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The Future of Behavioral Economics in Antitrust Jurisprudence

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The Future of Behavioral Economics in Antitrust Jurisprudence

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Neoclassical economics or "price theory" has had a profound effect upon antitrust analysis, first as practiced in academia and then as reflected in the jurisprudence of the Supreme Court of the United States. More recently, behavioral economics has had a large and growing influence upon legal scholarship generally. Still, behavioral economics has not yet affected judicial decisions in the United States in any substantive area of law. The question we address is whether that is likely to change in the foreseeable future, *i.e.*, whether the courts' present embrace of price theory in antitrust cases portends the courts' imminent acceptance of behavioral economics in either antitrust or consumer protection cases.

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I. Introduction

The influence of an academic movement upon judicial decision-making can be evaluated in various ways. One simple, perhaps simplistic, way is to count the citations in judicial opinions to scholarly works representative of that movement. By that metric, behavioral economics has not yet affected courts in the United States in any substantive area of law. The question we address is whether that is likely to change in the foreseeable future.

There is some reason to think judges will consult behavioral economics or literature influenced by behavioral economics with increasing regularity in the not-too-distant future; the movement is already influential and becoming more so within the legal academy. Legal scholars have begun to incorporate behavioral economics into their work in much the same way antitrust scholars began to incorporate neoclassical economics into their work in the 1950s and 1960s.[1] Since then, price theory has had a major effect upon legal analysis in general[2] and a profound effect upon antitrust law[3] and the antitrust jurisprudence of the Supreme Court.[4]

CONSIDERING THE OUTPOURING OF LEGAL SCHOLARSHIP INFLUENCED BY BEHAVIORAL ECONOMICS, WE MIGHT EXPECT FUTURE JUDGES—TAUGHT BY PROFESSORS WITH A BEHAVIORAL BENT—TO INCORPORATE THAT LEARNING INTO THEIR DECISIONS.

Considering the outpouring of legal scholarship influenced by behavioral economics, we might expect future judges—taught by professors with a behavioral bent—to incorporate that learning into their decisions. Behavioral economics in the late 20th and early 21st centuries and neoclassical economics in the 1950s and 1960s are not perfect analogues; however, there are several reasons to think behavioral economics will not have nearly as significant an effect upon future judicial decisions as neoclassical economics has had upon courts in the last several decades.

In this paper we briefly trace the influence price theory has had upon the antitrust academy and the judiciary. Then we place behavioral economics upon an evolutionary timeline to highlight its growing importance within the legal academy, but also to demonstrate its failure thus far to influence judicial decision-making in any meaningful way. We conclude with reasons for thinking behavioral economics is unlikely to influence future judicial decision-making.

II. Price Theory and Antitrust

Industrial organization ("IO") is a sub-discipline of microeconomics that focuses upon the structure and performance of markets and upon firms' strategic behavior within those markets. Although IO today is a rigorous discipline using com-

plex mathematical models, game theory, and econometric analysis, Richard Posner has aptly described IO in the 1950s and early 1960s as

> "tend[ing] to be untheoretical, descriptive, 'institutional,' and even metaphorical. Casual observation of business behavior, colorful characterizations (such as the term "barrier to entry"), eclectic forays into sociology and psychology, descriptive statistics, and verification by plausibility took the place of the careful definitions and parsimonious logical structure of economic theory."[5]

In the 1940s and 1950s, however, economists such as Aaron Director and George Stigler had begun to apply the rigorous fundamentals of neoclassical economics, or "price theory," to the study of industrial organization. These are the simple propositions "that demand curves slope downward, that an increase in the price of a product will reduce the demand for its complement, that resources gravitate to the areas where they will earn the highest return, etc."[6]

Although the teachings of price theory naturally appeared first in the economics journals, they began to show up in law reviews in the mid-1950s,[7] as antitrust scholars comfortable with economic analysis and economists willing to conform to the conventions of legal scholarship—often in collaboration—began to retail technical economics to a legal audience. Significantly, the interdisciplinary and (unlike law reviews) peer-reviewed *Journal of Law and Economics* debuted in 1958. The move from economics journals and textbooks to interdisciplinary journals, law reviews, and eventually casebooks was significant because most policymakers in government had a legal background and were not well-versed in the economic way of thinking, let alone able to read technical economic literature.

