ESSAY

Behavioral Economics and Investor Protection: Reasonable Investors, Efficient Markets

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> "[M]y questions about the stock market have hardened into a larger puzzle: a major industry appears to be built largely on an *illusion of skill*."[1]
>
> – Daniel Kahneman

The judicial view of a "reasonable investor" plays an important role in federal securities regulation. Courts express great confidence in the reasonable investor's cognitive abilities, a view not shared by behavioral economists. Similarly, the efficient market hypothesis has exerted a powerful influence in securities regulation, although empirical evidence calls into question some of the basic assumptions underlying it. Unfortunately, to date, courts have acknowledged the discrepancy between legal theory and behavioral economics only in one situation: class certification of federal securities class actions. It is time for courts to address the gap between judicial expectations about the behavior of reasonable investors and behavioral economists' views of investors' cognitive shortcomings, consistent with the central purpose of federal securities regulation: protecting investors from fraud.

I. THE RATIONALITY OF THE "REASONABLE INVESTOR": LAW AND BEHAVIORAL ECONOMICS

The elements of a private federal securities fraud claim under Rule 10b-5 include a misstatement of a material fact and the investor's

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1. DANIEL KAHNEMAN, THINKING, FAST AND SLOW 212 (2011).

reliance on that misstatement.[2] Because materiality is defined as information that a reasonable investor would consider important in making investment decisions,[3] the reasonable investor standard serves to distinguish between material and immaterial statements and hence to determine defendants' disclosure obligations. The Supreme Court tells us that courts should not treat reasonable investors like "nitwits"[4] and ascribe to them "child-like simplicity."[5] In the same vein, courts have stated disclosure should not be tailored to "what is fit for rubes."[6] To the contrary, defendants can engage in optimistic sales talk with impunity; since reasonable investors will not be misled by puffery, it is immaterial as a matter of law.[7] Similarly, corporations and securities salesmen are not required to disclose information that should be obvious to reasonable investors. Thus, courts tell us that reasonable investors "can do the math" to figure out the financial bottom line in at least some circumstances.[8] Additionally, courts expect reasonable investors to have an awareness of general economic conditions[9] and to understand the principle of diversification,[10] the time-value of money,[11] the nature of margin accounts,[12] and the securities industry's compensation

2. More precisely, the elements of a private Rule 10b-5 claim are: "(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." Matrixx Initiatives, Inc. v. Siracusano, 131 S. Ct. 1309, 1317–18 (2011) (quoting Stoneridge Inv. Partners, LLC v. Scientific-Atlanta, Inc., 552 U.S. 148, 157 (2008)).

3. *See* TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 449 (1976) (defining materiality in the context of omissions from proxy statements as what a reasonable shareholder would consider important in deciding how to vote); Basic Inc. v. Levinson, 485 U.S. 224, 232 (1988) (adopting the *TSC* standard for materiality in cases of misrepresentations influencing an investor's decision to sell).

4. *Basic*, 485 U.S. at 234 (quoting Flamm v. Eberstadt, 814 F.2d 1169, 1175 (7th Cir. 1987)).

5. *Id.*

6. Flamm v. Eberstadt, 814 F.2d 1169, 1175 (7th Cir. 1987).

7. Bogart v. Shearson Lehman Bros., Inc., No. 91 CIV. 1036 (LBS) (NG), 1995 WL 46399, at *2–3 (S.D.N.Y. Feb. 6, 1995). *But see* Peter H. Huang, *Moody Investing and the Supreme Court: Rethinking the Materiality of Information and the Reasonableness of Investors*, 13 SUP. CT. ECON. REV. 99, 112–18 (2005) (arguing that the current judicial treatment of puffery is flawed because it neglects the power of puffery to alter moods).

8. *See In re* Merck & Co. Sec. Litig., 432 F.3d 261, 270–71 (3d Cir. 2005) (treating a piecemeal disclosure requiring mathematical calculations and assumptions as a factual disclosure of the solution); Stefan J. Padfield, *Who Should Do the Math? Materiality Issues in Disclosures that Require Investors to Calculate the Bottom Line*, 34 PEPP. L. REV. 927, 943–44 (2007) (explaining how courts apply the general rule that failure to perform mathematical calculations for investors is not a material omission).

9. *In re* Donald Trump Casino Sec. Litig., 7 F.3d 357, 377 (3d Cir. 1993).

10. Dodds v. Cigna Sec., Inc., 12 F.3d 346, 351 (2d Cir. 1993).

11. Levitin v. PaineWebber, Inc., 159 F.3d 698, 702 (2d Cir. 1998).

12. Zerman v. Ball, 735 F.2d 15, 21 (2d Cir. 1984).

structure.[13] In short, courts hold investors to a high standard of rationality that may not comport with observed reality.[14] Recent studies consistently show that retail investors lack basic financial literacy.[15]

The judicial view of a reasonable investor is also important in delineating the reliance element of a private Rule 10b-5 claim. From Rule 10b-5's early days, courts required investors to establish reliance on a material misstatement because otherwise securities laws would create a "scheme of investors' insurance."[16] The treatment of reliance in private securities fraud actions, however, differs significantly from common law tort principles. At common law, victims of fraud did not have to establish "reasonable" reliance, which is an objective standard. Instead, they had to prove "justifiable" reliance,[17] which is "a matter of the qualities and characteristics of the particular plaintiff, and the circumstances of the particular case, rather than of the application of a community standard of conduct to all cases."[18] Moreover, under common law, "a person is justified in relying on a representation of fact 'although he might have ascertained the falsity of the representation had he made an investigation.'"[19] Courts, however, have taken a less forgiving view under federal securities laws and imposed greater due diligence responsibilities on investors.[20] For example, a widow with a

