models may be rebuilt to produce empirically supportable results. Behavioral law and economics then reexamines legal standards and rules of decision in the light of those results.⁷⁰

Behavioral economics is a close cousin of the study of information economics, perhaps for which reason George Akerloff, Nobel Laureate for his work in information economics, turned to behavioralism to explain human conduct in his book *Animal Spirits*, co-written with Robert Schiller.⁷¹ According to Oren Bar-Gill, “The behavioral market failure, with its emphasis on misperception and bias, is a direct extension of the imperfect information problem.”⁷²

⁶⁸ See Avishalom Tor, *A Behavioural Approach to Antitrust Law and Economics*, 14 CONSUMER POL’Y REV. 18, 18–19 (2004) [hereinafter *A Behavioural Approach*] (behavioral economics is “grounded in empirical observations of human behaviour” and “based on scientific findings regarding actual human behaviour, which can often provide better descriptions of market dynamics and thus more effective prescriptions for competition policy”); cf. Maurice E. Stucke, *Money, Is That What I Want?: Competition Policy and the Role of Behavioral Economics*, 50 SANTA CLARA L. REV. 893, 918 (2010) (experiments began on university students and migrated to “field experiments and data from actual market transactions”).

⁶⁹ See, e.g., Mark Armstrong & Steffen Huck, *Behavioral Economics as Applied to Firms: A Primer*, COMPETITION POL’Y INT’L, Spring 2010, at 3, 9–10 (describing laboratory experiments designed to test assumptions regarding cartel behavior).

⁷⁰ See generally Douglas H. Ginsburg & Derek W. Moore, *The Future of Behavioral Economics in Antitrust Jurisprudence*, COMPETITION POL’Y INT’L, Spring 2010, at 89, 92–95 (discussing the development of behavioral economics and behavioral law and economics).

⁷¹ GEORGE A. AKERLOFF & ROBERT J. SCHILLER, *ANIMAL SPIRITS: HOW HUMAN PSYCHOLOGY DRIVES THE ECONOMY, AND WHY IT MATTERS FOR GLOBAL CAPITALISM* 5 (2009) (noting prior work in rational choice economics and the need to break from that tradition to explain economic activity).

⁷² Oren Bar-Gill, *Competition and Consumer Protection: A Behavioral Economics Account*, in SWEDISH COMPETITION AUTHORITY, *THE PROS AND CONS OF CONSUMER PROTECTION* 1, 4–5 (forthcoming) [hereinafter *Competition and Consumer Protection*], available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1974499. Others have observed this as well, not all of them champions of Behavioral Antitrust. See, e.g., Michael A. Salinger, *Behavioral Economics, Consumer Protection, and Antitrust*, COMPETITION POL’Y INT’L, Spring 2010, at 65, 69–70 (2010) (comparing information asymmetries with deviations from rational choice).

Thus, marketers might rely on information asymmetries through non-disclosure of certain costs (subject to limits imposed by fraud and deception claims), or they might accomplish the same end through the technique of “drip pricing.” Drip pricing is a well-studied technique of exploiting individuals’ empirically demonstrated tendencies to make soft (psychological) commitments on the basis of “salient”—prominent—up-front prices before they learn of other expenses that might fundamentally alter the nature of the transaction.⁷³ AirTran Airways, Inc. recently settled Department of Transportation charges with regard to fare advertising that excluded taxes and fees from the advertised ticket price, making information about those taxes and fees available but not readily apparent.⁷⁴ The practice at issue might be considered either to rely on information asymmetries, if consumers were not meaningfully informed about the actual price, or to rely on drip pricing, if consumers were merely committed before being informed.

For another example of the relationship between information economics and behavioral economics, information economics is credited with carrying the day in *Eastman Kodak Corp. v. Image Technical Services, Inc.*, where the Court recognized that purchasers unable realistically to engage in life-cycle pricing of photocopiers could become locked in to a particular brand, giving monopoly power in parts and services aftermarkets to defendant Kodak.⁷⁵ As

⁷³ See Reeves & Stucke, *Behavioral Antitrust*, *supra* note 6, at 1541 (defining drip pricing); cf. ROBERT B. CIALDINI, *INFLUENCE: SCIENCE & PRACTICE* 59–66 (5th ed. 2009) [hereinafter *SCIENCE & PRACTICE*] (describing larger impacts of inducing commitment with regard to small initial decisions). The UK Office of Fair Trading has concluded that drip pricing is one of the two most pernicious pricing practices from the perspective of causing purchasers to spend more than they wished (in the absence of the pricing practice) to spend. See UK OFFICE OF FAIR TRADING, *ADVERTISING OF PRICES (OFT 1291)* (2010), available at <http://www.oft.gov.uk/OFT/work/markets-work/advertising-prices/>.

⁷⁴ The Department of Transportation recently fined Airtran Airways, Inc., for “deceptive price advertising” in violation of DOT rule 14 C.F.R. § 399.84 (2011), governing the manner in which fees and taxes may be separated from airfare advertisements. According to the consent agreement between Airtran and DOT:

AirTran displayed an advertisement on various third-party websites stating “Select destination on SALE Starting at \$59 one way.” The advertisement contained two asterisks, one following the fare and the other below the fare next to a statement reading, without further elaboration, “Additional taxes, fees, exclusions apply.” Nowhere in the advertisement were the nature and amount of the additional taxes stated. Rather, once the consumer clicked on the advertisement, he or she was taken to a landing page on AirTran’s website, where a list of routes and prices were displayed and consumers were not advised of the details of the additional taxes and fees, stated in fine print, unless they scrolled to the bottom of the page.

AirTran Airways, Inc., DOT Docket No. OST-2012-0002, at 2 (Jan. 4, 2012) (consent order). Such a marketing practice might be said to rely for its success on asymmetric information with regard to the amount of fees and taxes being charged (although disclosure would occur before the consumer made payment). The practice is an example of behavioral exploitation through drip pricing, encouraging consumers to commit psychologically before learning the additional expense to which they will be subjected.

⁷⁵ *Eastman Kodak Corp. v. Image Tech. Servs. Inc.*, 504 U.S. 451 (1992).

explained in greater detail below, behavioral economics would bolster that explanation with lessons about the marketing technique of drip pricing and proven cognitive biases such as “hyperbolic discounting” of future events, whereby perceived short-term benefits overwhelm medium- and long-term consequences of decisions.⁷⁶

II. BEHAVIORAL ANTITRUST

Cass Sunstein recommended in 2000 that scholars and policymakers devote their energies to applications of behavioral economics in legal policymaking,⁷⁷ though a few legal scholars had already been working in that direction. The enterprise took off early in fields including litigation economics,⁷⁸ criminal law,⁷⁹ corporate governance,⁸⁰ and consumer protection.⁸¹ It has been slower to be applied to antitrust, although since 2002 scholars have been doing so.

A. EARLY APPLICATIONS TO ANTITRUST

1. *Studying Conduct by Firms*

Avishalom Tor was the earliest student of behavioralist teachings in antitrust. Tor’s writings in the area began with *The Fable of Entry: Bounded Rationality, Market Discipline and Legal Policy*.⁸² He stated a more general

⁷⁶ According to Professor Bar-Gill:

[A] hyperbolic discounter heavily discounts costs and benefits that will materialize in the near future, at $t+1$, but assigns only a smaller *additional* discount for costs (and benefits) that will materialize in the more distant future, at $t+2$. This systematic disparity between people’s short-term and long-term discount rates has been consistently demonstrated both in the laboratory and in real-world settings.

Oren Bar-Gill, *Seduction by Plastic*, 98 Nw. U. L. REV. 1373, 1396 (2004) [hereinafter *Seduction*].

⁷⁷ See Sunstein, *Introduction*, *supra* note 63.

⁷⁸ See, e.g., Jeffrey J. Rachlinski, *Gains, Losses, and the Psychology of Litigation*, 70 S. CAL. L. REV. 113, 144 (1996).

⁷⁹ See, e.g., David S. Lee & Justin McCrary, *Crime, Punishment, and Myopia 2* (Nat’l Bureau of Econ. Research, Working Paper No. 11491, 2005) (finding that high discount rates for criminals undermines a rational-choice-based expected cost analysis), available at <http://www.nber.org/papers/w11491>.

⁸⁰ See, e.g., Antony Page, *Unconscious Bias and the Limits of Director Independence*, 2009 U. ILL. L. REV. 237.

⁸¹ The Federal Trade Commission has long regulated conduct on the basis of a sophisticated understanding of limitations in purchasers’ abilities to maximize their economic self-interest. See, e.g., 16 C.F.R. pt. 429 (2011) (door-to-door sales rule imposing a cooling-off period and requiring notice of a three-day right of rescission). The Commission also has published guides that may influence behavior to similar ends. See 16 C.F.R. pt. 238 (bait-and-switch sales techniques); 16 C.F.R. pt. 251 (guide concerning use of the word “free” and similar representations). The *Chicago Law Review* held a symposium on behavioral economics in the law of consumer protection. See generally Symposium, *Homo Economicus, Homo Myopicus, and the Law and Economics of Consumer Choice*, 73 U. CHI. L. REV. 1 (2006).

⁸² Tor, *The Fable of Entry*, *supra* note 7.

theory in *A Behavioral Approach to Antitrust Law and Economics*,⁸³ and, with William Rinner, discussed the application of Behavioral Antitrust to resale price maintenance in *Behavioral Antitrust: A New Approach to the Rule of Reason After Leegin*.⁸⁴ Oren Bar-Gill demonstrated in 2005 that the bounds behavioralists recognize on consumer decisionmaking may have policy implications for antitrust rules governing tying and bundling.⁸⁵ Maurice Stucke more recently has argued—in articles, including *Morality and Antitrust*,⁸⁶ *Behavioral Economists at the Gate*,⁸⁷ and *Behavioral Antitrust* (with Amanda Reeves)⁸⁸—about the inevitability of courts’ rethinking antitrust law in light of knowledge of human conduct in the economic marketplace.