The influence of economic reasoning upon antitrust analysis, practice, and jurisprudence continued to grow throughout the following decades. In 1965 Donald Turner, an antitrust law scholar with a Ph.D. in economics,[8] became the head of the Antitrust Division of the Department of Justice. In the 1970s Richard Posner and Robert Bork each applied neoclassical economics to antitrust as a whole.[9] Rather than using economic analysis to address a specific problem or analyze a particular case, they viewed the whole field, as Posner later said, "through the lens of price theory."[10] In 1981 James Miller, Ph.D., an economist without legal training, became Chairman of the Federal Trade Commission and William Baxter, a professor of antitrust law who had unqualifiedly embraced economic analysis, was put in charge of the Antitrust Division. In 1985 his successor (one of the present authors) elevated the position of Chief

Economist to that of a Deputy Assistant Attorney General, thereby giving the economists in the Division standing equal to the lawyers.

The changes that had originated in the academy and then affected the enforcement agencies eventually transformed the antitrust jurisprudence of the United States Supreme Court, which by the mid-1970s had recognized the importance of sound economic analysis in antitrust law.[11] First, the range of conduct deemed unlawful *per se* narrowed markedly as economic analysis displaced free-ranging considerations of political economy in giving meaning to the Sherman Act. Indeed, the Supreme Court's antitrust opinions have increasingly relied expressly upon the work of leading academic economists and their co-authors and colleagues in the law schools.[12] As a result of this convergence upon IO to inform the law, the degree of agreement among the Justices in antitrust cases has increased markedly; indeed, most antitrust decisions are now decided by a super majority of six or more. Economic analysis is also responsible for the prominence of simply-stated legal norms in antitrust decisions.[13]

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The Court's reliance upon price theory reflects the near-consensus among academics on the proper approach to antitrust analysis. There is now broad and non-partisan agreement in academia, the bar, and the courts regarding the importance of price theory in antitrust decision-making. And that has transformed the dialogue in the courts. Today, it is common to see briefs on both sides of a case making arguments based upon sophisticated economic literature.

Even if economic analysis does not indicate a uniquely correct result in every case, it significantly constrains the decision-making of the courts by narrowing the range of plausible outcomes. As a result, neoclassical economic analysis has promoted predictability and consistency in antitrust jurisprudence.

III. Behavioral Economics and the Legal Academy

The migration of behavioral economics from economics departments to law schools is, of course, a movement in the same direction as the earlier infiltration of the legal academy by price theory. There are some important differences, however, in the implications of the two phenomena.

A. BRIEF HISTORY OF BEHAVIORAL ECONOMICS

Neoclassical economics assumes that man, *homo economicus* if you will, has consistent preferences—if he prefers apples to oranges and oranges to nuts, then he prefers apples to nuts—and makes choices that maximize his utility at all times.[14]

Cognitive psychologists began to question this assumption and in the 1950s the polymathic Herbert Simon made prominent the idea that individuals have only limited or "bounded" rationality and therefore sometimes make choices that satisfy their preferences but do not maximize their utility.[15] This idea flows from the observation that humans do not possess the cognitive capacity required to process all the information necessary to maximize utility at all times; instead, they use heuristics or "shortcuts" to make decisions that sometimes fail to jibe with the predictions of neoclassical economics.[16]

