PREDICTIONS, PROJECTIONS, AND PRECAUTIONS: CONVEYING CAUTIONARY WARNINGS IN CORPORATE FORWARD-LOOKING STATEMENTS

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In this article, Professor Ripken discusses the problems that are created when corporate insiders make public predictions about the future prospects of their business. Investors crave these types of forward-looking corporate disclosures because investors use them to make judgments about the future profitability of companies. Corporations, however, are often reluctant to make predictions and projections because sometimes the predictions fail to come true, and investors may then sue corporations for misleading the market. Congress enacted a controversial statutory safe harbor designed to encourage corporations to make forward-looking statements. The safe harbor immunizes corporations from liability so long as they include meaningful cautionary warnings disclosing the risks that could cause actual results to differ from the insiders' predictions.

The corporate scandals that have come to light in recent years have caused investors to question whether it is appropriate to have a statutory safe harbor that allows a corporate executive to publicly paint a rosy picture of the company while knowing the business is in serious jeopardy. Because no clear standards exist for determining what constitutes a truly meaningful warning, it has become increasingly problematic to allow corporations to rely on cautionary warnings to protect corporations from liability. This article addresses this problem and discusses the nature of effective risk communication in the corporate context. Professor Ripken draws on insights from the "duty to warn" doctrine in tort law to develop a richer understanding of risk communication in consumer and securities markets. She ties these concepts into a more fundamental debate over the efficacy of

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warning law and the ability of financial markets to incorporate risk statements efficiently in the pricing of securities. Using the psychological research on cognitive and motivational constraints, biases, and heuristics, the article proposes guidelines for constructing warning statements that are more meaningful and instructive.

TABLE OF CONTENTS

I. Introduction 930
II. Forward-Looking Statement Safe Harbor.....937
A. SEC's Historical Treatment of Soft Information.....937
B. Judicial Bespeaks Caution Doctrine 941
C. Congressional Enactment of the Safe Harbor for Forward-Looking Statements 944
D. Components of the Safe Harbor for Forward-Looking Statements.....947
1. Alternative Safe Harbors 948
2. Meaningful Cautionary Statements 949
III. Duty to Warn in Tort Law.....953
A. Communication of Risks and Hazards.....953
B. Assumptions of Rationality.....955
IV. Cognitive and Motivational Constraints, Biases, and Heuristics....958
A. Overconfidence Bias 958
B. Optimism 962
C. Confirmation Bias and Anchoring Heuristic 965
D. Summary and Implications.....968
V. Efficient Capital Market Protections: Theory and Criticisms.....970
VI. Recommendations for Risk Disclosures and Warnings.....979
A. Content 979
B. Form.....982
C. Purpose 985
VII. Conclusion 987

I. INTRODUCTION

The regulation of stock market transactions assumes that by providing investors with material information they can make informed and intelligent investment decisions.[1] The reality, however, is that investing in

1. *See* THOMAS L. HAZEN, THE LAW OF SECURITIES REGULATION 22 (4th ed. 2002) (noting that federal securities regulation assumes that the full and fair disclosure of all relevant aspects of securities allows investors to evaluate the merits of investments and to fend for themselves.); *see also* SEC v. Capital Gains Research Bureau, Inc., 375 U.S. 180, 186 (1963) (describing the purpose of the securities laws as "substitut[ing] a philosophy of full disclosure for the philosophy of *caveat emptor* . . . ."). The House Report on the Securities Exchange Act of 1934 explained the importance of providing investors with information sufficient to make intelligent investment decisions: "No investor, no speculator, can safely buy and sell securities upon the exchanges without having an intelligent basis

the stock market is often tantamount to gambling.[2] Gambling is commonly defined as any activity in which a person stakes money in a game that involves some element of chance and risk in the hope of a reward that exceeds the initial investment.[3] The core of any such activity is to look beyond the present and to bet on the future. Investors in financial markets do this every day. Investors gather as much information as possible about the corporations whose shares they are interested in purchasing and then make a calculated decision to bet on the future of the companies by buying their stock. In evaluating the risks of these investments, investors are armed with specialized information that they perceive as pushing the odds in their favor. This specialized information comes in the form of "forward-looking statements" that are issued by corporate managers. These statements reveal insiders' own predictions as to what the future will hold for the company.

Forward-looking statements are typically disclosed in the form of projections, forecasts, plans, objectives, or estimates of future economic performance.[4] They are speculative in nature because they are made under conditions of uncertainty. The investing public craves the release of forward-looking information from corporations because it provides investors with guidance in formulating investment decisions based on the future expectations of companies.[5] Corporate management, however, is

for forming his judgment as to the value of the securities he buys or sells. . . . [T]he hiding and secreting of important information obstructs the operation of the markets as indices of real value." H.R. REP. NO. 1383-73, at 11 (1934).

2. *See* Theresa A. Gabaldon, *John Law, with a Tulip, in the South Seas: Gambling and the Regulation of Euphoric Market Transactions*, 26 J. CORP. L. 225, 229 (2001) (articulating the intuition that many stock market transactions "have been strongly reminiscent of gambling"); Thomas L. Hazen, *Rational Investments, Speculation, or Gambling?—Derivative Securities and Financial Futures and their Effect on the Underlying Capital Markets*, 86 NW. U. L. REV. 987, 988 (1992) (acknowledging the suggestion that speculative investing is a form of gambling); Meir Statman, *Lottery Players/Stock Traders*, 58 FIN. ANALYSTS J. 14 (2002) (discussing similarities between lottery playing and stock trading as negative-sum games). Commentators have noted the abundance of speculative trading in the stock market. *See, e.g.*, Lynn A. Stout, *Why the Law Hates Speculators: Regulation and Private Ordering in the Market for OTC Derivatives*, 48 DUKE L.J. 701, 728 (1999) (observing that "securities markets have long been associated with speculation"); Lynn A. Stout, *Technology, Transactions Costs, and Investor Welfare: Is a Motley Fool Born Every Minute?*, 75 WASH. U. L.Q. 791, 792 (1997) (noting that "the stock market exhibits a very high degree of speculative trading").

3. WILLIAM N. THOMPSON, GAMBLING IN AMERICA: AN ENCYCLOPEDIA OF HISTORY, ISSUES, AND SOCIETY xxiv (2001). Scholars of gambling behavior have observed that human beings may have an innate impulse to gamble. *See id*. at xxv (suggesting that humans may have a "deep-seated feeling within our genetic makeup that leads us on a quest for a prize, even if that quest involves dangers and unknown factors"); *see also* Statman, *supra* note 2, at 19 ("[T]the average man has an inherent instinct for gambling in some form or other."). *But cf*. Edward J. McCaffery, *Why People Play Lotteries and Why It Matters*, 1994 WIS. L. REV. 71, 93–116 (1994) (arguing that lottery play can be explained from more rational perspectives).

4. *See* Securities and Exchange Act of 1934 § 21E, 15 U.S.C. § 78u-5(i)(1) (1997) (defining "forward-looking statement").

5. *See* Mark Klock, *Two Possible Answers to the Enron Experience: Will It Be Regulation of Fortune Tellers or Rebirth of Secondary Liability?*, 28 J. CORP. L. 69, 98–99 (2002) (noting that investors seek forward-looking information because "the whole point of investing is to move current wealth forward through time"); Homer Kripke, *The SEC, The Accountants, Some Myths and Some Realities*,

often reluctant to make such forward-looking statements because their inherently speculative nature means that sometimes the projections and forecasts will fail to materialize, and the corporation might be blamed and found liable for misleading the market.[6] Historically, the SEC objected to the dissemination of forward-looking statements, fearing that unsophisticated investors would rely too heavily on this type of speculative information.[7] In order to promote the disclosure of future-oriented information, however, Congress in 1995 enacted the Safe Harbor for Forward-Looking Statements (the "Safe Harbor") as part of the Private Securities Litigation Reform Act (the "Reform Act").[8] The Safe Harbor was designed to give corporations the freedom to make projections and discuss the future potential of company operations without fear of liability should managers fail to predict the future accurately.[9]

The Safe Harbor was one of the most hotly debated provisions in the Reform Act and was considered "potentially one of the most dangerous features" of the legislation.[10] Codified as section 27A of the Securities Act of 1933 (the "1933 Act"), and section 21E of the Securities and Exchange Act of 1934 (the "1934 Act"), the Safe Harbor shields corporations from private lawsuits for violations of the anti-fraud provisions of the federal securities laws with respect to forward-looking statements.[11]

The Safe Harbor offers corporations three alternative methods for avoiding liability when forward-looking statements turn out to be false. First, the Safe Harbor applies if the forward-looking statement is accom-

45 N.Y.U. L. REV. 1151, 1197 (1970) (observing that "members of the financial community determine the value of a security by the capitalization of projected future income").

6. *See* 3C HAROLD S. BLOOMENTHAL & SAMUEL WOLFF, SECURITIES AND FEDERAL CORPORATE LAW § 15:2 (2d ed. 2002) ("Forward-looking statements inevitably prove to be wrong to some degree."); Jennifer O'Hare, *Good Faith and the Bespeaks Caution Doctrine: It's Not Just a State of Mind*, 58 U. PITT. L. REV. 619, 625 (1997) (noting that issuers fear exposure to a greater risk of litigation under the federal securities laws when disseminating forward-looking information).

7. *See* Safe Harbor for Forward Looking Statements, 59 Fed. Reg. 52, 723 (Oct. 13, 1994) (to be codified at 17 C.F.R. pt. 240); *see also* SEC DISCLOSURE GROUP, DISCLOSURE TO INVESTORS: A REAPPRAISAL OF FEDERAL ADMINISTRATIVE POLICIES UNDER THE '33 AND '34 ACTS 95–96 (1969) [hereinafter WHEAT REPORT]. The SEC later changed its position on forward-looking statements. *See* discussion *infra* notes 28–50 and accompanying text.

8. Pub. L. No. 104-67, 109 Stat. 737 (1995) (amendments codified in various provisions of 15 U.S.C. § 77. Congress passed the Reform Act to reform large class action securities litigation based on violations of the federal securities laws. The Reform Act was designed to curb frivolous and abusive securities lawsuits by making it more difficult for plaintiffs to bring securities class actions in federal court. *See generally Symposium on the Private Securities Litigation Reform Act of 1995*, 51 BUS. LAW. 975 (1996) (discussing different aspects of the Reform Act).

9. *See* Richard A. Rosen, *The Statutory Safe Harbor for Forward-Looking Statements After Two and a Half Years: Has It Changed the Law? Has It Achieved What Congress Intended?*, 76 WASH. U. L.Q. 645, 646 (1998).

10. 141 CONG. REC. S9211 (June 28, 1995) (statement of Sen. Sarbanes); *see also* O'Hare, *supra* note 6, at 619 (referring to the Safe Harbor as "[o]ne of the most controversial provisions" of the Reform Act).

11. *See* 15 U.S.C. §§ 77z-2(c)(1), 78u-5(c)(1) (2000). Specifically, the Safe Harbor protects issuers from liability for lawsuits stemming from forward-looking statements when the claim is "based on an untrue statement of a material fact or omission of a material fact necessary to make the statement not misleading." *Id*.

panied by "meaningful cautionary statements" identifying important factors that could cause actual results to differ from the forward-looking statement. Second, the Safe Harbor protects corporations from liability if the forward-looking statement is immaterial. Finally, the corporation is protected if the plaintiff cannot prove that the forward-looking statement was made with "actual knowledge" that it was false or misleading.[12] Because these three Safe Harbor provisions work independently of one another, the corporation's state of mind is irrelevant under the first two provisions. In other words, corporate executives can knowingly lie to the market by making a forward-looking statement they are fully aware will never materialize, so long as they attach meaningful cautionary language to warn the market of the potential risks of the investment. Some members of Congress sharply criticized this result, describing it as an open invitation to "crooked corporations . . . to promise the Sun, Moon, and stars in their forward-looking statements," knowing well that they will never deliver on what they have promised, so long as the corporations attach vaguely defined cautionary language to their projections.[13]

The corporate scandals that have come to light in recent years cause investors to question whether it is appropriate to have a statutory Safe Harbor that allows a corporate executive to publicly paint a rosy picture of the corporation while knowing the business is on the brink of imploding. The Safe Harbor's three prongs provide independent protection for corporations making these deceptively positive forward-looking statements. This statutory structure in effect places tremendous importance on the "meaningful cautionary statement" prong because the Safe Harbor shields even knowing falsehoods insofar as they are accompanied by language that is meaningful and cautionary. The term "meaningful cautionary statement," however, is never explicitly defined anywhere in the Reform Act. Because the statute provides little guidance as to which statements qualify as being truly meaningful and cautionary, interpretative questions and uncertainties abound. Courts have struggled to give meaning to the term "meaningful cautionary statement" but have yet to devise clear standards or parameters. Even after the recent corporate scandals, Congress has not moved to revise or clarify the Safe Harbor's reach.

The protections of the Safe Harbor are based on the premise that the meaningful cautionary language, by warning of the risks associated with the market, will counterbalance the effect of forward-looking statements that optimistically predict a rosy future for the corporation. This premise is not unique to securities law. The idea of disclosing risks of

12. *See* 15 U.S.C. §§ 77z-2, 78u-5 (1997).

13. 141 CONG. REC. S9208 (daily ed. June 28, 1995) (statement of Sen. Wellstone); *see also* 141 CONG. REC. S19051 (daily ed. Dec. 21, 1995) (statement of Sen. Boxer) (describing the Safe Harbor as a "pirate's cove" for "sharks and barracudas"); 141 CONG. REC. H15221 (daily ed. Dec. 20, 1995) (statement of Rep. Collins); Nancy J. Kim, *Proposal A License to Lie?; Foes Blast Reform of Securities Law*, THE RECORD, Nov. 12, 1995, at B1, available in LEXIS, News Library, Njrec File.

dangers and potential hazards is central to the development of the duty to warn in the products liability area of tort law.[14] Warnings serve the dual role of reducing the risk of harm and permitting consumers to make informed choices about purchasing a given product.[15] Rather than paternalistically prohibiting consumers from buying dangerous products or engaging in potentially harmful activities, tort law utilizes the warning disclosure doctrine to promote individual autonomy in decision making. It allows consumers to consider relevant risks and decide for themselves whether to buy the product or engage in the contemplated behavior.[16] Although products liability law and the regulation of securities markets are two distinct legal regimes, both share similar concerns for the preservation of individual autonomy in making informed choices with respect to risky conduct, and both embrace the use of warnings to facilitate that decision-making process. Thus, considerations about the adequacy of warnings for consumer protection purposes may provide helpful insights in developing a deeper and more substantive understanding of what constitutes a meaningful cautionary statement for purposes of informing investors of potentially risky securities transactions.

On a more fundamental level, the use of warnings to communicate risks and hazards raises broader questions about assumptions of rationality in consumer and financial markets. The emphasis in securities and products liability law on making accurate risk information available to the public is premised on the belief that individuals are rational, self-governing actors who are willing and able to process the information wisely.[17] If we assume that consumers and investors are rational risk cal-

14. The law of products liability holds that products are defective not only when they have manufacturing or design flaws, but also when they fail to provide reasonable warnings for foreseeable harms. 2 DAN B. DOBBS, THE LAW OF TORTS § 363 (2001). For a general discussion of the law of warning defects, *see id.* §§ 363–368.

15. *See* James A. Henderson & Aaron D. Twerski, *Doctrinal Collapse in Products Liability: The Empty Shell of Failure to Warn*, 65 N.Y.U. L. REV. 265, 285 (1990) (describing the two functions of warnings as reducing the risk of product-related injury and providing consumers with the information necessary to choose whether to encounter certain risks); W. Kip Viscusi, *Individual Rationality, Hazard Warnings, and the Foundations of Tort Law*, 48 RUTGERS L. REV. 625, 625 (1996).

16. *See* W. PAGE KEETON, PROSSER & KEETON ON THE LAW OF TORTS § 96, at 685 (5th ed. 1984) (noting that one of the functions of warnings is to protect individual autonomy in making decisions); 2 REPORTERS' STUDY, AMERICAN LAW INSTITUTE, ENTERPRISE RESPONSIBILITY FOR PERSONAL INJURY: APPROACHES TO LEGAL AND INSTITUTIONAL CHANGE 66 (1991) (noting that the provision of warnings "presupposes a commitment to individual autonomy—within limits, to letting informed people decide for themselves what products to buy"). Information disclosure rules in general are said to promote citizen power and democratic decision making. Clifford Rechtschaffen, *The Warning Game: Evaluating Warnings under California's* Proposition 65, 23 ECOLOGY L.Q. 303, 314 (1996); *see also* Cass R. Sunstein, *Informing America: Risk, Disclosure, and the First Amendment*, 20 FLA. ST. U. L. REV. 653, 655 (1993) (arguing that informational remedies advance individual liberty, economic efficiency, and democracy because "[i]f people are unaware of the consequences of their choices, they are, to that extent, less free").

17. *See* Chris Guthrie, *Prospect Theory, Risk Preference, and the Law*, 97 NW. U. L. REV. 1115, 1132 (2003) (noting that "most products liability law and scholarship rest on rational-actor assumptions about the information-processing abilities of consumers and manufacturers"); Donald C. Langevoort, *Selling Hope, Selling Risk: Some Lessons for Law from Behavioral Economics About Stockbrokers and Sophisticated Customers*, 84 CAL. L. REV. 627, 699 (1996) (observing that "most doc-

culators who are consistently capable of weighing the costs and benefits of risky alternatives and selecting the option that maximizes expected utility, then a system of warning disclosures makes good sense. Substantial evidence, however, indicates that such assumptions of rationality and efficiency in information processing are faulty. Cognitive biases and constraints cause individuals to depart systematically from rational choice models of decision making.[18] "Unlike the classical economic actor who 'can perfectly process available information about alternative courses of action, and can rank possible outcomes in order of expected utility,' human individuals display a startling ineptitude for comprehending causality and probability."[19]

If this is true, then perhaps it is sensible from a doctrinal perspective to rethink the prudence of placing so much weight on warnings and cautionary language. Moreover, it may be wise to consider the psychological research on the effective design of risk communication in the consumer product market and use it to improve the effectiveness of meaningful cautionary statements in the securities market. Unfortunately, when Congress enacted the meaningful cautionary statement prong of the Safe Harbor, its members failed to consider any psychological or social science data regarding the ability of individuals to comprehend and process warnings.[20] At the very least, these cognitive constraints should be considered if the very crux of a safe harbor rule, which completely absolves corporate actors of liability, rests on the interpretation of what is sufficiently meaningful and cautionary to a market consisting of sophisticated and unsophisticated investors.

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trinal structures invoke the assumption of dominating rationality" and that "the emphasis in securities law is on making accurate information available"); Anne C. Dailey, *Striving for Rationality*, 86 VA. L. REV. 349, 351 (2000) (book review) ("The law as we know it operates on the premise that individuals are autonomous, rational, self-governing beings.").

18. *See* Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1477 (1998) ("[H]uman behavior differs in systematic ways from that predicted by the standard economic model of unbounded rationality. . . . Actual judgments show systematic departures from models of unbiased forecasts, and actual decisions often violate the axioms of expected utility theory."); Donald C. Langevoort, *Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review*, 51 VAND. L. REV. 1499, 1503–06 (1998) (discussing cognitive psychology research revealing mental biases in making decisions); *see also infra* Part IV (examining research on cognitive constraints and biases).

19. Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: The Problem of Market Manipulation*, 74 N.Y.U. L. REV. 630, 672 (1999) (quoting Robert C. Ellickson, *Bringing Culture and Human Frailty to Rational Actors: A Critique of Classical Law and Economics*, 65 CHI.-KENT L. REV. 23, 23 (1989)).

20. This is unsurprising, given that "[a]lthough considerable social science research concerns the design of risk communication programs, government agencies rarely use social science data in developing regulations for information disclosure requirements." Brenda J. Nordenstam & Joseph F. DiMento, *Right-to-Know: Implications of Risk Communication Research for Regulatory Policy*, 23 U.C. DAVIS L. REV. 333, 345 (1990) (citing Michael B. Mazis & Richard Staelin, *Using Information-Processing Principles in Public Policymaking*, 1 J. PUB. POL'Y & MARKETING 3, 3 (1982) (reporting that government agencies rarely use information processing theory in public policy development for consumer information programs)).

This article addresses these issues and ties them to the broader debates over the efficacy of warning law in general and the adequacy of financial markets to efficiently incorporate forward-looking disclosures and cautionary statements in the pricing of securities. Part II traces the evolution of federal policy regarding forward-looking information on three different fronts: the SEC, the courts, and Congress.[21] The historical treatment of forward-looking disclosures reveals a constantly shifting ambivalence toward the perceived benefits and dangers of such disclosures. The Safe Harbor, as enacted in the Reform Act, represents the ultimate compromise between conflicting constituent interests who both favor and fear the use of forward-looking information in the public markets. Part II discusses in greater detail the statutory structure of the Safe Harbor with special emphasis on the significance and ambiguity of the meaningful cautionary statement provision.

In an attempt to fill in the definitional gap associated with the phrase meaningful cautionary statement, Part III draws upon products liability doctrine in tort law regarding the duty to warn of potential risks and hazards.[22] Although such doctrinal developments in tort are not directly applicable to the regulation of securities transactions, they can inform the analysis of the appropriate disclosure of risks involved in the securities markets. Helpful insights can be gained by exploring the rich body of products liability law and tying it into certain aspects of securities regulation.

Assumptions of consumer and investor rationality that underlie the use of warnings to communicate risks are examined in Part IV.[23] Warning disclosure rules are sensible only if it is reasonable to assume that individuals are capable of reading warnings, processing them, and factoring them into their decisions to purchase. The efficacy of disclosures that bespeak caution, however, may be compromised by individual decision makers' bounded rationality and cognitive limits. These cognitive constraints are especially relevant in conditions where individuals must assess the probability of uncertain events. Such conditions are particularly salient when corporate managers formulate and disclose forward-looking statements and investors then process and act upon those statements. Part IV argues that the psychological data on cognitive biases should be considered in developing a more effective approach to risk communication in the securities markets.[24]

These issues implicate even deeper concerns about the efficiency of modern financial markets to incorporate all relevant information and risk disclosure in the pricing of securities. Adherence to efficient capital market theory suggests that, even if unsophisticated investors suffer from

21. *See infra* notes 28–103 and accompanying text.
22. *See infra* notes 104–27 and accompanying text.
23. *See infra* notes 128–83 and accompanying text.
24. *See infra* notes 184–92 and accompanying text.

cognitive errors in decision making, the presence of sophisticated investors and market intermediaries will move the market price of securities to their fair, intrinsic value.[25] Part V criticizes this assumption and analyzes the presumed efficiency of the securities market to process and heed warning disclosures.[26] In light of considerable speculative behavior by investors, meaningful cautionary statements from corporate managers may not have their intended effects. The presence of sophisticated investors and professionals may be insufficient buffers when unreliable forward-looking information is distributed to the market. What often makes investors vulnerable is not their lack of information, but cognitive limits on their decision-making processes. Sophisticated investors are not immune from this vulnerability. These concerns pose broader policy questions about the appropriate scope of disclosure rules, prompting a debate over whether securities regulation policy should be focused more directly on the average, unsophisticated investor, rather than on market professionals and sophisticated investors. In light of the problems associated with the disclosure of forward-looking information and the challenges presented by the Safe Harbor's warnings component, Part VI proposes guidelines for constructing cautionary warnings that are genuinely meaningful to the investment community as a whole.[27]

II. FORWARD-LOOKING STATEMENT SAFE HARBOR

As an historical matter, the SEC, the judiciary, and Congress have viewed the costs and benefits of forward-looking information in different ways. Accordingly, each has formulated a separate approach to the disclosure of such information. The following subsections review the historical development of these varying approaches.