Central axioms of antitrust economics posit that the economic marketplace can be modeled with perfect utility maximization on the parts of both sellers and purchasers—as Michael Salinger puts it, “sacrific[ing] realism for tractability.”⁸⁹ In contrast, recent scholarship has challenged the assumption that sellers conduct themselves in ways that maximize their utility.⁹⁰ The conclusions of that research undermine established rules of decision in antitrust.⁹¹

In addition to those first movers in the application of behavioral economics to antitrust, other scholars, judges, and practitioners recently have joined the conversation. Deven Desai and Spencer Waller discussed concepts in antitrust that turn on the realities of human cognition, although without explicitly couching their analysis as one of Behavioral Antitrust.⁹² Christopher Leslie wrote that courts’ understanding of the economic rationality of firm conduct was ill-informed, producing erroneous rules of decision.⁹³ Leslie also dealt with the phenomenon of cognitively biased courts.⁹⁴ Firmly in the mold of Behavioral Antitrust scholarship, Leslie criticized conclusions that conduct by firms made “no economic sense,” and therefore could be presumed not to have taken place at all, when, in fact, the evidence was strong or irrefutable

⁸³ Tor, *A Behavioural Approach*, *supra* note 68.

⁸⁴ Avishalom Tor & William J. Rinner, *Behavioral Antitrust: A New Approach to the Rule of Reason after Leegin*, 2011 U. ILL. L. REV. 805.

⁸⁵ Oren Bar-Gill, *Bundling and Consumer Misperception*, 73 U. CHI. L. REV. 33, 53 (2006) [hereinafter *Bundling and Consumer Misperception*].

⁸⁶ Maurice E. Stucke, *Morality and Antitrust*, 2006 COLUM. BUS. L. REV. 443.

⁸⁷ Stucke, *Behavioral Economists at the Gate*, *supra* note 65.

⁸⁸ Reeves & Stucke, *Behavioral Antitrust*, *supra* note 6.

⁸⁹ Salinger, *supra* note 72, at 66.

⁹⁰ See, e.g., Stucke, *Behavioral Economists at the Gate*, *supra* note 65; Tor & Rinner, *supra* note 84.

⁹¹ See *infra* notes 125–135 and accompanying text.

⁹² See Deven R. Desai & Spencer Waller, *Brands, Competition, and the Law*, 2010 BYU L. REV. 1425.

⁹³ See Christopher R. Leslie, *Rationality Analysis in Antitrust*, 158 U. PA. L. REV. 261, 285–308 (2010).

⁹⁴ *Id.* at 308–18.

that the conduct did in fact occur.⁹⁵ Mark Armstrong and Steffen Huck “focus[ed] . . . on non-standard approaches to firm behavior,” keeping consumers “in the background.”⁹⁶ They show the usefulness of laboratory studies better to understand collusion, oligopoly conduct short of collusion, and unilateral conduct.⁹⁷

In important ways Behavioral Antitrust may be the strongest application of behavioral law and economics. First, law and economics generally has informed antitrust rules of decision more completely than any other substantive field.⁹⁸ Second, the most voluble complaints about the application of behavioral economics to legal policy relate to “first-order regulation,” in which government supplants private ordering. For example, David Friedman noted problems with application of behavioral economics in such areas as airline security. Regulators’ tendencies to “overestimate the importance of striking low probability events” (such as terrorist attacks) has led to intrusive security, which reduces airline traffic and thus increases road traffic fatalities, perhaps even out of proportion to the initial threat to be avoided.⁹⁹ Such challenges, including concerns for cognitively biased or politically motivated regulators¹⁰⁰ and slippery slopes toward over-regulation,¹⁰¹ do not apply to “second-order regulation” that seeks to maintain free markets by correcting for failures brought on by private ordering, rather than to regulate those markets directly.¹⁰²

2. Critics

Others are less willing to accept the importance of Behavioral Antitrust. The Chicago-leaning publication *Competition Policy International* published in Winter 2010 a symposium edition on behavioral economics in antitrust and consumer protection, containing articles by noted commentators, including

⁹⁵ *Id.* at 318–38.

⁹⁶ Armstrong & Huck, *supra* note 69, at 4.

⁹⁷ *See id.* at 6–7.

⁹⁸ *See* Waller, *Virus*, *supra* note 31, at 381–87.

⁹⁹ David D. Friedman, *Intriguing Research Project, with Reservations*, TRUTH ON THE MARKET (Dec. 6, 2010, 8:15 AM), <http://truthonthemarket.com/2010/12/06/david-friedman-on-behavioral-economics-intriguing-research-project-with-reservations/>.

¹⁰⁰ *See* Richard Thaler, *Rejoinder to the TOTM Free to Choose Symposium*, TRUTH ON THE MARKET (Dec. 13, 2010, 7:25 AM) [hereinafter *Rejoinder*] (“Professor Warren would be well advised to assume that there will eventually be a nitwit heading [the CFP] for a while.”), <http://truthonthemarket.com/2010/12/13/richard-thalers-rejoinder-to-the-totm-free-to-choose-symposium/>.

¹⁰¹ Larry Ribstein, *Free to Lose?*, TRUTH ON THE MARKET (Dec. 6, 2010, 8:18 AM), <http://truthonthemarket.com/2010/12/06/larry-ribstein-on-free-to-lose/>.

¹⁰² *Cf.* HOVENKAMP, ANTITRUST ENTERPRISE, *supra* note 18, at 14–15 (distinguishing “reactive” antitrust enforcement from “positive” administrative enterprises like electricity rate regulation).

Judge Douglas Ginsburg¹⁰³ and Michael Salinger.¹⁰⁴ Both Ginsburg and Salinger dispute the relevance of behavioral economics to antitrust. Salinger describes differing reactions to behavioral economics in political terms. “In both consumer protection and antitrust, the use of standard economic analysis has generally been to limit the scope of government intervention. The interest in behavioral economics (and some of the resistance to it) stems from the belief that it justifies intervention that conventional economic analysis suggests is unwarranted.”¹⁰⁵

A recent article by Joshua Wright and Judd Stone takes broader aim at the study of Behavioral Antitrust, articulating an “irrelevance theorem” that they argue demonstrates “behavioral economics . . . fails to offer *any* clear policy implications for antitrust law.”¹⁰⁶ Wright and Stone challenge the work of Tor, Stucke, and Leslie in arguing that Behavioral Antitrust currently offers no policy prescriptions that can be implemented.¹⁰⁷ Even then-Deputy Assistant Attorney General Carl Shapiro declined to endorse behavioral economics’ relevance to the antitrust analysis of firm conduct.¹⁰⁸

Critics question the capacity of behavioral insights to inform antitrust rules of decision. Judge Ginsburg and Derek Moore argue that Behavioral Antitrust is too great a deviation from the economic theory that has held sway in antitrust decisionmaking.¹⁰⁹ They believe it opens the door to undisciplined analysis and “whimsical” goals in antitrust jurisprudence and increases courts’ freedom to pursue “idiosyncratic” goals.¹¹⁰ However, Ginsburg and Moore do not provide any evidence supporting that concern. That is a general comment on the critics of Behavioral Antitrust. Wright and Stone speak of a “burden of proof” on the proponents of Behavioral Antitrust, although they give no reason why any one particular approach should be the default.¹¹¹

¹⁰³ Ginsburg & Moore, *supra* note 70.

¹⁰⁴ Salinger, *supra* note 72.

¹⁰⁵ *Id.* at 66.

¹⁰⁶ Wright & Stone, *supra* note 64, at 1527, 1526.

¹⁰⁷ *See id.* at 1521–22, 1533–34 (commenting on recent work by Stucke, Tor, and Leslie).

¹⁰⁸ Carl Shapiro, Deputy Ass’t Att’y Gen. for Econ., U.S. Dep’t of Justice, Remarks to the ABA Antitrust Symposium: Competition as Public Policy 3 (May 13, 2009), available at <http://www.justice.gov/atr/public/speeches/245857.pdf>. Although Shapiro backtracked from that statement with regard to predicting consumer behavior, his view of the use of behavioral economics in predicting organizational behavior did not appear to change. *See Roundtable Interview with Joseph Farrell and Carl Shapiro*, ANTITRUST SOURCE, Feb. 2010, at 8 [hereinafter *Roundtable Interview*], http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/Feb10_FarrShapRT2_25f.authcheckdam.pdf.

¹⁰⁹ Ginsburg & Moore, *supra* note 70.

¹¹⁰ *Id.*

¹¹¹ Wright & Stone, *supra* note 64, at 1522.

Wright and Stone's recent examination of Behavioral Antitrust concentrates on the question of non-utility-maximizing behavior by firms. Their article dispenses quickly with the question of consumers' deviations from the rational choice model, arguing that demand elasticity analyses take into account any consumer decisionmaking biases.¹¹² If a consumer's reservation price is determined to be X, any biases are built into that reservation price, and what those biases are may not be important for antitrust analysis.¹¹³ That point is correct for purposes of determining market power, a process that currently requires modeling hypothetical consumer behavior in response to price increases.¹¹⁴ But it does not undermine the value of understanding consumer behavior in antitrust policymaking. Conduct by firms that relates to the structure of a transaction with their consumers, such as marketing, pricing, tying, and bundling, presents the danger of adverse welfare effects that may be exacerbated by limitations on individual consumers' cognitive abilities.¹¹⁵ I propose below an antitrust application of the theory of behavioral exploitation through which firms may be structuring their conduct specifically to take advantage of those limitations, with attendant welfare effects that bring it within the heartland of conduct antitrust policy should encompass.¹¹⁶

One also might question whether critics of Behavioral Antitrust would accept the conclusions that empirical studies of consumer behavior might produce. For example, criticisms of *FTC v. Whole Foods Market, Inc.*, which supported a narrowly drawn product market on the basis of consumers' demonstrated preferences,¹¹⁷ invoke theoretical arguments about the unprofitability of a price hike due to price-sensitive marginal consumers.¹¹⁸ Professors Desai and Waller provide an explanation for many commentators' aversion to drawing product markets narrowly even where evidence of consumer behav-

¹¹² *Id.* at 1523.

¹¹³ For this reason, the concern for conflicting cognitive biases is overstated. See Thom Lambert, *Behavioral Law and Economics and the Conflicting Quirks Problem: A "Realist" Critique*, TRUTH ON THE MARKET (Dec. 6, 2010, 10:35 AM), <http://truthonthemarket.com/2010/12/06/realism-and-behavioral-law-and-economics/>. A test of consumer behavior in a real market setting necessarily will incorporate the range of biases that laboratory experiments have teased out. It may not always be possible to intuit the result in terms of the operative bias, but the empirical result (if robust) will provide a basis for antitrust analysis and possibly intervention.

¹¹⁴ See U.S. Dep't of Justice & Fed. Trade Comm'n, Horizontal Merger Guidelines § 4 (2010) [hereinafter 2010 Horizontal Merger Guidelines], available at <http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf>.

¹¹⁵ Cf. Bar-Gill, *Bundling and Consumer Misperception*, *supra* note 85, at 54 (discussing bundling "as a strategic response to consumer misperception").