In the 1970s psychologists Daniel Kahneman and Amos Tversky developed an alternative to the rational choice model of neoclassical economics, which they called "prospect theory." They first suggested that, when making a financial decision, individuals assign greater weight to a loss than to a gain of the same amount.[17] Building upon and adding to bounded rationality and prospect theory, behavioral economists and psychologists identified several heuristics or behavioral anomalies which, in their view, demonstrated the rational choice model was flawed because individuals depart from it in systematic, predictable ways. One example is the "availability heuristic," meaning people estimate "the frequency of some event . . . by judging how easy it is to recall other instances of this type (how 'available' such instances are)."[18] Another is the "endowment effect," which holds there is a gap between the price at which an individual will sell an item he owns and the lesser amount he would be willing to pay to purchase precisely the same item.[19] In other words, an individual values a good more highly if he owns (*i.e.*, is "endowed" with) it.

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B. FROM BE TO BLE

Fifty years after the pioneering work of Herbert Simon and 20 years after Kahneman and Tversky first developed prospect theory, behavioral economics began to make serious inroads into the scholarship published in law journals — and thus to create the field now denominated "behavioral law and economics ('BLE')." Milestones of BLE include: Christine Jolls, Cass Sunstein, & Richard Thaler's *A Behavioral Approach to Law and Economics*, published in the 1998 *Stanford Law Review*, which outlines and advocates using behavioral economics to analyze and reform law; Sunstein's 2000 anthology, *Behavioral Law and Economics*, a collection of scholarship largely co-authored by behavioral economists and legal academics; and Sunstein and Thaler's 2008 book *Nudge*, which attempts to make behavioral economic analysis of law accessible to the public at large.

A Westlaw search for the term "behavioral economics ('BE')" in American law journals reveals some interesting trends.

Years	Number of BE appearances in text	Number of BE appearances in titles
1980-84	1	0
1985-89	14	0
1990-94	12	0
1995-99	103	9
2000-04	548	27
2005-09	917	26

First, there is almost no mention of BE in law reviews until the latter half of the 1980s. Second, almost no scholarship in law reviews focused upon BE—as evidenced by the absence of that term from the titles of articles—until the latter half of the 1990s. Third, and most telling for the future, there has been a significant increase in the amount of BLE scholarship in the past decade.

How does the ascent of behavioral economics in the legal academy compare with that of price theory in antitrust scholarship some decades earlier? On the one hand, one might be inclined to see the late 1990s, when BE first became a subject treated in law reviews, as analogous to the late 1950s when neoclassical economic analyses of antitrust first appeared in law reviews.[20] But the type of scholarship produced by the two schools of thought in those nascent periods is markedly different. The antitrust pieces were the first attempts to retail economic analyses of business practices to an audience of lawyers. Director & Levi focused upon a narrow question: How should one understand the competitive effects of particular business practices? By contrast, the seminal piece by Jolls, Sunstein, & Thaler takes a much broader view. Rather than identify one case or even one area of the law that would benefit from a behavioral approach, they "propos[ed] a systematic framework for a behavioral approach to economic analysis of law, and us[ed] behavioral insights to develop specific models and approaches addressing topics of abiding interest in law and economics."[21]

> How does the ascent of behavioral economics in the legal academy compare with that of price theory in antitrust scholarship some decades earlier?

The ambitiousness of their work makes it more analogous to the treatises of the late 1970s, in which Bork and Posner sought to analyze the whole of antitrust law through the lens of price theory, but there is a major difference as well. When Jolls, Sunstein, & Thaler, published in 1998, BE was already influential and becoming more so in economics,[22] but BLE had hardly begun its upward trajectory; indeed there had been only a half-decade at most of serious scholarship exploring its implications in the law journals. Bork and Posner, on the other hand, were build-

ing upon two decades of work in price theory scholarship as applied specifically to antitrust issues and vetted in the law journals—scholarship that itself built upon a century of progress in economics. Their project was to synthesize and extend, not to establish, an intellectual movement.