A. SEC's Historical Treatment of Soft Information

Forward-looking statements fall within a category of disclosure traditionally referred to as "soft information." Soft information generally encompasses predictive statements or subjective analyses, such as projections, forecasts, plans, opinions, motives, or intentions.[28] These types of

25. *See* Jeffrey N. Gordon & Lewis A. Kornhauser, *Efficient Markets, Costly Information, and Securities Research*, 60 N.Y.U. L. REV. 761, 770–71 (1985) (describing the efficient market hypothesis); Gary F. Goldring, Note, *Mandatory Disclosure of Corporate Projections and the Goals of Securities Regulation*, 81 COLUM. L. REV. 1525, 1527–29 (1981) (explaining the theory of capital market efficiency); *see also infra* Part V (discussing the efficient capital market hypothesis).

26. *See infra* notes 193–231 and accompanying text.

27. *See infra* notes 232–58 and accompanying text.

28. *See* Victor Brudney, *A Note on Materiality and Soft Information under the Federal Securities Laws*, 75 VA. L. REV. 723, 723 n.2 (1989) (defining "soft" or "future-oriented" information in three broad categories); Carl W. Schneider, *Nits, Grits, and Soft Information in SEC Filings*, 121 U. PA. L. REV. 254, 255 (1972) (identifying five "non-exclusive and non-exhaustive categories" of information that can be characterized as "soft information"); *see also In re* Donald J. Trump Sec. Litig., 7 F.3d 357, 368 n.11 (3d Cir. 1993) ("The term soft information refers to statements of subjective analysis or ex-

statements often require the passage of time to discern their truth or falsity,[29] unlike objectively verifiable historical facts, or "hard information."[30] For example, a corporation's statement about a recently executed merger agreement with a rival company is a hard fact. An opinion projecting that the merger will significantly boost earnings and enhance the company's competitive position constitutes forward-looking, soft information.

Soft information, by its nature, involves a certain degree of conjecture and unreliability. The corporation's forecasts and estimates may turn out to be too optimistic (or too pessimistic), opinions may turn out to be mistaken, or objectives and plans may diverge from original intentions. Predictions about the future will always be uncertain and are surely bound to fail now and then.[31]

Due to the necessarily speculative nature of this type of information, the SEC for many years flatly prohibited the inclusion of forward-looking statements in corporate filings.[32] Viewing soft information as being inherently unreliable, the SEC feared that average investors would place too much emphasis on these predictive statements in making investment decisions.[33] Although sophisticated investors and market

trapolation, such as opinions, motives, and intentions, or forward looking statements, such as projections, estimates, and forecasts.").

29. *See* Harris v. Ivax Corp., 182 F.3d 799, 805 (11th Cir. 1999) (holding that statements whose truth or falsity is discernible only after they are made necessarily refer to future performance and are therefore forward-looking); JAMES D. COX ET AL., SECURITIES REGULATION: CASES AND MATERIALS 63 (3d ed. 2001) ("Soft information describes events or activities that will occur, if at all, at some future date.").

30. *See* Schneider, *supra* note 28, at 254–55 (defining "hard" information as "statements concerning objectively verifiable historical events or situations—commonly called 'facts'"); *see also* Klock, *supra* note 5, at 92 ("The general idea is that hard information is objectively verifiable fact and soft information is more of a subjective assessment."). It is not always easy to classify certain information. *See id.* (noting that the "distinction between hard and soft information is itself soft and opaque"); Schneider, *supra* note 28, at 256 ("'Hard' and 'soft' must be recognized as highly relative concepts suggesting no sharp dividing line. Many apparently hard statements have soft cores and vice versa."). Securities laws generally do not require disclosure of soft information. Fidel v. AK Steel Holding Corp., Fed. Sec. L. Rep. ¶ 92,000 (S.D. Ohio Sept. 19, 2002). "Soft information must be disclosed only if [it is] virtually as certain as hard facts." *Id.* (*quoting In re* Sofamor Danek Group, Inc., 123 F.3d 394, 402 (6th Cir. 1997)).

31. *See* Wielgos v. Commonwealth Edison Co., 892 F.2d 509, 514 (7th Cir. 1989) (observing that projections, by their nature, are inevitably inaccurate because things almost never go exactly as planned).

32. *See* Roger J. Dennis, *Mandatory Disclosure Theory and Management Projections: A Law and Economics Perspective*, 46 MD. L. REV. 1197, 1197–98 (1987) ("Traditionally, the SEC took a highly negative position on the disclosure of soft information [and] did not permit such information in SEC-filed documents."); Ted J. Fiflis, *Soft Information: The SEC's Former Exogenous Zone*, 26 UCLA L. REV. 95, 97 (1978) (noting that the SEC's policies traditionally prohibited the publication of most soft information in SEC filings); Carl W. Schneider & Jay A. Dubow, *Forward-Looking Information—Navigating in the Safe Harbor*, 51 BUS. LAW. 1070, 1079 (1996) (recounting the SEC's historic policy of "rigidly exclud[ing] forward-looking information and other so-called soft information from SEC filings").

33. *See* Safe Harbor for Forward-Looking Statements, Exchange Act Release No. 34,831 [1994–1995 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 85,436 at 85,779 (Oct. 13, 1994); J. Robert Brown, *Corporate Communications and the Federal Securities Laws*, 53 GEO. WASH. L. REV. 741, 792–93 (1985); Harry Heller, *Disclosure Requirements Under Federal Securities Regulation*, 16 BUS. LAW. 300,

watchers wanted disclosure of forward-looking information, the SEC was more concerned about the unsophisticated investor who might mistakenly attribute an unduly high aura of credibility, accuracy, and reliability to such statements.[34] The SEC felt that projections and other forms of soft information were per se misleading and therefore prohibited their dissemination in SEC filings.[35]

The SEC's position was sharply criticized because many commentators considered soft information to be at least as valuable as, and perhaps more valuable than, hard information.[36] Investing in a company always involves betting on its future; any information that provides insight into the future is highly useful. Because company managers have superior access to critical information, managers' own assessment of the company's future potential can provide a more effective basis for predicting the future than hard, historic data.[37] Commentators argued that the only way to make an informed investment judgment is to start with management's own projections for the future.[38]

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307 (1961) (noting that companies' attempts to predict future earnings have almost invariably been held by the SEC to be misleading "because they suggest to the investor a competence and authority which in fact does not exist").

34. *See* WHEAT REPORT, *supra* note 7, at 96 ("A real danger exists . . . that projections appearing in prospectuses and other documents filed under securities laws and reviewed by the [SEC] would be accorded a greater measure of validity by the unsophisticated than they would deserve."); HOUSE COMM. ON INTERSTATE & FOREIGN COM., 95TH CONG., REPORT OF THE ADVISORY COMMITTEE ON CORPORATE DISCLOSURE TO THE SEC 348 (Comm. Print No. 95-29, Nov. 3, 1977) ("[T]he [SEC] has excluded [soft] information from SEC filings for fear that such information, although useful and important to knowledgeable constituents of the investment community, might be misunderstood and unduly relied upon by unsophisticated investors."); Fiflis, *supra* note 32, at 97 (noting that the SEC was concerned about the increased "potential for deception of investors who, it is feared, might place undue credence in" soft information); Schneider, *supra* note 28, at 258 (explaining that investors justifiably assume that information in SEC filings "has been prepared with considerable care, tending to assure its accuracy").

35. *See* Fiflis, *supra* note 32, at 118; Kripke, *supra* note 5, at 1197. The SEC's original policy prohibiting forward-looking information in filings was also motivated by its reluctance to monitor the nature of such disclosures in prospectuses. *See* Schneider & Dubow, *supra* note 32, at 1085 ("By confining filings to objective statements of historic fact, it was easier [for the SEC] to police the adequacy of the document.").

36. *See* Brown, *supra* note 33, at 794 (noting that the SEC's policies regarding soft information did not escape criticism); Dennis, *supra* note 32, at 1199 (noting that the SEC began to change its attitude toward soft information because it "recognized that forward-looking data was perhaps the most useful type of information for investors").

37. *See* S. REP. NO. 104-98, at 15–16 (1995), *reprinted in* 1995 U.S.C.C.A.N. 679, 694–95 ("Understanding a company's own assessment of its future potential would be among the most valuable information shareholders and potential investors could have about a firm.") (quoting testimony of SEC Chairman Richard Breeden); Brudney, *supra* note 28, at 730 ("[D]isclosure of insiders' informed expectations about contingent events enables the investor to rely upon the best informed and most plausible statement about the future."); Kripke, *supra* note 5, at 1198 ("The management, which has the greatest stake in the matter, and which may have spent months of labor in its projections, certainly is in a better position than the public to forecast where the company is going."); Schneider & Dubow, *supra* note 32, at 1085 (discussing the value of forward-looking information).

38. *See* HOMER KRIPKE, THE SEC AND CORPORATE DISCLOSURE: REGULATION IN SEARCH OF A PURPOSE 317–18 (1979) (endorsing encouragement of projections); Kripke, *supra* note 5, at 1199; Note, *Disclosure of Future-Oriented Information under the Securities Laws*, 88 YALE L.J. 338, 360–61 (1978) (arguing that "managements should be required to disclose formal financial forecasts").

It was in this context that the SEC reexamined its policy on the disclosure of forward-looking information.[39] The SEC became convinced that projections could be beneficial to investors.[40] Eventually reversing its prior position, the SEC concluded that forward-looking information may be included, and should be encouraged, in public disclosure documents.[41] The SEC found that the "availability of forward-looking and analytical information is important to an investor's assessment of a corporation's future earning power and may be material to informed investment decision making."[42]

In order to promote the increased disclosure of future-oriented information, the SEC promulgated a safe harbor rule for forward-looking statements in 1979. The SEC added the safe harbor rule as Rule 175 under the 1933 Act and Rule 3b-6 under the 1934 Act.[43] This rule provided corporations with protection against liability when making forward-looking statements in SEC filings, so long as the statements were made in good faith and with a reasonable basis.[44]

The SEC safe harbor proved to be ineffective. It failed to encourage the release of more forward-looking information because of certain perceived flaws in the rule.[45] One major problem was that the safe har-

39. The SEC held extensive rulemaking hearings on the use of projections. *See* Public Hearings on Estimates, Forecasts or Projections of Economic Performance, Exchange Act Release No. 9844, [1972–1973 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 79,075 at 82,322 (Nov. 1, 1972); Dennis, *supra* note 32, at 1198–1200 (discussing the shift in the SEC's view of forward-looking information disclosure). For a comprehensive review of the SEC's reconsideration of its position on soft information, see Joel Seligman, *The SEC's Unfinished Soft Information Revolution*, 63 FORDHAM L. REV. 1953, 1955–62 (1995); *see also* John S. Poole, *Improving the Reliability of Management Forecasts*, 14 J. CORP. L. 547, 574–77 (1989) (discussing the development of the SEC's policy regarding management forecasts).

40. *See* Statement by the Commission on the Disclosure of Projections of Future Economic Performance, Exchange Act Release No. 5362 (Feb. 2, 1973), 1973 WL 149309 ("[T]he [SEC] has now determined that changes in its present policies with regard to use of projections would assist in the protection of investors and would be in the public interest."); Kimberly Till, Comment, *The SEC Safe Harbor for Forecasts—A Step in the Right Direction?*, 1980 DUKE L.J. 607, 615–18 (discussing the SEC's conclusion, after public hearings, that management's assessment of future performance conveys information of significant importance to investors).

41. *See* Goldring, *supra* note 25, at 1525; Bruce A. Hiler, *The SEC and the Courts' Approach to Disclosure of Earnings Projections, Asset Appraisals, and Other Soft Information: Old Problems, Changing Views*, 46 MD. L. REV. 1114, 1122–23 (1987).

42. Guides for Disclosure of Projections of Future Economic Performance, 43 Fed. Reg. 53,246, 53,247 (Nov. 15, 1978).

43. 17 C.F.R. § 230.175 (2004); 17 C.F.R. § 240.3b-6 (2004); *see* Safe Harbor Rule for Projections, Exchange Act Release No. 15,994 [1979 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 82,117, at 81,938 (June 25, 1979); Royce de R. Barondes, *The Bespeaks Caution Doctrine: Revisiting the Application of Federal Securities Law to Opinions and Estimates*, 19 J. CORP. L. 243, 247–51 (1994) (discussing the SEC safe harbor).

44. In a lawsuit based on the allegedly fraudulent nature of a forward-looking statement, the plaintiff had the burden of showing that the statement lacked a reasonable basis or was made in bad faith. 17 C.F.R. § 230.175(a) (2004); 17 C.F.R. § 240.3b-6(a) (2004); *see also* Brown, *supra* note 33, at 795–96 (describing plaintiff's burden of proof); Dennis, *supra* note 32, at 1199–1200 (discussing safe harbor rule standards and burden of proof); Poole, *supra* note 39, at 576–77 (same).

45. *See* David M. Levine & Adam C. Pritchard, *The Securities Litigation Uniform Standards Act of 1998: The Sun Sets on California's Blue Sky Laws*, 54 BUS. LAW. 1, 43 (1998) ("Surveys showed that Rule 175 did little to encourage issuers to disclose forward-looking information to the marketplace.");

bor applied only to statements made in documents filed with the SEC or in annual reports to shareholders. In all other circumstances, forward-looking statements could subject corporations to liability if the predictions turned out to be wrong.[46] Moreover, in the event of litigation arising from the statement, the factually oriented standards of good faith and reasonableness allowed for a certain amount of discovery and prevented an early dismissal of the lawsuit in favor of corporations.[47] The SEC noticed that "the provisions of the safe harbor are not applied by the courts in a manner that results in quick and inexpensive dismissals of frivolous lawsuits."[48]

Finally, in 1994, the SEC sought, and obtained, extensive public comments about proposals to expand the safe harbor rule.[49] Before the SEC could act to adopt an expanded rule, however, Congress preempted the SEC's administrative efforts by enacting the Reform Act in 1995, which included the controversial Safe Harbor for forward-looking statements.[50] The SEC, therefore, never adopted its own rule to define the precise scope of protection that would be appropriate for forward-looking information.

B. Judicial Bespeaks Caution Doctrine

While the SEC's policies on forward-looking statements shifted over time, the judiciary fashioned its own unique approach to soft information. In agreement with the SEC's early position on soft information, courts initially discouraged the disclosure of forward-looking information

see also Brown, *supra* note 33, at 796 (criticizing the SEC safe harbor rule as "provid[ing] companies with little additional comfort or encouragement to use projections"); Harvey L. Pitt et al., *Toward a Real Safe Harbor for Forward Looking Statements: A Reassessment of SEC Rule 175*, Practicing Law Institute, Corporate Law and Practice Course Handbook Series, 866 PLI/Corp 671, 674–75 (Nov. 1994) (suggesting that it was time to rethink the SEC safe harbor rule because of its ineffectiveness).

46. 17 C.F.R. § 230.175 (2004); 17 C.F.R. § 240.3b-6 (2004); *see* Levine & Pritchard, *supra* note 45, at 43. The SEC itself recognized that "the protections of the safe harbor are too narrow because they are limited to filed documents." Safe Harbor for Forward-Looking Statements, Securities Act Release No. 33,7101, [1994–1995 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 85,436, at 85,778 (Oct. 13, 1994).

47. *See* Levine & Pritchard, *supra* note 45, at 43; Pitt et al., *supra* note 45, at 678 ("The shortcoming of the rule is that the safe harbor it creates offers too little protection too late in the process. The rule requires such a subjective analysis that it often will only be of significance after a record has been developed through extensive—and expensive—discovery."); *see also* Brown, *supra* note 33, at 796 (discussing ambiguity in determining what constitutes "good faith" and "reasonable basis"); John M. Olivieri, Note, *Liability for Forward-Looking Statements: The Securities and Exchange Commission's Ambiguous Stance*, 1993 COLUM. BUS. L. REV. 221, 229–32 (1993) (same).

48. Safe Harbor for Forward-Looking Statements, Exchange Act Release No. 34,831 [1994–1995 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 85,436, at 85,778 (Oct. 13, 1994).

49. *See* Safe Harbor for Forward-Looking Statements, Concept Release and Notice of Hearing, Securities Act Release No. 33-7101, 57 SEC Docket 1999 (Oct. 13, 1994); S. REP. NO. 104-98 (1995), *reprinted in* 1995 U.S.C.C.A.N. 679, 719 (stating that the SEC had received approximately 150 comment letters in response to its Concept Release and had conducted national public hearings on the issue) (quoting testimony of SEC Chairman Arthur Levitt); *see also* Schneider & Dubow, *supra* note 32, at 1084 (describing the SEC's consideration of adopting an expanded safe harbor rule).

50. *See infra* Part II.C (discussing the enactment of the Safe Harbor under the Reform Act).

on the grounds that it would mislead average investors who might rely too heavily on corporations' predictive statements.[51] During the 1970s, however, courts began to alter their restrictive view of forward-looking statements. Judges felt the SEC was not doing enough to protect corporations from liability when disclosing valuable future-oriented information to the market.[52] Rather than waiting for the SEC to lead the way in adopting an effective safe harbor rule for forward-looking information, courts developed the common law "bespeaks caution" doctrine to protect corporations that made forward-looking statements.[53]

According to the bespeaks caution doctrine, forward-looking communications, such as forecasts, projections, or opinions, may not form the basis of a securities fraud claim if they are accompanied by meaningful warnings and cautionary statements.[54] To determine whether forward-looking statements are misleading, they must be analyzed in the context of surrounding cautionary language. Courts may rule, as a matter of law, that the cautionary language sufficiently tempers the optimistic forward-looking statements and, therefore, any suit based on the allegedly fraudulent nature of the forward-looking statements cannot withstand a motion to dismiss or a motion for summary judgment.[55] The corporate issuer of the forward-looking statements is thereby protected from frivolous lawsuits stemming from the disclosure of predictive statements which, in hindsight, did not prove to be true.

The doctrine is based on the assumption that statements that sufficiently "bespeak caution" to potential investors have several alternative effects. First, meaningful warnings and the adequate disclosure of risk factors can render overly rosy forward-looking statements immaterial as a matter of law.[56] Positive predictions may be quite salient, but if they

51. *See* Union Pac. R.R. v. Chi. & N.W.R.R., 226 F. Supp. 400, 408–09 (N.D. Ill. 1964) (describing concern that projections may mislead investors). Courts generally have viewed projections, appraisals, and ongoing negotiations as "inherently uncertain, with disclosure causing more harm than good." Brown, *supra* note 33, at 782.

52. *See* Jonathan B. Lurvey, Note, *Who Is Bespeaking to Whom? Plaintiff Sophistication, Market Information, and Forward-Looking Statements*, 45 DUKE L.J. 579, 584–89 (1995) (discussing the historical and doctrinal foundation of the bespeaks caution doctrine).

53. *Id.* at 581 ("In the void left by the SEC rules, courts created a form of protection for issuers' forward-looking statements called the 'bespeaks caution' doctrine.").

54. *See* 3C BLOOMENTHAL & WOLFF, *supra* note 6, § 12:57; Donald C. Langevoort, *Disclosures that "Bespeak Caution,"* 49 BUS. LAW. 481, 481–83 (1994) (describing the bespeaks caution doctrine); O'Hare, *supra* note 6, at 620 (same).

55. *See* Karacand v. Edwards, 53 F. Supp. 2d 1236, 1243 (D. Utah 1999) (acknowledging that the bespeaks caution doctrine is to be applied in considering a motion to dismiss); *In re* Silicon Graphics, Inc. Sec. Litig., No. C96-0393, 1996 WL 664639, at *13 (N.D. Cal. Sep. 25, 1996) ("The doctrine is typically applied in a motion to dismiss or a motion for summary judgment."). The doctrine is often invoked in lawsuits brought under Rule 10b-5 of the 1934 Act, and sections 11 and 12(2) of the 1933 Act. *See* Langevoort, *supra* note 54, at 483.

56. *In re* Donald J. Trump Casino Sec. Litig., 7 F.3d 357, 371 (3d Cir. 1993) (holding that "cautionary language, if sufficient, renders the alleged omissions or misrepresentations immaterial as a matter of law"); *see also* Lurvey, *supra* note 52, at 588 (noting that "cautionary language operates within the total mix of available information to render immaterial otherwise material misrepresenta-

are accompanied by cautionary language revealing the reasons why the predictions may not come true, the predictions are no longer material to the market. Second, clear warning statements make it unreasonable for investors to rely on the forward-looking information.[57] Reliance on a prediction that is presented with a detailed explanation of the risks of failure is not objectively reasonable or justified. Third, the use of cautionary language may make it unreasonable for the investor to view the forward-looking statement as being false or misleading in the first place.[58] Thus, the power of cautionary language is significant; it renders plaintiffs unable to meet the basic elements of a securities fraud claim against a corporation whose forward-looking statements turn out to be inaccurate.

In determining the sufficiency of the cautionary language, courts have held that the warnings must be substantive and tailored to the specific future projection.[59] The corporation must identify specific risks and disclose facts critical to appreciating the magnitude of the risks.[60] Mere boilerplate warnings or general descriptions of risks are inadequate.[61]

tions"); O'Hare, *supra* note 6, at 633–36 (discussing cases holding that cautionary statements render forward-looking statements immaterial).

