## Loyola University Chicago Law Journal

Volume 44 Issue 5 2013 Summer

Article 1

2013

## Foreword: Behavioral Econimis and Investor Protection

Michael J. Kaufman Loyola University Chicago, School of Law, mkaufma@luc.edu

Follow this and additional works at: http://lawecommons.luc.edu/luclj



Part of the Banking and Finance Law Commons

### Recommended Citation

Michael J. Kaufman, Foreword: Behavioral Econimis and Investor Protection, 44 Loy. U. Chi. L. J. 1323 (2013). Available at: http://lawecommons.luc.edu/luclj/vol44/iss5/1

This Prefatory Matter is brought to you for free and open access by LAW eCommons. It has been accepted for inclusion in Loyola University Chicago Law Journal by an authorized administrator of LAW eCommons. For more information, please contact law-library@luc.edu.

1\_Kaufman.docx 5/15/2013 12:45 PM

# Foreword: Behavioral Economics and Investor Protection

Michael J. Kaufman\*

In this extraordinary issue of the *Loyola University Chicago Law Journal*, the world's leading scholars, jurists, and practitioners have provided profound articles at the intersection of "Behavioral Economics and Investor Protection." The articles emanate from a remarkable Conference held at Loyola University Chicago School of Law.<sup>1</sup>

The Conference began with a keynote address by Professor Daniel Kahneman. Professor Kahneman received the Nobel Memorial Prize in Economic Sciences for integrating the insights from his psychological research into economic science. His pathbreaking work, which is captured in his international best-selling book, *Thinking, Fast and Slow*,<sup>2</sup> has animated the disciplines of behavioral science and behavioral economics.

In his presentation at Loyola, Professor Kahneman explicated his research, which challenges the presumption that human behavior is the product of purely rational, cost-benefit decision-making.<sup>3</sup> With his colleague Amos Tversky, Professor Kahneman discovered that most people do not actually make decisions that are consistent with

<sup>\*</sup> Associate Dean for Academic Affairs, Professor of Law, and Director of the Institute for Investor Protection, Loyola University Chicago School of Law.

<sup>1.</sup> The Conference, "Behavioral Economics and Investor Protection," held on October 5, 2012, was sponsored by the Loyola University Chicago Institute for Investor Protection and the Institute for Law and Economic Policy. The Loyola University Chicago Institute for Investor Protection is a non-partisan, independent academic center that, through research, education and outreach, promotes investor protection and seeks to inform policy questions affecting securities fraud prohibitions and remedies. The Institute for Law and Economic Policy is a public policy research and educational foundation established to preserve, study, and enhance access to the civil justice system by all consumers.

<sup>2.</sup> DANIEL KAHNEMAN, THINKING, FAST AND SLOW (2011).

<sup>3.</sup> See generally RICHARD POSNER, ECONOMIC ANALYSIS OF LAW (8th ed. 2011) (arguing that the task of economics is to explore the implications of assuming that man is a rational maximizer of ends and seeks always to maximize wealth); GARY BECKER, THE ECONOMIC APPROACH TO HUMAN BEHAVIOR (1978) (containing essays that purport to show that "all 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").

[Vol. 44

maximizing their own expected utility. He brilliantly created a "map of bounded rationality, by exploring the systematic biases that separate the beliefs that people have and the choices that they make from the optimal beliefs and choices assumed in rational agent models."<sup>4</sup> As Kahneman explained at Loyola: "We show that people are not adequately characterized as fully rational by a definition of rationality which is completely unrealistic. This is the definition of rationality in standard decision theory . . . . "5

According to Kahneman, the choices that individuals make are narrowly bounded by their contexts, frames, or environments. Humans are prone to many cognitive biases or heuristics that distort their These heuristics produce context-driven decisions that judgment. cannot be fully explained by classical models of pure rational choice or subjective utility.<sup>6</sup> For instance, individuals display a bias toward loss aversion; they feel the pain of a loss much more acutely than the pleasure of an equivalent gain. As such, their decisions reflect a "status quo bias" and "an endowment effect"—they tend to over-value what they have and refrain from making many value-maximizing transactions. Contrary to the model of the rational decision-maker, Professor Kahneman proved that the objects of choice are assessed by individuals through an all too human, emotional, and intuitive psychological process.