¹¹⁶ Behavioral exploitation as a form of conduct appears to have been first defined in 2008. See Matthew A. Edwards, *The FTC and New Paternalism*, 60 ADMIN. L. REV. 323, 325 (2008).

¹¹⁷ *FTC v. Whole Foods Mkt., Inc.*, 548 F.3d 1028, 1043–45 (D.C. Cir. 2008) (Tatel, J., concurring).

¹¹⁸ See, e.g., Kevin Arquit, *Keynote Address: ILJ 2009 Symposium*, 43 CORNELL INT'L L.J. 1, 23 (2010).

ior supports the result. They demonstrate in their article, *Brands, Competition, and the Law*, that antitrust law fails sufficiently to recognize the impacts of brands on consumer decisionmaking, with consequences for, among other things, product market definition.¹¹⁹ Desai and Waller thus encourage an approach that relies on consumers' demonstrated preferences (for, in their argument, well-developed brands), if proof can be made of the competitive impact of those preferences.

Some critics of Behavioral Antitrust appear at bottom to contend that the complications behavioral economics introduces into antitrust analysis render the enterprise too cumbersome for use.¹²⁰ The "too complex" complaint is an old one. It explains the limited inroads of information economics in antitrust economics. Michael Rothschild and Joseph Stiglitz's 1976 demonstration that simplifying assumptions in economic analysis render that analysis inapplicable to the real world carries equal weight in the Behavioral Antitrust debate.¹²¹ If the argument is that reality makes economics unworkable, the conclusion might be that it is economics that should go, not reality.

3. Result Neutrality

Behavioral Antitrust is result-neutral.¹²² Wright and Stone correctly argue that Behavioral Antitrust "does not systematically support a more interventionist competition policy."¹²³ Reeves and Stucke agree: "Behavioral economics does not necessarily call for less or more antitrust regulation."¹²⁴ This recognition provides the strongest hope that a Neo-Chicago antitrust policy

¹¹⁹ Desai & Waller, *supra* note 92, at 1475–76.

¹²⁰ See, e.g., Geoffrey A. Manne, *Interesting Doesn't Necessarily Mean Policy Relevant*, TRUTH ON THE MARKET (Dec. 6, 2010, 10:25 AM) (noting the challenges of understanding the aggregate impacts of sometimes conflicting biases), <http://truthonthemarket.com/2010/12/06/geoffrey-manne-on-interesting-doesnt-necessarily-mean-policy-relevant/>; Lambert, *supra* note 113 (making the same argument).

¹²¹ See Michael Rothschild & Joseph Stiglitz, *Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information*, 90 Q.J. ECON. 629 (1976). Rothschild and Stiglitz argue:

Economic theorists traditionally banish discussions of information to footnotes. Serious consideration of costs of communication, imperfect knowledge, and the like would, it is believed, complicate without informing. This paper, which analyzes competitive markets in which the characteristics of the commodities exchanged are not fully known to at least one of the parties to the transaction, suggests that this comforting myth is false. Some of the most important conclusions of economic theory are not robust to considerations of imperfect information.

Id. at 629.

¹²² Cf. Thaler, *Rejoinder*, *supra* note 100 (denying any political agenda for behavioral economics).

¹²³ Wright & Stone, *supra* note 64, at 1526.

¹²⁴ Reeves & Stucke, *Behavioral Antitrust*, *supra* note 6, at 1543.

will find common ground with advocates of Behavioral Antitrust in service of a less ideological enterprise of economically informed antitrust.

If behavioral economics teaches that individuals are not perfect expected utility maximizers—in fact, individuals predictably deviate from that assumption toward, among other traits, altruism—antitrust doctrine might recognize the existence of such unicorns as the benevolent monopolist, who can be relied on not to use monopoly power to the detriment of consumers.¹²⁵ Other examples of altruistic market players wielding monopoly power (including joint power in the case of conspiracy) might include educational institutions, which have in the past been the subject of antitrust scrutiny for their conduct in both sports and educational marketplaces;¹²⁶ and members of learned professions, over whose conduct a deep body of doctrine also has developed.¹²⁷ If empirical evidence were to demonstrate that non-economic motivations overcame (with sufficient frequency not to be *de minimis*) profit motives for those or other actors, Behavioral Antitrust might support less regulatory intervention than has been the norm. That might take the form of adopting a rule of reason approach, under which the effects of the conduct could be tested empirically on a case-by-case basis, to conduct that in other markets would be subject to *per se* condemnation. The lessons from empirical study might also inform a quick look or rule of reason approach with proof of non-economic justifications for conduct.¹²⁸

Of course, Behavioral Antitrust also raises the possibility of enforcement where it has in recent decades not been considered appropriate. Evidence of predatory conspiracies in *Matsushita Electric Industrial Co. v. Zenith Radio Corp.*¹²⁹ and *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*¹³⁰

¹²⁵ See *White & White, Inc. v. Am. Hosp. Supply Corp.*, 540 F. Supp. 951, 1007 n.20 (W.D. Mich. 1982) (finding that low prices by a “benevolent monopolist” are not a basis for avoiding antitrust liability), *rev'd on other grounds*, 723 F.2d 495 (6th Cir. 1983).

¹²⁶ See *NCAA v. Bd. of Regents of the Univ. of Okla.*, 468 U.S. 85 (1984) (evaluating a conspiracy to restrict output in collegiate football); *United States v. Brown Univ.*, 5 F.3d 658 (3d Cir. 1993) (applying a rule of reason analysis to agreements among elite universities not to compete for a certain student population).

¹²⁷ See *Cal. Dental Ass'n v. FTC*, 526 U.S. 756 (1999) (evaluating an advertising restriction imposed by professional regulatory body); *Arizona v. Maricopa Cty. Med. Soc'y*, 457 U.S. 332 (1982) (evaluating maximum price fixing by private association of medical doctors); *Nat'l Soc'y of Prof'l Eng'rs v. United States*, 435 U.S. 679 (1978) (evaluating an agreement restricting competitive bidding among engineers); *Goldfarb v. Va. State Bar*, 421 U.S. 773 (1975) (evaluating a fee schedule by a state bar association).

¹²⁸ For example, in *NCAA* the defendant schools unsuccessfully argued the preservation of the product of college football and the college game day warranted output restrictions. See *NCAA*, 468 U.S. at 115–17. In *Brown University*, the defendants successfully argued in favor of a rule of reason approach on the basis of the non-economic benefits of enhancing the educational experience. *Brown University*, 5 F.3d at 677–78.

¹²⁹ 75 U.S. 574 (1986).

¹³⁰ 509 U.S. 209 (1992).

failed to prevent judgment as a matter of law because the Court relied on theoretical arguments that the alleged conspiracies could not survive and harm consumers if the conspirators acted rationally. Accepting the possibility that defendants in either case were not profit maximizers—perhaps motivated by a desire for market dominance or national glory—could lead to a different result.¹³¹

Likewise, dismissal was appropriate in *Bell Atlantic Corp. v. Twombly*¹³² because economic theory predicted that under the particular circumstances of the industry, profit-maximizing firms could be expected unilaterally to engage in parallel or interdependent conduct, which is not illegal.¹³³ Allegations of parallel or interdependent conduct thus did not plausibly demonstrate a conspiracy.¹³⁴ But if empirical study were to demonstrate that the observed parallel-conduct equilibrium could not be reached without conspiracy, because, for example, firms favored competitive success as defined by market share above profits, allegations of parallel conduct would plausibly support a claim of conspiracy.¹³⁵

B. BEHAVIORAL EXPLOITATION

It is axiomatic that the goal of modern antitrust is to maximize consumer welfare. That seems an impossible task if we do not understand the consumer. Behavioral economics promises to help fill that knowledge gap.¹³⁶

Notably, scholars who have explored Behavioral Antitrust have concentrated almost exclusively on the behavior of firms, arguing that collections of individuals will be affected by the biases that affect those individuals (even if the impact of those biases is muted or more difficult to comprehend).¹³⁷ Their work has been subject to challenge in part because of the difficulty of demon-

¹³¹ See Leslie, *supra* note 93, at 293–95 (noting goals other than profit maximization facing some business firms); *id.* at 319–24 (discussing courts’ refusal or inability to accept direct evidence that contravenes theory); Avishalom Tor, *Illustrating a Behaviorally Informed Approach to Antitrust Law: The Case of Predatory Pricing*, ANTITRUST, Fall 2003, at 52, 55–56 (discussing “risk-seeking predatory behavior”).

¹³² 550 U.S. 544 (2007).

¹³³ *Id.* at 553–54.

¹³⁴ *Id.*; see Max Huffman, *The Necessity of Pleading Elements in Private Antitrust Conspiracy Claims*, 10 U. PA. J. BUS. & EMP. L. 627, 652 (2008) (neutral facts not sufficient to survive a motion to dismiss on the question of conspiracy).

¹³⁵ Cf. Stucke, *Behavioral Economists at the Gate*, *supra* note 65, at 532–36 (arguing that firms may not be profit maximizers).

¹³⁶ Cf. *Roundtable Interview*, *supra* note 108, at 7–8 (noting the value of “attent[ion] to the evidence regarding consumer behavior”).

¹³⁷ See *supra* notes 82–88 and accompanying text (citing work by Stucke, Tor, Rinner, Leslie, Armstrong, and Huck).

strating the aggregate effect of cognitive biases across the conduct of entire firms.¹³⁸

I concentrate instead on the effect of consumers' inability to maximize their utility. Former Deputy Assistant Attorney General Carl Shapiro, a leading commentator and enforcer who had expressed skepticism of the contributions of Behavioral Antitrust, nonetheless recognized the value of Behavioral Antitrust for better understanding consumer behavior. Shapiro noted:

Any time we are trying to understand and predict consumer responses we need to be attentive to the evidence regarding consumer behavior. That may well involve various behavioral issues.

For example, consumers react to surcharges and discounts differently, and in some cases that can be part of the analysis. We also have to look at things like advertising competition, which relates to consumer behavior. We often have issues of reputation or branding that relate to consumers and their response to those images and those brands. So we are regularly dealing with consumer responses to a firm's strategies, which get us into behavioral economics.¹³⁹

And academic critics of Behavioral Antitrust appear to accept the relevance of the behavioralist critique with regard to consumer (as opposed to firm) behavior.¹⁴⁰

1. *Exploiting Decisionmaking Biases*

Behavioral exploitation is intentionally exploiting known biases in decisionmaking by consumers.¹⁴¹ Merchant sellers employing sophisticated marketing practices are known to engage in such conduct in the ordinary course of their business.¹⁴² Courts and regulators have for decades recognized the reality of behavioral exploitation in the commercial marketplace.¹⁴³ And aca-

¹³⁸ See Wright & Stone, *supra* note 64, at 1524 (“[I]t does not follow that firms necessarily behave with similar, or similarly predictable, consequences.”).