57. *See In re* Splash Tech. Holdings, Inc., Sec. Litig., No. C99-00109 SBA, 2000 WL 1727377, at *9 (N.D. Cal. Sept. 29, 2000) (explaining that when appropriate cautionary language accompanies forward-looking statements, the reasonableness of reliance is impacted); *In re* Towers Fin. Corp. Noteholders Litig., No. 93 CIV.0810 (WK)(AJP), 1996 WL 393579, at *15–17 (S.D.N.Y. July 15, 1996) (holding that plaintiffs could not have reasonably relied on alleged misrepresentations in the offering memoranda because it contained sufficiently cautionary language); *see also* Langevoort, *supra* note 54, at 487 (describing some courts' view that the cautionary language takes away the plaintiffs' right to rely on the projections); Lurvey, *supra* note 52, at 588 (noting that cautionary language renders possibly misleading statements harmless because investors cannot reasonably rely on them); O'Hare, *supra* note 6, at 636–38 (discussing cases holding cautionary statements prevent investors from reasonably relying on forward-looking statements).

58. *See* Grossman v. Novell, 120 F.3d 1112, 1120 (10th Cir. 1997) (finding that "sufficiently specific risk disclosures or other cautionary statements" can "nullify any potentially misleading effect" of forward-looking presentations); Langevoort, *supra* note 54, at 487 (describing some courts' view that the cautionary language can so dilute the optimistic disclosure that the statements do not have the propensity to mislead); O'Hare, *supra* note 6, at 630–32 (discussing cases holding cautionary statements prevent forward-looking statements from becoming false or misleading as a matter of law).

59. *In re* Donald J. Trump Casino Sec. Litig., 7 F.3d 357, 364 (3d Cir. 1993); *see also* Kline v. First W. Gov't Sec., Inc., 24 F.3d 480, 489 (3d Cir. 1994) ("Not just any cautionary language will trigger application of the doctrine. Instead, disclaimers must relate directly to that on which investors claim to have relied."); *In re* Prudential Sec. Inc. Ltd. P'ships Litig., 930 F. Supp. 68, 72 (S.D.N.Y. 1996) ("Cautionary language cited to justify application of the doctrine must precisely address the substance of the specific statement or omission that is challenged."). For example, in one case a court held that the bespeaks caution doctrine did not apply because the defendants did not identify cautionary language directly relating to the plaintiffs' assertion that defendants failed to disclose the company's declining economic growth while continuing to make glowing predictions of future success. *See In re* Staffmark, Inc. Sec. Litig., 123 F. Supp. 2d 1160, 1172 n.9 (E.D. Ark. 2000).

60. Credit Suisse First Boston v. ARM Fin. Group, No.99 CIV 12046 WHP, 2001 WL 300733, at *8 (S.D.N.Y. Mar. 28, 2001) ("[W]arnings of specific risks . . . do not shelter defendants from liability if they fail to disclose hard facts critical to appreciating the magnitude of the risks described.").

61. *In re* Donald J. Trump Casino Sec. Litig., 7 F.3d 357, 371 (3d Cir. 1993) (recognizing that "a vague or blanket (boilerplate) disclaimer which merely warns the reader that the investment has risks will ordinarily be inadequate"); *see also* Lurvey, *supra* note 52, at 589 ("Mere boilerplate warnings are insufficient to invoke the doctrine."); O'Hare, *supra* note 6, at 629 (noting the insufficiency of general warnings that forward-looking statements are uncertain and may not come true).

For example, in *In re BankAmerica Corp. Securities Litigation*, the court held that a corporation's boilerplate warnings about the risk of general market volatility were insufficient to alert investors to the existence of a large financial relationship between the company and a highly leveraged hedge fund that was experiencing losses due to its risky trading practices.[62]

The bespeaks caution doctrine provides significant protection for issuers of forward-looking information. The judicially created doctrine shields more forward-looking statements than the SEC safe harbor rule because the doctrine is applicable to statements made outside of SEC filings, such as press releases or other corporate communications.[63] Moreover, the bespeaks caution doctrine allows courts to dispose of plaintiffs' claims as a matter of law earlier in the litigation process. It offers an almost "magic bullet" for corporations by suggesting "a way of styling forward-looking disclosures to reasonably assure termination of a subsequent lawsuit . . . through a motion to dismiss or summary judgment, thereby avoiding the drain of class certification, extensive discovery, and the resulting pressure to settle."[64]

By constructing this doctrine to protect the disclosure of future-oriented information, courts went beyond what the SEC had done in its own safe harbor rules. Congress, however, took it one step further and developed a rule that surpassed the SEC rule and the judicial doctrine in scope. With the adoption in 1995 of the controversial Safe Harbor for forward-looking statements in the Reform Act, Congress created the most extensive safe harbor yet for the disclosure of forward-looking statements.

C. Congressional Enactment of the Safe Harbor for Forward-Looking Statements

The purpose of enacting the statutory Safe Harbor was to encourage more companies to make public projections about the future potential of their businesses without fearing the liability that might arise if their public statements failed to predict the future accurately.[65] Congress believed that the threat of liability had chilled and muzzled corporate managers from providing helpful forward-looking information to the

62. 78 F. Supp. 2d 976, 997 n.10 (E.D. Mo. 1999).

63. *See* 17 C.F.R. § 230.175(b) (2004) (limiting application of the rule to forward-looking statements in filed documents); 17 C.F.R. § 240.3b-6(b) (2004) (same); 3B BLOOMENTHAL & WOLFF, *supra* note 6, § 12:57.

64. Langevoort, *supra* note 54, at 482.

65. *See* S. REP. NO. 104-98, at 5 (1995), *reprinted in* 1995 U.S.C.C.A.N. 679, 684 (explaining that the purpose of the safe harbor is to encourage voluntary disclosure of forward-looking information and reduce the chilling effect of threats of mass shareholder litigation); *see also* Helwig v. Vencor, Inc., 251 F.3d 540, 559 (6th Cir. 2001) ("The safe harbor was designed to encourage company disclosure of future plans and objectives by removing the threat of liability."); *In re* Splash Tech. Holdings Inc. Sec. Litig., 160 F. Supp. 2d 1059, 1068 (N.D. Cal. 2001).

market.[66] The perception was that professional plaintiffs' class-action attorneys were filing frivolous strike suits against corporations each time their stock prices dropped, alleging that the change in stock price meant managers' optimistic forward-looking statements must have been false or misleading.[67] In order to avoid expensive, protracted litigation and discovery excesses, corporations settled the suits, and the benefits of settlement flowed mostly to plaintiffs' attorneys rather than shareholders.[68] Congress thus sought to make it much more difficult to bring lawsuits based on forward-looking statements. The solution was to craft a statute that would not only allow courts to terminate such claims on a motion to dismiss and automatically stay any discovery while the motion was pending, but also permit corporations to make predictions with actual knowledge that they were false, so long as they were accompanied by sufficient cautionary language.[69]

The debate over the statutory Safe Harbor was heated. Many opposed the adoption of the Safe Harbor and questioned the underlying assumption that an epidemic of abusive litigation even existed.[70] Some

66. *See* 141 CONG. REC. H13703 (daily ed. Nov. 28, 1995) ("Fear that inaccurate projections will trigger the filing of securities class action lawsuits has muzzled corporate management."); S. REP. NO. 104-98, at 9 (1995), *reprinted in* 1995 U.S.C.C.A.N. 679, 688 ("Many companies refuse to talk or write about future business plans, knowing that projections that fail to materialize will inevitably result in a lawsuit."); *see also* Harris v. Ivax Corp., 182 F.3d 799, 806 (11th Cir. 1999) (noting that Congress sought to "loosen the 'muzzling effect' of potential liability for forward-looking statements, which often kept investors in the dark about what management foresaw for the company"); Karacand v. Edwards, 53 F. Supp. 2d 1236, 1243 (D. Utah 1999) (describing congressional concern that companies were unwilling to disclose projections to the market for fear of potentially limitless liability if the projections later turned out to be inaccurate); Schneider & Dubow, *supra* note 32, at 1071.

67. *See* H.R. REP. NO. 104-50, pt. 1, at 16 (1995), *reprinted in* 1995 WL 78795 (criticizing "entrepreneurial trial lawyers" who use "professional plaintiffs" to file "cookie-cutter complaints" within hours after stock price declines); James A. Kassis, *The Private Securities Litigation Reform Act of 1995: A Review of Its Key Provisions and an Assessment of Its Effects at the Close of 2001*, 26 SETON HALL LEGIS. J. 119, 120–21 (2001). It is not uncommon for multiple complaints to be filed shortly after a negative announcement involving missed expectations, the failure of an anticipated product, or a change in business strategy. Lisa K. Wagner & Adrienne M. Ward, *Securities Class Actions: A Company's Bad News Gets Worse*, BUS. L. TODAY, July/Aug. 2002, at 15; *see also* Lurvey, *supra* note 52, at 581 (describing the "perception that strike suits go hand in hand with the disclosure of forward-looking information").

68. Congress "heard testimony that discovery in securities class actions resembles a fishing expedition" wherein plaintiffs' attorneys "search through all of the company's documents and take endless depositions for . . . any shred of evidence that the company knew a downturn was coming." S. REP. NO. 104-98, at 14 (1995), *reprinted in* 1995 U.S.C.C.A.N. 679, 693; *see also* H.R. REP. NO. 104-50, pt. 1, at 15 (1995), *reprinted in* 1995 WL 78795 (describing the pressure to settle frivolous shareholder lawsuits for substantial sums as a type of "legal extortion"). There were estimates that discovery costs comprised eighty percent of the expense of defending securities class actions. 141 CONG. REC. S19151 (daily ed. Dec. 22, 1995).

69. *See infra* Part II.D (discussing statutory structure and components of the Safe Harbor).

70. Many consumer groups, senior citizen groups, and labor organizations opposed the legislation because it appeared more pro-business than pro-investor and would arguably expose average shareholders to corporate fraud. *See* Lisa Girion, *Crisis in Corporate America: 1995 Tort Reform Act Said to Provide Safe Harbor for Fraud Legislation*, L.A. TIMES, July 21, 2002, at C1. Senators Sarbanes, Bryan, and Boxer objected to the legislation and argued that there was little evidence of crisis levels of frivolous securities litigation. S. REP. NO. 104-98, at 38 (1995), *reprinted in* 1995 U.S.C.C.A.N. 679, 716. Armed with statistics from the Administrative Office of the Unites States Courts, the Direc-

feared that the Safe Harbor would undermine the rights of small investors to protect themselves against corporations who might use "grossly exaggerated" claims to attract investors.[71] Others felt that Congress should defer to the SEC and allow the SEC to complete its rulemaking process and determine the proper scope of an administrative safe harbor rule for forward-looking statements.[72] Many objected to the license given to corporations to lie knowingly to the market as long as sufficiently meaningful cautionary statements were attached to the lies.[73]

Ultimately, Congress approved the Reform Act and the statutory Safe Harbor contained within it, but President Bill Clinton vetoed the legislation out of concern that it would "have the effect of closing the courthouse door on investors who have legitimate claims."[74] While supporting the creation of the statutory Safe Harbor for forward-looking statements, the President opposed language in the legislative history that courts would use as a guide to congressional intent in interpreting the meaning of "meaningful cautionary statements."[75] Specifically, the President objected to explanatory statements in the legislative history that he felt watered down the nature of the cautionary language that must accompany forward-looking statements to receive the Safe Harbor's protection.[76] Notwithstanding the President's opposition, Congress

tor of the SEC's Division of Enforcement testified that "the numbers do not reveal the type of increase that ordinarily would be characterized as an 'explosion'" of securities lawsuits. *Id.* at 717. Professor Coffee testified that the perception of an epidemic of securities litigation was a myth. *See What We Know and Don't Know: A Very Short Primer on Securities Class Actions: Hearing Before the Subcomm. on Telecomms. and Fin. of the Comm. on Energy and Commerce*, 1994 WL 14169587 (testimony of John C. Coffee, Jr., Professor, Columbia Law School).

71. 141 CONG. REC. S9202 (daily ed. June 28, 1995) (comments of Sen. Cohen).

72. 141 CONG. REC. S9203 (daily ed. June 28, 1995) (comments of Sen. Feingold); *see also* 141 CONG. REC. S9203 (daily ed. June 28, 1995) (comments of Sen. Cohen) (arguing that the safe harbor rule should be implemented by regulation rather than statute and that the SEC should be given the opportunity to fashion an appropriately balanced safe harbor for forward-looking statements). The SEC urged Congress to allow the SEC to proceed with its own rulemaking proceedings rather than pass safe harbor legislation. *See* H.R. REP. NO. 104-50, pt. 1, at 45 (1995), *reprinted in* 1995 WL 78795; S. REP. NO. 104-98, at 41 (1995), *reprinted in* 1995 U.S.C.C.A.N. 679, 719–20. Several other organizations expressed the same view, including the North American Securities Administrators Association, the Government Finance Officers Association, and the National League of Cities. *See* S. REP. NO. 104-98, at 42 (1995), *reprinted in* 1995 U.S.C.C.A.N. 679, 720. Congress declined to defer to SEC rulemaking on this issue. *See* Schneider & Dubow, *supra* note 32, at 1084.

73. *See* 141 CONG. REC. S9202, (daily ed. June 28, 1995) (comments of Sen. Cohen) (expressing concern that "a few carefully placed disclaimers could provide a legal protection for misleading statements that were made knowingly"). Congressman Markey stated that it was "simply wrong" to adopt a safe harbor that allows company executives to "intentionally lie to the investing public." 141 CONG. REC. H15216 (daily ed. Dec. 20, 1995).

74. 141 CONG. REC. H15214 (daily ed. Dec. 20, 1995) (veto message of President); *see also* Michael K. Frisby & Jeffrey Taylor, *Clinton Vetoes Bill Limiting Securities Suits*, WALL ST. J., Dec. 20, 1995, at A3.

75. 141 CONG. REC. H15215 (daily ed. Dec. 20, 1995); *see also* Kassis, *supra* note 67, at 135–36.

76. 141 CONG. REC. H15215 (daily ed. Dec. 20, 1995). The Statement of Managers stated the Conference Committee's expectation that "the cautionary statements identify important factors that could cause results to differ materially—but not all factors. Failure to include the particular factor that ultimately causes the forward-looking statement not to come true will not mean that the statement is not protected by the safe harbor." 141 CONG. REC. H13703 (daily ed. Nov. 28, 1995).

voted to override the veto and enacted the Reform Act with the statutory Safe Harbor.[77]

D. Components of the Safe Harbor for Forward-Looking Statements

The Safe Harbor was enacted in the form of an amendment adding Section 27A to the 1933 Act and Section 21E to the 1934 Act.[78] The Safe Harbor applies only to "forward-looking statements," which are defined broadly to include projections of revenues, income, earnings per share, capital expenditures, dividends, or other financial items; plans and objectives of management for future operations; statements of future economic performance; and statements of any underlying assumptions for the forward-looking disclosures.[79] Only certain issuers and individuals are protected under the rule: an issuer that is a reporting company under the 1934 Act; any person acting on behalf of such a company; and an outside reviewer retained by the company who makes a statement on behalf of the company.[80]

One of the most important features of the Safe Harbor is its procedural effect on any private action that alleges a violation of the securities laws based on a materially false or misleading statement or omission. The court must stay discovery during the pendency of any motion by the

77. *See* 141 CONG. REC. S19180 (daily ed. Dec. 22, 1995) (Senate vote); 141 CONG. REC. H15215, H15223–24 (daily ed. Dec. 20, 1995) (House vote). The ultimate result was a safe harbor rule that was far more extensive than the SEC was likely to have adopted. *See* Schneider & Dubow, *supra* note 32, at 1084. For a detailed description of the legislative path to the enactment of the Reform Act, see John W. Avery, *Securities Litigation Reform: The Long and Winding Road to the Private Securities Litigation Reform Act of 1995*, 51 BUS. LAW. 335 (1996); Kassis, *supra* note 67, at 125–36.

78. 15 U.S.C. § 77z-2 (2000); 15 U.S.C. § 78u-5 (2000). The text of the two provisions is identical.

79. 15 U.S.C. § 77z-2(i)(1)(A)–(D) (2000); 15 U.S.C. § 78u-5(i)(1)(A)–(D) (2000). The statutory definition of forward-looking statements also includes "any report issued by an outside reviewer retained by an issuer, to the extent that the report assesses a forward-looking statement made by the issuer" and any statement that contains "a projection or estimate of such other items as may be specified by" the securities laws. 15 U.S.C. § 77z-2(i)(1)(E)–(F) (2000); 15 U.S.C. § 78u-5(i)(1)(E)–(F) (2000). The Safe Harbor carves out certain categories of information and transactions that are not entitled to protection. For example, forward-looking statements that are contained in financial statements prepared in accordance with generally accepted accounting principles, made in connection with a tender offer or an initial public offering, or related to the operations of a partnership or limited liability company are excluded from coverage under the Safe Harbor. 15 U.S.C. § 77z-2(b)(2)(A), (C)–(E) (2000); 15 U.S.C. § 78u-5(b)(2)(A), (C)–(E) (2000). Forward-looking statements that are issued by investment companies or made in a disclosure of beneficial ownership pursuant to a Schedule 13(D) filing are also excluded from coverage. 15 U.S.C. § 77z-2(b)(2)(B), (F) (2000); 15 U.S.C. § 78u-5(b)(2)(B), (F) (2000). Moreover, no Safe Harbor protection is afforded to issuers who make forward-looking statements in connection with an offering of securities by a blank check company, a rollup transaction, a going private transaction, or an issuance of penny stock. 15 U.S.C. § 77z-2(b)(1)(B)–(E) (2000); 15 U.S.C. § 78u-5(b)(1)(B)–(E) (2000).

80. 15 U.S.C. § 77z-2(a)(1)–(3) (2000); 15 U.S.C. § 78u-5(a)(1)–(3) (2000). The statute also protects "an underwriter, with respect to information provided by" the company. 15 U.S.C. § 77z-2(a)(4) (2000); 15 U.S.C. § 78u-5(a)(4) (2000). The Safe Harbor does not apply to issuers that have been convicted of certain crimes or subject to judicial or administrative orders arising under anti-fraud provisions within the previous three years. 15 U.S.C. § 77z-2(b)(1)(A) (2000); 15 U.S.C. § 78u-5(b)(1)(A) (2000).

corporate defendant for summary judgment.[81] This allows corporations to avoid the time and expense of dealing with costly discovery requests and authorizes courts to dispose of lawsuits at a much earlier stage.

1. Alternative Safe Harbors

The Safe Harbor contains three alternative provisions that immunize defendants from liability for making forward-looking statements that turn out to be untrue. First, a defendant will not be liable for any forward-looking statement that is "identified as a forward-looking statement, and is accompanied by meaningful cautionary statements identifying important factors that could cause actual results to differ materially from those in the forward-looking statement" (the "meaningful cautionary statement prong").[82] Second, no liability attaches to forward-looking statements that are "immaterial" (the "immateriality prong").[83] Third, the defendant is not liable if the plaintiff fails to prove that the forward-looking statement "was made with actual knowledge . . . that the statement was false or misleading" (the "actual knowledge prong").[84]

81. 15 U.S.C. § 77z-2(f) (2000); 15 U.S.C. § 78u-5(f) (2000); *see* John C. Coffee, Jr., *The Future of the Private Securities Litigation Reform Act: Or Why the Fat Lady Has Not Yet Sung*, 51 BUS. LAW. 975, 985–89 (1996) (discussing the effects of the discovery stay provision); Schneider & Dubow, *supra* note 32, at 1088 (noting the benefits of automatic stay of discovery for defendants).

82. 15 U.S.C. § 77z-2(c)(1)(A)(i) (2000); 15 U.S.C. § 78u-5(c)(1)(A)(i) (2000). The meaningful cautionary statement prong applies to both written and oral forward-looking statements. In the case of oral statements, no liability will arise so long as the oral statement is accompanied by a statement that additional information concerning factors that could cause actual results to differ materially from those in the forward-looking statement is contained in a readily available written document. *See* 15 U.S.C. § 77z-2(c)(2) (2000); 15 U.S.C. § 78u-5(c)(2) (2000) (stating rules for oral forward-looking statements); *see also* 3C BLOOMENTHAL & WOLFF, *supra* note 6, § 15:18 (discussing oral forward-looking statements and the Safe Harbor).

83. 15 U.S.C. § 77z-2(c)(1)(A)(ii) (2000); 15 U.S.C. § 78u-5(c)(1)(A)(ii) (2000). The immateriality prong shares similarities with rules relating to puffery. *See* Rosen, *supra* note 9, at 660. Vague and general statements of optimism are mere puffery and are considered immaterial to the market. *See In re* Advanta Corp. Sec. Litig., 180 F.3d 525, 538 (3d Cir. 1999). Such puffing statements are not actionable because no reasonable investor would rely on them. *See In re* Burlington Coat Factory Sec. Litig., 114 F.3d 1410, 1428 n.14 (3d Cir. 1997); Grossman v. Novell, Inc., 120 F.3d 1112, 1119 (10th Cir. 1997); *In re* Sec. Litig. BMC Software, Inc., 183 F. Supp. 2d 860, 888 (S.D. Tex. 2001). The immateriality prong in the Safe Harbor may protect defendants from liability for such loosely optimistic statements about the future because it is highly unlikely that a reasonable investor would be misled by them.

84. 15 U.S.C. § 77z-2(c)(1)(B)(i) (2000); 15 U.S.C. § 78u-5(c)(1)(B)(i) (2000). The "actual knowledge prong" poses the most difficult standard for the plaintiff to meet. In order to avoid the dismissal of the plaintiff's claim under the Safe Harbor, the plaintiff is required to allege specific facts showing that the defendant had actual knowledge of the falsity of the forward-looking statement at the time it was made. *See In re* Employee Solutions Sec. Litig., No. CIV 97 545PHXRG5, 1998 WL 1031506, at *4 (D. Ariz. Sept. 22, 1998). Generalized allegations that the defendant must have known the truth are insufficient. *See In re* Champion Enter., Inc., Sec. Litig., 144 F. Supp. 2d 848, 859 (E.D. Mich. 2001) ("The author of the statement must *actually know* that the statement is *false* (not merely misleading). Knowledge may not be imputed or assumed and this must be specifically alleged."). Rather, specific internal reports or documents, for example, showing the defendant knew the statements were false are required. *See, e.g.*, Wenger v. Lumisys, Inc., 2 F. Supp. 2d 1231, 1251 (N.D. Cal. 1998) (holding that generalized allegations that the defendants knew of the adverse undisclosed facts from internal corporate documents were insufficient to allege scienter when plaintiff failed to point to any specific internal reports or documents showing the company knew any of its statements were

Because the statutory provisions operate independently of each other, the fulfillment of any one of the three alternatives is sufficient to dismiss the plaintiff's claim. For example, if a forward-looking statement does not include adequate cautionary language, but the company believed the forward-looking statement was true and accurate when made, then the company may rely on the actual knowledge prong and avoid liability. This is because the plaintiff would be unable to prove that the company made the statement knowing of its falsity.