As Kahneman emphasized in his Loyola address, and as he details in Thinking, Fast and Slow, the complexity of human thought and action can be understood by envisioning two systems operating simultaneously in the brain. System 1 drives the brain's first response; it is the mind's quick, automatic, intuitive, and mostly unconscious associative response to stimuli. System 2 is the slow, deliberate, conscious, calculating, analytical, laborious, and seemingly rational mode of cognition. The rapid judgments and reactions directed by System 1 are indispensable to human survival; but they are also influenced by biases and mistakes. System 1 generates an effortless response to a choice. Yet, when an appropriate response is not readily accessible, System 1 produces a response to a different choice, one that is only "associatively" related to

<sup>4.</sup> Daniel Kahneman, Maps of Bounded Rationality: Psychology for Behavioral Economics, 93 AM. ECON. REV. 1449, 1449 (2003).

<sup>5.</sup> Daniel Kahneman, Behavioral Economics and Investor Protection: Keynote Address, 44 LOY. U. CHI. L.J. 1333, 1333 (2013) [hereinafter Kahneman, Keynote Address]. See also Daniel Kahneman & Amos Tversky, Prospect Theory: An Analysis of Decision Under Risk, 47 ECONOMETRICA 263 (1979) (critiquing expected utility theory and proposing prospect theory as an alternative).

<sup>6.</sup> See Nicholas C. Barberis, Thirty Years of Prospect Theory in Economics: A Review and Assessment, 27 J. ECON. PERSPECTIVES 172 (2013).

#### 2013] *Foreword* 1325

the actual choice presented.<sup>7</sup> In his Loyola remarks, Kahneman also described the results of many of his experiments and observations, which demonstrate that the rapid associations and intuitions produced by System 1 usually overwhelm and therefore skew the supposed objective deliberations of System 2. As a consequence, individual choices are more likely to reflect predictable biases than purely rational calculations.

After presenting his insights, Professor Kahneman challenged the Conference participants to consider the implications of his research for the proper development of the law and policy governing investor protection. He contended that because people are "limited" by cognitive biases and heuristics, they "need more protection than they would in the standard rational model." In particular, they need legal protection from "their own mistakes" and from the many "legal, but predatory actions in the market [that] exploit the laziness of System 2."

Moreover, Kahneman stressed that any legal structure designed to influence behavior should be targeted at "System 1 responses" that humans tend to make when faced with important choices. Kahneman praised the work of his colleagues, Richard Thaler and Cass Sunstein, who have built on his research to demonstrate that policy-makers can and should "nudge" individuals toward desirable decisions by shaping the architecture in which their choices are made.<sup>10</sup>

Despite Kahneman's transformative research, however, the presumption that individuals are rational utility-maximizers still permeates the law and policy governing the protection of investors from securities fraud. Investors who pursue remedies under the primary antifraud provisions of the federal securities laws, section 10(b) of the Securities Exchange Act of 1934 and its attendant Rule 10b-5,11 must

<sup>7.</sup> In his keynote address at the Conference, and in his life's work, Professor Kahneman offers compelling examples of how "associative processes" dictate major biases in human judgment and choice. *See* Kahneman, *Keynote Address, supra* note 5, at 1334–38. *See also* Carey K. Morewedge & Daniel Kahneman, *Associative Processes in Intuitive Judgment*, 14 TRENDS IN COGNITIVE SCIS. 435 (2010).

<sup>8.</sup> Kahneman, Keynote Address, supra note 5, at 1330.

<sup>9.</sup> *Id*.

<sup>10.</sup> See RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH AND HAPPINESS (2000) (providing lessons for structuring social policies so that citizens still have control over their actions, but are gently "nudged" to act in their own best interests); Cass R. Sunstein, *Empirically Informed Regulation*, 78 U. CHI. L. REV. 1349 (2011) ("A general lesson is that small, inexpensive policy initiatives can have large and highly beneficial effects").

<sup>11.</sup> Rule 10b-5, 17 C.F.R. § 240.10b-5 (2011), was promulgated by the U.S. Securities and Exchange Commission pursuant to its authority under section 10(b) of the Securities Exchange Act of 1934, 15 U.S.C. § 78j(b) (2006).