13. Platsis v. E.F. Hutton & Co., Inc., 946 F.2d 38, 41 (6th Cir. 1991).

14. *See* Margaret V. Sachs, *Materiality and Social Change: The Case for Replacing "the Reasonable Investor" with "the Least Sophisticated Investor" in Inefficient Markets*, 81 TUL. L. REV. 473, 473 (2006) (describing the judicial characterization of the reasonable investor as a "savvy person who grasps market fundamentals"); David A. Hoffman, *The "Duty" to Be a Rational Shareholder*, 90 MINN. L. REV. 537, 538–39 (2006) (describing the "rationality burden" courts impose on investors).

15. *See, e.g.*, U.S. SEC. & EXCH. COMM'N, STUDY REGARDING FINANCIAL LITERACY AMONG INVESTORS, at vii–viii (2012), *available at* http://www.sec.gov/news/studies/2012/917-financial-literacy-study-part1.pdf.

16. List v. Fashion Park, Inc., 340 F.2d 457, 463 (2d Cir. 1965) (adopting a subjective standard of reliance). *See also* Dura Pharm., Inc. v. Broudo, 544 U.S. 336, 345 (2005) (explaining that the purpose of securities law is "to protect [investors] against those economic losses that misrepresentations actually cause").

17. Professor Dobbs agrees that "[r]eliance upon the defendant's material representations is ordinarily justified unless the plaintiff is on notice that the statement is not to be trusted or knows the statement to be false." DAN B. DOBBS, THE LAW OF TORTS § 474, at 1359 (2000). However, he takes issue with the Restatement (Second) of Torts' description of justifiable reliance as subjective in all instances. DAN B. DOBBS ET AL., THE LAW OF TORTS § 672, at 669 (2d ed. 2011).

18. Field v. Mans, 516 U.S. 59, 71 (1995) (quoting RESTATEMENT (SECOND) OF TORTS § 545A, cmt. b (1976)).

19. *Id.* at 70 (quoting RESTATEMENT (SECOND) OF TORTS § 540 (1976)).

20. Under section 21D(f)(10)(A)(i)(II) of the Securities Exchange Act, 15 U.S.C. § 78u-4(f)(10)(A)(i)(I)–(II) (2006), a person "knowingly commits a violation of securities laws" based on an untrue statement of material fact when he has actual knowledge that the representation is false and persons are likely to "reasonably rely" on the misrepresentation.

tenth grade education was expected to read and understand written disclosures about risk and illiquidity in a lengthy complex prospectus rather than rely on oral representations of suitability made by her broker.[21]

Behavioral economists, by contrast, do not observe real people investing in today's markets behaving as the reasonable investors that federal securities law expects them to be.[22] These cognitive errors affect decisions made by both retail investors and financial practitioners and go beyond issues of financial literacy. Studies show that many investors are not rational in their decision-making; there are observable biases resulting from departures from rational decision-making.[23] Researchers have compiled an extensive catalogue of investors' cognitive errors. These include: loss aversion (investors are reluctant to sell losing stocks even when advantageous for them to do so),[24] overconfidence (investors, particularly male investors, are overconfident in their investment strategies),[25] and representativeness heuristic (investors chase trends believing they have systematic causes).[26] More generally, the nature of investing itself may induce investors to treat it as a game or as gambling.[27] To date, courts have not acknowledged this gap between judicial expectations about the behavior

21. *See* Dodds v. Cigna Sec., Inc., 12 F.3d 346, 350–51 (2d Cir. 1993) (citing Armstrong v. McAlpin, 699 F.2d 79, 88 (2d Cir. 1983)) (applying an objective test in determining when the widowed plaintiff should have had constructive notice of fraud for purposes of the statute of limitations); Kosovich v. Metro Homes, No. 09 Civ. 6992 (JSR), 2009 WL 5171737, at *4 (S.D.N.Y. Dec. 30, 2009) (stating that the plaintiff's "professed financial cluelessness is beside the point if he acted unreasonably"), *aff'd*, 405 F. App'x. 540 (2d Cir. 2010). *See also* Barbara Black & Jill I. Gross, *Making It Up as They Go Along: The Role of Law in Securities Arbitration*, 23 CARDOZO L. REV. 991, 1038 n.303 (2002) (listing cases where summary judgment was awarded for broker-dealer due to lack of justifiable reliance).

22. *See generally* MEIR STATMAN, WHAT INVESTORS REALLY WANT (2011) (describing how cognitive errors and emotions drive investment decisions); HERSH SHEFRIN, BEYOND GREED AND FEAR (2000) (describing how behavioral heuristics, biases, errors, and framing affect how financial practitioners make investment decisions).

23. Ronald J. Gilson & Reinier Kraakman, *The Mechanisms of Market Efficiency Twenty Years Later: The Hindsight Bias*, 28 J. CORP. L. 715, 723 (2003) [hereinafter *MOME II*].