IV. Behavioral Economics and the Courts

Behavioral economics has since infiltrated deeply into the legal academy and, with Cass Sunstein now heading the office that reviews proposed regulations for consistency with the policies of the president,[23] BE is poised to make inroads within the executive branch of government. If, however, BE is to affect an area of law—whether antitrust, consumer protection, or any other—then legislatures and courts must take notice. So far they have not.[24]

IF, HOWEVER, BE IS TO AFFECT AN AREA OF LAW—WHETHER ANTITRUST, CONSUMER PROTECTION, OR ANY OTHER—THEN LEGISLATURES AND COURTS MUST TAKE NOTICE. SO FAR THEY HAVE NOT.

The Supreme Court has cited a BLE article only once.[25] In considering whether an award of punitive damages was excessive, the Court cited an article by Cass Sunstein, David Schkade, & Daniel Kahneman for the modest proposition that "juries do not normally engage in … a finely tuned exercise of deterrence calibration when awarding punitive damages."[26]

BLE has played no more prominent a role in the lower federal courts.[27] Indeed, the term "behavioral economics" appears in only three reported cases. *Honorable v. Easy Life*[28] involved a claim of racial discrimination in the sale of residential real estate. The plaintiffs alleged the defendant real estate company exploited unsophisticated buyers.[29] The court cited several BLE articles,[30] and stated:

> "[T]he economic theories that imply that market prices are efficient, thus beneficial for consumers, presuppose that consumers are informed, markets are competitive, and the costs of making transactions are not excessively burdensome.… But these assumptions must be relaxed, and perhaps, ultimately replaced, if economic theory is to have any application to what happens in actual markets."[31]

A search of federal court decisions for citations to BLE literature, *i.e.*, without regard to whether the term "behavioral economics" appears, does not change the outcome. We could find only 13 other cases that cite any of this literature and

most of those cases either concern the issue whether a jury's award of punitive damages is excessive or cite a BLE work only in passing.[32]

V. What Conclusions Can We Draw?

If BE is going to affect judicial decision making to a degree at all similar to the effect that price theory has had upon antitrust law, then we should see a significant increase in courts' reliance upon BLE scholarship in another 10 to 15 years. Why then? Because, as Herbert Hovenkamp has pointed out:

> "Elite American judges generally absorb the thinking of elite American intellectuals. Classical constitutional doctrine followed after the political economy that prevailed in America's best universities. . . . This was the political economy taught in American universities in the 1870s and 1880s. . . . Like judges of every era, [American judges] drew their wisdom — particularly the wisdom they applied to public law — from outside. . . . When the dominant American economic ideology changed—not until the first three decades of the twentieth century—the legal ideology followed close behind."[33]

A similar lag occurred between the emergence of price theory in IO and its influence upon antitrust jurisprudence. To the extent BE is now infiltrating if not permeating undergraduate economics courses and becoming a more prevalent mode of analysis in American law schools, we may in due course see judges sympathetic to behavioral ideas they first encountered at a younger age.

> THERE ARE SEVERAL REASONS TO THINK WE WILL NOT SEE COURTS RELYING UPON BE SCHOLARSHIP IN ANTITRUST CASES, HOWEVER. FIRST, FROM A JUDICIAL PERSPECTIVE, BE IS ALMOST THE OPPOSITE OF PRICE THEORY.

There are several reasons to think we will not see courts relying upon BE scholarship in antitrust cases, however. First, from a judicial perspective, BE is almost the opposite of price theory, which narrows significantly the range of outcomes a court may reach in an antitrust case; that price theory ideally generates determinate results is its great virtue as an aspect of jurisprudence. By interpreting the Sherman Act to promote consumer welfare *qua* allocative efficiency,[34] first scholars and then the Supreme Court delegitimated and excluded from consideration the myriad factors that had influenced judges in the past, including such whimsical goals as preserving small, locally owned businesses[35] or avoiding aggressive price cutting that could drive out less efficient rivals.[36]