#### Loyola University Chicago Law Journal [Vol. 44

plead and prove: "(1) a material misrepresentation or omission by the defendant; (2) scienter; (3) a connection between the misrepresentation or omission and the purchase or sale of a security; (4) reliance upon the misrepresentation or omission; (5) economic loss; and (6) loss causation."12

In shaping each of these essential elements of a securities fraud claim, the courts have been heavily influenced by the rational choice model of human and market behavior. For example, based on their presumption that corporate officers would not rationally choose to deceive investors, the courts have been reluctant to find that allegations in a securities fraud complaint are sufficient to create a "strong inference" of scienter.13 Similarly, the judicial creation of an "objective" definition of "materiality," and the judicial endorsement of the "fraud-on-the market" theory of reliance, are based on the presumption that investors' decisions to buy or sell securities usually reflect rational, unbiased responses to new information.<sup>14</sup> Standards for

1326

<sup>12.</sup> Amgen Inc. v. Conn. Ret. Plans & Trust Funds, 133 S. Ct. 1184, 1192 (2013) (quoting Matrixx Initiatives, Inc. v. Siracusano, 131 S. Ct. 1309, 1317 (2011)).

<sup>13.</sup> Under the Private Securities Litigation Reform Act of 1995, plaintiffs must "state with particularity facts giving rise to a strong inference that the defendant acted with the required state of mind." 15 U.S.C. § 78u-4(b)(2)(A) (2006). The required state of mind is scienter, which is recklessness or intent to deceive, manipulate, or defraud. Ernst & Ernst v. Hochfelder, 425 U.S. 185, 193 n.12 (1976). In Tellabs, Inc. v. Makor Issues & Rights, Ltd., the Supreme Court held that a securities fraud complaint will survive dismissal only if "a reasonable person would deem the inference of scienter cogent and at least as compelling as any opposing inference one could draw from the facts alleged." 551 U.S. 308, 324 (2007). Courts thus must "take into account plausible opposing inferences" in determining whether the defendant acted with the requisite intent. Matrixx Initiatives, Inc. v. Siracusano, 131 S. Ct. 1309, 1324 (2011).

As part of this weighing process, federal courts have presumed that fraud is economically irrational, and thus pleading scienter has become "exceedingly difficult." See Reiger v. Price Waterhouse Coopers, LLP, 117 F. Supp. 2d 1003, 1007 (S.D. Cal. 2000) ("[A] large independent accounting will rarely, if ever, have any rational economic incentive to participate in the client's fraud."). See also Cozzarelli v. Inspire Pharm. Inc., 549 F.3d 618, 627 (4th Cir. 2008) (finding it "improbable" that the defendant, Inspire, would tout a drug that it thought "was doomed for failure"); Banca Cremi, S.A. v. Alex. Brown & Sons, Inc., 132 F.3d 1017, 1035 (4th Cir. 1997) (finding it "unthinkable" that the defendant would choose to deceive investors); DiLeo v. Ernst & Young, 901 F.2d 624, 629 (7th Cir. 1990) (stating that it would be "irrational" for an accountant to engage in securities fraud); In re First Chi. Corp. Sec. Litig., 769 F. Supp. 1444 (N.D. Ill. 1991) ("[W]here the fraud is shown to be irrational behavior, the circumstantial evidence must be stronger . . . ." (citation omitted)).

<sup>14.</sup> See Amgen, 133 S. Ct. at 1196 ("[The] 'question of materiality . . . is an objective one, involving the significance of an omitted or misrepresented fact to a reasonable investor." (quoting TSC Indus., Inc. v. Northway, Inc., 426 US 438, 445 (1976))). In Amgen, the Supreme Court reaffirmed the "fraud-on-the-market" presumption of reliance, which it had "endorsed" in Basic Inc. v. Levinson, 405 U.S. 224 (1988), and in Erica P. John Fund, Inc. v. Halliburton, Co., 131 S. Ct. 2179 (2011). The Amgen Court also found congressional support for that presumption. Amgen, 133 S. Ct. at 1200-01. According to the Court, the "fraud-on-the-market premise is that the price of a security traded in an efficient market will reflect all publicly available information

#### 2013] *Foreword* 1327

establishing the elements of loss causation and damages in securities fraud cases through an expert's "event study" loss are guided by the assumption that investors react to the disclosure of concealed information by entering predictably rational transactions that result in efficient market price movements. Indeed, the judicial presumption of rational choice informs virtually every element of a securities fraud claim.

Yet, as Professor Kahneman's work proves, that presumption cannot be fully justified as a mechanism for explaining, predicting, or judging actual human behavior. How should the law respond when its fundamental premises have been challenged? In particular, how should the law and policy governing securities fraud evolve to incorporate the overwhelming evidence of the actual behavior of investors? Each of the authors herein has taken on that critically important question.