By the same token, a corporate defendant who issues a forward-looking statement that is material, and is actually known to be false when made, can still escape liability so long as meaningful cautionary statements are attached. The good faith of the corporation in making the projection is irrelevant under the meaningful cautionary statement prong. In fact, the Conference Report to the Reform Act made clear that the "first prong of the safe harbor requires courts to examine only the cautionary statement accompanying the forward-looking statement. Courts should not examine the state of mind of the person making the statement."[85] Thus, the meaningful cautionary statement prong is of enormous significance. It essentially allows a corporation to issue material forward-looking statements without regard for the speaker's knowledge of their truth or falsity, as long as the statements are accompanied by meaningful cautionary language. Deciphering the meaning of the phrase "meaningful cautionary statement" therefore becomes vitally important.

2. *Meaningful Cautionary Statements*

The meaningful cautionary statement prong shares similarities with the judicially created bespeaks caution doctrine. The effect is to negate the force of a forward-looking statement by attaching adequate warnings that bespeak caution to investors.[86] Indeed, some courts and commentators have suggested that the meaningful cautionary statement prong of the Safe Harbor is merely the statutory counterpart of the bespeaks caution doctrine.[87]

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false). Such proof would be extremely difficult for the plaintiff to uncover without the opportunity for discovery due to the automatic stay of discovery under the Safe Harbor. 15 U.S.C. § 77z-2(f) (2000); 15 U.S.C. § 78u-5(f) (2000).

85. JOINT EXPLANATORY STATEMENT OF THE COMM. OF CONFERENCE, STATEMENT OF MANAGERS, H.R. CONF. REP. NO. 104-369, at 45 (1995), *reprinted in* 1995 U.S.C.C.A.N. 730, 743.

86. *See supra* Part II.B (discussing the bespeaks caution doctrine).

87. *See* Bryant v. Avado Brands, Inc., 187 F.3d 1271, 1276 n.7 (11th Cir. 1999) (referring to the bespeaks caution doctrine as the Safe Harbor's judicially created counterpart); *In re* Unicapital Corp. Sec. Litig., 149 F. Supp. 2d 1353, 1373 (S.D. Fla. 2001) (noting that the bespeaks caution doctrine was codified in the Safe Harbor); Karacand v. Edwards, 53 F. Supp. 2d 1236, 1243 (D. Utah 1999) ("Congress created a statutory version of the bespeaks caution doctrine, the Safe Harbor."); Kassis, *supra* note 67, at 137 ("The safe harbor was enacted to codify the common law 'bespeaks caution' doctrine."). Equating the Safe Harbor with the bespeaks caution doctrine is misguided because the Safe Harbor is not completely coextensive with the judicial doctrine, and in certain respects, is far more protective of forward-looking statements than the bespeaks caution doctrine. Ann M. Olazábal, *Safe*

Despite the importance of this first prong of the Safe Harbor, the statute never explicitly defines the term "meaningful cautionary statement," nor did Congress ever purport to agree on its accepted meaning. Because of the ambiguous nature of the phrase, it is difficult to determine exactly what types of warning statements qualify as being sufficiently meaningful on a consistent basis.

The legislative history provides only limited guidance. The Conference Report states that "[u]nder this first prong of the safe harbor, boilerplate warnings will not suffice as meaningful cautionary statements."[88] This much is identical to what is incorporated in the bespeaks caution doctrine. Standard disclaimers are considered meaningless, and blanket warnings about general risks are insufficient to immunize forward-looking statements.[89] Corporations know that if they seek to rely on the first prong of the Safe Harbor, they will need to do more to explain the specific risk factors that could cause results to differ from projected outcomes. Identifying precisely which factors must be disclosed, however, is difficult because here again the statute is vague.

The statute requires that the meaningful cautionary statements identify "important factors that could cause actual results to differ materially from those in the forward-looking statement."[90] The Conference Report provides more guidance, stating that the cautionary statements must convey substantial information about factors that realistically could cause the predicted results to turn out differently.[91] "Important factors" are described as those that are "relevant to the projection."[92] However, the Conference Report clarified that corporations are not required to include all possible risk factors, or even the single factor that ends up causing the projections to be unrealized. Cautionary statements need identify only "important factors . . . but not all factors. Failure to include the particular factor that ultimately causes the forward-looking statement not to come true will not mean that the [forward-looking] statement is not protected by the safe harbor."[93]

Harbor for Forward-Looking Statements Under the Private Securities Litigation Reform Act of 1995: What's Safe and What's Not?, 105 DICK. L. REV. 1, 12 (2000). The Conference Report clarified that the enactment of the Safe Harbor was not intended to replace the bespeaks caution doctrine or foreclose further development of the judicial doctrine. 141 CONG. REC. H13691-08, H13704 (1995).

88. JOINT EXPLANATORY STATEMENT OF THE COMM. OF CONFERENCE, STATEMENT OF MANAGERS, H.R. CONF. REP. NO. 104-369, at 43 (1995), *reprinted in* 1995 U.S.C.C.A.N. 730, 742.

89. *See supra* notes 61–62 and accompanying text (discussing the bespeaks caution doctrine's rejection of boilerplate warnings).

90. 15 U.S.C. § 77z-2(c)(1)(A)(i) (2000); 15 U.S.C. § 78u-5(c)(1)(A)(i) (2000).

91. JOINT EXPLANATORY STATEMENT OF THE COMM. OF CONFERENCE, STATEMENT OF MANAGERS, H.R. CONF. REP. NO. 104-369, at 43 (1995), *reprinted* in 1995 U.S.C.C.A.N. 730, 742.

92. JOINT EXPLANATORY STATEMENT OF THE COMM. OF CONFERENCE, STATEMENT OF MANAGERS, H.R. CONF. REP. NO. 104-369, at 43–44 (1995), *reprinted in* 1995 U.S.C.C.A.N. 730, 742–43.

93. JOINT EXPLANATORY STATEMENT OF THE COMM. OF CONFERENCE, STATEMENT OF MANAGERS, H.R. CONF. REP. NO. 104-369, at 44 (1995), *reprinted in* 1995 U.S.C.C.A.N. 730, 743. In this regard, the Safe Harbor is broader than the bespeaks caution doctrine which typically requires that the cautionary statement be substantive and specifically tailored to the projection. *See supra* note

Therefore, neither the legislative history, nor the statute explicitly defines the phrase "meaningful cautionary statements." On the one hand, the Conference Report forbids boilerplate warnings; on the other hand, it concedes that not all important risk factors must be disclosed. This language addresses the two extreme ends of the continuum, but it does not provide clear direction for navigating the Safe Harbor's meaningful cautionary statement prong.

Unsurprisingly, courts have not interpreted the Safe Harbor's requirements in entirely consistent ways. At times, disclaimers that appear to be little more than generic boilerplate are held to rise to the level of "meaningful cautionary statements."[94] In some instances, the standard for what constitutes a "meaningful cautionary statement" in one court appears to be more lenient and easily satisfied than in other courts.[95] Warnings that seem to be substantially similar qualify as "meaningful cautionary statements" for purposes of Safe Harbor protections in certain cases but not in others.

For example, in *In re PLC Systems, Inc. Securities Litigation*,[96] the manufacturer of a medical laser device made several forward-looking statements in various press releases about its expectation that the device would soon receive full approval from the Food and Drug Administration (FDA).[97] In its SEC filings, the company specifically cautioned that, given the uncertainties relating to the FDA approval process, the company could not "project when, if at all, [FDA] approval would be granted."[98] The court held that such cautionary statements were sufficient and met the requirements of the Safe Harbor to protect the corporation from liability.[99] In contrast, similar cautionary language in *In re*

59 and accompanying text; *see also* Coffee, *supra* note 81, at 990 (noting the likelihood that the Safe Harbor was intended to go well beyond the bespeaks caution doctrine by relaxing the doctrine's "specific tailoring" requirement). Some commentators have suggested that what is necessary to fulfill the "meaningful cautionary statement" requirement in the Safe Harbor is probably less than what is necessary to avoid liability under the bespeaks caution doctrine. *See* Edward Brodsky, *Making the Safe Harbor Safer: Giving Meaning to "Meaningful Cautionary Statements,"* 7 SEC. REFORM ACT LITIG. RPTR. 7, 10 (1999).

94. *See In re* Smith-Gardner Sec. Litig., 214 F. Supp. 2d 1291, 1307 (S.D. Fla. 2002) ("The Court finds that the warnings at issue perhaps constitute little more than generic, boiler-plate language but still meet the requirements of meaningful cautionary language.").

95. The court in *In re Unicapital Corp. Sec. Litig.*, 149 F. Supp. 2d 1353 (S.D. Fla. 2001), observed that the Eleventh Circuit's standard for "meaningful cautionary statement" is "unquestionably somewhat more lenient (i.e. easily satisfied) than the standard employed by the Third Circuit." *Id*. at 1375 n.35. It is worth noting, however, that the Third Circuit case cited by the court was a bespeaks caution case. *See* Kline v. First W. Gov't. Sec., Inc., 24 F.3d 480 (3d Cir. 1994). The issue nonetheless involved the sufficiency of the cautionary language to warn investors of risks. *In re* Unicapital Corp. Sec. Litig., 149 F. Supp. 2d at 1374–75.

96. 41 F. Supp. 2d 106 (D. Mass. 1999).

97. *Id*. at 117–18. The company forecasted FDA action in positive terms: "We *believe* the recent filing . . . allows PLC Systems to remain on track for an FDA approval this year. We *expect* that full approval could be granted in the summer months." *Id*. at 118.

98. *Id*. at 118 n.7.

99. *Id*. at 118.

Amylin Pharmaceuticals, Inc. Securities Litigation[100] was found to be insufficient to merit Safe Harbor protection. In that case, a pharmaceutical company made forward-looking statements about its belief that one of its drugs would receive FDA approval for marketing.[101] In its SEC filings, the company cautioned that the FDA may not approve the drug without additional testing.[102] The court held that the cautionary language was inadequate because "merely warning investors that FDA may not approve the drug tells them something they already know."[103] Although *PLC Systems* and *Amylin Pharmaceuticals* contained similar cautionary language—that FDA approval might not be forthcoming—one court found the warnings to be sufficiently "meaningful" while the other found them to be virtually meaningless.

This lack of consistency and the development of conflicting interpretations of the meaningful cautionary statement prong are understandable. Without clear guidelines in the Safe Harbor itself, interpretative questions and uncertainties are inevitable. Moreover, an element of subjectivity is necessarily involved when trying to determine what is truly "meaningful" and "cautionary" in any one case.

Perhaps an examination of another legal doctrine that relates to warnings may provide helpful insights in developing a more meaningful standard for purposes of the Safe Harbor. In tort law, the concept of disclosing risks of dangers is central to the "duty to warn" in products liability cases. Although products liability rules and the regulation of forward-looking statements in securities transactions are two separate and unrelated doctrines, both share similar reliance on warnings to alert the consumer and investor markets to significant risks. Thus, considerations about the adequacy of cautionary language in the consumer protection realm may shed additional light on composing meaningful warnings in the securities markets. By no means does this Article argue that products liability law should be imported into the securities regulation regime. Rather, the exploration of concepts contained in "duty to warn" law is intended to enrich the discussion and analysis of meaningful warnings in corporate disclosures.

100. [2002 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 92,007 (S.D. Cal. Oct. 9, 2002).

101. In particular, the company stated, "We have completed clinical testing . . . that we believe is sufficient to support [FDA] approval [of the company's drug]." *Id*. at 90,872–73.

102. The company warned: "The data collected from our clinical trials may not be sufficient to support approval of [the drug]. . . . The FDA may also require additional testing for safety and efficacy." *Id*. at 90,876.

103. *Id*.

III. DUTY TO WARN IN TORT LAW

A. *Communication of Risks and Hazards*

The doctrine of the "duty to warn" has been the focus of increasing attention in products liability law.[104] Under this doctrine, a product is defective, and the product manufacturer can be held liable for that defect, if the manufacturer failed to provide a reasonable warning for foreseeable risks of harm.[105] The manufacturer must identify the specific hazards that the consumer is likely to encounter, and the warnings must disclose the inherent risks that reasonably foreseeable product users would deem material or significant in deciding whether to purchase or use the product.[106]

The duty to warn does not extend to generally known, patent, or obvious dangers.[107] A warning is not necessary if people are already familiar with the risks. Warnings that deal with obvious or widely known risks may end up being ignored by consumers and diminishing the significance of warnings about more important, nonobvious, risks.[108]

The purpose of warnings is to provide consumers with the information necessary to make an informed choice about whether they wish to encounter certain kinds of risks in purchasing a particular product.[109]

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104. *See* Kenneth I. Weissman, *A "Comment J" Parry to Howard Latin's* "Good" *Warnings, Bad Products, and Cognitive Limitations*, 70 ST. JOHN'S L. REV. 629, 633 n.17 (1996). For a description of the evolution of products liability doctrine in the United States, see generally MICHAEL J. MOORE & W. KIP VISCUSI, PRODUCT LIABILITY ENTERING THE TWENTY-FIRST CENTURY: THE U.S. PERSPECTIVE 7–14 (2001).

105. *See* RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY § 2(c) (1998) [hereinafter RESTATEMENT]; DOBBS, *supra* note 14, § 363. Section 2 of the Restatement (Third) describes three types of product defects: manufacturing defects, design defects, and warning defects. RESTATEMENT, *supra*, § 2. A product is defective for a failure to warn "when the foreseeable risks of harm posed by the product could have been reduced or avoided by the provision of reasonable instructions or warnings . . . and the omission of the instructions or warnings renders the product not reasonably safe." *Id.* § 2(c). Liability for failure to warn can be based on negligence and, in certain circumstances, on strict liability. *See* KEETON, *supra* note 16, § 99, at 697–98; Rebecca Korzec, *Restating the Obvious in Maryland Products Liability Law:* The Restatement (Third) of Torts*: Products Liability and Failure to Warn Defenses*, 30 U. BALT. L. REV. 341, 345 (2001).

106. RESTATEMENT, *supra* note 105, § 2 cmt. i. Warnings are not required when the reasonable probability of harm is "remote, slight, or inconsequential." Henkel v. R & S Bottling Co., 323 N.W.2d 185, 188 (Iowa 1982).

107. Maneely v. Gen. Motors Corp., 108 F.3d 1176, 1179 (9th Cir. 1997) (noting that a manufacturer need not provide a warning when dangers are generally known and recognized); M. Stuart Madden, *The Duty to Warn in Products Liability: Contours and Criticism*, 89 W. VA. L. REV. 221, 253 (1987) (observing that there is no duty to warn of obviously hazardous conditions); *see also* RESTATEMENT, *supra* note 105, § 2 cmt. j.

108. RESTATEMENT, *supra* note 105, § 2 cmt. j. The Restatement cautions that warnings about obvious or generally known risks could reduce the efficacy of warnings overall. *Id.*; *see also Maneely*, 108 F.3d at 1180 ("At some point, manufacturers must be relieved of the paternalistic responsibility of warning users of every possible risk that could arise from foreseeable use of their product. That point comes when ordinary users readily recognize the risk on their own."); James A. Henderson, Jr. & Aaron D. Twerski, *The Products Liability Restatement in the Courts: An Initial Assessment*, 27 WM. MITCHELL L. REV. 7, 16 (2000) (noting that warnings about obvious and well-known risks "tend to clutter warning labels with useless information").

109. *See* Henderson & Twerski, *supra* note 15, at 285; Kenneth R. Laughery & Amy Hammond, *Overview*, *in* WARNINGS AND RISK COMMUNICATION 3, 8 (Michael S. Wogalter et al. eds., 1999) (dis-

Cautionary statements must therefore contain facts to permit the average consumer to understand the potential dangers that lie ahead.[110] In order to be effective, the warnings must be sufficiently conspicuous to attract the consumer's attention, and they must be of sufficient clarity, force, and intensity to convey the nature and extent of the risks.[111] Whether the warning is sufficiently meaningful will be measured by considering its content, comprehensibility, manner of expression, and ability to communicate the likelihood and severity of specific dangers.[112]

It is important to recognize that warnings are not costless. In hindsight, it is always easy to conclude that manufacturers should have added just a few more sentences or pages to their product warning labels or documents. After all, it would involve only a "bit more paper and a little more ink."[113] Such reasoning, however, is naive. One of the primary costs of adding more warnings is the danger of overwarning, i.e., other important warnings can lose their effectiveness when buried in too much fine print.[114] Therefore, manufacturers must make prudent decisions

cussing the purpose of warnings) [hereinafter WARNINGS AND RISK COMMUNICATION]; *see also* RESTATEMENT, *supra* note 105, § 2 cmt. i; W. KIP VISCUSI, REFORMING PRODUCTS LIABILITY 134–39 (1991) (discussing the objectives of hazard warnings). The emphasis on informed decisions "places warnings squarely in the category of a communication." Laughery & Hammond, *supra*, at 8. Therefore, the principles of communication theory may be relevant in evaluating warnings. *See* Victor E. Schwartz & Russell W. Driver, *Warnings in the Workplace: The Need for a Synthesis of Law and Communication Theory*, 52 U. CIN. L. REV. 38, 45–50 (1983) (discussing communication theory).

110. *See* Mark Geistfeld, *Inadequate Product Warnings and Causation*, 30 U. MICH. J.L. REFORM 309, 323 (1997) ("[A]n adequate warning satisfies the needs of the average consumer."). Warnings should be drafted to "maximize informed decisionmaking for consumers as a group." *Id*.

111. *See* James B. Sales, *The Duty to Warn and Instruct for Safe Use in Strict Tort Liability*, 13 ST. MARY'S L.J. 521, 551–52 (1982) (discussing a dual standard for measuring the adequacy of warnings: whether the warning is calculated to reach the product user in a form that would catch the attention of a prudent user, and whether the warning is comprehensible to the average user to convey a fair indication of the nature and extent of the danger); *see also* DOBBS, *supra* note 14, § 364 (discussing adequacy of warnings).

112. *See* McHargue v. Stokes Div. of Pennwalt, 686 F. Supp. 1428, 1437 n.8 (D. Colo. 1988) (noting that in order for a warning to be found "adequate and proper," it must convey the "specific danger and risk, including the likelihood and severity of injury"); RESTATEMENT, *supra* note 105, § 2 cmt. i. Some commentators have suggested that courts evaluate several factors to determine the adequacy of warnings. *See, e.g.*, Weissman, *supra* note 104, at 685–87 (asserting that courts should consider "the warning's clarity, level of detail, effectiveness in the communication of the risk of harm, the size and location of warnings, the use of symbols to supplement or replace words, and communication of the consequences of misuse"); *see also* Sales, *supra* note 111, at 559–66 (identifying seven factors for establishing the adequacy of warnings, including conspicuousness, use of symbols, communication of the risks, location, clarity, breadth, and avoidance of dilution).

113. Henderson & Twerski, *supra* note 15, at 297. Often, courts find that the cost of adding adequate warnings is so minimal, merely "the expense of adding some more printing to a label," that manufacturers should be liable for failing to do so. Moran v. Faberge, Inc., 332 A.2d 11, 15 (Md. 1975).

114. *See* Lars Noah, *The Imperative to Warn: Disentangling the "Right to Know" from the "Need to Know" about Consumer Protection Hazards*, 11 YALE J. ON REG. 293, 374–91 (1994) (discussing the hazards of overwarning, including the dilution of other existing warnings); *see also* Cotton v. Buckeye Gas Prods. Co., 840 F.2d 935, 938 (D.C. Cir. 1988) ("The inclusion of each extra item dilutes the punch of every other item. Given short attention spans, items crowd each other out; they get lost in fine print."); Aetna Cas. & Sur. Co. v. Ralph Wilson Plastics Co., 509 N.W.2d 520, 523 (Mich. Ct. App. 1993) ("[E]xcessive warnings on product labels may be counterproductive, causing 'sensory overload' that literally drowns crucial information in a sea of mind-numbing detail."). The very same concerns

about the type, amount, and form of warnings that are provided to the market. The duty to warn is informed by the reasonable foreseeability of harms; omniscience is not required of manufacturers.[115] The goal is not merely to protect the manufacturer from liability, but to equip the reasonable consumer with sufficient cautionary disclosures to promote informed and autonomous decision making.

An emerging link between the duty to warn in products liability law and the duty to disclose risks in securities regulation is apparent. Just as investors need information about potential risks regarding a company in order to price its securities efficiently, consumers need information about potential dangers regarding a product in order to measure the net benefit of purchasing the product.[116] The purpose of providing warning disclosures is to help investors and consumers evaluate the securities and products at issue. The clear and comprehensible disclosure of specific and nonobvious risks allows consumers and investors to make informed choices about their future and about pursuing certain courses of action.

The utilization of warnings and cautionary language to communicate risks in consumer and financial markets raises broader questions about the law's dependence on rational choice models of decision making. The emphasis in securities law and products liability law on ensuring that accurate risk information is available to the public rests on the assumption that consumers and investors are rational, competent, self-governing actors who are willing and capable of circumspectly processing the information. It would make no sense to insist that risks be disclosed if we did not assume that people could rationally weigh the costs and benefits of risky alternatives and select the optimal choice. However, as the following discussion indicates, there is increasing evidence to suggest that this assumption may be misguided.

B. Assumptions of Rationality

Rational choice theory is a powerful and compelling economic model of human behavior that postulates that individuals "can perfectly process available information about alternative courses of action . . . can

are often at issue in disclosure standards for the securities markets. In *TSC Industries v. Northway, Inc.*, the Supreme Court declined to formulate a broad materiality standard that would lead corporate managers "simply to bury the shareholders in an avalanche of trivial information—a result that is hardly conducive to informed decisionmaking." 426 U.S. 438, 448–49 (1976).

115. *See* Hildy Bowbeer et al., *Warning! Failure to Read This Article May Be Hazardous to Your Failure to Warn Defense*, 27 WM. MITCHELL L. REV. 439, 447 (2000). "[F]ailure-to-warn law does not require manufacturers to fashion product warnings that are ideal in every way. It simply demands that those warnings be 'adequate.'" Michael S. Jacobs, *Toward a Process-Based Approach to Failure-to-Warn Law*, 71 N.C. L. REV. 121, 127 (1992). Connections can quickly be drawn to Safe Harbor rules for meaningful cautionary statements. The warnings to be attached to forward-looking statements need not identify all factors that could cause actual results to differ, but only "important factors." *See supra* notes 90–93 and accompanying text (discussing requirements for meaningful cautionary statements). In this regard, the disclosure of risks need only be sufficient, rather than ideal.