BE may provide some guidance in the odd case, but the central theme of the discipline—that in certain circumstances humans are not rational utility maximizers and their departure from the rational choice paradigm is systematic and predictable—rather than foreclosing possibilities, opens them up and thereby increases the degrees of freedom with which a court may pursue personal, idiosyncratic goals. BE does not—at least not yet—provide or even promise to provide a general standard by which to decide any particular type of case.[37] Perhaps this is why BLE scholars were so quick to promote a "systematic framework for a behavioral approach to economic analysis of law"[38] rather than apply BE to the narrow legal questions that are actually decided by courts. The greater degrees of freedom a court would have if it departed from the rational choice model might well appeal to a lower court judge but would be anathema to the Supreme Court, which has labored for more than 30 years to reign in and rationalize antitrust law.

One can certainly imagine the FTC using behavioral economics to give content to its authority to prohibit "unfair methods of competition."

Second, courts are unlikely to embrace BLE on their own initiative. Indeed it is difficult to imagine ways in which behavioral economics can be made useful to a particular legal issue that must be decided by a court in the first instance. In reviewing the decision of an administrative agency, on the other hand, an adversely affected firm might argue it was arbitrary and capricious for the agency not to have taken into account the relevant BE literature. This might arise in a case objecting to the decision of a risk-regulating agency, such as the Food and Drug Administration or the Consumer Protection Safety Commission, either requiring or failing to require some disclosure about a product.

Alternatively, a private party or an agency charged with consumer protection, such as the Federal Trade Commission, might argue that a practice is deceptive because it exploits a widespread cognitive bias identified in the BE literature.[39] One can certainly imagine the FTC using behavioral economics to give content to its authority to prohibit "unfair methods of competition."[40] But this is far different from a court using BE to interpret what is meant by that phrase, which seems unlikely again because BE could serve only to broaden, rather than to narrow the meaning of the term "unfair."[41]

Third, we are not likely to see an increase in judicial reliance upon BLE literature because courts are constitutionally averse to broad principles, whether drawn from neoclassical or from behavioral economics.[42] BE, by suggesting individuals tend to deviate from the rational-choice-utility-maximization paradigm in certain respects, weighs in favor of general rules, *e.g.*, that a certain type of conduct—say, advertising that something is "free"—is deceptive. Courts are more inclined to make circumscribed decisions that narrowly answer the question whether a particular practice is impermissible in a specific context and avoid speaking more broadly than is necessary to decide the case before them.

For example, in a recent article on "behavioral antitrust," Avishalom Tor & William Rinner have argued "a behavioral analysis suggests that real-world, boundedly rational manufacturers are prone to overuse" resale price maintenance as a competitive strategy.[43] Even if true, this point is of limited utility to a court in an RPM case, where the issue is whether a particular instance of resale price maintenance is anticompetitive; that is an empirical question the answer to which does not depend upon the state of mind of the manufacturer. Tor & Rinner's point is of greater relevance to a legislature considering whether to make resale price maintenance illegal *per se* or to an antitrust enforcement agency deciding whether to devote resources to RPM cases.

FINALLY, AND PERHAPS MOST IMPORTANT, BE IS STILL IN A NASCENT FORM.

Finally, and perhaps most important, BE is still in a nascent form. Although modern price theory was refined greatly in the mid-20th century, its seeds were sewn much earlier.[44] The first instance of recognizable BE dates back just 50 years and economists still debate whether certain cognitive biases, which are now commonly assumed, can be replicated in laboratory experiments.[45] Even when natural experiments have been observed, there is evidence the behavioral approach fails to predict consumer choice better than does the rational choice model.[46] Although legal scholars are quick to devise policy prescriptions upon the basis of some admittedly interesting conclusions that can be drawn from the work of behavioral economists, courts and even regulatory agencies are not likely to shape the law accordingly until there is greater agreement among economists doing behavioral work about whether particular findings are verifiable, replicable, and empirically supported.