\*\*\*

United States Court of Appeals Judge Richard Posner begins by providing a fascinating perspective on the "profound effect" that Professor Kahneman's research has had on law and economics. Judge Posner is one of our most influential jurists and legal scholars.<sup>17</sup> He has

about a company; accordingly, a buyer of the security may be presumed to have relied on that information in purchasing the security." *Id.* at 1190. The Court also observed that it is "reasonable to presume that most investors—knowing that they have little hope of outperforming the market in the long run based solely on their analysis of publicly available information—will rely on the security's market price as an unbiased assessment of the security's value in light of all public information." *Id.* at 1192.

15. Dunbar and Sen describe event studies as follows:

The typical approach to estimating damages in a securities-fraud case involves performing an event study to determine both the materiality of the allegedly misleading information and the magnitude of the losses caused by the alleged fraud. Because of its wide acceptability, standards governing its operation, known rate of error, and ability to test hypotheses, the event-study technique provides a good example of scientific evidence.

Frederick C. Dunbar & Arun Sen, Counterfactual Keys to Causation and Damages in Shareholder Class-Action Lawsuits, 2009 WIS. L. REV. 199, 230.

16. See, e.g., Fener v. Operating Eng'rs Constr. Indus. & Miscellaneous Pension Fund, 579 F.3d 401, 409–10 (5th Cir. 2009) (explaining that an expert's event study measures precise market price response to the disclosure of concealed information necessary to prove loss causation and damages); In re Williams Sec. Litig., 558 F.3d 1130, 1135 (10th Cir. 2009) (requiring an event study showing price movement in response to disclosure of concealed information to avoid summary judgment). See also Michael J. Kaufman and John M. Wunderlich, Regressing: The Troubling Dispositive Role of Event Studies in Securities Fraud Litigation, 15 STAN. J.L. BUS. & FIN. 183, 208–19 (2009) (documenting the increasing judicial recognition of the necessity of proving securities fraud elements through event studies that are predicated on rational investor choices in response to new information).

17. See David Campbell, Welfare Economics for Capitalists: The Economic Consequences of Judge Posner, 33 CARDOZO L. REV. 2233, 2234 (2012) ("Richard Posner [has] 'clearly played

[Vol. 44

authored more than forty books and countless articles, many of which apply economic analysis to matters of law and policy.<sup>18</sup> In his article, Behavioral Finance before Kahneman, 19 Judge Posner places Professor Kahnemen's work within a strong tradition of criticism of the model of man as a "rational maximizer." According to Judge Posner, the discipline of "behavioral finance" challenges that model based on evidence that the irrational biases of investors are "systematic" and "pervasive." Contrary to the proponents of the "efficient-market theory, which posits rationality," Judge Posner recognizes that "investor irrationalities persist and cause systematic deviations between stock price and fundamental value."<sup>20</sup> In fact, "irrational investor behavior" is actually "promoted" by "securities professionals who see profit opportunities in exploiting that behavior."21 Judge Posner concludes by exploring the limits of rational choice in fully explaining the psychological influences that generate bubbles and bursts, including the fear of the unknown which causes investors to freeze in the face of negative uncertainty.

In his article, titled Daniel Kahneman's Influence on Legal Theory, 22 Professor Russell Korobkin, of the UCLA School of Law, next demonstrates how Kahneman's research has inspired scores of legal scholars—working in virtually every area of the law—to examine how the law can best be used to "(1) promote the efficient allocation of resources . . . , (2) encourage certain socially desirable conduct . . . , and (3) help individuals fulfill their potential . . . . "23 Professor Korobkin concludes that behavioral law and economics is the "future of legal policy analysis."

Thomas Ulen, the Swanlund Chair and Professor of Law Emeritus at the University of Illinois Law School, also offers a persuasive analysis of the broad influence of behavioral science on the development of legal doctrine. In A Behavioral View of Investor Protection,<sup>24</sup> Professor Ulen

the major role' in the development of law and economics," (quoting R.H. Coase, Law and Economics at Chicago, 36 J.L. & ECON. 239, 251 (1993))); Frank J. Vandall, Judge Posner's Negligence-Efficiency Theory: A Critique, 35 EMORY L.J. 383, 383 (1986) (describing Judge Posner as the "most prolific and most cited law and economics scholar").

<sup>18.</sup> For a sample of Judge Posner's publications, see Campbell, supra note 17, at 2233 n.1, 2236 nn.9-10, 2241 n.43.

<sup>19.</sup> Richard A. Posner, Behavioral Finance before Kahneman, 44 LOY. U. CHI. L.J. 1341 (2013).

<sup>20.</sup> Id. at 1343.

<sup>21.</sup> *Id*.