116. Geistfeld, *supra* note 110, at 347.

rank possible outcomes in order of expected utility . . . [and can] choose the course of action that will maximize [their] personal expected utility."[117] This model imposes a sense of order on the world and gives us a comforting confidence that the law is efficacious.[118] The underlying assumption is that people are rational actors who will seek out information regarding alternatives, skillfully calculate utilities for each option, and select the option that will allow them to reach the highest point on their preference scales.[119] In the consumer context, the model suggests that autonomous individuals evaluate the pros and cons of risky activity in light of the information they are given, and then make rational choices to maximize their satisfactions.[120]

If we accept the premise that individuals are supremely competent, rational information processors who can derive helpful insight from warning statements, then developing a warning disclosure system seems sensible. Regulation that emphasizes the disclosure of information, rather than the outright elimination of risky products or activities, is consistent with assumptions of rational decision making.[121] Thus, attaching

117. Robert C. Ellickson, *Bringing Culture and Human Frailty to Rational Actors: A Critique of Classical Law and Economics*, 65 CHI.-KENT L. REV. 23, 23 (1989); *see also* 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."); Guthrie, *supra* note 17, at 1115–16 ("Rational choice theory, which describes how people would behave if they followed the dictates of a series of logical axioms, posits that people make outcome-maximizing decisions."); Hanson & Kysar, *supra* note 19, at 642 ("Rational behavior came to be synonymous with expected-utility-maximizing behavior."). Rational choice theory has influenced a wide range of disciplines for many years. *See* Dailey, *supra* note 17, at 381–83 (noting that the rational actor model is a "simple and elegant paradigm for human behavior" that has prevailed in the law and economics field for over thirty years); Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051, 1060 (2000) (observing that scholars in "political science, history, international relations, sociology, finance and accountancy, and, of course, law, have adopted rational choice theory as their central account of human decision making."). *See generally* RATIONAL CHOICE: THE CONTRAST BETWEEN ECONOMICS AND PSYCHOLOGY (Robin M. Hogarth & Melvin W. Reder eds., 1987) [hereinafter RATIONAL CHOICE] (discussing rational choice theory from the perspectives of multiple economists and psychologists).

118. *See* Langevoort, *supra* note 17, at 699 (noting that the rational actor assumption underlies the comforting belief that "behavior is controllable through simple interventions" like information disclosure rules).

119. *See* Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q. J. ECON. 99, 99 (1955); Rechtschaffen, *supra* note 16, at 315–16. The model assumes that individuals have a stable set of preferences against which they can evaluate alternatives when making decisions. Simon, *supra*, at 99.

120. *See* Howard Latin, "*Good" Warnings, Bad Products, and Cognitive Limitations*, 41 UCLA L. REV. 1193, 1199 (1994) (describing the rational risk calculator model in the consumer product market); Herbert Simon, *Rationality as Process and as Product of Thought*, 68 AM. ECON. REV. 1, 2 (1978) ("As is well known, the rational man of economics is a maximizer, who will settle for nothing less than the best."). On a more global level, markets are assumed to incorporate actions taken by rational decision makers who act to maximize their own gains, thereby keeping the market efficient. *See* Robin M. Hogarth & Melvin W. Reder, *Introduction: Perspective from Economics and Psychology*, *in* RATIONAL CHOICE, *supra* note 117, at 1, 6; *see also infra* Part V (discussing the efficient capital market hypothesis).

121. *See* WESLEY A. MAGAT & W. KIP VISCUSI, INFORMATIONAL APPROACHES TO REGULATION xiii (1992) (describing economists' argument that, assuming consumers are rational, the government should choose information provision over regulation of risky activities).

meaningful cautionary language to forward-looking statements in the securities context, for example, should enable investors to make rational choices about expected outcomes.

There are good reasons to believe, however, that reliance on such assumptions of rationality and efficiency in information processing is misplaced. Human decision-making processes are not always governed by reason.[122] A substantial amount of behavioral evidence reveals that people do not consistently act in accordance with rational choice theory.[123] Instead, the rationality of individuals' decisions and actions is bounded because of inevitable limits on time, attention, skill, and information.[124] The constraints of human reasoning cause people to make choices that often may not maximize their utilities. People have a tendency to use heuristics, i.e., mental shortcuts or rules of thumb, when making decisions about risks.[125] Cognitive and motivational constraints, heuristics, and decision-making biases cause systematic departures in behavior from outcomes predicted by rational actor models of behavior.[126]

122. Critics of rational choice theory argue that it "is a simplistic theory having little correspondence with the real world of (individual) consumer behavior." Jacob Jacoby, *Is It Rational to Assume Consumer Rationality? Some Consumer Psychological Perspectives on Rational Choice Theory*, 6 ROGER WILLIAMS U. L. REV. 81, 84 (2000). Several of the key assumptions underlying rational choice theory have been subject to criticism. *See id*. at 100–22 (attacking nine assumptions of the theory).

123. *See* Werner F.M. De Bondt, *A Portrait of the Individual Investor*, 42 EUR. ECON. REV. 831, 831 (1998) (noting that, for the last forty years, "psychologists have amassed evidence that" reason alone "is not an adequate basis for a descriptive theory of decision making"); Korobkin & Ulen, *supra* note 117, at 1055 ("There is simply too much credible experimental evidence that individuals frequently act in ways that are incompatible with the assumptions of rational choice theory."); Robert A. Prentice & Jonathan J. Koehler, *A Normality Bias in Legal Decision Making*, 88 CORNELL L. REV. 583, 584–85 (2003) (observing that "a veritable mountain of scientific evidence now exists showing that decision makers" do not always act in "rational pursuit of self-interest"); *see also infra* Part IV (discussing psychological research on cognitive limitations and heuristics that affect information processing). Critics of the rational actor model argue that it is incompatible with effective legal analysis. *See, e.g*., Howard Latin, *Activity Levels, Due Care, and Selective Realism in Economic Analysis of Tort Law*, 39 RUTGERS L. REV. 487, 487 (1987).

124. Howard A. Latin, *Problem-Solving Behavior and Theories of Tort Liability*, 73 CAL. L. REV. 677, 684 (1985); Jolls et al., *supra* note 18, at 1477. Herbert Simon introduced and discussed the bounded nature of rationality in several of his articles. Bounded rationality refers to the intrinsic limitations people have in processing information and making decisions that reflect optimal choices. *See* HERBERT A. SIMON, ADMINISTRATIVE BEHAVIOR xxiv (2d ed. 1961) (explaining that people are "*intendedly* rational, but only *limitedly* so"). *See generally* HERBERT A. SIMON, MODELS OF BOUNDED RATIONALITY (1982). Other bounds on human behavior include "bounded willpower" and "bounded self-interest." Jolls et al., *supra* note 18, at 1479.

125. James R. Bettman et al., *Cognitive Considerations in Designing Effective Labels for Presenting Risk Information*, 5 J. PUB. POL'Y & MARKETING 1, 6 (1986); Hillary A. Sale, *Judging Heuristics*, 35 U.C. DAVIS L. REV. 903, 906 (2002); *see also* Matthew L. Spitzer, Book Review, 9 HOFSTRA L. REV. 1621, 1622 (1981) ("Judgmental heuristics are rules of thumb and short cuts which help to create, maintain, alter or summon particular knowledge structures."); Weissman, *supra* note 104, at 668 (noting that cognitive heuristics are mental strategies that people adopt to simplify the processing of complex information). Although reliance on heuristics can be useful, it can also cause severe and systematic errors in judgment. Chris Guthrie et al., *Inside the Judicial Mind*, 86 CORNELL L. REV. 777, 780 (2001).

126. Classic resources describing these systematic judgment and decision-making constraints include DECISION MAKING: DESCRIPTIVE, NORMATIVE, AND PRESCRIPTIVE INTERACTIONS (David E. Bell et al. eds., 1988) [hereinafter DECISION MAKING]; ROBYN M. DAWES, RATIONAL CHOICE IN AN UNCERTAIN WORLD (1988); JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES (Daniel

These cognitive limitations come into play whenever a person must assess the probability of an uncertain event—a circumstance that characterizes the very nature of investing in securities markets.[127] In disseminating forward-looking information with accompanying cautionary language, the corporate managers who make the statements, and the investors who read them, act with bounded rationality as both groups attempt to predict and analyze future outcomes. It may be inappropriate to assume that individual investors rationally process forward-looking statements and the warnings that are attached to them. In the context of individual behavior within markets, evidence of heuristics, biases, and shortcomings in decision-making processes suggests that some rethinking of strong assumptions of rationality may be in order. The following section discusses several of these cognitive and motivational constraints with reference to their specific effects on corporate managers and individual investors. The insights gained from the psychological research can be helpful in developing a more effective approach to warnings and risk communication in the securities markets.

IV. COGNITIVE AND MOTIVATIONAL CONSTRAINTS, BIASES, AND HEURISTICS

A. *Overconfidence Bias*

Perhaps one of the most widespread and "robust finding[s] in the psychology of judgment is that people are overconfident."[128] As a general rule, most people think they are better than average at many tasks. For example, studies have shown that the vast majority of people are confident that their driving abilities are better than average.[129] They have a tendency to think they are more intelligent and more ethical than aver-

Kahneman et al. eds., 1982) [hereinafter JUDGMENT UNDER UNCERTAINTY]; RICHARD NISBETT & LEE ROSS, HUMAN INFERENCE: STRATEGIES AND SHORTCOMINGS OF SOCIAL JUDGMENT (1980). *But cf.* Jennifer Arlen, *The Future of Behavioral Economic Analysis of Law*, 51 VAND. L. REV. 1765, 1768 (1998) (arguing that rational choice theory remains viable because many cognitive biases can be remedied by experience, work within organizations, or expert advice). Deviations from the value-maximizing behavior predicted by rational choice models occur both at the individual and organizational levels. *See* Robert Prentice, *Whither Securities Regulation? Some Behavioral Observations Regarding Proposals for its Future*, 51 DUKE L.J. 1397, 1413–14 (2002).

127. *See* Hanson & Kysar, *supra* note 19, at 662–72 (discussing several cognitive anomalies exhibited when people attempt to assess probabilistic judgments).

128. Werner F.M. De Bondt & Richard H. Thaler, *Financial Decision-Making in Markets and Firms: A Behavioral Perspective*, *in* 9 HANDBOOKS IN OPERATIONS RESEARCH AND MANAGEMENT SCIENCE 389 (R. Jarrow et al. eds. 1995).

129. Paul Slovic et al., *Facts Versus Fears: Understanding Perceived Risk*, *in* JUDGMENT UNDER UNCERTAINTY, *supra* note 126, at 463, 468, 470; Ola Svensen, *Are We All Less Risky and More Skillful than Our Fellow Drivers?*, 47 ACTA PSYCHOLOGICA 143, 146–47 (1981). This overconfidence may stem from a person's belief that "I am different" or "I am more careful." Baruch Fischhoff, *Cognitive Liabilities and Product Liability*, 1 J. PROD. LIAB. 207, 212 (1977).

age,[130] and more likely to have gifted children, a higher than average salary, and greater than average satisfaction in their jobs.[131]

For corporate managers, this overconfidence bias can lead not only to self-serving beliefs about their managerial skills, but also to an overestimation of their knowledge and of the validity of their judgments.[132] The bias drives a systematic and persistent view that one's own company is superior to its competitors and will perform better than average in the competitive market.[133] Managers can develop an inflated sense of the value of what they do and the quality of the products or services their company sells.

Overconfidence facilitates an enhanced sense of ability to control events and risks. This illusion of control can induce corporate managers to believe their own actions and skill can cause positive outcomes to occur, even when events are uncontrollable.[134] In fact, this motivational bias leads people generally to view positive results and good fortune as the product of their own talents and decision-making abilities, while attributing negative outcomes to external circumstances over which they had no control.[135] Evidence suggests that the bias appears regularly in annual reports corporations send to their shareholders. Studies of annual reports indicate that favorable corporate outcomes are more likely to be attributed to company strategy and managerial effort, while nega-

130. *See* Robert A. Prentice, *The SEC and MDP: Implications of the Self-Serving Bias for Independent Auditing*, 61 OHIO ST. L.J. 1597, 1613 (2000); *see also* Marsha T. Gabriel et al., *Narcissistic Illusions in Self-Evaluations of Intelligence and Attractiveness*, 62 J. PERSONALITY 143, 146–51 (1994).

131. Shelley E. Taylor & Jonathon D. Brown, *Illusion and Well-Being: A Social Psychological Perspective on Mental Health*, 103 PSYCHOL. BULL. 193, 195–97 (1988). Recently married couples almost unanimously expect that they will not get divorced, despite knowing the average divorce rate. *See* Lynn A. Baker & Robert E. Emery, *When Every Relationship Is Above Average: Perceptions and Expectations of Divorce at the Time of Marriage*, 17 LAW & HUM. BEHAV. 439, 442–43 (1993).

132. *See* Baruch Fischhoff et al., *Knowing with Certainty: The Appropriateness of Extreme Confidence*, 3 J. EXPERIMENTAL PSYCHOL.: HUM. PERCEPTION & PERFORMANCE 552 (1977) (summarizing experiments showing that people tend to be overconfident in their beliefs and the degree of certainty in their judgments); Dale W. Griffin & Carol A. Varey, *Towards a Consensus on Overconfidence*, 65 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 227, 228 (1996) (describing the overestimation of one's knowledge and judgment as a form of overconfidence).

133. *See* Donald C. Langevoort, *Organized Illusions: A Behavioral Theory of Why Corporations Mislead Stock Market Investors (and Cause other Social Harms)*, 146 U. PA. L. REV. 101, 140 (1997) (discussing overconfidence in business organizations).

134. *See* Paul M. Biner et al., *Need State and the Illusion of Control*, 21 PERSONALITY & SOC. PSYCHOL. BULL. 899, 899 (Sept. 1995) (describing the "illusion of control" as the "tendency to be overconfident in one's ability to attain outcomes that are chance determined"); *see also* DAWES, *supra* note 126, at 256 (citing studies that show "we treat chance events as if they involve skill and are hence controllable"). An example of this tendency is found when gamblers throw the dice with greater force when they want high numbers than when they are trying to roll low numbers. *See id*. at 257. *See generally* Ellen J. Langer, *The Illusion of Control*, *in* JUDGMENT UNDER UNCERTAINTY, *supra* note 126, at 231 (discussing the illusion of control and possible causes for its persistence).

135. *See* DAWES, *supra* note 126, at 263 (citing evidence that most people tend to ascribe their successes to their own abilities and their failures to factors beyond their control, such as bad luck); Donald C. Langevoort, *Taming the Animal Spirits of the Stock Markets: A Behavioral Approach to Securities Regulation*, 97 NW. U. L. REV. 135, 147 (2002) (noting that overconfidence leads to the tendency to take credit for good results while externalizing blame for bad ones). "[P]eople are not willing to recognize that their failures stem from a lack of competence or skill." *Id.*

tive results are more often attributed to external constraints such as inflation, poor weather, or governmental policy.[136]

These tendencies may cause managers to place unwarranted confidence in their predictions about future events. People tend to overestimate their ability to predict outcomes accurately.[137] In making predictive judgments under uncertainty, people are prone to exhibit far too much confidence in highly fallible choices.[138] Corporate managers may take on too many risks with the belief that adverse outcomes are unlikely to occur, or that they can be prevented by the managers' own skill and expertise.[139] Overconfidence in their abilities may motivate them to trivialize potential risks or not to see them as risks at all.[140]

All of these tendencies can have important effects on the type of forward-looking statements made by corporate managers and the manner in which the statements are disclosed to the public. If the overconfidence bias leads managers to have an exaggerated belief in (1) the superiority of their company, (2) the strength of their own management skills to produce positive outcomes for the company, (3) their ability to predict the future accurately, and (4) the probability that adverse risks will never materialize, then managers' forward-looking statements may end up being far more rosy than they should. Moreover, if managers have a tendency to underestimate or rationalize potential risks, then cautionary language about risk factors may not be as substantive as would otherwise be the case, leading to boilerplate risk disclosures.[141]

Corporate managers are not the only ones whose decisions and actions may be influenced by the overconfidence bias. Investors also can be overconfident in their abilities to assess risks and to make wise investment decisions. Most investors overrate their stock-picking abilities

136. *See* Gary Johns, *A Multi-Level Theory of Self-Serving Behavior in and by Organizations*, *in* 21 RESEARCH IN ORGANIZATIONAL BEHAVIOR 1, 8 (Robert I. Sutton & Barry M. Staw eds., 1999) (summarizing studies of causal attribution statements in corporate annual reports).

137. HERSH SHEFRIN, BEYOND GREED AND FEAR: UNDERSTANDING BEHAVIORAL FINANCE AND THE PSYCHOLOGY OF INVESTING 51 (2000) (noting people's tendency to be overconfident in their ability to predict what will happen in the stock market); Jeffrey J. Rachlinski, *The Uncertain Psychological Case for Paternalism*, 97 NW. U. L. REV. 1165, 1172 (2003) (describing overconfidence as "overestimating one's ability to predict outcomes").

138. *See* Daniel Kahneman & Amos Tversky, *On the Psychology of Prediction*, 80 PSYCHOL. REV. 237, 249 (1973). This phenomenon is termed the "illusion of validity," and it "often persists even when its illusory character is recognized." *Id*. One ironic aspect of the phenomenon is that people are much less likely to be overconfident about easy probabilistic judgments; it is the difficult judgments that produce the most overconfidence. Ward Edwards & Detlof von Winterfeldt, *Cognitive Illusions and Their Implications for the Law*, 59 S. CAL. L. REV. 225, 239 (1986).

139. *See* A. Mechele Dickerson, *A Behavioral Approach to Analyzing Corporate Failures*, 38 WAKE FOREST L. REV. 1, 5 (2003).

140. *Cf*. Langevoort, *supra* note 17, at 695 (suggesting that because motivational biases may lead stock brokers to ignore or trivialize risks, brokers may push securities on investors without adequately disclosing the investment risks).

141. *See* Langevoort, *supra* note 133, at 161 n.212 (sensing that biases in organizations may result in boilerplate risk disclosure due to a resistance to meaningful public acknowledgement of the seriousness of risks).

and believe their investment skills are above average.[142] Studies have shown that investors consistently overestimate both the future performance and the past performance of their investments.[143] The illusion of control causes investors to believe that positive investment outcomes are due to investors' own skills and superior strategy, rather than good luck.[144]

Such overconfidence and overly broad sense of control is especially acute for online traders and day traders.[145] Placing trades directly online, rather than having to use a broker as an intermediary, can make investors feel even more empowered and in control of their investments.[146] The abundance of online investment information now available to individual investors can bolster the illusion of knowledge and control.[147]

Just like corporate managers, overconfident investors can "systematically underestimate the levels of risk they assume."[148] Investors may feel certain that they have better-than-average abilities to avoid adverse risks and to invest only in those companies that will produce positive outcomes. In the context of evaluating forward-looking statements issued by corporations, investors may mistakenly believe that their superior investment strategies will enable them to discern exactly which companies' forward-looking statements predict the future accurately. Moreover, in much the same way that overconfidence often results in a failure to read product warnings in the consumer product market,[149] investors' overconfidence may induce them to ignore or trivialize caution-

142. *See* SHEFRIN, *supra* note 137, at 132–33 (discussing overconfidence of investors); ROBERT J. SHILLER, IRRATIONAL EXUBERANCE 142–46 (2000) (discussing investors' overconfidence and intuitive judgments). Overconfidence can lead to increased market trading volume and volatility. Terrance Odean, *Volume, Volatility, Price, and Profit When All Traders Are Above Average*, 53 J. FIN. 1887, 1888–89 (1998); *see also* Brad M. Barber & Terrance Odean, *Trading Is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors*, 55 J. FIN. 773, 800 (2000) (finding that overconfidence sparks excessively high trading levels which, in turn, result in poor investment performance for individual traders).

143. *See* Don A. Moore et al., *Positive Illusions and Forecasting Errors in Mutual Fund Investment Decisions*, 79 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 95, 95 (1999).

144. *See* SHILLER, *supra* note 142, at 59 (noting investors' tendency to interpret their investing success as confirmation of their own abilities); Langevoort, *supra* note 135, at 147 (commenting that due to overconfidence, investors "will attribute a streak of good luck as skill and will attribute a run of losses to bad luck or someone else's fault"); Moore et al., *supra* note 143, at 97 (noting illusion of control may cause investors to overestimate their investment performance); Statman, *supra* note 2, at 18 (observing that the illusion of control "leads stock traders to believe that their chosen stocks have better odds than stocks chosen by darts thrown at stock tables.").

145. *See* SHEFRIN, *supra* note 137, at 133–34 (discussing overconfidence of online investors). For a description of day traders and the regulation of day trading, see Caroline Bradley, *Disorderly Conduct: Day Traders and the Ideology of 'Fair and Orderly Markets,'* 26 J. CORP. L. 63, 88–95 (2000).

146. Brad M. Barber & Terrance Odean, *The Internet and the Investor*, 15 J. ECON. PERSP. 41, 42 (Winter 2001).

147. *Id*. at 42, 47. An illusion of knowledge can stem from a greater volume and variety of information made available to online investors. *Id*. at 46.

148. Donald C. Langevoort, *Theories, Assumptions, and Securities Regulation: Market Efficiency Revisited*, 140 U. PA. L. REV. 851, 859 (1992).

149. *See* Latin, *supra* note 120, at 1211.

ary statements that are attached to forward-looking information in the securities market.

B. Optimism

Closely related to the overconfidence bias is the tendency people have to be overwhelmingly optimistic about their lives and the future; people consistently believe they are far more likely than others to experience positive life outcomes.[150] A strong sense of optimism may have cultural underpinnings as well as psychological roots. Cultural historians have noted: "In America, optimism is the tendency. Deep in the American psyche is that can-do-ishness, the Lewis and Clark syndrome; there are no limits."[151] Negative thoughts and predictions are at odds with that national loathing of pessimism.

In the corporate context, optimism sells.[152] In corporations' efforts to sell their products, services, or securities to the public, corporations are naturally inclined to predict a favorable future. Indeed, it has been observed that the future-oriented information contained in the "Management Discussion and Analysis" section of required corporate SEC filings tends to reflect the optimism bias.[153] The tendency toward optimism in corporate disclosures, especially in forward-looking statements, may be due to structural factors within organizations themselves. The reasons why companies systematically and optimistically distort construals of their future prospects could stem from the hierarchical nature of communication and decision-making structures inside the organization. As information flows upward and is filtered through multiple layers within the managerial hierarchy, positive information tends to move more quickly to the top while negative information travels more slowly and is skewed to minimize blame at each level.[154] A natural optimistic bias results and is reflected in the ultimate forward-looking information package that is disseminated to the public. Thus, organizational communication systems, in conjunction with individual cognitive biases, can

150. *See* Hanson & Kysar, *supra* note 19, at 654–57 (discussing studies that exhibit individuals' bias for optimism); Taylor & Brown, *supra* note 131, at 196–97 (discussing unrealistic optimism).