24. Terrance Odean, *Are Investors Reluctant to Realize Their Losses?*, 53 J. FIN. 1775, 1781–95 (1998).

25. Terrance Odean, *Do Investors Trade Too Much?*, 89 AM. ECON. REV. 1279, 1280–92 (1999); Kent Daniel, David Hirshleifer & Avanidhar Subrahmanyam, *Investor Psychology and Security Under- and Overreactions*, 53 J. FIN. 1839, 1844–45 (1998).

26. David Hirshleifer, *Investor Psychology and Asset Pricing*, 56 J. FIN. 1533, 1545–46 (2001).

27. *See* STATMAN, *supra* note 22, at 56 ("Profits are the utilitarian benefits of winning the beat-the-market game, and cognitive errors and emotions mislead us into thinking that winning is easy. But we are also drawn into the game by the promise of expressive and emotional benefits.").

of reasonable investors and behavioral economists' views of investors' cognitive shortcomings.

II. RELIANCE AND THE "FRAUD ON THE MARKET" PRESUMPTION

The Supreme Court has recognized the difficulties in establishing reliance in securities fraud actions and has mitigated the burden on investors in two circumstances. *Affiliated Ute Citizens of Utah v. United States*[28] held that if there is an omission of a material fact by one with a duty to disclose, the investor to whom the duty was owed need not provide specific proof of reliance.[29] The *Affiliated Ute* presumption is of limited utility, however, since courts generally treat allegations of misleading disclosure as misrepresentation and not nondisclosure claims.[30] In addition, courts may not recognize a duty to disclose material information in the absence of a traditional fiduciary relationship.[31]

The second situation in which there is a rebuttable presumption of reliance is the fraud-on-the-market presumption set forth in *Basic Inc. v. Levinson*.[32] If the plaintiffs meet the prerequisites of fraud-on-the-market, it is presumed that the misleading information is reflected in the market price at the time of the transaction. Although it is available in both individual and class actions, the fraud-on-the-market presumption assumes great importance in Rule 10b-5 class actions because otherwise individual questions of reliance would predominate and claims of multiple investors could not be aggregated in a class action.[33] To invoke the fraud-on-the-market presumption, plaintiffs must show that

28. 406 U.S. 128 (1972). *Affiliated Ute* addressed the reliance requirement in a case involving rather unusual facts. Plaintiffs, mixed-bloods of the Ute Indian Tribe, sued a bank and two of its employees. *Id.* at 140. The bank had acted as a transfer agent for stock of a corporation formed for the purpose of distributing tribal assets. *Id.* at 136–37. Although the attorneys of the corporation requested that the bank discourage resales of the stock, the bank's employees actively encouraged a secondary market among non-Indians. *Id.* at 145–46, 152. Additionally, the defendants "devised a plan and induced the mixed-blood holders of [the] stock to dispose of their shares without disclosing to them material facts that reasonably could have been expected to influence their decisions to sell." *Id.* at 153.

29. *Id.* at 153–54 ("Under the circumstances of this case . . . positive proof of reliance is not a prerequisite to recovery. All that is necessary is that the facts withheld be material . . . . This obligation to disclose and this withholding of a material fact establish the requisite element of causation of fact.").

30. Binder v. Gillespie, 184 F.3d 1059, 1063–64 (9th Cir. 1999).

31. *See* Basic Inc. v. Levinson, 485 U.S. 224, 239 n.17 (1988) ("Silence, absent a duty to disclose, is not misleading under Rule 10b-5.").

32. *Id.* at 241–47.

33. *See* FED. R. CIV. P. 23(b)(3) (requiring that questions of law or fact common to the class predominate over questions affecting individual members of the class).

the stock traded in an efficient market,[34] the alleged misrepresentation was publicly known, and the transaction took place between the time the misrepresentation was made and the time the truth was discovered.[35]

Apart from the "truth on the market" defense, which refutes the materiality of the misleading disclosure by showing that other information in the marketplace ameliorated its effect,[36] it is not clear how the fraud-on-the-market presumption can be rebutted.[37] Short sellers illustrate the difficulty. If, in response to corporate disclosures, they are selling shares when most traders are buying, it can be argued that short sellers are not relying on those disclosures.[38] On the other hand, short sellers may disbelieve management's statements without necessarily believing that the disclosures are fraudulent, in which case they are relying on the integrity of the market price and have suffered an injury by trading the stock at a distorted price.[39]

In the early post-*Basic* years, it could plausibly be argued that the fraud-on-the-market presumption was best understood as eliminating reliance as a required element in securities fraud actions (at least in those involving secondary trading in publicly traded securities) and placing the analytical emphasis on causation.[40] The Supreme Court, however, distinguished between reliance and loss causation in *Dura*

34. Courts generally apply the factors set forth in Cammer v. Bloom, 711 F. Supp. 1264, 1286–87 (D.N.J. 1989): the average weekly trading volume; the number of analysts following the security; the extent to which market makers traded the security; the issuer's eligibility to file a Form S-3 registration statement; and the cause-and-effect relationship between material disclosures and changes in the security's price. Additional factors include the company's market capitalization; the size of the public float; the ability to short sell the security; and the level of autocorrelation. *In re* DVI, Inc. Sec. Litig., 639 F.3d 623, 633 n.14 (3d Cir. 2011). *See also* Krogman v. Sterritt, 202 F.R.D. 467, 478 (N.D. Tex. 2001) (considering the difference between the price at which investors are willing to buy the security versus the price at which they are willing to sell, along with the size of the float for the security).