<sup>22.</sup> Russell Korobkin, Daniel Kahneman's Influence on Legal Theory, 44 LOY. U. CHI. L.J. 1349 (2013).

<sup>24.</sup> Thomas S. Ulen, A Behavioral View of Investor Protection, 44 LOY. U. CHI. L.J. 1357

2013] *Foreword* 1329

shares Professor Korobkin's appreciation for Kahneman's work and its influence on the recent path of the law in a wide variety of areas. He recalls how Kahneman's work gave him an "epiphany" that led him to rethink all of his prior work in law and economics, which was based on "rational choice theory." Professor Ulen then carefully applies the insights of behavioral economics to the precise issue of investor protection, and advocates augmented disclosure obligations, financial literacy training, and additional randomized controlled trials to test "behaviorally inspired policies."

Professors Charles Murdock and Barry Sullivan from the Loyola University of Chicago School of Law then glean from Daniel Kahneman's work tremendous insights for lawyers, particularly those engaged in the art of advocacy. Entitled *What Kahneman Means for Lawyers: Some Reflections on* Thinking, First and Slow,<sup>25</sup> their essay offers strategies for practicing attorneys, including: "framing" the "right" questions in preparing witnesses for trial; "priming" fact-finders by using associative language; "anchoring" settlement negotiations and calculations; appealing to human intuition by fashioning a coherent trial story; appreciating the role of stereotypes, first impressions, and confirmatory bias in the decisions of adjudicators; and even understanding the disposition toward overconfidence and loss aversion in negotiating transactions. Professors Murdock and Sullivan conclude that an understanding of Kahneman's work is "indispensable" to any attorney wishing to perfect their advocacy and persuasion skills.

In *Building On Kahneman's Insights in the Development of Behavioral Finance*, <sup>26</sup> Professor Hersh Shefrin—one of the founders of behavioral finance—describes how the work of Kahneman and Tversky "dramatically influenced" his own research, particularly his discoveries of the disposition effect, market risk aversion, return biases over time, and the planning fallacy. Professor Shefrin insightfully applies each of these concepts to the fraud-on-the-market theory, the fiduciary responsibilities of financial advisors, and the recklessness standard in securities fraud cases. As he demonstrates, the "behavioral perspective stemming from Kahneman's insights raises critical issues for the theory and practice of law"<sup>27</sup> in securities fraud regulation and litigation.

The next series of articles applies the insights of behavioral

<sup>(2013)</sup> 

<sup>25.</sup> Charles W. Murdock & Barry Sullivan, What Kahneman Means for Lawyers: Some Reflections on Thinking, Fast and Slow, 44 LOY. U. CHI. L.J. 1377 (2013).

<sup>26.</sup> Hersh Shefrin, Building On Kahneman's Insights in the Development of Behavioral Finance, 44 LOY. U. CHI. L.J. 1401 (2013).

<sup>27.</sup> Id. at 1420.

economics to the requirement that victims of securities fraud seeking a remedy for their losses must plead and prove that the defendant acted with scienter. In her compelling essay, *Behavioral Science and Scienter in Class Action Securities Fraud Litigation*, <sup>28</sup> Professor Ann Morales Olazábal explains the implications of Kahneman's "groundbreaking" work for proof of scienter and contends that "since cognitive illusions, mental heuristics, and other psychological effects inevitably bias issuer disclosure, a level of scienter closer to gross negligence (or even negligence) may be the key to achieving an appropriate level of deterrent effect via the law."<sup>29</sup>

In Conjoining "Recklessness" in Securities Fraud Cases to Moral Culpability,<sup>30</sup> however, Judge Jed Rakoff of the United States District Court for the Southern District of New York cautions that in his experience, judges and juries have very little difficulty in "actually determining when someone has acted intentionally in undertaking a fraud."<sup>31</sup> Although he appreciates that purely negligent behavior can cause great harm, Judge Rakoff contends that financial liability should be imposed only if the defendant's recklessness includes the "moral culpability" that stems from "consciously" turning away from what was "incredibly risky."

In their essay, *The Dangers of Missing the Forest: The Harm Caused By* VeriFone Holdings *in a* Tellabs *World*,<sup>32</sup> leading securities litigators Carol Gilden and Michael Eisenkraft of Cohen Milstein Sellers & Toll PLLC, and Harvard Law School graduate Josh Segal, apply the lessons of behavioral economics to the issue of whether a securities fraud complaint has met the Supreme Court's requirement of pleading a "strong inference" of scienter. Gilden et al. show that the Supreme Court's "holistic" approach, which requires that allegations of scienter be considered "collectively," is consistent with Kahneman's insight that human behavior cannot be understood in the absence of its context. Nonetheless, as their essay shows, some influential federal courts still are failing to rigidly follow the holistic approach, thereby disregarding the Supreme Court's precedent and the realities of human behavior.