151. Mary McNamara, *Pessimists Are Now Prophets*, L.A. TIMES, Feb. 17, 2003, at E1 (quoting cultural historian Simon Schama).

152. Langevoort, *supra* note 54, at 494.

153. *See* Langevoort, *supra* note 133, at 157 n.197 (citing Moses L. Pava & Marc J. Epstein, *How Good Is MD&A as an Investment Tool?*, 175 J. ACCT. 51, 52–53 (1993)).

154. Langevoort, *supra* note 133, at 125. Professor Langevoort insightfully explains how the nature of upward information flow within organizations poses a challenge for corporate decision making because of pressures at each level in the hierarchy to place a positive spin on the information being relayed. *Id*. at 119–26. Moreover, the bias toward optimism is even more pronounced in groups than in individuals. *See, e.g*., Chip Heath & Forest J. Jourden, *Illusion, Disillusion and the Buffering Effect of Groups*, 69 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 103, 104–13 (1997) (finding that group activities tend to foster more positive illusions than individual efforts, and groups produce higher levels of positive affect by buffering people from negative feelings they typically harbor after completing a task individually).

exacerbate the tendencies to view current and future circumstances with undue optimism.

Moreover, optimists are prized in the hiring and promotion process. They make better leaders who have the ability to motivate others and spread their "can do" attitude throughout the organization.[155] In the business setting, the most successful people tend not to be the realists, but the optimists, whose high levels of self-esteem, decisiveness, and assertiveness make them more influential and persuasive.[156] Corporate managers who are optimistic are more willing to take risks and to minimize the likelihood that adverse results will occur.

Such attitudes have direct effects on the types of cautionary statements that managers disclose about risk factors in the company's forward-looking statements. Faced with the prospect that a product under development is failing or that earnings are faltering, optimistic corporate managers may honestly believe that these are minor obstacles that can be overcome; hence, they will be disinclined to acknowledge publicly the seriousness of these potential problems.[157] Disclosures that tend to reduce the significance of risk factors can have misleading effects because the market is not adequately warned of the negative outcomes that have some probability of occurring.

Corporate managers are not alone in their tendency toward optimism. Investors can also be exceedingly optimistic about the future of the market and about their own investment performance.[158] They can harbor irrational beliefs that their investment decisions will consistently produce good results and that they can beat the market.[159] They underestimate the risks associated with buying securities and resist the possibility that catastrophic risks may materialize.

155. *See* Donald C. Langevoort, *The Epistemology of Corporate-Securities Lawyering: Beliefs, Biases and Organizational Behavior*, 63 BROOK. L. REV. 629, 645 (1997) (describing overoptimism in younger firms that prize energetic and enthusiastic managers). Optimistic corporate managers "will place great weight on hiring new managers with similar traits . . . , resisting the enthusiasm-draining acknowledgment of uncontrollable risk." *Id*. Overoptimism may constitute the greatest threat to accurate disclosure of risks and negative information. *Id*.

156. Langevoort, *supra* note 133, at 153–54 (discussing the adaptive nature of optimism for success in business and citing supporting social science data).

157. *Id*. at 141. Indeed, persistent overconfidence and optimism can lead directors of a company on the verge of bankruptcy, with full knowledge of the dire state of the firm's finances, to believe nonetheless that the firm can fully recover. *See* Dickerson, *supra* note 139, at 6–7.

158. *See* SHEFRIN, *supra* note 137, at 131–32 (discussing excessive optimism of investors); De Bondt, *supra* note 123, at 839 (finding that investors are overoptimistic about the likely performance of their shares).

159. *See* Henry T.C. Hu, *Faith and Magic: Investor Beliefs and Government Neutrality*, 78 TEX. L. REV. 777, 861 (2000) ("Investors have a patently unrealistic view of the true downside [of investing in the stock market]."). Many studies have shown that individual investors tend to be poor traders, "buying stocks for the wrong reasons, holding losers for too long, and acting on whims and emotions." Marcia Vickers & Gary Weiss, *Wall Street's Hype Machine: It Could Spell Trouble for Investors*, BUS. WK., Apr. 3, 2000, at 112, 115. Excess optimism may lead investors to believe they can become millionaires overnight by investing in the market. *See* Rachlinski, *supra* note 137, at 1187 (noting that media stories about investors who become instant millionaires spur exuberance in trading).

The optimism bias, in general, causes people systematically to discount or underrate risks in their lives.[160] Although they recognize that risks of bad outcomes exist, they are reluctant to believe these risks apply to them personally.[161] People think they are less likely to experience negative events and less vulnerable to risks than other people.[162]

These optimistic tendencies may affect the way investors respond to forward-looking information issued by corporate managers. Forward-looking statements that project favorable outcomes reinforce investors' own optimism about the future; weak cautionary statements about risk factors are not likely to shake an investor's beliefs about the probability of positive returns. Unless the warnings are substantive and salient, investors' undue optimism and illusions of invulnerability may impede their ability to heed the warnings. This concern is similar to that raised in the consumer product market, where "[p]eople may not respond properly to many risks designated in warnings because they are unduly optimistic about their ability to avoid these hazards."[163] Because corporate managers' own optimism can lead them cognitively to minimize certain risks, the market may not have a clear picture of how potential risks could damage the outlook projected by the forward-looking information. Moreover, the overall cultural bias against pessimism and negativity may motivate managers to say what they think the market wants to hear, and, in turn, the market may focus too readily on only those aspects of the message that it likes.

160. *See* Cass R. Sunstein, *Behavioral Analysis of Law*, 64 U. CHI. L. REV. 1175, 1183 (1997); *see also* Arlen, *supra* note 126, at 1773–74.

161. *See* David M. DeJoy, *Attitudes and Beliefs*, *in* WARNINGS AND RISK COMMUNICATION, *supra* note 109, at 189, 198 (finding that people have great difficulty in personalizing risk). This behavior might be characterized as the "'it can't happen to me' syndrome, or, more properly, the 'it's less likely to happen to me than the average person' syndrome." Hanson & Kysar, *supra* note 19, at 656. For example, studies suggest that smokers perceive smoking to be significantly less risky for themselves than for other smokers. *See* Jon D. Hanson & Douglas A. Kysar, *Taking Behavioralism Seriously: Some Evidence of Market Manipulation*, 112 HARV. L. REV. 1420, 1512–14 (1999) (summarizing studies).

162. *See* Christine Jolls, *Behavioral Economics Analysis of Redistributive Legal Rules*, 51 VAND. L. REV. 1653, 1659–61 (1998); Jolls et al., *supra* note 18, at 1524; *see also* DeJoy, *supra* note 161, at 198 (noting that people consistently underestimate the likelihood of experiencing negative events in their lives); Prentice, *supra* note 130, at 1614 (citing studies indicating that people underestimate their risk of lung cancer, infection from AIDS, and drug addiction); Sunstein, *supra* note 160, at 1183–84 (citing studies finding that the vast majority of people believe they are less likely than others to have car accidents, heart attacks, asthma, and other health problems). Unrealistic optimism may even induce people to believe they are less likely than their peers to be a victim of crime. *See* Moore et al., *supra* note 143, at 97 (citing L.S. Perloff & B.K. Fetzer, *Self-Other Judgments and Perceived Vulnerability to Victimization*, 50 J. PERSONALITY & SOC. PSYCHOL. 502 (1986)).

163. Latin, *supra* note 120, at 1243; *see also* Nordenstam & DiMento, *supra* note 20, at 363 (noting that people's perception of invulnerability to personal risks as compared to others can impede the adoption of hazard prevention measures).

C. Confirmation Bias and Anchoring Heuristic

In addition to the overconfidence and optimism biases, people have a tendency to seek out confirming evidence of their beliefs and to discount information that contradicts their views.[164] The "confirmation bias" involves a tendency to "search for, treat kindly, and be overly impressed by information that confirms [one's] initial impressions or preferences."[165] Individuals can become polarized in their perspectives as they filter information for evidence that supports their decisions or actions. Once they make up their mind about something, they tend to avoid, minimize, or reject new information that contradicts their previously established beliefs.[166] This reaction may stem from a desire to continue believing what they want or expect to believe.[167]

The anchoring heuristic can also come into play when people are confronted with new information. Anchoring refers to the tendency of individuals to latch "on to an idea or fact and [use] it as a reference point for future decisions."[168] Once a person begins with an initial value or probability estimate, subsequent decisions are biased toward that initial reference point,[169] and people tend to resist altering an original assessment when presented with pertinent new information.[170] If the initial probability judgment is incorrect or irrational, then all future assessments based on the original anchor will likely be in error as well.[171] Much like

164. *See* Barber & Odean, *supra* note 146, at 46–47; Dickerson, *supra* note 139, at 5–6; *see also* Prentice, *supra* note 130, at 1617 n.98 (citing studies discussing the confirmation bias).

165. GARY BELSKY & THOMAS GILOVICH, WHY SMART PEOPLE MAKE BIG MONEY MISTAKES—AND HOW TO CORRECT THEM 130 (1999). By the same token, people will avoid asking questions or gathering data challenging their previously held ideas; the bias could therefore be termed "disconfirmation disinclination." *Id.*; *see also* SHEFRIN, *supra* note 137, at 64 (noting psychological finding that people "are prone to search for confirming evidence, not disconfirming evidence"). Research in the area of belief perseverance is also relevant. *See* NISBETT & ROSS, *supra* note 126, at 179–92 (discussing the belief perseverance phenomenon).

166. *See* DeJoy, *supra* note 161, at 199 (discussing the suppression of conflicting information); Latin, *supra* note 120, at 1227–28; Prentice, *supra* note 130, at 1618 n.102 (citing studies showing that people persevere in beliefs even after the evidence upon which their beliefs were formed has been completely discredited). A possible motivation for this reaction is that the suggestion that a person made a mistake in judgment is ego-threatening and stressful. Filtering out or ignoring such threatening information resolves the person's cognitive dissonance. Donald C. Langevoort, *Ego, Human Behavior, and Law*, 81 VA. L. REV. 853, 857 (1995).

167. This tendency may arise out of self-serving beliefs to "see what we expect to see" and to "see what we want to see." THOMAS GILOVICH, HOW WE KNOW WHAT ISN'T SO 49–87 (discussing the motivational determinants of belief and the evaluation of ambiguous data).

168. BELSKY & GILOVICH, *supra* note 165, at 136; *see also* DAWES, *supra* note 126, at 121–25 (discussing anchoring and adjustment); Guthrie et al., *supra* note 125, at 787–90 (discussing anchoring).

169. *See* Amos Tversky & Daniel Kahneman, *Judgment under Uncertainty: Heuristics and Biases*, *in* JUDGMENT UNDER UNCERTAINTY, *supra* note 126, at 3, 14; *see also* Stephen M. Bainbridge, *Mandatory Disclosure: A Behavioral Analysis*, 68 U. CIN. L. REV. 1023, 1046 (2000) (describing the anchoring phenomenon); Rachlinski, *supra* note 137, at 1171 (noting that people rely heavily on reference points when making numeric estimates).

170. *See* Roger G. Noll & James E. Krier, *Some Implications of Cognitive Psychology for Risk Regulation*, 19 J. LEG. STUD. 747, 754 (1990) (describing anchoring as a source of error in making probability estimates).

171. *See* Sunstein, *supra* note 160, at 1188.

the confirmation bias, the anchoring heuristic can lead people to make initial judgments that "prove remarkably resistant to further information, alternative modes of reasoning, and even logical or evidential challenges."[172] Thus, after people make initial probability estimates of risk, they may not modify their risk assessments as much as is warranted by new information regarding the risk.[173]

In the corporate setting, once managers have committed to a course of action or particular business strategy, the confirmation bias provides strong motivation to resist evidence that their decisions were wrong.[174] In fact, when faced with contradicting information, they may become even more entrenched in their viewpoints and persevere to an unwarranted degree with their previously planned objectives. This can lead to what is termed an "escalation of commitment" in which even more resources and efforts are directed toward achieving the originally conceived goals.[175]

In the context of disclosing forward-looking statements, managers who make a projection about a particular investment of the firm's resources may be motivated to focus on the project's favorable potential, rather than on its risks of failure, in order to bolster the wisdom of their decision. They may seek out information that confirms the positive nature of their forward-looking statements and discount evidence that contradicts their forecasts. The confirmation bias can lead to the exaggeration of the reliability of forecasts about the future.[176] Anchoring can

172. NISBETT & ROSS, *supra* note 126, at 41; *see also* Rechtschaffen, *supra* note 16, at 330 (identifying the anchoring heuristic as a tendency people have "to maintain their prior beliefs despite later evidence to the contrary"). The extent to which individuals may be unwilling to integrate new information can be unwarranted if they "yield ground only grudgingly and primed to challenge the relevance, reliability, or authority of subsequent information." NISBETT & ROSS, *supra* note 126, at 41.

173. *See* Latin, *supra* note 120, at 1238 (discussing the implications of the anchoring heuristic on warnings).

174. *See* MAX H. BAZERMAN, JUDGMENT IN MANAGERIAL DECISION MAKING 39–41, 85–88 (3d ed. 1994); *see also* Langevoort, *supra* note 133, at 142–43 (discussing managerial reluctance to reverse course once a commitment has been made).

175. *See* Johns, *supra* note 136, at 22–25 (discussing the escalation of commitment as a self-serving search for identity and resources); Barry M. Staw, *The Escalation of Commitment to a Course of Action*, 6 ACAD. MGMT. REV. 577, 584 (1981) (finding that people have a tendency to escalate commitment to an extent unwarranted by "objective" facts). Corporate executives may have difficulty terminating losing projects due to another psychological tendency: loss aversion. *See* SHEFRIN, *supra* note 137, at 24; *see also* Amos Tversky & Daniel Kahneman, *Rational Choice and the Framing of Decisions*, *in* DECISION MAKING, *supra* note 126, at 167, 173 (explaining that loss aversion causes people's responses to losses to be far more extreme than their responses to gains). People have a strong aversion to losses and often feel the need to continue with the committed activity in order to recoup their losses or "break even." This tendency has been referred to as the "get-evenitis" disease. *See* SHEFRIN, *supra* note 137, at 24, 107–17. Again, cultural factors may contribute to these tendencies. Just as optimism seems to be deeply "American," the "unflagging enthusiasm that has sparked so many successful ventures also makes it difficult for Americans to accept that a project they believed in just isn't going to work out." McNamara, *supra* note 151, at E1. One cultural historian remarked: "'Once something is half-started or half-funded, there is something in the American mind that refuses to slam on the brakes' even if there is evidence of possible disaster." *Id*. (quoting Simon Schama).

176. *See* Kenneth L. Fisher & Meir Statman, C*ognitive Biases in Market Forecasts: The Frailty of Forecasting*, J. PORTFOLIO MGMT. 72, 74–76 (Fall 2000) (noting that the confirmation bias is one of

cause managers to underestimate the probabilities of failure.[177] Because the tendency will be to de-emphasize information that conflicts with managers' favorable impressions, the cautionary language that managers attach to the forward-looking statements may not reveal the seriousness of the risks as vigorously as it otherwise might.

The behavior of investors can also be influenced by the confirmation bias and the anchoring heuristic. Investors may look for information that affirms, rather than undermines, their beliefs, and they may be slow to change their beliefs in the face of new evidence.[178] Once investors have decided to select a particular investment, changing course would imply they made a mistake in judgment. Via an escalation of commitment, investors may "throw good money after bad" to losing investments in order to try to break even.[179] With the same motivation that managers have "to see what they want to see,"[180] investors who read positive corporate forward-looking statements may be persuaded that favorable results are likely to occur. Once such beliefs are held, investors will find it difficult to revise their impressions in the face of weak or ambiguous cautionary language about the potential risks.

The same concerns are raised in the context of warnings in the products liability area. "In terms of warnings, it is reasonable to expect that people holding preconceived notions about the risk associated with a particular product or activity will ignore or misappraise new information if it is inconsistent with their current thinking."[181] Due to the anchoring

five cognitive biases that underlie the illusion of validity which can cause forecasters to exaggerate the reliability of their forecasts).

177. *See* Tversky & Kahneman, *supra* note 169, at 15–16 (explaining anchoring biases in the evaluation of conjunctive and disjunctive events, and concluding that anchoring can result in the overestimation of the probability that a plan will succeed and the underestimation of the likelihood that it will fail).

178. *See* SHEFRIN, *supra* note 137, at 62 ("Investors search only for confirming evidence; and they ignore disconfirming evidence." (emphasis omitted)); Nicholas Barberis et al., *A Model of Investor Sentiment*, 49 J. FIN. ECON. 307, 315 (1998) (discussing the related phenomenon of conservatism that causes investors to disregard new information and cling to their prior estimates of earnings performance).

179. Langevoort, *supra* note 166, at 857–88. Studies have shown that investors "seem more willing to invest in a faltering venture when they have previously committed funds to it." *See* Richard H. Thaler & Eric J. Johnson, *Gambling with the House Money and Trying to Break Even: The Effects of Prior Outcomes on Risky Choice*, 36 MGMT. SCI. 643, 659 (1990) (citing Barry M. Staw, *Knee-Deep in the Big Muddy: A Study of Escalating Commitment to a Chosen Alternative*, 16 ORGANIZATIONAL BEHAV. & HUM. PERFORMANCE 26 (1976)). Loss aversion and investors' desire to break even may contribute to their tendency to avoid selling investments that have declined in value, hoping that the losses might be recouped in the future. *See* Terrance Odean, *Are Investors Reluctant to Realize Their Losses?*, 53 J. FIN. 1775, 1797 (1998) (finding that individual investors tend to sell winners and hold losers, leading to lower returns); Hersh Shefrin & Meir Statman, *The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence*, 40 J. FIN. 777, 788 (1985) (discussing seemingly irrational reluctance of investors to hold winning stocks and sell losing stocks).

180. *See* GILOVICH, *supra* note 167, at 75–87 (discussing motivational determinants of belief as "seeing what we want to see").

181. DeJoy, *supra* note 161, at 199. One study found that "[m]any people tend to deny or disbelieve information that danger is near at hand. They seize on any vagueness, ambiguity, or incompatibility in the warning message enabling them to interpret the situation optimistically." Latin, *supra*

heuristic, changing people's initial risk perceptions is difficult and requires clear and persuasive warnings.[182] The nature of anchoring suggests that the first items of information that people receive will have greater influence on their judgments than later information.[183] This primacy effect has important implications for the positioning of warnings in a manner that draws the initial attention of the reader to the risks.

Thus, the confirmation bias and the anchoring heuristic may lead investors who have already formed a favorable impression of a company to interpret managers' cautionary language in a manner that conforms to investors' own previously held optimistic views. Risk factor warnings that are not particularly salient or given primary consideration may not enter into investors' initial risk perceptions at all.

D. Summary and Implications

As the foregoing discussion indicates, cognitive and motivational constraints and biases can lead to systematic glitches in decision making, particularly when judgments involve probabilistic matters. These constraints and biases may be evolutionarily adaptive and can have significant positive effects.[184] People who live their lives with a large degree of confidence and optimism tend to be healthier, happier, and more successful.[185] Confidence is associated with initiative and action, facilitating entry into leadership roles.[186] Self-serving biases allowing people to see

note 120, at 1245 (quoting Charles E. Fritz, *Disaster*, *in* CONTEMPORARY SOCIAL PROBLEMS 651, 665 (Robert K. Merton & Robert A. Nisbet eds. 1961)). However, when people do not already hold strong views about a particular product risk, presenting warnings in different formats can significantly alter people's perspectives. DeJoy, *supra* note 161, at 199.

182. *See* Rechtschaffen, *supra* note 16, at 330.

183. *See* Prentice & Koehler, *supra* note 123, at 603–04 (discussing the anchoring bias and the importance of first impressions in forming judgments). Psychologists have identified this as the "primacy effect." *See* NISBETT & ROSS, *supra* note 126, at 172 (noting that "the primacy effect in impression formation, in which early-presented information has an undue influence on final judgment, is found almost universally").

184. *See* Donald C. Langevoort, *Taking Myths Seriously: An Essay for Lawyers*, 74 CHI.-KENT L. REV. 1569, 1573 (2000); Korobkin & Ulen, *supra* note 117, at 1085.

185. *See* SHELLEY E. TAYLOR, POSITIVE ILLUSIONS: CREATIVE SELF-DECEPTION AND THE HEALTHY MIND 49, 58–65, 108–13 (1989). There is some evidence, though it remains debatable, that moderately or clinically depressed individuals tend to have more realistic, as opposed to optimistic, outlooks. *See* Jolls, *supra* note 162, at 1661; Rachlinski, *supra* note 137, at 1172; Taylor & Brown, *supra* note 131, at 196–99; *see also* SUSAN T. FISKE & SHELLEY E. TAYLOR, SOCIAL COGNITION 214 (2d ed. 1991) (suggesting that people with low self-esteem or slight depression tend to have more accurate self-appraisals). The optimism bias may be "a hard-wired characteristic of human nature" that on some level promotes survival. Donald C. Langevoort, *Toward More Effective Risk Disclosure for Technology-Enhanced Investing*, 75 WASH. U. L.Q. 753, 759, 760 n.19 (1997); *see also* Langevoort, *supra* note 184, at 1573 n.13 (observing that sociobiologists view confidence and optimism as genetically favored).

186. *See* Griffin & Varey, *supra* note 132, at 228 (suggesting that overconfidence can be adaptive where it is linked to increased enthusiasm and tenacity); Langevoort, *supra* note 184, at 1573–74 (noting that confidence can become a self-fulfilling prophecy as displays of initiative and persistence cause others to defer to the confident person's lead).

what they want to see in their own self-interest help to preserve a level of self-esteem that contributes to their mental and emotional health.[187]

Nonetheless, the effects of cognitive and motivational constraints on human decision-making processes indicate that people do not always think and behave in a manner consistent with rational choice theory. An individual's ability to process information and make utility-maximizing judgments under conditions of uncertainty is inevitably bounded by limits on time, attention, and information. Because cognitive and motivational factors influence how a person thinks about probabilistic data, the primary determinants of risk perception may be affective and experiential, not necessarily deliberate and rational.[188]

Biases can affect the perception of risk not only in the context of product hazards and tort law, but also in the context of corporate financial markets and securities law. Overconfidence, optimism, and confirmation and anchoring biases may help explain why subjective forward-looking elements of corporate disclosure and publicity can be unduly positive and have the potential to mislead.[189] These same biases can contribute to the likelihood that investors themselves will have difficulty perceiving and assessing the nature of the risks involved. Warning statements in the products liability setting can be ineffective due to consumers' cognitive and motivational constraints in receiving, comprehending and acting on the information given. Similarly, warning statements in securities disclosure can be ineffective in communicating the risks to investors, especially in relation to uncertain, future-oriented information.