¹³⁹ Roundtable Interview, *supra* note 108, at 7–8. Joseph Farrell, Director of the Bureau of Economics at the Federal Trade Commission, agrees *id.* at 8. (“I think that’s right.”).

¹⁴⁰ Wright & Stone, *supra* note 64, at 1523, 1549.

¹⁴¹ Huffman, *Bridging the Divide*, *supra* note 19, at 22; cf. Bar-Gill, *Bundling and Consumer Misperception*, *supra* note 85, at 47 (referring to sellers’ “exploiting consumer misperception”). Behavioral exploitation can occur in the opposite direction as well, where a sophisticated purchaser exploits decisionmaking biases held by the seller.

¹⁴² See generally ROBERT B. CIALDINI, *INFLUENCE: THE PSYCHOLOGY OF PERSUASION* (revised ed. 2007) [hereinafter *PSYCHOLOGY*].

¹⁴³ See *Charles of the Ritz Distribs. Corp. v. FTC*, 143 F.2d 676 (2d Cir. 1944) (interpreting the deception standard under FTC Act § 5, 15 U.S.C. § 45, broadly to protect “the ignorant, the unthinking and the credulous”); *Vokes v. Arthur Murray, Inc.*, 212 So. 2d 906, 907 (Fla. Dist. Ct. App. 1968) (finding cause of action for common law misrepresentation where dance studio “blandish[ed] and cajole[d]” naïve consumer, conduct that is closer to behavioral exploitation than to the traditional view of deception). The FTC’s 1983 policy statement on deception is not to the contrary, although it may contravene the broadest reading of *Charles of the Ritz*. Accord-

demic commentators recognize the ability of sophisticated sellers to profit at the expense of less-sophisticated purchasers in zero-sum competitions for surplus welfare.¹⁴⁴ Nor is it new that commercial conduct targeting consumers, rather than competitors, can be anticompetitive.¹⁴⁵

Behavioral economics describes decisionmaking heuristics that operate to interfere with individual consumers' abilities to maximize their utility in bargaining. The heuristics are sometimes discussed interchangeably with strategies that can be employed to exploit them. One heuristic, discussed above, is hyperbolic discounting; drip pricing is a technique for exploiting it.¹⁴⁶ Another relevant heuristic is "anchoring," which describes the tendency to see a particular value in relation to a possibly unrelated reference point.¹⁴⁷ A savvy seller can "frame" the consumer's decision in a way to take advantage of the

ing to the FTC in 1983, "When representations or sales practices are targeted to a specific audience, the Commission determines the effect of the practice on a reasonable member of that group. In evaluating a particular practice, the Commission considers the totality of the practice in determining how reasonable consumers are likely to respond." Letter from James C. Miller III, Chairman, Fed. Trade Comm'n, to the Hon. John D. Dingell, Chairman, House Comm. on Energy and Commerce (Oct. 14, 1983) (later labeled by the FTC as its "Policy Statement on Deception"), available at <http://www.ftc.gov/bcp/policystmt/ad-decept.htm>. The policy statement also gives an example—"[d]epending on the circumstances, accurate information in the text may not remedy a false headline because reasonable consumers may glance only at the headline"—that closely tracks the Department of Transportation's charge against AirTran Airways for price advertising in violation of DOT regulations, which I use above as an example of drip pricing. See discussion *supra* at note 74; see also Cavendish Elithorn, Remarks at the Fourth Antitrust Marathon, 6 EUR. COMPETITION J. 1, 28–30 (2010) (appended to Huffman, *Bridging the Divide*, *supra* note 19); UK OFFICE OF FAIR TRADING, JOINING UP COMPETITION AND CONSUMER POLICY: THE OFT'S APPROACH TO BUILDING AN INTEGRATED AGENCY ¶ 3.9 (OFT 1151) (2009), available at www.offt.gov.uk/shared_offt/speeches/2009/spe-1209.pdf.

¹⁴⁴ See, e.g., Oren Bar-Gill & Elizabeth Warren, *Making Credit Safer*, 157 U. PA. L. REV. 1, 69 (2008); Edward J. Janger & Susan Block-Lieb, *Consumer Credit and Competition: The Puzzle of Competitive Credit Markets*, 6 EUR. COMPETITION J. 68, 70 (2010) (discussing lenders' abilities to compete with opaque transaction terms that undermine consumers' abilities to protect their interests); Russell Korobkin, *Behavioral Economics, Contract Formation, and Contract Law*, in BEHAVIORAL LAW AND ECONOMICS, *supra* note 63, at 137–38 (noting that the effect of decision-making biases on contracting may be to undermine optimal resource allocation through private transactions); cf. Lacko, *supra* note 39 (analyzing information asymmetry and the consequent "lemons equilibrium" where low quality products predominate in a market). See generally Salinger, *supra* note 72, at 76 (citing Steven Salop & Joseph Stiglitz, *Bargains and Ripoffs: A Model of Monopolistically Competitive Price Dispersion*, 44 REV. ECON. STUD. 493 (1977), and acknowledging the ability of merchants to exploit uninformed purchasers even in markets with informed purchasers, with specific recognition of pricing practices that exploit bounds on cognition).

¹⁴⁵ See Desai & Waller, *supra* note 92; William S. Comanor & Thomas A. Wilson, *The Effect of Advertising on Competition: A Survey*, 17 J. ECON. LITERATURE 453 (1979).

¹⁴⁶ See *supra* note 73 and accompanying text.

¹⁴⁷ See Geoffrey C. Rapp, *Gouging: Terrorist Attacks, Hurricanes, and the Legal and Economic Aspects of Post-Disaster Price Regulation*, 94 KY. L.J. 535, (2006) ("Anchoring describes the process by which an individual attaches a particular value to an item because the value is 'available' or 'strongly present in the mind.'").

anchoring heuristic.¹⁴⁸ A common example is that of televisions in an electronics store. Although a consumer may not seriously consider purchasing the \$5000 model, its very presence increases the consumer's reservation price.¹⁴⁹

A third is the "ownership bias" or "endowment effect," whereby "an individual's valuation of an entitlement depends on whether the individual is given initial ownership of that entitlement."¹⁵⁰ The classic demonstration of the endowment effect is the coffee mug experiment reported by Daniel Kahneman, Jack Knetsch, and Richard Thaler in 1991; students "endowed" with coffee mugs consistently value them more highly than do students endowed with money, when the two groups are told to bargain for voluntary exchanges.¹⁵¹ Tendencies toward over-optimism have also been empirically demonstrated.¹⁵² The optimism bias likely underlies consumer credit decisions such as agreeing to short-term teaser rates that lead to increased payments in the future, on the basis of probabilistically unwarranted optimism with regard to the likelihood of the consumer carrying a balance after the rate increases.¹⁵³

2. Behavioral Exploitation and Antitrust

The antitrust implications of firms' well-known practices of exploiting purchasers' cognitive biases have not been analyzed sufficiently. The antitrust theory of behavioral exploitation explores the competitive consequences of the realities of the relationship between merchants—sophisticated sellers—

¹⁴⁸ See generally ARIELY, *supra* note 66, at 1–8 (giving examples). Many treat the "framing effect" as a separate heuristic. See, e.g., Christine Jolls & Cass R. Sunstein, *Debiasing Through Law*, 35 J. LEGAL STUD. 199, 206 (2006).

¹⁴⁹ See, e.g., Sherry F. Colb, *Prison, Death, and Anchoring*, 847 PLILit 235, 237–38 (2010). Robert Cialdini describes this as the "retail store sales practice of 'talking the top of the line,'" and gives a real-world example of an experiment run in a retail store by pool table manufacturer Brunswick Corporation: during one week customers were first introduced to the low end of the line, and during the second week they were first introduced to the top end of the line. The average sale in the first week was \$550 and the average sale in the second week exceeded \$1000. See CIALDINI, *PSYCHOLOGY*, *supra* note 142, at 47 (quoting sources).

¹⁵⁰ Jolls & Sunstein, *supra* note 148, at 205.

¹⁵¹ See Daniel Kahneman, Jack L. Knetsch & Richard H. Thaler, *Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias*, 5 J. ECON. PERSP., Winter 1991, at 193. Although the coffee mug experiment has been criticized as being overly stylized, subsequent experiments do a better job of approximating real-world contracting situations. See Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: The Problem of Market Manipulation*, 74 N.Y.U. L. REV. 630, 673–74 (1999) (canvassing the literature and giving examples).

¹⁵² See Bar-Gill, *Seduction*, *supra* note 76, at 1395–401.

¹⁵³ See *id.*; Oren Bar-Gill, *The Law, Economics, and Psychology of Subprime Mortgage Contracts*, 94 CORNELL L. REV. 1073, 1120–21 (2009) [hereinafter *Subprime Mortgage Contracts*]. As with many cognitive biases that have been empirically proved in recent decades, the phenomenon of excessive optimism has been understood for centuries. See Armstrong & Huck, *supra* note 69, at 26 & n.91 (citing Nava Ashraf et al., *Adam Smith, Behavioral Economist*, J. ECON. PERSP., Summer 2005, at 131) (discussing Adam Smith).

and consumers, who are relatively naïve.¹⁵⁴ Where a merchant's intentional behavioral exploitation crosses the line separating mere persuasion (advertising) from compulsion (behavioral exploitation), the exploitation is conduct that, when combined with other elements of an antitrust claim, may bring about antitrust harm.¹⁵⁵

Consumer marketplaces are comprised of myriad individual transactions between consumers and merchants, each contributing to the aggregate of economic activity. In individual transactions parties engage in zero-sum bargaining over surplus welfare.¹⁵⁶ The outcome of the transaction impacts the parties, who are bound to the transaction terms reached.¹⁵⁷ It also impacts the parties' immediate competitors, who are excluded from the particular transaction once it concludes.¹⁵⁸ Only when an individual transaction is large enough will it impact the market more broadly, producing what is called an effect on competition.¹⁵⁹ An effect on competition also will occur when a sufficiently large set of de minimis transactions are in the aggregate substantial relative to the size of the market.