35. Erica P. John Fund, Inc. v. Halliburton Co., 131 S. Ct. 2179, 2185 (2011). Proof of materiality is not a prerequisite to certification of a securities fraud class action. Amgen Inc. v. Conn. Ret. Plans & Trust Funds, 133 S. Ct. 1184, 1195–97 (2013).

36. Ganino v. Citizens Utils. Co., 228 F.3d 154, 167 (2d Cir. 2000).

37. *See Basic*, 485 U.S. at 248 ("Any showing that severs the link between the alleged misrepresentation and either the price received (or paid) by the plaintiff, or his decision to trade at a fair market price, will be sufficient to rebut the presumption of reliance.").

38. *See* Zlotnick v. TIE Commc'ns, 836 F.2d 818, 821–23 (3d Cir. 1988) (holding that the fraud-on-the-market presumption was not available to a short seller, who instead must establish actual reliance).

39. *See* Schleicher v. Wendt, 618 F.3d 679, 684 (7th Cir. 2010) (rejecting defendants' arguments that short sellers could be excluded from the class).

40. *See generally* Barbara Black, *The Strange Case of Fraud on the Market: A Label in Search of a Theory*, 52 ALB. L. REV. 923 (1988) (arguing that fraud-on-the-market is best conceptualized in terms of causation rather than reliance).

Pharmaceuticals, Inc. v. Broudo[41] and *Erica P. John Fund v. Halliburton*.[42] *Halliburton*, in particular, reaffirmed the traditional role of reliance in establishing a connection between the misrepresentation and the injury.[43]

III. THE EFFICIENT MARKET HYPOTHESIS AND BEHAVIORAL ECONOMICS

The efficient market hypothesis has exerted a powerful influence on securities regulation.[44] Its basic tenets can be succinctly stated. In efficient markets, securities prices fully reflect available information because "professionally-informed traders quickly notice and take advantage of mispricing, thereby driving prices back to their proper level."[45] The efficient market hypothesis, therefore, is grounded in three assumptions:

> First, investors are assumed to be rational and hence to value securities rationally. Second, to the extent that some investors are not rational, their trades are random and therefore cancel each other out without affecting prices. Third, to the extent that investors are irrational in similar ways, they are met in the market by rational arbitrageurs who eliminate their influence on prices.[46]

According to behavioral finance scholars, however, "many investors are not rational in their financial decision-making, . . . there are observable directional biases resulting from departures from rational decision-making, and . . . significant barriers prevent professional traders from fully correcting the mistakes made by less than rational investors."[47] Accordingly, in contrast to the efficient market hypothesis, behavioral finance theory asserts that "systematic and significant deviations from efficiency are expected to persist for long periods of

41. 544 U.S. 336, 342–44 (2005). *Dura* held that an inflated purchase price does not itself prove causation and loss because precedent also requires a showing that the plaintiff would not have invested had he known the truth. *Id.*

42. 131 S. Ct. 2179, 2186 (2011). *Halliburton* clarified that "[l]oss causation addresses a matter different from whether an investor relied on a misrepresentation," as reliance focuses on the facts surrounding an investor's decision to take part in the transaction. *Id.*

43. *Id.*

44. The literature on the efficient market hypothesis, from both economists and legal scholars, is voluminous. *See, e.g.*, Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549, 549–50 & nn.1–5 (1984) (discussing the legal field's acceptance of the efficient market hypothesis and listing sources in which the efficient market hypothesis is discussed); *MOME II*, *supra* note 23 (analyzing the framework for market efficiency).

45. *MOME II*, *supra* note 23, at 723.

46. ANDREI SHLEIFER, INEFFICIENT MARKETS: AN INTRODUCTION TO BEHAVIORAL FINANCE 2 (2000).

47. *MOME II*, *supra* note 23, at 723–24.

time."[48]

Indeed, empirical evidence does call into question basic assumptions underlying the efficient market hypothesis. As discussed earlier, it is increasingly difficult to sustain the case that investors act rationally in making investment decisions.[49] Moreover, there are difficulties in assessing how markets react to information. For example, it is a basic assumption that open and developed markets are sufficiently efficient so that publicly available material information affects stock prices. Yet there are documented instances where this is not the case, as where the market did not react to publicly available information about the impact of a breakthrough in cancer research on a corporation until the *New York Times* wrote about it more than five months after the original release.[50] Studies report examples of persistent mispricing, as where securities or their equivalents trade at different prices in different markets, even though arbitrage should correct these mispricings.[51] Finally, there is skepticism about whether investors rely on publicly available information (even indirectly) because "more than news seems to move stock prices."[52]

In short, contrary to the efficient market hypothesis, behavioral economics asserts that investors' deviations from economic rationality are highly pervasive and systematic[53] and that real-world arbitrage is risky and limited, unable to restore rationality to the markets.[54]

48. SHLEIFER, *supra* note 46, at 2.

49. *See supra* notes 22–27 and accompanying text (discussing examples of non-rational investment strategies).

50. Frederick C. Dunbar & Dana Heller, *Fraud on the Market Meets Behavioral Finance*, 31 DEL. J. CORP. L. 455, 509–10 (2006). *See also* Donald C. Langevoort, Basic *at Twenty: Rethinking Fraud on the Market*, 2009 WIS. L. REV. 151, 173–74 [hereinafter Langevoort, Basic *at Twenty*] (discussing the dismissal of the plaintiffs' securities fraud class action because of the market's initial lack of reaction to news about Merck's revenues).