With respect to the Safe Harbor for forward-looking statements in particular, Congress placed considerable weight on the use of warnings and meaningful cautionary language to immunize corporations from liability for making projections and forecasts, but Congress never considered the psychological and social science research revealing the difficulties people have processing warning disclosures. This is unfortunate, though not surprising, given that government agencies often ignore the vast amount of social science data concerning the design of risk communication systems when they develop regulations for information disclosure.[190] Cognitive insights can have dramatic implications for the study of

187. *See* Langevoort, *supra* note 166, at 855–56; Prentice, *supra* note 130, at 1612. One theory for explaining self-serving behavior is that it acts as a defense against threats to a person's identity or a way to garner or protect scarce resources. *See* Johns, *supra* note 136, at 10.

188. *See* Hanson & Kysar, *supra* note 19, at 671 (concluding that the manner in which individuals actually perceive and deal with risk departs significantly from the expected utility functions of economic theory). Ultimately the behavioral research may suggest that "otherwise well-informed, intelligent individuals may not have valid perceptions of the risks they face in their everyday lives." Fischhoff, *supra* note 129, at 209.

189. *See* Langevoort, *supra* note 133, at 157 (discussing the likelihood that biases can affect the way corporations phrase their forward-looking disclosure).

190. *See supra* note 20 and accompanying text.

securities regulation, along with many other areas of the law.[191] Although evidence of cognitive and motivational biases can raise questions about the efficacy of using warnings to convey risk information, it does not mean that warnings should be abandoned altogether in favor of more paternalistic regulation of consumer or investor activity. Rather, the psychological data can be used to elucidate the debate over warnings and to develop methods for increasing the effectiveness of risk disclosure in light of individual's bounded rationality.

A deeper concern implicated by the discussion of risk communication is whether the efficiency of modern financial markets as a whole can take care of many of the problems associated with the information processing difficulties that afflict individuals. As discussed below, adherents of efficient capital market theory may argue that even if individual investors suffer from cognitive errors in decision making, the presence of sophisticated, institutional investors, analysts, and professional market intermediaries, who can process information and risk communications much more accurately, will ultimately move the market price of securities to their fair, intrinsic value.[192] Thus, investors ultimately are not harmed or disadvantaged by their own information processing and decision-making deficiencies. So long as corporate managers disclose risks in cautionary language that is comprehensible to sophisticated investors, the efficiency of the market protects the unsophisticated as well.

However, the ability of the market to absorb and accommodate human biases may not be as strong as efficient capital market theorists assume. The following section discusses the presumed efficiency of the securities markets to process information and heed warning disclosures. Evidence of irrationality and inefficiency in the market suggests that reliance on the work of professionals and sophisticated investors may be misguided, particularly in the context of filtering probabilistic, forward-looking risk information.

V. EFFICIENT CAPITAL MARKET PROTECTIONS: THEORY AND CRITICISMS

The Efficient Capital Market Hypothesis (the "ECMH"), as a description of the manner in which the securities markets operate, "is

191. Matthew L. Spitzer, *Comment on Noll and Krier, "Some Implications of Cognitive Psychology for Risk Regulation,"* 19 J. LEG. STUD. 801, 805 (1990).

192. *See infra* Part V (discussing the efficient capital market hypothesis). Similar arguments have been made in the context of consumer product markets. Commentators have asserted that "the competitive market acts as a safety net for our internal cognitive limitations." Jason R. Penzer, Note, *Grading the Report Card: Lessons from Cognitive Psychology, Marketing, and the Law of Information Disclosure for Quality Assessment in Health Care Reform*, 12 YALE J. ON REG. 207, 241 (1995) (describing arguments of critics of information overload concept). The argument is that "[t]he systematic mental errors that individuals make when faced with raw data . . . do not translate into worrisome market failures" because "vigilant and sophisticated consumers" interpret the data and "effectively police the market for all consumers." *Id.*

firmly entrenched in the law of securities regulation."[193] The ECMH posits that efficient securities markets rapidly and accurately incorporate all relevant available information into the market price of any given security.[194] The theory assumes that market prices react immediately to each new bit of public information that becomes available; therefore, the price of securities is always a reflection of their fair, intrinsic value.[195] According to the ECMH, the pricing of stocks is accurate because competition among sophisticated and informed investors enables the market to move stocks to their true value in accordance with the best estimates of the risks and returns.[196] The underlying assumption is that there is an infinite supply of savvy arbitrageurs and traders who are ready to step in and buy or sell securities whenever prices stray from their inherent value.[197]

The ECMH is unaffected by evidence of investors' cognitive or motivational constraints because it assumes that the biases, errors in judgments, and decision-making shortcomings of uninformed investors are random and will cancel each other out in the market.[198] This economic

193. Thomas L. Hazen, *The Short-Term/Long-Term Dichotomy and Investment Theory: Implications for Securities Market Regulation and for Corporate Law*, 70 N.C. L. REV. 137, 154 (1991); *see also* Langevoort, *supra* note 148, at 873 ("Yet we are told that modern securities regulation has accepted the efficient market hypothesis as its vision."); Baruch Lev & Meiring de Villiers, *Stock Price Crashes and 10b-5 Damages: A Legal, Economic, and Policy Analysis*, 47 STAN. L. REV. 7, 19 (1994) ("The theory of capital markets efficiency has profoundly affected securities litigation."); Lynn A. Stout, *The Unimportance of Being Efficient: An Economic Analysis of Stock Market Pricing and Securities Regulation*, 87 MICH. L. REV. 613, 621 (1988) (observing that the ECMH "vision of efficiency has captured the hearts and minds of the securities culture"). The ECMH has strongly influenced the development of SEC policy, judicial reasoning, and corporate law doctrine for almost forty years. *See* Gordon & Kornhauser, *supra* note 25, at 762–64.

194. *See* KRIPKE, *supra* note 38, at 84 (describing the semi-strong version of the theory which asserts that "the current price reflects everything that is publicly known about the stocks being traded"); Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549, 554–65 (1984) (defining market efficiency); Gordon & Kornhauser, *supra* note 25, at 770–72 (explaining the efficient market hypothesis); Lynn A. Stout, *Are Stock Markets Costly Casinos? Disagreement, Market Failure, and Securities Regulation*, 81 VA. L. REV. 611, 646–48 (1995) (describing concept of the ECMH in modern financial theory). Different forms of the ECMH range from the weak, to the semi-strong, to the strong versions, depending on how much past and present information is believed to be reflected in prices. *See* COX ET AL., *supra* note 29, at 28–31 (discussing different types of efficiency); Hazen, *supra* note 193, at 154–55 (describing the three different forms of efficient market theory).

195. *See* Stout, *supra* note 194, at 647 (noting that the ECMH assumes that efficient prices are accurate prices because the stock market's quick and accurate response to new information causes market prices correctly to reflect best estimates of expected risks and returns); Christopher P. Saari, Note, *The Efficient Capital Market Hypothesis, Economic Theory and the Regulation of the Securities Industry*, 29 STAN. L. REV. 1031, 1038–39, 1069 (1977) (noting that in efficient markets, the market price of a security will always reflect its true worth and the price will always be "fair").

196. *See* Louis Lowenstein, *Efficient Market Theory: Let the Punishment Fit the Crime*, 51 WASH. & LEE L. REV. 925, 926 (1994) (describing the ECMH's explanation for pricing securities).

197. *See* RICHARD H. THALER, THE WINNER'S CURSE: PARADOXES AND ANOMALIES OF ECONOMIC LIFE 149 (1992); Lowenstein, *supra* note 196, at 926 (stating the ECMH's assumption that "mispriced stocks cannot long exist because if they did, 'smart money' investors/arbitrageurs would already have eliminated them").

198. *See* Arlen, *supra* note 126, at 1766 (noting that law and economics scholars believe "deviations from rational choice generally are not systematic, and thus generally will cancel each other out"); Langevoort, *supra* note 148, at 862 (questioning the ECMH's assumption that "[m]istakes, biases, and excessive optimism or pessimism are removed from the price-setting process because the random, uninformed biases of individuals in the market will cancel each other out").

model of market efficiency accepts the fact that people are subject to errors and inconsistencies in decision making, but it trusts that these fallibilities are random, not systematic in nature, and therefore will be exploited and weeded out of the market by more sophisticated, rational agents.[199] Thus, the competitive market will force those investors who are less skilled, or who fail to make rational decisions, to withdraw from the market. Moreover, biases such as overconfidence and optimism among corporate managers will not fool the efficient market because sophisticated investors and market professionals will be able to see through such managerial biases and discount for them. Overly optimistic forward-looking statements and weak cautionary language stemming from managers' overconfidence will be harmless because the sophisticated market may find other information that will expose the true risks that management ignored or minimized.[200]

The ECMH sparks questions about the need to protect unsophisticated investors through information disclosure rules in the first place. The ECMH may acknowledge that unsophisticated investors as a group are saddled with cognitive biases that cause them to make irrational, non-utility maximizing choices, and that these investors will not benefit from, nor understand or perhaps even read, corporate disclosure documents. The trading activity of these nonprofessionals is thought to be merely random with little net effect on the market prices of securities.[201] Nonetheless, the ECMH assumes sophisticated investors and professionals in the market will read, understand, analyze, and scrutinize corporate disclosures, and the rational judgments and trading activity of these sophisticated traders ultimately will set the market price of securities for the rest of the market. Unsophisticated investors are protected because the prices of the securities they buy and sell are fair and reflect their fundamental value.[202] Sophisticated market intermediaries filter the information that investors receive from issuers. Thus, individual investors will not be harmed by unduly positive forward-looking information because

199. *See* RATIONAL CHOICE, *supra* note 117, at 6 (noting the importance of market discipline through competition and stating the assumption that markets "reflect actions taken by experienced decision makers seeking to maximize their own gains"); Howard Kunreuther & Paul Slovic, *Economics, Psychology, and Protective Behavior*, 68 AM. ECON. REV. 64, 64 (1978) (noting that economists tend to dismiss arguments about the rationality of individual behavior on the grounds that "in the competitive world outside the laboratory, rational agents will survive at the expense of others").

200. *See* Langevoort, *supra* note 155, at 658 (explaining that the efficient market hypothesis assures that "biases will frequently be harmless" because "[i]nvestment analysts and other professionally informed investors are able to discount the most predictable forms of overoptimism and the illusion of control").

201. *See* Lowenstein, *supra* note 196, at 926 (noting that the efficient market theory posits that sophisticated investors are the ones who accurately price stocks and that the trading by nonprofessionals is random and of no effect); *see also* Langevoort, *supra* note 155, at 658 n.78 (noting that the efficient market hypothesis holds that "[u]ninformed traders have no significant price impact").

202. *See* Edmund W. Kitch, *Proposals for Reform of Securities Regulation: An Overview*, 41 VA. J. INT'L L. 629, 649 (2001) (discussing debate in connection with the view that investors are helpless, but nonetheless protected by the actions of sophisticated investors in pricing securities).

sophisticated traders will have already discounted those disclosures and modified the price of the securities accordingly.

The problem with this argument and with many of the arguments stemming from the ECMH, especially in connection with forward-looking disclosures, is that the validity of the ECMH itself has been in question for many years.[203] Critics argue that markets are volatile and inefficient and that the bounded rationality of investors bounds the efficiency of the securities market.[204] Cognitive and motivational constraints can, and do, affect markets. Heuristic-driven biases cause prices to stray from fundamental values as psychological factors and emotions play a role in market movement.[205] Market watchers have cataloged seemingly irrational correlations between stock prices and various calendar patterns, weekend effects, and weather changes.[206] Investing is susceptible

203. *See, e.g.*, Lawrence A. Cunningham, *Capital Market Theory, Mandatory Disclosure, and Price Discovery*, 51 WASH. & LEE L. REV. 843 (1994) (arguing that the ECMH is flawed); Gordon & Kornhauser, *supra* note 25, at 841–46 (describing empirical work questioning whether even the most well-developed capital markets are efficient); Lowenstein, *supra* note 196, at 927–28 (indicting the efficient market theory for increasingly desocializing the financial markets); William K.S. Wang, *Some Arguments that the Stock Market Is Not Efficient*, 19 U.C. DAVIS L. REV. 341, 349–394 (1986) (describing theoretical and empirical problems with the efficient market hypothesis).

204. *See* ROBERT J. SHILLER, MARKET VOLATILITY (1991) (collecting earlier works critiquing the efficient market hypothesis); ANDREI SHLEIFER, INEFFICIENT MARKETS: AN INTRODUCTION TO BEHAVIORAL FINANCE 10–23 (2000) (discussing theoretical and empirical challenges to the efficient market hypothesis); ADVANCES IN BEHAVIORAL FINANCE (Richard H. Thaler ed., 1993) [hereinafter BEHAVIORAL FINANCE] (collecting several articles that indicate behavioral research undermines the efficient market hypothesis); Langevoort, *supra* note 135, at 140–43 (discussing some evidence against market efficiency); Prentice, *supra* note 126, at 1409 (noting that there is overwhelming evidence that the efficiency of the stock market is substantially bounded). Even supporters of rational choice theory acknowledge that not all markets act rationally. *See* Charles R. Plott, *Rational Choice in Experimental Markets*, *in* RATIONAL CHOICE, *supra* note 117, at 117, 139–41. There is the possibility that markets are not efficient because noise traders create inefficiencies by trading in an uninformed fashion. *See, e.g.*, J. Bradford De Long et al., *Noise Trader Risk in Financial Markets*, 98 J. POL. ECON. 703, 705–06 (1990); *see also* Paul G. Mahoney, *Is There a Cure for "Excessive" Trading?*, 81 VA. L. REV. 713, 718–21 (1995) (discussing the noise trading theory).

205. *See* Lawrence H. Summers, *Does the Stock Market Rationally Reflect Fundamental Values?*, 41 J. FIN. 591, 592, 600 (1986) (arguing that "existing evidence does not establish that financial markets are efficient in the sense of rationally reflecting fundamentals" and that "valuation errors are being made continuously" in the financial markets); *see also* SHILLER, *supra* note 142, at 203 (asserting that the market is set by millions of investors "who are motivated substantially by their own emotions, random attentions, and perceptions of conventional wisdom"); LARS TVEDE, THE PSYCHOLOGY OF FINANCE 15 (1999) (observing that the market can be "subjective, emotional and ruled by the whim of changing trends"); Lev & de Villiers, *supra* note 193, at 20 (asserting that "most price changes, for both individual stocks and the market as a whole, appear to be unrelated to the release of any fundamental information").

206. *See* THALER, *supra* note 197, at 140–47 (discussing abnormal market activity and price returns in the month of January, before and after weekends, before holidays, and at the turn of the month); Hazen, *supra* note 193, at 156–57 (describing the apparent irrationality of the "October syndrome" in which many of the stock market's worst and volatile performances have occurred in the month of October); Prentice, *supra* note 126, at 1410 (citing empirical work showing that good weather tends to put investors in an upbeat mood and translates into higher daily stock returns). All of these patterns are inconsistent with the ECMH because it assumes that prices will follow an unpredictable random walk as information is instantly incorporated into market prices. *See* Homer Kripke, *A Search for a Meaningful Securities Disclosure Policy*, 31 BUS. LAW. 293, 311 (1975).

to fads and fashions, just like any other social activity.[207] Observations of herding behavior indicate that investors often overreact emotionally to what they perceive others are doing and simply follow the crowd blindly.[208] Because individual investors share common cognitive biases and information processing problems, investors in the aggregate may err in the same direction.[209] As a result, investor irrationality has contributed to speculative bubbles and market crashes in a manner that the ECMH cannot comprehensively explain.[210] Far from constituting fully measured, efficient behavior, investing in the stock market involves speculative activity that is often compared to gambling.[211] The market provides a forum for people to engage in the play value of speculating about the future,[212] and even at its most professional level, investing can be characterized as an art, not necessarily a science. Market activity is composed of the choices that market participants make, choices that are the product partly of reason and partly of emotion.[213]

The ECMH assumes that the presence of sophisticated investors in the long run corrects for all these market anomalies, and that corporate disclosures should be directed only toward knowledgeable, sophisticated investors and market professionals who will then "filter information to the masses and thereby cause the market price to adjust efficiently . . . ."[214] When it comes to soft, forward-looking information in

207. BRUCE I. JACOBS, CAPITAL IDEAS AND MARKET REALITIES: OPTION REPLICATION, INVESTOR BEHAVIOR, AND STOCK MARKET CRASHES 87 (1999); *see also* Langevoort, *supra* note 148, at 863 (noting that one problem with the efficient market hypothesis is that there is anecdotal evidence of apparent market fads and fashions). Another way to characterize such investing may be to say that investors who buy securities because of a perception of public enthusiasm are "buying the public fancy." *See* Gabaldon, *supra* note 2, at 237.

208. *See* BELSKY & GILOVICH, *supra* note 165, at 175–92 (discussing herd behavior in the stock market); Hazen, *supra* note 2, at 997–99 (same). Herd behavior occurs when decision makers imitate what other people are doing, rather than choose a course of action based on information and judgment with regard to the merits. *See* Bainbridge, *supra* note 169, at 1038. Herding can amplify price swings that are attributable to irrelevant external factors rather than to relevant information concerning economic performance. Hazen, *supra* note 2, at 998. "By mimicking or anticipating the behavior of other investors," the herd instinct can be a substantial cause of irrational market volatility. *Id*. at 998.

209. JACOBS, *supra* note 207, at 87.

210. *See* Cunningham, *supra* note 203, at 847–48 (arguing that catastrophic market crashes reveal infirmities in the ECMH); Frank Partnoy, *Why Markets Crash and What Law Can Do About It*, 61 U. PITT. L. REV. 741, 755–57 (2000) (discussing cognitive errors as causes of market crashes); Prentice, *supra* note 126, at 1411.

211. *See* SHILLER, *supra* note 204, at 58–60 (discussing links between gambling behavior and speculative investing); Hazen, *supra* note 2, at 1002–03 (noting that speculative investment strategies are irrational and can be compared to gambling); Statman, *supra* note 2, at 14–15 (comparing stock trading with lottery playing); *see also supra* note 2 and accompanying text.

212. SHILLER, *supra* note 204, at 59 ("Investing in speculative assets clearly shares with gambling the element of play."); *see also* McCaffery, *supra* note 3, at 89–93 (discussing the consumption value of play in the context of lotteries).

213. *See* Lowenstein, *supra* note 196, at 942; *see also* TVEDE, *supra* note 205, at 39 (noting that the market occasionally "gets completely dominated by such irrational emotions as hope, greed and fear"); Statman, *supra* note 2, at 17 ("Hope and fear may be the strongest emotions that drive lottery players and stock traders . . . .").

214. Fiflis, *supra* note 32, at 106. Homer Kripke argued that the average layperson does not read or comprehend corporate disclosure documents. *See* Homer Kripke, *The Myth of the Informed Lay-*

particular, the market efficiency argument is that the credence unsophisticated investors attach to forecasts will be determined largely by what rational, professional investors think.[215] The reality, however, is that the professional investment community, with all of its sophistication, does not always behave with the rationality and efficiency that the ECMH expects. Counting on sophisticated investors and market professionals to analyze and filter corporate disclosures, to incorporate such information accurately in the pricing of securities, and thereby to protect the entire market, may be asking for too much.

Sophisticated investors and professionals can suffer from the same cognitive and motivational biases that constrain individual, unsophisticated investors.[216] Some evidence shows that even professional security analysts and economic forecasters overreact to certain information in the market.[217] Overconfidence and optimism biases can be even more pronounced in professional investors than lay investors.[218] Sophisticated investors' past investment experience may lead them to take greater risks in the belief that they are much better stock-pickers than they really are. They may also be overconfident in their ability to assess corporate managers' credibility and performance, and reluctant to admit their own shortcomings in decision making.[219] Because professional institutional

man, 28 BUS. LAW. 631, 633, 638 (1973) (arguing that corporate disclosure should be oriented toward sophisticated investors and professionals through whom information and suggestions for action filter down to the layperson); Kripke, *supra* note 5, at 1165 ("The heart of my position is that the intelligent investor . . . who tries to act in any informed way does so by getting at least part of his information second hand, filtered through professionals.").

215. *See* Seligman, *supra* note 39, at 1956 (discussing historical shifts in beliefs about unsophisticated investors' undue reliance on corporate projections). The implication is that more soft information should be supplied to sophisticated investors because they are capable of comprehending it and weighing its relevance against its reliability. Fiflis, *supra* note 32, at 107.

216. *See* Daniel Kahneman & Mark W. Riepe, *Aspects of Investor Psychology*, 24 J. PORTFOLIO MGMT., Summer 1998, at 52, 53–54 (describing several cognitive illusions, including overconfidence and overoptimism, that affect the decision making of professional brokers and investors); Langevoort, *supra* note 17, at 634–69 (drawing on behavioral research to explain why professional brokers and sophisticated investors can engage in excessively risky investment choices); Prentice, *supra* note 126, at 1489 ("Even the most intelligent, expert investors are subject to the vast majority of the cognitive limitations" that apply to individual investors.)

217. *See* Werner F.M. De Bondt & Richard H. Thaler, *Does the Stock Market Overreact?*, *in* BEHAVIORAL FINANCE, *supra* note 204, at 249–50; Werner F.M. De Bondt & Richard H. Thaler, *Do Security Analysts Overreact?*, 80 AM. ECON. REV. 52, 56–57 (1990).

218. *See* Hanson & Kysar, *supra* note 19, at 661 (explaining that "when the pertinent events are not easily predictable and the feedback is not unambiguous, experts tend to be even more overconfident than laypersons"); Rachlinski, *supra* note 137, at 1172–73 (summarizing research indicating that overoptimism, overconfidence, and egocentricism can be particularly potent when individuals possess some expertise); *see also* BELSKY & GILOVICH, *supra* note 165, at 152 (stating that numerous studies have demonstrated that several professional groups, including securities analysts, are capable of displaying significant overconfidence); JACOBS, *supra* note 207, at 88–89 (discussing evidence of significant overoptimism in stock analysts' earnings estimates); Slovic et al., *supra* note 129, at 475–78 (noting that experts also display overconfidence bias).