This is not to say BE is doomed forever to be irrelevant to the law and to legal policy. The problems we have identified serve only to show the BLE literature—in its present state—is of little if any utility to a court. We think it highly unlikely, even in the long run, that courts will view any particular area of law—consumer protection and antitrust law included—let alone the law more generally, through the lens of BE. The executive and the legislature are better suited and more likely than the judiciary to incorporate the teachings of BE—if they are persuasive—into policy prescriptions.

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1 For clarity, we shall refer to legal scholarship influenced by neoclassical economics or "price theory" as "traditional law and economics."

2 *See, e.g.*, RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW, 7th ed. (2007).

3 *See* ROBERT H. BORK, THE ANTITRUST PARADOX (1978); RICHARD A. POSNER, ANTITRUST LAW: AN ECONOMIC PERSPECTIVE (1976).

4 *See* Leah Brannon & Douglas H. Ginsburg, *Antitrust Decisions of the U.S. Supreme Court 1967 to 2007*, 3 COMP. POL'Y INT'L 1 (2007).

5 Richard A. Posner, *The Chicago School of Antitrust Analysis*, 127 U. Penn. L. Rev. 925, 928-29 (1979) (hereinafter "Chicago School").

6 *Id.*, at 928.

7 *See e.g.*, Ward Bowman, *Tying Arrangements and the Leverage Problem*, 67 Yale L.J. 19 (1957); Aaron Director & Edward Levi, *Law and the Future: Trade Regulation*, 51 Nw. L. Rev. 281 (1956); Robert H. Bork, *Vertical Integration and the Sherman Act: The Legal History of an Economic Misconception*, 22 U. Chi. L. Rev. 157 (1954).

8 Turner himself was a member of the "Harvard School" of antitrust analysis, which was based upon a different strand of industrial organization and entailed a somewhat more interventionist approach. *See* William E. Kovacic, *The Intellectual DNA of Modern U.S. Competition Law For Dominant Firm Conduct: The Chicago/Harvard Double Helix*, 2007 Col. Bus. L. Rev 1, 30-31. Because he adhered to the "structure-conduct-performance" paradigm—which holds that the competitive performance of a particular industry or market is determined largely by the number and relative size of the incumbent firms—as reflected in the 1968 Merger Guidelines, Turner's appointment did not represent the triumph of price theory in antitrust policy. Still, Turner's appointment demonstrates the then-growing importance to antitrust analysis of being able to speak the language of economics.

9 *See* Bork, *supra* note 3; Posner, *supra* note 3.

10 Posner, Chicago School, *supra* note 5, at 928.

11 *See generally* Brannon & Ginsburg, *supra* note 4.

12 Over the last 20 years more than 75 percent of the Court's antitrust opinions cite antitrust scholarship applying price theory. Brannon & Ginsburg, *supra* note 4.

13 *See, e.g.*, NCAA v. Bd. of Regents, 468 U.S. 85, 107 (1984) ("Congress designed the Sherman Act as a consumer welfare prescription. A restraint that has the effect of reducing the importance of consumer preference in setting price and output is not consistent with this fundamental goal of antitrust law" (internal citations omitted)).

14 *See* Gary S. Becker, The Economic Approach to Human Behavior 14 (1976) ("[A]ll human behavior can be viewed as involving participants who maximize their utility from a stable set of preferences and accumulate an optimal amount of information and other inputs in a variety of markets").

15 Herbert A. Simon, The Models of Man (1957); Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q.J. Econ. 99 (1955), reprinted in this journal at 241-58.

16 *See* Christine Jolls, Cass. R. Sunstein, & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 Stan. L. Rev. 1471, 1476-77 (1998)

17 Daniel Kahneman & Amos Tversky, *Judgment Under Uncertainty: Heuristics and Biases*, 185 Science 1124 (1974); Kahneman & Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 Econometrica 263 (1979).