The dominant characteristic of transactions in markets in which individual end-user purchasers deal directly with merchants in consumer goods transactions is the disparity in sophistication between the parties to the transaction. "Merchants" are by common definition repeat players who are educated in the products and services they sell and in the legal rules and market norms gov-

¹⁵⁴ It might be possible to articulate a variation on Wright and Stone's "irrelevance theorem" in response to the theory of behavioral exploitation, if, for example, both firms and consumers were cognitively biased and those biases interacted either unpredictably or in a nullifying manner. See *supra* note 106 and accompanying text. I argue that the relative lack of sophistication renders consumers more susceptible to cognitive biases than firms. See generally Armstrong & Huck, *supra* note 69, at 4–5 (articulating "a number of reasons why one might expect firms to be better decision makers than consumers").

¹⁵⁵ Both of the primary antitrust standards—concerted conduct and dominant firm conduct—require proof of conduct in combination with other elements, depending on whether the claim is brought under Section 1 or 2 of the Sherman Act, 15 U.S.C. §§ 1–2. See Anderson & Huffman, *supra* note 10, at 29–51.

¹⁵⁶ Surplus welfare is the amount the purchaser is willing to spend in excess of the cost of production for the seller. KEITH N. HYLTON, ANTITRUST LAW: ECONOMIC THEORY AND COMMON LAW EVOLUTION 3 (2003). The bargaining in an individual transaction is zero-sum because it is static in nature and does not have the capacity to shift the supply or demand curves in a way that increases aggregate welfare.

¹⁵⁷ The binding occurs both contractually and extra-contractually through transaction costs.

¹⁵⁸ This sort of exclusion is in itself not an antitrust harm. See *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 236 (1st Cir. 1983) (finding that "virtually every contract to buy 'forecloses' or 'excludes' alternative sellers from *some* portion of the market"). But antitrust law is implicated if the exclusion is on the basis of something other than the merits of the prevailing merchant's offerings.

¹⁵⁹ This might occur if the transaction is a long term supply contract, see, for example, *Nic-Sand, Inc. v. 3M Co.*, 507 F.3d 442, 452–53 (6th Cir. 2007) (evaluating allegations by plaintiff that defendant monopolized the market by entering into long-term contracts with retailers), or a particularly large government bid.

erning the transaction.¹⁶⁰ “Consumers,” although the term is not by dictionary definition so limited, normally connotes relatively naïve individual end user consumers.¹⁶¹

The disparity in sophistication offers two clear avenues through which a merchant can take advantage of, and harm, the purchaser. The first is simple deception, where through material false statements (or sometimes omissions) the merchant deliberately misleads the purchaser.¹⁶² It has long been understood that the profit-maximizing approach for a merchant is to engage in some optimal level of deceptive conduct.¹⁶³ What that optimal level is depends on (1) whether the deception can be discovered after the fact, preventing repeat business (and perhaps even leading to law enforcement¹⁶⁴), and (2) whether the merchant hopes for repeat business from the purchaser in the first place. The first of those conditions, which is a function of information asymmetry, is met in the context of the typical merchant-consumer transaction. Sophisticated merchants can often hide their deception from less sophisticated purchasers.¹⁶⁵ The second condition is met where the merchant enjoys monopoly power as well as—counter-intuitively—where the merchant participates in a marketplace characterized by perfect competition. As Michael Darby and Edi Karni noted, players in perfectly competitive markets anticipate zero present value of future profits from any one customer due to market characteristics such as an infinity of sellers and buyers and costless switching.¹⁶⁶

Behavioral exploitation presents concerns similar to deception. The theoretical argument for there being an optimal amount of deception applies equally to behavioral exploitation: so long as it is difficult to discover after the fact, limiting concerns for loss of business or law enforcement, or the merchant does not rely on the purchaser’s repeat business, behavioral exploitation is a

¹⁶⁰ See U.C.C. § 2-104(1) (2007) (definition of “merchant”).

¹⁶¹ Huffman, *Bridging the Divide*, *supra* note 19, at 9. *But see infra* notes 205–207 and accompanying text (describing behavioral exploitation against purchasers of durable office supplies).

¹⁶² See *Int’l Harvester Co.*, 104 F.T.C. 949 (1984) (finding that deception requires material misrepresentation, practice, or omission); MICHAEL M. GREENFIELD, *CONSUMER TRANSACTIONS* 6–7 (5th ed. 2009).

¹⁶³ POSNER, *REGULATION*, *supra* note 39; Darby & Karni, *supra* note 39, at 86–87 (summarizing their assumptions and conclusions); LACKO, *supra* note 39, at 1 (noting “[t]he inability of consumers to observe quality prior to purchase creates incentives for sellers to attempt to earn profits through misrepresentation and cheating on quality” and that “[s]ellers also face incentives pushing them in the opposite direction” in the presence of asymmetric information).

¹⁶⁴ See 15 U.S.C. § 45 (FTC Act § 5) (outlawing “deceptive acts or practices”); *see, e.g.*, ARK. CODE ANN. § 4-88-107 (West 2011) (covering “[d]eceptive and unconscionable trade practices”); *Jones v. West Side Buick*, 93 S.W.2d 1083 (Mo. Ct. App. 1936) (common-law fraud).

¹⁶⁵ Darby & Karni, *supra* note 39, at 69 (giving the example of auto mechanic services); LACKO, *supra* note 39, at 1 (finding that asymmetric information produces incentives to mislead).

¹⁶⁶ Darby & Karni, *supra* note 39, at 75. *See generally* W. KIP VISCUSI ET AL., *ECONOMICS OF REGULATION AND ANTITRUST* 3 (4th ed. 2005) (defining perfect competition).

rational business strategy. The first criterion's satisfaction is almost tautological in the case of behavioral exploitation, which is by definition subtle (or hidden). Concerns for legal sanction are less substantial for behavioral exploitation than they are for deception. The regulation of behavioral exploitation that does exist is much more marginal, and targeted, than that of deception,¹⁶⁷ though examples do exist of successful challenges to conduct that meets the definition I rely on here.¹⁶⁸ The second criterion frequently will be met, for example, in the circumstance of durable goods transactions, where the incidence of repeat business is low relative to the size of any individual transaction.

The potential competitive concerns underlying behavioral exploitation are threefold. First, efficient resource allocation is disturbed as consumers are induced to enter transactions they would eschew but for the conduct. Resources flow to consumers' ostensible, rather than actual, preferences. Aggregate welfare is thereby diminished.¹⁶⁹ It is important to distinguish this effect from the demand-curve shifting that underlies dynamic competition. Behavioral exploitation is not a question of introducing and marketing new products, changing consumers' utility functions permanently (or until the next innovation comes along). Behavioral exploitation is a question of a short-term shift in the demand curve, altering consumers' views of their own utility functions long enough to induce a hard (contractual) commitment to the transaction.

Second, behavioral exploitation might facilitate a merchant's gaining or preserving a competitive advantage over a rival, raising concerns for monopolization under Section 2 of the Sherman Act or unilateral effects in a merger reviewed under Clayton Act Section 7.¹⁷⁰ A possible example of a firm's reliance on behavioral exploitation in seeking market dominance comes from the market for home mortgage lending in the years leading to the financial crisis. According to the Financial Crisis Inquiry Report, Countrywide Financial, Inc. achieved a leading position in its market through a course of marketing sub-

¹⁶⁷ See, e.g., 16 C.F.R. pt. 429 (2011) (door-to-door sales rule imposing a cooling-off period and requiring notice of a three-day right of rescission); 14 C.F.R. pt. 399 (airfare advertising regulation); see also discussion *supra* at note 74 (discussing the DOT consent order with AirTran Airways).

¹⁶⁸ See examples *supra* at notes 74 (AirTran Airways fine), 143, and accompanying text (citing common-law decisions).

¹⁶⁹ Cf. Bar-Gill, *Competition and Consumer Protection*, *supra* note 72, at 4 (noting that "perceived benefits" of a transaction may deviate from "actual benefits"); Bar-Gill, *Subprime Mortgage Contracts*, *supra* note 153, at 1130 (noting "welfare cost in the form of allocation inefficiency: borrowers are not matched with the most efficient lender.").

¹⁷⁰ 15 U.S.C. §§ 2, 18; see also 2010 Horizontal Merger Guidelines, *supra* note 114, § 6 (unilateral effects).

prime home loans to consumers who failed to appreciate the long-term consequences of their borrowing decisions.¹⁷¹

Third, it is possible to articulate theories of harm based on concerted exploitation by more than one firm. Concerted conduct may occur pursuant to an agreement in violation of Section 1 of the Sherman Act,¹⁷² or through the process of conscious parallelism. A likely example of consciously parallel behavioral exploitation is the nearly industry-wide policy of unbundling charges for checked bags in airline travel.¹⁷³ Unbundled baggage fees permit a consumer to make a purchase decision on the basis of a salient, low up-front price. When the obligation to pay the fee becomes apparent, some combination of lock-in effect in the form of non-refundable tickets or immutable schedules likely renders the consumer unable to avoid the baggage charge. Consciously parallel conduct does not provide a basis for Section 1 liability under the current state of the law,¹⁷⁴ but the potential for conscious parallelism is relevant to merger review under Clayton Act Section 7,¹⁷⁵ and there have

¹⁷¹ NATIONAL COMMISSION ON THE CAUSES OF THE FINANCIAL & ECONOMIC CRISIS IN THE UNITED STATES, THE FINANCIAL CRISIS INQUIRY REPORT 105 (2011), available at <http://www.gpoaccess.gov/fcic/fcic.pdf>. Testimony in 1998 by then-FTC Bureau Director Jodie Bernstein before the U.S. Senate describes subprime transactions in terms that invoke strategies of exploiting borrowers' decisionmaking heuristics, including drip pricing and framing. See Home Equity Lending Abuses in the Subprime Mortgage Industry, Prepared Statement of the Federal Trade Commission, U.S. Senate Special Committee on Aging (Mar. 16, 1998), available at <http://www.ftc.gov/os/1998/03/grass5.htm>.

¹⁷² 15 U.S.C. § 1.