In the concluding set of articles, the authors turn to the relationship

<sup>28.</sup> Ann Morales Olazábal, Behavioral Science and Scienter in Class Action Securities Fraud Litigation, 44 LOY, U. CHI. L.J. 1423 (2013).

<sup>29.</sup> Id. at 1441.

<sup>30.</sup> Jed S. Rakoff, Conjoining "Recklessness" in Securities Fraud Cases to Moral Culpability, 44 LOY. U. CHI. L.J. 1447 (2013).

<sup>31.</sup> Id. at 1449.

<sup>32.</sup> Carol Gilden, Michael B. Eisenkraft & Josh Segal, *The Dangers of Missing the Forest: The Harm Caused By* VeriFone Holdings *in a* Tellabs *World*, 44. LOY. U. CHI. L.J. 1457 (2013).

2013] *Foreword* 1331

between behavioral economics and the essential elements of materiality, reliance, and causation in securities fraud litigation. In his thought-provoking essay, *Rewiring the DNA of Securities Fraud Litigation:* Amgen's *Missed Opportunity*,<sup>33</sup> Geoffrey Rapp, the Harold A. Anderson Professor of Law and Values at the University of Toledo College of Law, argues that the insights of behavioral psychology and experiential economics require that key elements of securities fraud liability be "jettisoned (or at least fundamentally rethought)."<sup>34</sup> He contends that the judicial interpretations of materiality, an efficient market, reliance, and even scienter are based on unsupportable fictions. Accordingly, they should be eliminated, and replaced by a standard of liability modeled on state consumer fraud statutes, which create modest damages remedies for any false statement made in connection with a securities transaction.

In her article, *Behavioral Economics and Investor Protection: Reasonable Investors, Efficient Markets*, <sup>35</sup> Barbara Black, the Charles Hartsock Professor of Law at the University of Cincinnati College of Law, then carefully demonstrates that some courts have exploited the insights from behavioral economics to frustrate investor protection, actually making it more difficult for investors to pursue class-wide relief based on the theory of fraud on an efficient market. Professor Black astutely shows that research from behavioral economics "supports the need for (at least some) paternalistic responses to cognitive biases," <sup>36</sup> including investor protection measures that go beyond existing disclosure obligations.

Finally, in his comprehensive article, *Behavioral Economics Applied:* Loss Causation,<sup>37</sup> Professor Robert Prentice, of the McCombs School of Business at the University of Texas at Austin, tackles the critical issue of loss causation in securities fraud litigation. He first suggests that proving loss causation in securities fraud cases is justifiably difficult because judgments about causation are infused with cognitive biases that lead adjudicators to tend to find causation where it might not exist. Yet, Professor Prentice also draws on the insights of behavioral science to show that jurors tend to have a cognitive bias against the alleged

<sup>33.</sup> Geoffrey Rapp, Rewiring the DNA of Securities Fraud Litigation: Amgen's Missed Opportunity, 44. LOY, U. CHI. L.J. 1475 (2013).

<sup>34.</sup> Id. at 1479.

<sup>35.</sup> Barbara Black, Behavioral Economics and Investor Protection: Reasonable Investors, Efficient Markets, 44 LOY. U. CHI. L.J. 1493 (2013).

<sup>36.</sup> Id. at 1507.

<sup>37.</sup> Robert A. Prentice, *Behavioral Economics Applied: Loss Causation*, 44 LOY. U. CHI. L.J. 1509 (2013).

#### 1332 Loyola University Chicago Law Journal [Vol. 44

victims of securities fraud. Moreover, he observes that contemporary judicial assessments about the causal link between securities fraud and economic harm are "bounded" by relatively conservative judicial pre-dispositions. Professor Prentice ultimately questions the judicial system's confidence in the ability of judges and jurors to adjudicate the issue of loss causation in complicated securities fraud cases.

Like each of the authors in this special issue of the *Loyola University Chicago Law Journal*, Professor Prentice understands that Kahneman's pioneering work demands a serious re-examination of the fundamental principles and assumptions underlying the existing regime of securities fraud regulation and litigation. In the articles that follow, the authors not only conduct that re-examination, they also provide great guidance for all scholars, judges, practitioners, and policy-makers engaged in the law, policy, and practice of investor protection.