51. *See* Dunbar & Heller, *supra* note 50, at 478–79 (describing the persistent mispricing of two stocks, Royal Dutch and Shell Transport, that are backed by the same operating assets). *See generally* Philip S. Russel, *The Enigma of Closed-End Funds Pricing: Twenty-Six Years Later*, 16 INT'L J. FIN. 2985 (2004) (finding that theories do not account for persistent mispricing of closed-end funds relative to net asset value).

52. SHLEIFER, *supra* note 46, at 20 (noting that the 1987 market crash, when stocks dropped sharply and suddenly without any new information, is difficult to explain consistent with the efficient market hypothesis).

53. *Id.* at 12 (citing Kahneman and Tversky's research to show that "[i]nvestor sentiment reflects the common judgment errors made by a substantial number of investors, rather than uncorrelated random mistakes").

54. *Id.* at 13. Gilson and Kraakman acknowledge that they underestimated institutional limits on arbitrage. *MOME II*, *supra* note 23, at 736.

IV. RETHINKING *BASIC* IN LIGHT OF BEHAVIORAL ECONOMICS

It is frequently stated that the efficient market hypothesis is the underpinning of the fraud-on-the-market presumption; market efficiency has been described as "the cornerstone" of the fraud-on-the-market presumption.[55] In recent years, "[judicial] inquiry into efficiency has tended towards the zealous."[56] As one example, the First Circuit in *In re PolyMedica Corp. Securities Litigation* held: "For application of the fraud-on-the-market theory, we conclude that an efficient market is one in which the market price of the stock *fully reflects all* publicly available information."[57] As another example, a New Jersey federal district court held:

> The Efficient Market Hypothesis . . . is premised on the belief that individuals are rational, self-governing actors who are able to process the information wisely, and they do so promptly. . . . The [Efficient Market] Hypothesis assumes that investors are rational risk calculators who consistently weigh the costs and benefits of alternatives and select the best option, thus causing the market's immediate reaction to any financially-important news.[58]

In short, rather than confining their scrutiny to objective market factors evidencing relative efficiency,[59] some courts now require markets to live up to the impossibly high standard of the hypothetical reasonable investor who justifiably relies on corporate disclosures "wisely" and "promptly." A market cannot live up to this standard any more than an investor can.[60]

To date, there have been only a handful of cases that refer to behavioral economics or behavioral finance in the context of class certification of securities fraud class actions.[61] These cases predict that behavioral finance may lead to the demise of the fraud-on-the-market presumption:

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55. *In re* DVI, Inc. Sec. Litig., 639 F.3d 623, 633 (3d Cir. 2011), *abrogated by* Amgen Inc. v. Conn. Ret. Plans & Trust Funds, 133 S. Ct. 1184 (2013).

56. DONNA M. NAGY ET AL., SECURITIES LITIGATION AND ENFORCEMENT: CASES AND MATERIALS 163 (3d ed. 2003).

57. *In re* PolyMedica Corp. Sec. Litig., 432 F.3d 1, 14 (1st Cir. 2005) (requiring informational, not fundamental, efficiency).

58. *In re* Intelligroup Sec. Litig., 468 F. Supp. 2d 670, 696 (D.N.J. 2006) (internal citations omitted).

59. *See supra* note 34 (listing relevant market factors).

60. *See* Bradford Cornell, *Market Efficiency and Securities Litigation: Implications of the Appellate Decision in* Thane, 6 VA. L. & BUS. REV. 237, 254 (2011) (criticizing courts for viewing market efficiency as a yes-or-no question, rather than relatively and contextually).

61. Indeed, at this Conference, the practitioners on the investor protection panel (one from the defense bar, one from plaintiffs' bar) agreed on the irrelevance of economic theory "in the trenches."

> The emerging field of behavioral finance suggests that differing investor assessments of value appear to be the rule, rather than the exception. Because the notion of information efficiency upon which the fraud-on-the-market presumption rests is crumbling under sustained academic scrutiny, the future of securities fraud class action litigation—dependent on this presumption—may be in jeopardy.[62]

Similarly, this "emphasis on the rarity of efficient markets . . . would have the likely effect of making it unduly difficult to establish the fraud-on-the-market presumption of reliance."[63]

I submit, however, that the persuasive power of *Basic* does not depend on acceptance of the efficient market hypothesis. It is true that *Basic* refers to the efficient market hypothesis to acknowledge that "in an open and developed securities market, the price of the company's stock is determined by the available material information regarding the company and its business . . . [and] [m]isleading statements will therefore defraud purchasers of stock even if the purchasers do not directly rely on the misstatements."[64]

At its core, however, *Basic* is a pragmatic, not a theoretical, opinion based on the purposes of federal securities laws, including the protection of investors and the enhancement of investor confidence. These purposes are furthered through full and accurate disclosure of material information. The securities fraud class action plays an important role in carrying out these purposes.[65] The *Basic* decision rests on the common sense propositions that "there cannot be honest markets without honest publicity"[66] and the "fundamental purpose" of the Securities Exchange Act is "implementing a philosophy of full disclosure."[67] "Arising out of considerations of fairness, public policy, and probability, as well as judicial economy, presumptions are also

62. *In re* PolyMedica Corp. Sec. Litig., 453 F. Supp. 2d 260, 272 n.10 (D. Mass. 2006) (citation omitted), *on remand from* 432 F.3d 1 (1st Cir. 2005).