18 Jolls, Sunstein, & Thaler, *supra* note 16, at 1477.

19 *Id.*, at 1484.

20 *See* sources in note 7, *supra*.

21 Jolls, Sunstein, & Thaler, *supra* note 16, at 1473-74.

22 The John Bates Clark Medal, then awarded biannually to a leading American economist under the age of 40, was consecutively awarded to behavioral economists Andrei Shleifer and Matthew Rabin in 1999 and 2001.

23 The Office of Information and Regulatory Affairs is a component of the Office of Management and Budget in the Executive Office of the President.

24 This paper is limited in scope to the question whether courts have been influenced by BLE; whether a legislature has adopted the teachings of BLE is outside that scope.

25 In Exxon Shipping Co. v. Baker, 128 S.Ct. 2605 (2008), the Court cited several BLE articles concerning jury awards of punitive damages but "[b]ecause the research was funded in part by Exxon," the Court explicitly "decline[ed] to rely on it." *Id.* at 2626 n.17.

26 Cooper Industries v. Leatherman Tool Group, 532 U.S. 424, 439 (2001).

27 For the sake of brevity, we have limited our discussion to the federal courts. We have no reason to believe state courts have been more receptive to BLE.

28 Honorable v. Easy Life Real Estate System, 100 F.Supp. 2d 885 (N.D. Ill. 2000).

29 *Id*. at 888.

30 *Id*. at 892.

31 *Id*. at 888.

32 It is possible, though we think it unlikely, that a case recently argued before the United States Supreme Court could yield an opinion that relies upon certain BLE literature. In Jones v. Harris Associates, 527 F.3d 627 (7th Cir. 2008) reh'g denied 537 F.3d 728, cert. granted, 129 S.Ct. 1579 (2009), economists Robert Litan, Joseph Mason, & Ian Ayers have filed an amicus brief arguing behavioral economics is relevant to a dispute over whether a family of mutual funds overpaid its investment advisor:

> [R]ecent discoveries in the behavioral finance literature reveal that the vast majority of investors cannot accurately assess the quality of the mutual funds in which they invest — that is, they do not behave rationally as predicted by economic models. Problems such as 'misperceptions of chance,' 'sample-size neglect,' 'loss aversion,' and 'mental accounting' render the assessment of mutual fund performance extremely difficult for investors. Accordingly, the proposition that mutual fund investors will simply 'fire' their advisers by 'redeeming their shares and investing their assets elsewhere' ignores these natural impediments to competition.

See also Adam Liptak, *Supreme Court to Hear Case on Executive Pay*, NY Times, Aug. 18, 2009, A10.

33 Herbert Hovenkamp, Enterprise and American Law, 1836-1937 (1991), 97-98, 182, 204.

34 *See* Reiter v. Sonotone Corp., 442 U.S. 330, 343 (1979) (noting that legislative history "suggest[s] that Congress designed the Sherman Act as a 'consumer welfare prescription'") (quoting Bork, *supra* note 3, at 66); Nat'l Collegiate Athletic Ass'n v. Bd. of Regents, 468 U.S. 85, 107 (1984) ("Congress designed the Sherman Act as a consumer welfare prescription. A restraint that has the effect of reducing the importance of consumer preference in setting price and output is not consistent with this fundamental goal of antitrust law.") (citation omitted); *see also* GTE Sylvania Inc. v. Continental T.V. Inc., 537 F.2d 980, 1003 (9th Cir. 1976) (en banc), aff'd 433 U.S. 36 (1977) ("Since the legislative intent underlying the Sherman Act had as its goal the promotion of consumer welfare, we decline blindly to

condemn a business practice as illegal per se because it imposes a partial, though perhaps reasonable, limitation on intrabrand competition, when there is a significant possibility that its overall effect is to promote competition between brands.") (citing Bork, *supra* note 3, at 11).