¹⁷³ See, e.g., *Baggage Allowance*, AMERICAN AIRLINES, <http://www.aa.com/i18n/travelInformation/baggage/baggageAllowance.jsp?anchorEvent=false&from=Nav>; *Checked Baggage*, DELTA AIR LINES, http://www.delta.com/traveling_checkin/baggage/checked/index.jsp; *Baggage*, UNITED AIR LINES, <http://www.united.com/page/middlepage/0,6823,1031,00.html>; *Checked Baggage*, ALASKA AIR GROUP, <http://www.alaskaair.com/content/travel-info/policies/baggage-checked.aspx>; *Optional Service Fees & Government Taxes*, U.S. AIRWAYS, http://www.usairways.com/en-US/traveltools/specialneeds/ticketingpolicies/taxesfees.html?c=hp_txt_01120. Southwest Airlines is a notable exception, and Frontier Airlines' baggage fees are less than its larger competitors. See *Baggage Allowance*, SOUTHWEST AIRLINES, <http://www.southwest.com/html/customer-service/baggage/checked-bags-pol.html>; *Optional Service Fees*, FRONTIER AIRLINES, <http://www.frontierairlines.com/optional-service-fees>.

As of January 2012 the Department of Transportation prohibits the related practice of disclosing taxes and fees separately from the base ticket price. See 14 C.F.R. § 399.84(a) (2011). Comments made by the Air Transport Association (a trade group representing airlines) in response to the Notice of Proposed Rulemaking demonstrate the perceived competitive benefit from advertising fares independently of taxes and fees, complaining that an airline may "be disadvantaged if it is required to include those taxes and fees in the advertised price." See *Enhancing Airline Passenger Protections*, 76 Fed. Reg. 23,110, 23,142 (Apr. 25, 2011) (to be codified at 14 C.F.R. pts. 244, 250, 253, 259, 399).

¹⁷⁴ See *Bell Atl. Corp. v. Twombly*, 550 U.S. 544 (2007) (holding that tacit collusion is not illegal).

¹⁷⁵ See 2010 Horizontal Merger Guidelines, *supra* note 114, § 7, at 24 ("Coordinated interaction alternatively can involve parallel accommodating conduct not pursuant to a prior understanding.").

been calls for FTC Act Section 5 enforcement against conscious parallelism.¹⁷⁶

C. BEHAVIORAL EXPLOITATION EXPLAINS MISUNDERSTOOD AUTHORITIES

Antitrust does not lack for its share of poorly understood authorities. Cases including *Kodak* and *Whole Foods* demonstrate courts' appreciation of the realities of contracting and purchasing behavior and the relevance of those realities for antitrust rules of decision. Some holdings find scant support in rational choice economic theory but are easy to understand using behavioral insights.

The story of *Eastman Kodak Corp. v. Image Technical Services, Inc.* is well known to students of antitrust law.¹⁷⁷ Kodak sold durable goods in the form of expensive copiers for business and government use. Once purchased, customers lived with them for many years.¹⁷⁸ Repair and replacement of defective parts was the dominant strategy for anybody who already owned the machine, creating a lock-in effect after purchases were consummated.

The reality of such lock-in effects is common in modern consumer contracting. Sometimes, as in *Kodak*, the product itself may be so expensive vis-à-vis any post-purchase maintenance or updating costs that purchasers are certain to bear those after-the-fact costs rather than to replace the product, unless some private remedy (warranty) or public law (e.g., lemon laws) undoes the lock-in effect. Automobiles and major home appliances may offer one or both of those protections.¹⁷⁹ Second, the product itself, whether or not expensive, may realistically be available only with a long-term service commitment. That has been the case with some consumer electronics like cellular telephones.¹⁸⁰

¹⁷⁶ See, e.g., Reza Dibadj, *Conscious Parallelism Revisited*, 47 SAN DIEGO L. REV. 589, 606 (2010) (arguing that FTC Act Section 5 enforcement against conscious parallelism may be possible). Notably, Donald Turner proposed a similar approach to conscious parallelism in 1962. See Donald F. Turner, *The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusals to Deal*, 75 HARV. L. REV. 655, 682 (1962) (arguing that FTC Act Section 5 enforcement is possible against tacit collusion). Federal courts have not been receptive to this interpretation of Section 5. See *E.I. du Pont de Nemours & Co. v. FTC*, 729 F.2d 128 (2d Cir. 1984); *Boise Cascade Corp. v. FTC*, 637 F.2d 573 (9th Cir. 1980).

¹⁷⁷ 504 U.S. 451 (1992).

¹⁷⁸ *Id.* at 456–57.

¹⁷⁹ See, e.g., CAL. CIV. CODE §§ 1790–1795.8 (West 2012) (California's lemon law).

¹⁸⁰ For example, although Apple's popular iPhone is available for sale "unlocked and contract free" through Apple, see *Select an iPhone*, APPLE, http://store.apple.com/us/browse/home/shop_iphone/family/iphone/iphone4s, the phone is discounted by \$450 if purchased with a two-year service contract from a carrier, such as AT&T Wireless, Verizon, or Sprint. See *id.* Earlier versions of the iPhone were only available with two-year contracts from AT&T. See *In re Apple and AT&TM Antitrust Litig.*, No. C 07-05132, 2011 WL 6018401, at *1 (N.D. Cal. Dec. 1, 2011) (noting agreement over the reality of a required two-year service contract for the iPhone).

The precise issue presented by *Kodak* related to claims for unlawful tying under Sections 1 and 2 of the Sherman Act. Kodak was alleged to have tied the service of copier repair, a competitive marketplace, to the provision of parts for Kodak copiers, a market protected by Kodak's intellectual property. For the tying claim to succeed, the plaintiff needed to prove market power in the tying (parts) market. That in turn depended on the lock-in effect created by the sale of the copy machines.¹⁸¹ The interesting question in *Kodak* was whether lock-in effects created market power for Kodak.

For those customers who already have made irrevocable purchase decisions (or, if the lock-in effect derives from a contractual commitment like a two-year service plan for cellular telephone or cable service, have sealed the contract), the demand for parts and services is inelastic.¹⁸² The *Kodak* Court appreciated that fact when holding that Kodak could have market power in the parts market, which it controlled through its intellectual property.¹⁸³

For the customers who have not yet committed to a purchase decision or long-term contract, the demand is elastic. In *Kodak*, it was acknowledged that the market for copiers was highly competitive. Competitors in the market for these durable office products included IBM and Xerox, among several others.¹⁸⁴ Analogous consumer goods marketplaces, such as automobiles and cellular telephones, are also highly competitive. The issue for finding market power on the basis of lock-in effects is whether the elastic demand of uncommitted purchasers constrains the sellers' pricing to the committed purchasers.

The answer is that it does if two conditions hold: (1) the pricing to committed purchasers is sufficiently transparent (defined by the cost of obtaining the necessary information, including the cost of becoming aware of what information is necessary) to become part of the purchasing decisions by the uncom-

¹⁸¹ *Kodak*, 504 U.S. at 461-62.

¹⁸² The committed/uncommitted purchaser distinction can be analogized to the inframarginal/marginal purchaser distinction. See *FTC v. Whole Foods Mkt., Inc.*, 548 F.3d 1028, 1039-41 (D.C. Cir. 2008) (distinguishing between "core" and "marginal" purchasers); HYLTON, *supra* note 156, at 3. Marginal purchasers have highly price-elastic demand, which is represented by their residing close to the equilibrium point on the supply-demand curve. Uncommitted purchasers also are easily lost to competitors. By contrast, the inframarginal purchaser—the committed purchaser in the *Kodak* story—has highly inelastic demand.

¹⁸³ *Kodak*, 504 U.S. at 476. *Kodak* came to the Supreme Court on a challenge to summary judgment for defendant on the question of market power. The Court affirmed the Ninth Circuit's reversal of summary judgment. At trial on remand the jury found monopoly power, and that finding was upheld on appeal to the Ninth Circuit, partly on the basis of Kodak's waiver of its objection to a jury instruction. *Image Technical Servs., Inc. v. Kodak Co.*, 125 F.3d 1195, 1206 (9th Cir. 1997).

¹⁸⁴ *Image Technical Servs., Inc. v. Eastman Kodak Co.*, 1989-1 Trade Cas. (CCH) ¶ 68,402 (N.D. Cal. 1988) ("Plaintiffs do not contend Kodak possesses monopoly power in the new equipment market in which it competes with Xerox, IBM, Bell and Howell, 3M, and various Japanese manufacturers and holds no significant share.").

mitted, and (2) the uncommitted purchasers are capable under the circumstances of using the available information in reaching their decisions. The *Kodak* dissent believed, correctly, that informed purchasers able to maximize their expected utility would constrain Kodak's exercise of market power post-purchase.¹⁸⁵ The market power question is whether that constraint is sufficient to prevent the seller's acting as a monopolist with regard to uninformed, or locked-in, purchasers.

1. *The Informationist Justification*

The *Kodak* Court found market power in the parts aftermarket (supporting the parts-services tying claim) on the failure of the first condition. The Court recognized the reality of information asymmetries—Kodak knew more than its customers—in the equipment marketplace. Kodak was well positioned to know the expected repair and replacement costs for each copier it sold, but had no incentive to disclose that information to its customers. Its customers (presumably with the exception of the largest and most sophisticated, who could compile their own data on copier performance) did not have that knowledge, and lacked a low-cost method of acquiring it.¹⁸⁶ The information asymmetries permitted Kodak to succeed in the highly price-elastic portion of the market in which it contracted with uncommitted purchasers.

The same applies to the consumer marketplaces that are analogous to the one in *Kodak*. Information on the costs incurred in the aftermarkets can be difficult to acquire. Regular product innovation may defeat attempts by publications like *Consumer Reports* to compile reliable data on the cost to own durable goods. For some products like cellular telephones, the costs associated with service include, in addition to the monthly charge, the inconveniences of service disruptions or equipment malfunction. The information on those costs that is available to purchasers tends to be anecdotal, and service providers lack incentive to disclose the data that they possess.¹⁸⁷ A significant part of the consumer cost in service markets is the efficiency of the seller response to purchaser needs. Sellers can hide those costs from purchasers through a variant on price discrimination—responding differently to uncommitted purchas-

¹⁸⁵ See *Kodak*, 504 U.S. at 490–91 (Scalia, J., dissenting). This would be true in the absence of fraud (dissemination of material misinformation) by Kodak.

¹⁸⁶ It is questionable whether committed purchasers have incentives to disclose this information to uncommitted purchasers or third-party aggregators. Certainly a committed purchaser has an incentive to see that its competitors bear at least the same costs that it bears.