63. Xcelera.com Sec. Litig., 430 F.3d 503, 511 (1st Cir. 2005).

64. Basic Inc. v. Levinson, 485 U.S. 224, 241–42 (1988) (quoting Peil v. Speiser, 806 F.2d 1154, 1160 (3d Cir. 1986)). *See also id.* at 244 ("[T]he market is performing a substantial part of the valuation process performed by an investor in a face-to-face transaction" (quoting *In re* LTV Sec. Litig., 88 F.R.D. 134, 143 (N.D. Tex. 1980))).

65. As Professor Langevoort expresses it:

> If *Basic*'s presumption is essentially an entitlement to rely on the market price as undistorted by fraud, it is hard to see why investors should lose that entitlement simply because of some market imperfection. To the contrary, these kinds of imperfections would seem to strengthen, not weaken, the need for additional investor protection.

Langevoort, Basic *at Twenty*, *supra* note 50, at 176.

66. *Basic*, 485 U.S. at 230.

67. *Id.* (quoting Santa Fe Indus., Inc. v. Green, 430 U.S. 462, 478 (1977)).

useful devices for allocating the burdens of proof between parties."[68] Accordingly, the Supreme Court in *Basic* concluded that the "presumption of reliance employed in this case is consistent with, and by facilitating Rule 10b-5 litigation, supports, the congressional policy embodied in the [Securities Exchange] Act."[69] Consistent with this pragmatic approach, the Court did not find it necessary to set forth a rigorous test for market efficiency. Rather, it stated: "We need only believe that market professionals generally consider most publicly announced material statements about companies."[70]

Basic, of course, was decided in 1988. Detractors of the opinion urge reconsideration because of additional knowledge about how markets really work. In *Amgen Inc. v. Connecticut Retirement Funds & Trusts*,[71] which addressed the question whether proof of materiality is required at the class certification stage, corporate defendants and their advocates urged the Court to seize the opportunity to rethink the fraud-on-the-market presumption and cited "the modesty of the economic reasoning that undergirds *Basic*'s presumption"[72] as grounds to tighten the requirements for class certification in securities fraud class actions. A majority of the Justices, however, recognized that Congress addressed the policy question in the Private Securities Litigation Reform Act of 1995 (PSLRA) and rejected calls to eliminate the fraud-on-the-market presumption.[73] Nevertheless, it is likely that challenges to the fraud-on-the-market presumption on the basis of behavioral finance will continue.

I believe, however, that this debate over competing economic theories, while important and interesting, has nothing to do with the continuing viability of the fraud-on-the-market presumption.[74] Rather,

68. *Id.* at 245.

69. *Id.*

70. *Id.* at 246 n.24.

71. 133 S. Ct. 1184 (2013).

72. Brief of *Amici Curiae* Chamber of Commerce of the United States of America, Pharmaceutical Research and Manufacturers of America, and Biotechnology Industry Organization Supporting Petitioners at 28, Amgen Inc. v. Conn. Ret. Plans & Trust Funds, 133 S. Ct. 1184 (2013) (No. 11-1085).

73. *Amgen*, 133 S. Ct. at 1201. Specifically, the Court stated that through PSLRA, Pub. L. No. 104-67, 109 Stat. 737 (1995) (codified as amended in scattered sections of 15 U.S.C. (2006)), Congress "recognized that although private securities-fraud litigation furthers important public policy interests, prime among them, deterring wrongdoing and providing restitution to defrauded investors, such lawsuits have also been subject to abuse," including frivolous claims to extract large settlements. *Amgen*, 131 S. Ct. at 1200.

74. I am not the first to make this argument. *See, e.g.*, Donald C. Langevoort, *Theories, Assumptions, and Securities Regulation: Market Efficiency Revisited*, 140 U. PA. L. REV. 851, 895 (1992) (explaining that the efficient market hypothesis is not meant to be used as a predictor of the behavior of individual investors).

Basic has two enduring messages.

First, it does not make sense for investors to spend their time poring through lengthy and densely written disclosure documents. Investors get information from many sources; perhaps their investing is informed by advice from their financial advisers, by reading financial articles, or by Internet chat rooms. Given the variety and complexity of available information, the difficulty of evaluating this information, and the many other demands placed on investors' time and energy, investors can reasonably decide it is sensible to treat stock prices as indicative of the stock's value. Accordingly, it is sufficient to believe that "market professionals generally consider most publicly announced material statements about companies."[75] As two commentators express it:

> Reliance on the integrity of the market price is sensibly presumed . . . if the market bears enough hallmarks of efficiency that investors, mindful of the costs they would incur if they went out and conducted their own research into stock values, reasonably could decide instead to treat the market's price as indicative of fair value.[76]

Second, without the fraud-on-the-market presumption, plaintiffs would not be able to bring Rule 10b-5 class actions.[77] What is the relevance of empirical evidence about anomalies in stock pricing, even that some investors could opt to trade in a crooked market,[78] to the pragmatic view that federal securities class actions, as reformed by the PSLRA, should continue to exist to deter future violations and achieve at least some compensation for defrauded investors?[79] Corporate defendants and their supporters dispute the benefits of this litigation, but both the Supreme Court and Congress have decided this question. Any changes in policy must come from Congress.