35 *See* U.S. v. Trans-Missouri Freight Ass'n., 166 U.S. 290, 323 (1897) (trade may be "badly and unfortunately restrained by driving out of business the small dealers and worthy men").

36 *See* Utah Pie v. Continental Baking Co., 386 U.S. 685, 690 (1967) ("There was ample evidence to show that each of the respondents contributed to what proved to be a deteriorating price structure over the period covered by this suit, and each of the respondents in the course of the ongoing price competition sold frozen pies in the Salt Lake market at prices lower than it sold pies of like grade and quality in other markets considerably closer to its plants").

37 Indeed in Jones v. Harris, *supra* note 32, behavioral economics seems to raise more questions than it answers: What behavioral anomalies might be present? Is there empirical proof they are present? How would the presence of such anomalies in a certain percentage of market actors affect the market overall? Even if a model predicated upon behavioral insights might more accurately describe the behavior of market actors — and it surely might — it is difficult to imagine the Supreme Court adopting behavioral insights without reason to believe these questions can be answered reliably in the crucible of litigation.

38 Jolls, Sunstein, & Thaler, *supra* note 16, at 1473-74.

39 This is similar to the argument made by the economists in Jones v. Harris that the Court should not rely upon market forces in a particular context because consumers' cognitive biases prevent the market from functioning properly.

40 15 U.S.C. § 45.

41 Cf. Robert A. Lande, *Revitalizing Section 5 of the FTC Act Using "Consumer Choice" Analysis*, Antitrust Source, Feb. 2009, available at http://www.abanet.org/antitrust/at-source/09/02/Feb09-Lande2-26f.pdf (suggesting § 5 must be interpreted "in a manner that is definite, predictable, principled, and clearly bounded" if its application is to survive judicial review); *see also* Michelle M. Burtis, *Modern Industrial Organization: A Comment*, 12 Geo. Mason L. Rev. 39, 41-43 (2003) (arguing game theory-based economic models have not been prominently featured in antitrust litigation in part because models "suffer from a 'multiplicity of equilibria'"); Dennis W. Carlton, *The Relevance for Antitrust Policy of Theoretical and Empirical Advances in Industrial Organization*, 12 Geo. Mason L. Rev. 47, 50 (2003) ("[A]lthough there are some examples where game theory can improve our understanding of some antitrust issues (*e.g.*, "agreement" in Section I cases), in general, game theory alone is unlikely to produce insights that are sufficiently robust to provide a clear guide to the implementation of antitrust policy").

42 *See* Edward R. Becker, *The Uses of 'Law and Economics' by Judges*, 33 J. Legal Educ. 306, 310 (1983) ("[L]aw and economics will not influence the judgments of courts if it consists of an abstruse methodology. You are not going to get very far in presenting a system or a methodology for all seasons").

43 Tor & Rinner, Behavioral Antitrust: A New Approach to the Rule of Reason After Leegin, University of Haifa Faculty of Law Legal Studies Research Paper Series (December 1, 2009) *available at* http://ssrn.com/abstract=1522948.

44 *See, e.g.*, Alfred Marshall, Principles of Economics (1890); Antoine A. Cournot, Research into the Mathematical Principles of the Theory of Wealth (1838).

45 *See, e.g.*, Charles R. Plott & Kathryn Zeiler, *Exchange Asymmetries Incorrectly Interpreted as Evidence of Endowment Effect Theory and Prospect Theory?*, 97 Am. Econ. Rev. 1449 (2007); Plott & Zeiler, *The*

Willingness to Pay-Willingness to Accept Gap, the Endowment Effect, Subject Misconceptions, and Experimental Procedures for Eliciting Valuations, 95 AM. ECON. REV. 530 (2005).

46 Joshua D. Wright, *Behavioral Law and Economics, Paternalism, and Consumer Contracts: An Empirical Perspective*, 2 NYU J. LAW & LIBERTY 470 (2007).