¹⁸⁷ Cf. Bar-Gill, *Bundling and Consumer Misperception*, *supra* note 85, at 33 n.1 (“The concern that sellers will often lack the incentive to educate consumers is reinforced by the public-good nature of such educational efforts. If a seller succeeds in correcting consumers’ misperceptions, competitors will be quick to adapt their products to the changed demand. And the seller, who brought about this desirable change in demand, will not be able to recoup her investment in educating consumers.”).

ers than to committed purchasers,¹⁸⁸ which would explain shorter hold times if a caller selected the “start new service” option when calling a cellular service provider.¹⁸⁹ For these reasons, an informationist defense of *Kodak* would argue that uncommitted purchasers are often uninformed about the real state of the relationship post-commitment, and thus they are unable to constrain the aftermarket pricing or conduct of the seller employing a lock-in strategy.¹⁹⁰

A critic might respond that purchasers save on up-front information costs, and the market power created by the lock-in is only as great as the benefit to the purchaser of avoiding those costs. At least in the absence of consciously parallel conduct, where competitors find it profitable to imitate the strategy of exploiting the information asymmetry, competitors in competitive marketplaces could be expected to provide the missing information. Also, any substantial disparity between the expectation of the uncommitted purchaser and the actual costs will present an arbitrage opportunity to third-party aggregators of information.¹⁹¹ That is especially so with the increasing access to information through third-party aggregators, including online search engines and online consumer product reviews. For example, long before the Department of Transportation required airlines to include fees and taxes in fare advertisements, comparison shopping websites offered that service.¹⁹²

The profit opportunities for third-party sellers of information may themselves represent an inefficient allocation of resources that antitrust policy should condemn.¹⁹³ Further, the above critique may overstate the strength of the competitive response. In oligopoly markets firms may find it profitable to

¹⁸⁸ Cf. A. Michael Spence, *Monopoly, Quality, and Regulation*, 6 BELL J. ECON. 417, 419 (1975) (arguing that the ability to price discriminate is necessary to provide lesser quality to the average consumer while retaining marginal consumer).

¹⁸⁹ In an article on which the Court relied in *Kodak*, Richard Craswell showed that information asymmetries can serve as a substitute to market power. See Richard Craswell, *Tying Requirements in Competitive Markets: The Consumer Protection Issues*, 62 B.U. L. REV. 661, 671 (1982). Craswell also noted the efficiency loss resulting from this exercise of power. *Id.* at 672.

¹⁹⁰ See *id.* at 672–73 (“In principle, all of these [aftermarket] costs can be reduced to a single expected present value, but the calculation often will be a difficult one.”).

¹⁹¹ See Howard Beales, Richard Craswell & Steven C. Salop, *The Efficient Regulation of Consumer Information*, 24 J.L. & ECON. 491, 501–02 (1981) (discussing the market for information).

¹⁹² See, e.g., ORBITZ (Feb. 29, 2012), <http://www.orbitz.com> (demonstrating that airfare and rental car fares are quoted as including taxes and fees).

¹⁹³ The information costs, including the expenses associated with information aggregators, represent an allocative inefficiency caused by the business model of relying on supracompetitive profits in an aftermarket to subsidize normal profits in the upfront marketplace. An antitrust policy concerned with economic efficiency should not applaud this result. Also, if the seller has the best and cheapest information (as is likely) and does not find it competitively advantageous to disseminate that information to buyers, leaving on the table the profit opportunities from such dissemination, we can assume the information disseminated by third parties does not cure the information asymmetry sufficiently to erode profits available to the seller from exploiting the asymmetry.

act in parallel in taking advantage of information asymmetries.¹⁹⁴ Not all markets are as readily susceptible to comparison shopping as are markets for airline travel, and not all information asymmetries are as easily eliminated by third-party disclosure as are hidden taxes and fees.¹⁹⁵ The critique also ignores the second criterion for the seller's acquiring market power in the aftermarket by employing a lock-in strategy: the purchasers' inability—under the circumstances—to use available information in reaching decisions that maximize their expected utility.

2. *The Behavioralist Justification*

According to Bar-Gill, writing about credit card teaser rates:

Even if consumers anticipate lock-in, they still underestimate the cost of lock-in, since they do not expect to borrow (or to borrow as much) in the future. Hyperbolic discounting reinforces this revised version of the switching cost argument. Naïve hyperbolic discounters may wrongly anticipate that they would switch to a new card, but in fact will not switch when the introductory period ends.¹⁹⁶

This is a behavioralist response. It presents an alternative justification for the result in *Kodak* that is complementary to, and perhaps more robust than, the informationist justification.

Empirical study directed to understanding individuals' deviations from utility-maximizing behavior has uncovered a number of decisionmaking heuristics that are relevant to the realities of consumers' decisions in markets with lock-in effects and aftermarket costs. The phenomenon of hyperbolic discounting, whereby medium- and long-run consequences of a decision are considered too uncertain to be included in the up-front decision, is the most readily applicable. Hyperbolic discounting can be blamed for myriad ill-advised purchase decisions; for example, the phenomenon is well discussed in the literature on failures in the mortgage lending markets.¹⁹⁷ The consumer

¹⁹⁴ In markets susceptible to oligopoly conduct, competitors will find it profitable to imitate the strategy of exploiting the information asymmetry. *Cf.* POSNER, REGULATION, *supra* note 39, at 7 (recognizing that competitors who benefit from the information asymmetry lack incentives to expose it, citing the example of cigarette markets). An example of this reality is a local market for rental cars, in which every company hides the charges imposed to cover costs of taxes behind low nominal rental rates (even when those post-commitment charges were large in relation to the nominal rental rate). Before third-party websites like Orbitz bundled the costs into the up-front advertised price, purchasers could form either a hard or a soft commitment to the purchase before being made aware of the full costs.

¹⁹⁵ Continuing with the airfare example, Orbitz or a competitor airline would find it difficult to bundle into a single salient number matters such as airlines' safety record; seat sizes; quality of cabin service; baggage fees; and ticket-change fees, among other relevant facets of competition.

¹⁹⁶ Bar-Gill, *Seduction*, *supra* note 76, at 1407.

¹⁹⁷ *See, e.g.*, Bar-Gill & Warren, *supra* note 144, at 136. I note above that this might be seen to present antitrust problems. *See supra* note 171 and accompanying text.

purchaser of an automobile may conduct her or his cost-benefit analysis in terms of the immediate purchase decision and not in terms of the expected costs, and expected benefits, five years later.¹⁹⁸ Purchasers of goods on credit compare immediate up-front gratification against highly discounted costs of long-term repayment.¹⁹⁹ This effect is readily exploited by savvy sellers who advertise costs in terms of monthly payments rather than total purchase price.

The anchoring heuristic also has been well discussed in the behavioral economics literature.²⁰⁰ Dan Ariely employed the more accessible term “relativity.”²⁰¹ By articulating costs in relation to a much larger cost, the smaller costs become overwhelmed by the larger. Sales of optional equipment or services on automobiles may succeed due to a seller’s framing the decision strategically; the \$1000 cold-weather package or \$3000 extended warranty is small in relation to the \$25,000 cost of the automobile. Even at \$25 or more, checked-bag charges at airport ticket counters are small in relation to the ticket price, and the same goes for insurance charges and the GPS option at the rental car counter. Other exploitable decisionmaking heuristics include the ownership bias²⁰² and the optimism bias.²⁰³ Having made a soft or hard commitment to a purchase, the value of the item increases in the mind of the purchaser. A purchaser who is later told there is an additional, undisclosed charge will be more inclined to pay that charge than one who learns of the charge before becoming committed to the purchase.²⁰⁴ And an over-optimistic consumer might be blind to downstream costs that are statistically likely to occur.

Applying this to *Kodak*, a purchaser of equipment in the competitive fore-market reaches a purchase decision on the basis of a competitive advertised price.²⁰⁵ That purchaser is initially unaware of aftermarket costs. Even if he or she is made aware of those costs prior to purchase, decisionmaking heuristics can minimize the impact of that knowledge on the purchase decision. Those heuristics include hyperbolic discounting of aftermarket costs, anchoring ef-

¹⁹⁸ Cf. Jason J. Kilborn, *Behavioral Economics, Overindebtedness & Comparative Consumer Bankruptcy: Searching for Causes and Evaluating Solutions*, 22 EMORY BANKR. DEV. J. 13, 22 (2005) (discussing hyperbolic discounting in consumer credit transactions). The long-term cost-benefit analysis of an automobile purchase is not limited to the obligation to make payments on a loan, but also includes, for example, value depreciation, insurance expenses, and opportunity costs

¹⁹⁹ See *id.* at 22.

²⁰⁰ See *supra* notes 147–149 and accompanying text.

²⁰¹ ARIELY, *supra* note 66, at 1.

²⁰² See *supra* notes 150–151 and accompanying text.

²⁰³ See *supra* notes 152–153 and accompanying text.

²⁰⁴ Cialdini reports of practices including permitting consumers to drive cars before “discovering an error” in the quoted price. The psychologically committed consumer tends to accept the upwardly revised price. CIALDINI, *PSYCHOLOGY*, *supra* note 142, at 98–99.

²⁰⁵ Recall that the equipment market in *Kodak* was competitive. See *supra* note 184 and accompanying text.

fects with the impact of minimizing the aftermarket costs relative to the up-front price, ownership bias coming into play after commitment (even before actual ownership), raising the purchaser's reservation price, and optimism bias undervaluing the likelihood of aftermarket costs.

Tellingly, Kodak argued to the Court that its marketing strategy was to make its profit in the parts and services aftermarket rather than in the equipment fore-market.²⁰⁶ It was in essence selling the package—machines, parts, and services—and was doing so largely on credit. And it had deliberately structured the transaction in a way that maximized the likelihood of purchasers becoming psychologically or actually locked in without full consideration of the costs of the overall package. This harmed consumers directly; it had the potential to harm competitors who did not engage in the same sort of conduct; and it presented concerns for allocative efficiency that properly concerned the Supreme Court.²⁰⁷

3. Antitrust Harms

Hovenkamp recently criticized *Kodak* on the basis of his study of “Coasean markets,” which, Hovenkamp teaches, are the markets in which individual buyers and sellers transact business.²⁰⁸ In the case of *Kodak*, the Coasean market is the relationship between the locked-in purchaser and the seller. Hovenkamp argues the monopoly power the seller has in a Coasean market, like the relationship between Kodak and its locked-in purchasers (or a cell phone customer and service provider) is irrelevant to the question whether the seller has market power in a properly defined antitrust market. He sees *Kodak* as reflecting confusion on the Court's part between the Coasean market and the antitrust market, sending “antitrust policy off in the wrong direction.”²⁰⁹

Hovenkamp's critique of *Kodak* applies both to the informationist justification and to the behavioralist justification that I articulate here. Whether the lock-in occurs because of an information asymmetry or a marketing strategy that exploits cognitive biases, the harm is still transaction-level harm rather than market-wide harm. But Hovenkamp's critique is flawed. While one instance of behavioral exploitation will harm only the one purchaser but have a

²⁰⁶ See *Eastman Kodak Corp. v. Image Technical Servs., Inc.*, 504 U.S. 451, 478 (1992).