V. BEHAVIORAL ECONOMICS IS RIGHT: REAL PEOPLE ARE NOT REASONABLE INVESTORS

Behavioral economics is right that real people investing in today's markets are not the "reasonable investors" the law expects them to be.[80]

75. Basic Inc. v. Levinson, 485 U.S. 224, 246 n.24 (1988).

76. Bradford Cornell & James C. Rutten, *Market Efficiency, Crashes, and Securities Litigation*, 81 TUL. L. REV. 443, 449 (2006).

77. *See supra* note 33 and accompanying text.

78. According to Frederick Dunbar and Dana Heller, some rational investors are willing to gamble that they can get out of the market before general public awareness of the fraud destroys the market price of the stock. Dunbar & Heller, *supra* note 50, at 504. *See also* SHLEIFER, *supra* note 46, at 154, 157 (asserting that rational speculators can destabilize prices and cause bubbles).

79. Barbara Black, *Eliminating Securities Fraud Class Actions Under the Radar*, 2009 COLUM. BUS. L. REV. 802, 817–18.

80. *See supra* notes 22–27.

Yet, to date, behavioral economics has not caused any judicial re-examination of materiality or justifiable reliance in situations where investors do not have the advantage of the fraud-on-the-market presumption. Frequently, this occurs in situations where investors allege fraud in face-to-face dealings with their brokers or other financial advisers, where courts deny investors relief either because the misleading disclosures were not material (because the reasonable investor would not have relied on them[81] or would already know the correct information),[82] or because the investor's reliance on oral representations was not reasonable since he could have discovered corrective information in a lengthy disclosure document.[83]

Of course, as I have argued above with respect to the fraud-on-the-market presumption and the efficient market hypothesis, legal reality and economic reality do not necessarily have to be in agreement. Policy is the justification for legal fictions. Just as the fraud-on-the-market presumption can stand even in the face of empirical evidence of market inefficiencies, the law can ascribe characteristics to a reasonable investor even though real investors may not possess them.

What then are the policy considerations to support a "reasonable investor" standard that requires greater rationality than most investors possess? Courts have not engaged in extensive policy analysis, but it appears that courts want people to make sensible investment decisions, and so they will deny them any recovery for their losses unless they live up to the "reasonable investor" standard. Courts apparently believe that if we treat investors like children, nitwits, or rubes, they will act that way.[84] Investing necessarily involves risk-taking; investors should not play the game unless they know what they are doing.[85]

But is it good public policy to allow people to get away with fraud? Torts scholars have pondered why the justifiable reliance standard[86] should bar fraud victims from recovery. According to Dan Dobbs, it

81. *See supra* note 7.

82. *See supra* notes 8–13.

83. *See supra* note 21.

84. "One word encompasses all the grandeur and majesty of western civilization. That word is 'freedom' . . . . Not as well recognized, but equally true is that the absolute concomitant of freedom is responsibility . . . ." Puckett v. Rufenacht, Bromagen & Hertz, Inc., 587 So. 2d 273, 278 (Miss. 1991). *Puckett* dismissed fraud claims brought by a self-directed investor who lost over $2 million, including his retirement fund, in commodities futures trading. *Id.*

85. *See* Levitin v. Paine Webber, Inc., 159 F.3d 698, 702 (2d Cir. 1998) (stating that the decision to invest in stocks is a decision to forego safer interest-bearing opportunities in order to seek out higher returns).

86. Justifiable reliance, unlike securities fraud, is a subjective standard. *See supra* notes 17–19 and accompanying text.

may be an indirect way to assess other issues, namely, whether the plaintiff relied at all on a material misstatement and whether the defendant made the misstatement to induce reliance. If the evidence establishes these conditions, the defendant should be held liable, even if plaintiff's reliance appears foolish.[87]

Applying this reasoning to securities fraud, it is certainly true that unhappy investors, having suffered a loss, may find it difficult to accept that the broker-dealer or corporate management is not to blame for their losses. This may cause them, after the fact, to put too much weight on, and take out of context, statements that turned out to be incorrect.[88] In addition, there is a fair amount of suspicion, whether deserved or not, about investors' motives and worries about greedy investors seeking to extort payment from their innocent advisers.[89]

One cognitive fallacy that courts have embraced is hindsight bias—the concern that because something went wrong, its flaws should have been apparent at the start. The fact that a broker's recommendation did not result in gains does not establish fraud or breach of duty on the broker's part; the fact that a corporation's projections did not come to pass does not establish scienter. Accordingly, courts must guard against plaintiffs' pleading "fraud by hindsight."[90] Out of concern for hindsight bias, courts have increased the burden on plaintiffs to establish fraud.[91]

Unfortunately, however, courts have gone too far in imposing due diligence obligations on investors. It is simply unrealistic to expect unsophisticated investors to read lengthy disclosure documents, and given their complexity, it would be a waste of investors' time. Investors may sensibly rely on the recommendations of their advisers who invite their reliance and hold themselves out as trusted financial advisers and should not be expected to fact-check their advisers' recommendations.

87. DOBBS, *supra* note 17, § 474, at 1360–61.

88. *See* Gustafson v. Alloyd Co., Inc., 513 U.S. 561, 578 (1995) (stating that Congress did not intend to extend liability for misstatements to "every casual communication between buyer and seller").