²⁰⁷ The resource misallocation arises in the overspending on the package due to the actual or psychological lock-in. But for the marketing practices, competition should have reduced Kodak's profits on the package to the competitive level. See *supra* notes 186–190 and accompanying text.

²⁰⁸ See Hovenkamp, *Transaction Cost Economics*, *supra* note 26, at 626. Because the parties are forced to bargain with one another, every Coasean market represents a bilateral monopoly. See *id.* at 627. Hovenkamp's term is derived from Ronald Coase's description of bargaining between two parties over a legal entitlement, resulting in an efficient allocation of rights. See R. H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960).

²⁰⁹ See Hovenkamp, *Transaction Cost Economics*, *supra* note 26, at 628.

de minimis impact on competition generally, a marketing strategy built on behavioral exploitation threatens market-wide impacts across the aggregate of individual transactions. The successful exploiter of decisionmaking biases will be able to gain or maintain market share over a large number of transactions. Where conduct is deceptive, a robust anti-fraud enforcement program at the federal or state level (or both) can protect against market harm. Partly for that reason Hovenkamp, at least, does not see deception as an antitrust concern.²¹⁰ That same argument has limited application to behavioral exploitation. Only a limited consumer protection backstop exists to prevent the inefficient resource allocation behavioral exploitation causes.²¹¹

It is possible, of course, for Congress to pass new laws, courts to interpret the laws that do exist, or the Federal Trade Commission to act under its broader Section 5 power (including its power to challenge both unfair methods of competition and unfair or deceptive acts or practices), to address practices that exploit known decisionmaking biases, as the Commission did in its narrow rule, issued under its “unfair acts” authority, targeting door-to-door sales.²¹² But the line between procompetitive advertising and marketing behavior and behavioral exploitation is narrow. As has long been recognized in the case of predatory pricing, outlawing one risks inappropriately chilling the other.²¹³ It is also difficult in the individual case to distinguish harm caused by behavioral exploitation from simple buyer’s remorse occurring without the fault of the seller. For those reasons, adopting an enforcement scheme targeting behavioral exploitation on a transaction-by-transaction basis may be im-

²¹⁰ See 3B PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 782d (3d ed. 2008).

²¹¹ Even where redundant prohibitions exist, the de minimis argument for deference to consumer protection regulation is a curious one. Many antitrust harms are felt in isolated transactions, and relevant economic impacts only exist if enough isolated transactions are aggregated. For example, a direct purchaser complaining of price fixing complains only of the harm he or she suffers, but is not required to rely on a fraud claim (which would be difficult to make in any event, unless omitting to tell a consumer the fact of price fixing is a material omission).

²¹² See *supra* notes 81, 167, and accompanying text. The rule created a three-day cooling-off period during which the purchaser could reconsider the sale.

²¹³ See *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 594 (1986); cf. JOHN E. CALFEE, FEAR OF PERSUASION: A NEW PERSPECTIVE ON ADVERTISING AND REGULATION 102–03 (1997) (discussing why “[a]dvertising [b]ans [a]re [a]nti-[c]onsumer”).

The chilling-effect concern might be mitigated if behavioral exploitation were to be outlawed by FTC rule or Section 5 enforcement rather than by interpretation of the Sherman or Clayton Acts, because the FTC Act and rules promulgated under its authority are not enforceable by private right of action. See Thomas B. Leary, *A Suggestion for the Revival of Section 5*, ANTITRUST SOURCE, Feb. 2009, at 1, 1–3 (proposing a use of Section 5 in “frontier” cases that are not easily pursued under the Sherman or Clayton Acts), http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/Feb09_Leary2_26f.authcheckdam.pdf. But see William E. Kovacic & Marc Winerman, *Competition Policy and the Application of Section 5 of the Federal Trade Commission Act*, 76 ANTITRUST L.J. 929, 939 & n.54, 948 & n.84 (2010) (noting that Section 5 standards may be used to interpret state laws that do allow for private enforcement, and that Section 5 holdings may serve as precedent in later private litigation).

possible. But treating behavioral exploitation as an antitrust harm permits aggregation of the effects and allows enforcement on the basis of market effects, rather than individual consumer harm that may be difficult to attribute to overreaching by a merchant seller.

Behavioral exploitation as a theory of antitrust liability relies on proof of (1) general intent on the part of the merchant seller, and (2) an effect on the market. In one form, some courts disfavor reliance on intent evidence in antitrust enforcement because of the danger of its abuse—serving as evidence of harm where it does not exist²¹⁴—but the showing of general intent I would require has the effect of limiting, not expanding, enforcement. A merchant might be held to have had sufficient intent to exploit a particular decisionmaking heuristic if it had studied the heuristic or paid for focus groups to learn the most effective way to increase consumer response.²¹⁵ Proof that a merchant merely offered an array of products—though it might well nonetheless trigger the same heuristic and cause a market effect²¹⁶—would be insufficient to meet the requirement of proving intent.

Proof of an effect on the market is necessary to prevent overuse of the theory of behavioral exploitation in consumer, competitor, and government suits based on antitrust laws.²¹⁷ The behavioral exploitation theory is not novel in this requirement; a market effect requirement is nearly ubiquitous in antitrust, with the narrow exception of conduct held to be illegal per se.²¹⁸ Such an effect existed in *Kodak*, where on remand from the Supreme Court's holding that a lock-in sufficed to demonstrate market power, a jury concluded that Kodak did have a monopoly in the parts aftermarket despite the competitive market for its equipment.²¹⁹ Proving that the effect flows from the behavioral exploitation, rather than some other cause, is a more complex problem, but no more so than the causal demonstration required throughout antitrust litigation

²¹⁴ See *A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc.*, 881 F.2d 1396, 1400–01 (7th Cir. 1989) (citing *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 232 (1st Cir. 1983) (Breyer, J.)) (discussing variations in how courts have treated evidence of a firm's intent, including the *Barry Wright* treatment).

²¹⁵ General intent is consistent with other scienter standards in civil antitrust claims. See, e.g., *United States v. Aluminum Co. of Am.*, 148 F.2d 416, 432 (2d Cir. 1945); Ronald A. Cass & Keith N. Hylton, *Antitrust Intent*, 74 S. CAL. L. REV. 657, 661 (2001). A merchant has this mental state if it acts deliberately, knowing of the probable consequences of its actions.

²¹⁶ See *supra* notes 148–149 and accompanying text.

²¹⁷ The danger to be avoided includes, for example, the threat of treble damages liability in a suit by a purchaser suffering buyer's remorse. See Edwards, *supra* note 116, at 360 (“Could a consumer who impulsively purchases a candy bar and a copy of a gossip magazine claim that he has suffered a cognizable injury under the FTC Act?”).

²¹⁸ See *Chicago Bd. of Trade v. United States*, 246 U.S. 231, 238 (1918) (defining the rule of reason to include examination of “the nature of the restraint and its effect, actual or probable”).

²¹⁹ See *Image Technical Servs., Inc. v. Eastman Kodak Co.*, 125 F.3d 1195, 1201 (9th Cir. 1997).

focusing on a defendant's conduct. Private plaintiffs are saddled with a causation requirement as a matter of the antitrust standing doctrine,²²⁰ and all plaintiffs, including public enforcers, face functionally the same burden under the rule of reason.²²¹

D. NEO-CHICAGO AND BEHAVIORAL ANTITRUST

Behavioral Antitrust relies on lessons from empirical study of individual behavior to address theoretical pronouncements of the Chicago School. In cases like *Kodak*, the application of Behavioral Antitrust suggests the Post-Chicago arguments (favoring the Court's holding), rather than those of the Chicago School approach, more accurately reflect the realities of the marketplace at issue. In other cases Behavioral Antitrust may favor a result the Chicago School would advocate. Perhaps, for example, modern consumer behavior, including Internet researching and purchasing conduct, renders recoupment of losses incurred in predation to be as unlikely as some affiliated with the Chicago School have argued.²²² Behavioral Antitrust also offers the potential for a broader understanding of what conduct might lead to anticompetitive effects through a more complete understanding of consumer behavior.

Understanding the role of Behavioral Antitrust this way, it begins to sound much like a goal espoused by the proponents of Neo-Chicago Antitrust: informing theoretical insights with empirical study. Both disciplines serve the end of refining antitrust analysis through economic study informed by real-world facts, including a recognition that facts, or our understanding of them, have changed in the decades since the 1970s.

III. CONCLUSION

An analysis of *Kodak* demonstrates how a consumer-targeted Behavioral Antitrust analysis can provide a fuller understanding of the opportunities for sellers to bring about harm to competition in markets where simpler economic models predict competitive harm will not occur. On its surface it is a difficult task to reconcile the newest economic theory in antitrust, Behavioral Antitrust, with Neo-Chicago antitrust. That is particularly so because the Chicago School, which Neo-Chicago celebrates, gained ascendancy in the 1970s while

²²⁰ See 15 U.S.C. § 4 (harm must be "by reason of" a violation of the antitrust laws); *Palmyra Park Hosp., Inc. v. Phoebe Putney Mem'l Hosp.*, 604 F.3d 1291, 1299 (11th Cir. 2010) (holding that plaintiff's harm must be of the sort that makes the conduct illegal).

²²¹ See, e.g., *Brooke Grp., Inc. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 225 (1993) (requiring a showing of a causal connection between conduct and an increase in prices); *Cal. Dental Ass'n v. FTC*, 526 U.S. 756, 774–77 (1999) (government enforcement action where Court required proof that the complained of conduct caused a harmful effect).

²²² See *Brooke Group*, 509 U.S. at 232; BORK, PARADOX, *supra* note 18, at 149–55; Easterbrook, *Limits*, *supra* note 10, at 27.

rejecting the information economics of the same decade. It would be unpleasantly symmetrical if Neo-Chicago developed while rejecting behavioral economics, the cousin of information economics, and its legal application in Behavioral Antitrust.

But at bottom, Neo-Chicago antitrust and Behavioral Antitrust seek the same goal. They seek to refine the approach to economically informed antitrust, better to ensure that economic theories serve the economic efficiency and consumer protection goals of antitrust enforcement. No reason exists why they cannot work together in doing so.