89. Robert H. Mundheim, *Professional Responsibilities of Broker-Dealers: The Suitability Doctrine*, 1965 DUKE L.J. 445, 463–64 (discussing concerns that imposing civil liability for violations of industry standards "would be an invitation for disappointed customers to blackmail their broker-dealers").

90. *See, e.g.*, Boyer v. Crown Stock Distribution, Inc., 587 F.3d 787, 794–95 (7th Cir. 2009); Elam v. Neidorff, 544 F.3d 921, 927–30 (8th Cir. 2008). *See also* Mitu Gulati, Jeffrey J. Rachlinski & Donald C. Langevoort, *Fraud by Hindsight*, 98 NW. U. L. REV. 773, 775 (2004) (recognizing that courts cite concerns with hindsight bias in nearly one-third of published opinions in securities class action cases).

91. *See* Gulati et al., *supra* note 90, at 775 ("Increasingly, the doctrine against 'fraud by hindsight' . . . has become a hurdle that plaintiffs in securities cases must overcome.").

CONCLUSION

To date, courts have considered behavioral economics in securities regulation in two situations: (1) to cast doubt upon the fraud-on-the-market presumption in the context of class certification of securities fraud class actions;[92] and (2) to increase plaintiffs' burden in establishing fraud.[93] The efficient market hypothesis, with its strong belief in the efficiency of the markets, generally distrusts government regulation.[94] Yet the efficient market hypothesis provided additional theoretical support to bolster pragmatic reasons for adopting the fraud-on-the-market presumption. In contrast, behavioral economics, with its emphasis on investors' judgment errors, supports (at least to some degree) government paternalism.[95] It is exceedingly ironic that behavioral economics, with its recognition of the cognitive fallibilities of investors, has, to date, been asserted to reduce investor protection.[96]

The research from behavioral economics on cognitive failings has much to offer in rethinking the artificial construct of a "reasonable investor" and its resulting lack of protection for investors, particularly unsophisticated retail investors. Despite their cognitive failings and their lack of training for the task,[97] investors are forced to invest in the market to save for their retirement and for other expensive undertakings, such as their children's college education. Behavioral economics thus supports the need for (at least some) paternalistic responses to cognitive biases.[98] Disclosure is not the panacea that drafters of federal securities

92. *See supra* notes 61–63 and accompanying text.

93. *See supra* notes 90–91.

94. *See, e.g.*, Larry E. Ribstein, *Market vs. Regulatory Responses to Corporate Fraud: A Critique of the Sarbanes-Oxley Act of 2002*, 28 J. CORP. L. 1 (2002) (arguing that contract and market-based approaches are preferable to regulation).

95. *See generally* Cass R. Sunstein, *Libertarian Paternalism Is Not an Oxymoron*, 70 U. CHI. L. REV. 1159 (2003) (arguing that behavioral findings should be used to attempt to steer people's choices in welfare-promoting directions without eliminating freedom of choice). Gilson and Kraakman recognize the need for paternalistic responses to cognitive bias, in particular to protect retail investors and their retirement savings. *MOME II*, *supra* note 23, at 738.

96. *See* Larry E. Ribstein, *Fraud on a Noisy Market*, 10 LEWIS & CLARK L. REV. 137 (2006) (arguing that behavioral economics supports constraints on fraud-on-the-market because of difficulties in assessing how markets react to information).

97. *See* Howell E. Jackson, *To What Extent Should Individual Investors Rely on the Mechanisms of Market Efficiency: A Preliminary Investigation of Dispersion in Investor Returns*, 28 J. CORP. L. 671, 686 (2003) (recommending that the SEC should focus on educating retail investors about risks associated with equity investments, particularly the risks of undiversified investments and investment strategies with high transaction costs).

98. Securities regulation must address a complex question, which two behavioral economists aptly stated: "How can we allow people of varying abilities and financial sophistication to express their preferences for investments without making them vulnerable to salespeople selling 'snake oil'?" GEORGE A. AKERLOF & ROBERT J. SHILLER, ANIMAL SPIRITS: HOW HUMAN

laws may have thought it to be.[99] For example, requiring mutual funds to disclose fees and expenses has not deterred broker-dealers' efforts to persuade their brokerage customers to purchase expensive actively managed proprietary mutual funds instead of low-cost index funds that offer better returns.[100]

Where is behavioral economics when investors need it?

PSYCHOLOGY DRIVES THE ECONOMY, AND WHY IT MATTERS FOR GLOBAL CAPITALISM 175 (2009).

99. *See generally* Steven M. Davidoff & Claire A. Hill, *Limits of Disclosure*, 36 SEATTLE U. L. REV. 599 (2013) (arguing that disclosures cannot prevent market failure unless investors carefully read those disclosures and appraise the security on its merits before investing).

100. *See* Mercer Bullard, Geoffrey C. Friesen & Travis Sapp, *Investor Timing and Fund Distribution Channels* (2008), *available at* http://ssrn.com/abstract=1070545 (finding that investors who transact through investment professionals in load-carrying mutual funds experience substantially poorer timing performance than investors who purchase pure no-load funds). For an encouraging sign that times may be changing, see Kirsten Grind, *Investors Sour on Pro Stock Pickers*, WALL ST. J., Jan. 3, 2013, at A1 (reporting that in 2012, investors withdrew funds from actively managed funds and shifted into lower-cost funds that track the market).