219. *See* Langevoort, *supra* note 155, at 659 n.84. It is interesting to note that in many securities fraud class actions, the primary claimants are typically institutional investors who have a great deal of investment sophistication. Their expertise does not immunize them from being deceived by misleading corporate disclosure. *Id*. at 659 n.83.

investors are managed by human beings who have cognitive biases, institutional investors are just as susceptible to the effects of the popular investing culture as individual investors.[220] Evidence indicates that even large institutional investors engage in speculative investment activity,[221] and they may be just as likely to exhibit and contribute to herding behavior in the market.[222] Sophisticated investors are not immune to tendencies to make risky decisions based on fads, emotions, and intuitions. Just like every other participant in the securities market, sophisticated investors and professionals are trying to make predictive judgments about the future, under conditions of uncertainty, and subject to information processing and decision-making biases. As is the case for ordinary investors, sophisticated investors may not appreciate the magnitude of the risks of certain investments unless the warnings are communicated in a way that is cognitively salient and penetrating.

Thus, sophisticated investors and professionals may not scrutinize corporate disclosures and publicity with the level of care and skepticism that efficient market proponents assume. Sophisticated investors are just as prone as lay investors to believe rosy forward-looking statements that confirm their own prior optimistic assessments. In the end, the professional investment community is still influenced heavily by corporate managers' views of the company's future prospects and potential risks.

Even if sophisticated investors could completely overcome their own cognitive biases and accurately price securities for the benefit of unsophisticated investors, the fact remains that managers are the source of key forward-looking information in the market. Sophisticated investors can try to discount for the cognitive biases that influence the formation

220. *See* SHILLER, *supra* note 142, at 18 (arguing that it is inappropriate to draw sharp distinctions between professional investors and individual investors and to assume that professional investors offset the irrational exuberance of the nonprofessional investing public).

221. *See* Hazen, *supra* note 2, at 997 (noting that irrational speculative behavior is not limited to individuals, but has also been a characteristic of institutional investors in recent years); Felix G. Rohatyn, *Institutional 'Investor' or 'Speculator'?*, WALL ST. J., June 24, 1988, at A18 (stating that speculative behavior today is no longer driven by individual investors, but by pension funds, banks, savings and loans, and insurance companies). Sophisticated investors have shown the same tendency as gamblers, corporate executives, and individual investors to engage in more risky behavior when they are trying to recoup losses or "break even." *See* Prentice, *supra* note 126, at 1487–88, nn.439–42 (discussing escalation of commitment, loss aversion, and "get-evenitis" tendencies). Case studies indicate that "get-evenitis" afflicts both sophisticated and unsophisticated investors. SHEFRIN, *supra* note 137, at 107. The belief that sophisticated investors are smarter and therefore less likely to make irrational speculative judgments is not necessarily accurate. "[I]t makes little more sense to talk about smart money in terms of predicting future earnings than it does to talk about smart money in the Illinois lottery. They are guesses, and often not very good ones." Langevoort, *supra* note 148, at 867 n.50.

222. *See* David Hirshleifer et al., *Security Analysis and Trading Patterns When Some Investors Receive Information Before Others*, 49 J. FIN. 1665, 1667 & n.2 (1994) (citing empirical and theoretical work discussing herding behavior of institutional investors and security analysts); *see also* Bainbridge, *supra* note 169, at 1039 (describing herding behavior by institutional investors and market professionals); Hazen, *supra* note 2, at 998 ("Herd behavior is not limited to individual investors; institutional investors through their professional money managers similarly have shown a tendency to run with the herd."). Financial economists have found a remarkable amount of herding behavior among professional investors. *See* Langevoort, *supra* note 17, at 644.

of managerial projections and forecasts, but sophisticated investors cannot eliminate such managerial biases at their source, no matter how efficient the market is. Thus, to assume that the only listener of corporate publicity and disclosure is the informed, sophisticated investor, and that the unsophisticated trader can be ignored because the sophisticated trader acts as a protective buffer, misses the point to some degree. The bounded rationality and bounded efficiency of the market and its participants suggest that individual, unsophisticated investors deserve the attention of securities regulation protections, and that reliance solely on the efforts of sophisticated investors to protect the integrity of the market is overly optimistic itself.

If, then, the focus should be on how to communicate forward-looking information and future risks to unsophisticated investors in a meaningful way, perhaps some of the previous insights gleaned from the psychological research regarding the effective design of warnings in the consumer products market may be helpful. Critics might argue that structuring forward-looking disclosure and warning policies toward ordinary investors effectively tailors the system to the lowest common denominator of investor sophistication, to the detriment of everyone.[223] However, as a policy matter, society may well decide that it is better to insist on precautions that provide help to some who need it more in order to protect the market as a whole. Similar concerns are often apparent in the consumer product market where warnings are oriented toward the unsophisticated for the benefit of society at large which prefers not to have to bear the welfare costs of caring for people who suffer devastating losses from product defects.[224]

The stock market today is very different from times past when only a small segment of the public invested in publicly traded securities; today, a huge portion of the U.S. population owns publicly traded stocks

223. *See* Schneider, *supra* note 28, at 267–68 (arguing that it is counterproductive to limit the disclosure of soft information). This criticism stems from the underlying assumption that lay investors do not read formal and highly stylized corporate disclosure documents. *See* Kripke, *supra* note 214, at 632–35 (discussing the implausibility of the belief that lay investors read and benefit from prospectuses); *see also* Alan R. Palmiter, *Toward Disclosure Choice in Securities Offerings*, 1999 COLUM. BUS. L. REV. 1, 18 (1999) (noting that "most public investors are unlikely to actually read and grasp the stylized prospectus"). This does not mean, however, that lay investors do not read corporate publicity in, for example, press releases, that may contain forward-looking statements and optimistic outlooks for the future.

224. *See* Stephen D. Sugarman, *Assumption of Risk*, 31 VAL. U. L. REV. 833, 866 (1997). Similarly, society may not wish to bear the welfare costs of caring for huge numbers of ordinary investors who lose their entire retirement savings accounts in the stock market due to market crashes and the bursting of speculative bubbles created by irrational exuberance. From a regulatory perspective, one of the traditional rationales for securities rules has been the protection of unsophisticated investors who are not able to fend for themselves. *See* Alison Grey Anderson, *The Disclosure Process in Federal Securities Regulation: A Brief Review*, 25 HASTINGS L.J. 311, 313–14 (1974); Hazen, *supra* note 2, at 1013; Till, *supra* note 40, at 610 n.15. As a political matter, some may see the SEC's most important role as providing protection for the ordinary investor. *See* Hu, *supra* note 159, at 795.

either directly or indirectly.[225] A large number of individual investors now trade on-line directly through on-line brokerage accounts.[226] "The current generation of [individual] investors . . . trade[s] very actively by historical standards."[227] The trading activity of day traders, for example, can have significant effects on the market, at times driving the price of a single stock up substantially and then down again in the same day.[228] Thus, individual investors can have more of an impact on the market today, and it is unwise to ignore their trading behavior under the mistaken belief that only sophisticated investors and market professionals influence the market price of securities.

Individual investors can trade stocks quickly and cheaply without the help, advice, or filtering efforts of professional market intermediaries. Because individual investors can place trades directly, rather than through personal brokers who traditionally acted as gatekeepers to the stock market,[229] the investment decisions of individual traders have grown increasingly more autonomous in nature. Investors no longer need to rely solely on market professionals to filter and disseminate corporate forward-looking information because the public has more direct access to information regarding corporations than ever before.[230] The vast amount of investment information available on-line has given ordinary investors extraordinary access to data from issuers, and investors often act on that data without consulting professional intermediaries.[231] Sophisticated investors are no longer the only ones who will read and be influenced by forward-looking information; rather, ordinary individual investors who make their own autonomous investment decisions are

225. CHARLES P. JONES, INVESTMENTS: ANALYSIS AND MANAGEMENT 51 (8th ed. 2002). Nearly half of all U.S. households own equities. *See* INV. CO. INST. & SEC. INDUS. ASS'N, EQUITY OWNERSHIP IN AMERICA 15 (2002) [hereinafter EQUITY OWNERSHIP]. There are approximately 84.3 million individual equity investors in the U.S. *Id*. The proportion of families with stock holdings continues to rise as even investors of modest means can take advantage of low-cost, no-load mutual funds that offer a diversified portfolio of stocks. *See* Hu, *supra* note 159, at 806 (citing evidence showing that increasing percentages of families and individual investors are entering the stock market).

226. Nearly forty percent of investors who bought or sold individual stock in 2001 used the Internet to conduct some or all of those transactions. EQUITY OWNERSHIP, *supra* note 225, at 54; *see also* Barber & Odean, *supra* note 146, at 41 (citing evidence of tremendous growth in on-line trading accounts).

227. Barber & Odean, *supra* note 146, at 49.

228. *See* Gabaldon, *supra* note 2, at 239 (discussing day traders' ability to affect the securities markets). It has been asserted that day traders can account for up to fifteen percent of the volume on the Nasdaq stock exchange. *Id*. Day traders are not market professionals, but they arguably are not quite like typical ordinary investors either. *See* Bradley, *supra* note 145, at 90 ("The day trader seems to live in the space between the categories of professional and nonprofessional market participants.").

229. *See* Langevoort, *supra* note 135, at 154 (noting that brokers' former role as gatekeepers to the stock exchanges has changed with the advent of online trading).

230. An example of this can be found in Regulation FD, which was adopted in 2000 to equalize the playing field when corporations disseminate information about their business. Under Regulation FD, companies that disclose any material nonpublic information to brokers, analysts, and other market professionals must simultaneously make public disclosure of that information so that all investors can have access to it. 17 C.F.R. § 243.100 (2000); *see also* HAZEN, *supra* note 1, § 12.19[4] (discussing Regulation FD).

231. *See* Barber & Odean, *supra* note 146, at 42, 45.

likely to see and consider such future-oriented disclosures much more now than in the past.

Thus, if corporate managers wish to make public forward-looking statements with meaningful cautionary language in reliance on the Safe Harbor for forward-looking information, it is important to try to maximize the effectiveness of those warnings in communicating the risks to ordinary as well as sophisticated investors. In order to be meaningful, the cautionary statements should be written in a manner that recognizes the cognitive and motivational tendencies that all investors, whether sophisticated or not, exhibit when making probabilistic judgments. Keeping these concerns in mind, the following section provides some recommendations for designing risk communications to make forward-looking disclosures and their accompanying warnings more meaningful.

VI. RECOMMENDATIONS FOR RISK DISCLOSURES AND WARNINGS

In enacting the Safe Harbor for forward-looking statements, Congress placed great weight on the use of meaningful cautionary language to immunize corporations from liability for making forward-looking statements that turn out to be false or misleading, even when corporations have actual knowledge of the falsity.[232] The statute, however, provides little guidance for constructing meaningful warnings. In light of some of the insights gained from the psychological research on information-processing and decision-making biases in the context of warnings, this Article proposes that the following factors be considered when determining whether cautionary language, in content and in form, is sufficiently meaningful to inform investors of the risks.

A. Content

Under the Safe Harbor, the content of the cautionary language must identify "important factors that could cause actual results to differ materially from those in the forward-looking statement."[233] Technically this statutory language would permit mere identification of possible risk factors in bullet list form, without any further discussion. That type of disclosure, however, does not meaningfully inform investors of the nature of the risks. For warning disclosures to be effective, a thoughtful discussion of the relevant risk factors should be included.

Part of the problem with the Safe Harbor's content requirement is that it seems to condone minimal disclosure. For example, if a company is aware of six important factors that could materially affect its projected results but decides to disclose only three of the factors, then the statutory

232. *See supra* Part II.D (discussing the Safe Harbor's alternative prongs and the significance of the meaningful cautionary language prong).

233. 15 U.S.C. § 77z-2(c)(1)(A)(i) (2000); 15 U.S.C. § 78u-5(c)(1)(A)(i) (2000).

requirements have technically been met because the Safe Harbor requires only that some "important factors" be identified. However, such incomplete disclosure seems to miss the point of securities regulation in general, i.e., to provide investors with material information from which they can make reasonably informed choices. Safe harbor provisions generally are designed to exempt corporate issuers from basic rules when the issuers go above and beyond the minimal compliance with the basic rules. Corporations deserve safe harbor protection when they use an abundance of caution and act in a way that goes beyond what would normally be required of them. That is the nature of a safe harbor. To promote less than complete disclosure of important risk factors in the context of forward-looking statements seems to undermine the reason for allowing a safe harbor rule in this area in the first place.

Therefore, corporations that want to take advantage of the Safe Harbor for forward-looking information should seek to identify the factors that the corporation anticipates will be more likely than not to cause actual results to differ.[234] Rather than mentioning only some of the significant factors that may affect forecasted results, corporate managers should be urged to provide more than mere minimal disclosure. Potential problems that the corporation believes will be more likely than not to cause actual results to differ materially from the corporation's projections are sufficiently important to merit discussion if the corporation wishes to rely on the Safe Harbor. The content of the cautionary language should identify those factors that are likely to impact the results predicted by the company.

Moreover, the cautionary language should address the magnitude of the potential risks involved. As the research on cognitive risk perception in the consumer product market makes clear, "[o]ne prerequisite for responding appropriately to a risk is having a proper appreciation of its magnitude."[235] Investors are too likely to dismiss cautionary language unless there is some sense of the seriousness of the dangers that prompts the investor to pause for a moment to consider the extent of the risk. The cautionary language should clearly assess the likelihood that these risks will materialize and that they will consequently cause actual results to differ from what is predicted in the forward-looking statements. To be meaningful, warnings must inform investors of not only the possibility that negative events might occur, but also the realistic probability that

234. Although the Conference Committee did not adopt this particular language in its construction of the Safe Harbor, this standard could still be adopted as a guideline for determining which factors are "important factors" for purposes of Safe Harbor protection. As Professor Coffee has noted, even if precise language is not accepted by Congress, "no negative inference is generally drawn from congressional inaction." Coffee, *supra* note 81, at 997.

235. *See* Fischhoff, *supra* note 129, at 208. In assessing the adequacy of warnings in products liability cases, courts have recognized that one factor contributing to an ideal product warning is whether it discusses the seriousness of the danger. Nordenstam & DiMento, *supra* note 20, at 370.

they will.[236] If cautionary statements are to be effective, they need to present as complete a picture of the risks as reasonably possible.

The content of the cautionary language should also discuss how the identified risk factors apply specifically and uniquely to the business of the particular company. Vague and relatively uninformative statements listing risks that could generally apply to almost any company in any industry are not likely to be read or cognitively registered by investors.

For example, the following risk factors are so broad that they do not convey meaningful information about the specific dangers faced by a particular company: "There is uncertainty as to the Company's future profitability." "The Company may face difficulty obtaining financing sufficient to support the Company's growth goals." "External factors may affect the Company's business such as: changes in laws and regulations; activities of governments, agencies, or other organizations; shifts in social, economic, and political conditions; inflation or deflation; and increases in federal, state, or local taxes." These statements, standing alone, without a more detailed discussion as to how these risk factors relate to the Company itself, are simply boilerplate and likely to be ignored by investors. Cautionary language may include general discussions of risks faced by the industry or the wider economy, but the cautionary language should also explain how those industry and economic risks can present particular obstacles and uncertainties for the specific company at issue.[237] The more distinct and specific the projections and forecasts are, the more particularized the accompanying risk factors should be.

Although the content of the cautionary language is important, the manner in which the information is presented is equally, if not more, important when trying to communicate the risks. Studies in the consumer product market that focus on the cognitive and motivational limitations people have in making decisions have shown that the strategies people use to acquire information are strongly affected by the format of the information presented.[238] Research in psychology and marketing draws a

236. *See* Langevoort, *supra* note 17, at 692 (discussing factors for effective risk disclosure). What investors need is not simply an identification of the risks that can occur, but issuer-specific evaluation of those risks. *See* Langevoort, *supra* note 185, at 763 (suggesting a form of "Risk Disclosure and Analysis" that would allow investors to assess, through insiders' eyes, the presence, probability, and magnitude of risks).

237. *See* Marc H. Folladori, *Protecting Forward-Looking Statements: The Private Securities Litigation Reform Act of 1995 and Other Safeguards*, 1353 PLI/Corp 663, Practicing Law Institute, Corporate Law and Practice Course Handbook Series, at 676–77 (2003) (discussing comments in the Report of the Committee on Securities Regulation of the Association of the Bar of the City of New York: *"Forward-Looking Statements and Cautionary Language after the 1995 Private Securities Litigation Reform Act: A Study of Recent Practices"* (Aug. 1998)); *see also* Olazábal, *supra* note 87, at 22–23 (noting that "a rule of thumb for listing risk factors" is that an issuer identify risk factors that are "specific to its business").

238. *See* James R. Bettman & Pradeep Kakkar, *Effects of Information Presentation Format on Consumer Information Acquisition Strategies*, 3 J. CONSUMER RES. 233, 239 (1977); *see also* David E. Kanouse & Barbara Hayes-Roth, *Cognitive Considerations in the Design of Product Warnings*, *in* 6 BANBURY REPORT: PRODUCT LABELING AND HEALTH RISKS 147, 148 (1980) (discussing the effects of four variables in constructing effective warning messages—length, organization, tone, and writing

critical distinction between the availability of risk information and the form in which it is presented.[239] The same available information can be formatted in different ways to increase or decrease its impact on decisions.[240] The salience of the information influences people's cognitive ability and motivational inclination to process it.[241] People's perceptions of the probability of uncertain events are shaped by the way those events are described. Therefore, designing effective warning statements for purposes of forward-looking disclosures requires that managers address not only the content and quality of the risk information made available, but also the format in which that information is framed and given to investors. The following discussion focuses on the format factors that can make cautionary language more salient.

B. Form

In order for warning statements to be effective, they must have prominence in the disclosure document. People are not likely to read or process risk information that is not easy to find or that is mired in fine print.[242] The placement of cautionary language should ensure it is noticeable.[243] Positioning warnings to attract a user's attention is crucial to effective risk communication.[244] If risk factors are placed at the end of a lengthy disclosure document, buried in the middle, or cross-referenced in several different documents and in multiple sections of the same document, readers are not likely to be able to process and effectively piece together the entire warning message. Therefore, cautionary language must be prominent in order to alert investors to the risks associated with any forward-looking information investors receive.

style—and concluding that together "they go a long way toward determining the essential character of a message").

239. MAGAT & VISCUSI, *supra* note 121, at 133. The research indicates that merely making information available is not sufficient to convey risks adequately. *See id*. When it comes to creating warning labels, researchers have found that the design of the label matters just as much as its actual wording. *See id*. at 186 ("A recurring theme of our research on information and warnings policies is that format effects are important.").

240. Bettman et al., *supra* note 125, at 2 ("There is extensive evidence from both basic and applied research that the *same* information presented in different formats can result in different decisions." (citations omitted)); *see* MAGAT & VISCUSI, *supra* note 121, at 186.

241. *See* Viscusi, *supra* note 15, at 661 (noting that due to cognitive limitations, the salience of the information format is consequential and influences consumers' capacity to process risk information).

242. *See* Bettman et al., *supra* note 125, at 15 (stating that one important factor in designing effective risk communication labels is that the consumer should easily be able to locate particular pieces of information when needed, and "should not have to search through fine print or hunt all over the label").

243. *See* Rechtschaffen, *supra* note 16, at 362–63 (arguing that warnings should contain design features and be placed in a manner that emphasizes noticeability). Cognitive limits on how people process warning information suggest that hazard warnings that are not prominently located on a product are much less likely to be read. *See* MAGAT & VISCUSI, *supra* note 121, at 8.

244. *See* Nordenstam & DiMento, *supra* note 20, at 372 (noting that the adequacy of a warning depends in part on the "utility of the location in which the manufacturer places the warning").

The risk information must be salient enough to attract and hold people's attention.[245] Experts have found that the most usefully designed product warnings "possess characteristics that make them stand out from their background."[246] In determining the adequacy of warnings, courts have considered the likelihood that the style and format of the warning will catch the user's attention.[247] A great deal of cognitive research regarding the factors that capture and maintain a person's attention has shown that font styles, bold print, capital letters, highlighting, color contrast, and formatting structure can have significant effects on the probability that a person's attention will be drawn to warning statements.[248]

Some of this research may prove helpful in the context of drafting meaningful cautionary disclosures to accompany corporate forward-looking statements. At the very least, discussions of important risk factors should be formatted to be sufficiently salient to draw investors' attention. Distinct typeface should be used to identify cautionary language and to emphasize the most serious and probable risk factors. A separate section devoted entirely to highlighting cautionary factors that are relevant to forward-looking statements may help investors process the risks more readily than if the cautionary statements are interspersed throughout the document and merely blend in with the rest of the disclosure. Bolded statements or sections that draw attention to the warnings stand a greater chance of being noticed than warnings written in small and pallid print.[249]

People must not only notice a warning statement, but also be able to understand its message. Warnings need to be presented in language that

245. *See* SUSAN G. HADDEN, READ THE LABEL: REDUCING RISK BY PROVIDING INFORMATION 219 (1986) ("[W]arning labels must be able to grab and hold attention in order to fulfill their purpose."). Attention is an important focus of psychologists' research on warnings. *See* Stephen L. Young & David R. Lovvoll, *Intermediate Processing Stages: Methodological Considerations for Research on Warnings*, *in* WARNINGS AND RISK COMMUNICATION, *supra* note 109, at 27–28 (discussing basic Gestalt psychological principles and their implications for research on attention to warnings).

246. *See* Rechtschaffen, *supra* note 16, at 324.

247. *See* Nordenstam & DiMento, *supra* note 20, at 371. Courts have stated that the warning's conspicuousness, prominence, and relative size of print must be adequate to alert the reasonably prudent person to the dangers. *See* First Nat'l Bank in Albuquerque v. Nor-Am Agric. Prods., Inc., 537 P.2d 682, 691 (N.M. Ct. App. 1975).

248. *See* Michael S. Wogalter & S. David Leonard, *Attention Capture and Maintenance*, *in* WARNINGS AND RISK COMMUNICATIONS, *supra* note 109, at 123, 125–37; *see also* Baruch Fischhoff, *Need to Know: Analytical and Psychological Criteria*, 6 ROGER WILLIAMS U. L. REV. 55, 64–65 (2000) (observing that there is a substantial amount of research literature on what draws people's attention to labels) (citing SELECTIONS FROM HUMAN FACTORS AND ERGONOMICS SOCIETY ANNUAL MEETINGS 1980–1993 (Kenneth R. Laughery, Sr. et al. eds., 1994)); Rechtschaffen, *supra* note 16, at 324 (noting research showing that the use of symbols, icons, and signal words can also make warnings more conspicuous).

249. From one perspective, the best way to guarantee that warnings will be noticed is to format them to be as dynamic and eye-catching as advertising. *See* Rechtschaffen, *supra* note 16, at 362. Although such warnings are more likely to be noticed and read, it seems unrealistic to place on corporations the burden of devoting the same marketing efforts to warning messages as they do to advertising material. So long as corporations present cautionary language in a format that is reasonably likely to catch the public's attention and alert investors to the potential risks, investors should be able to make informed investment decisions.

is understandable and coherent.[250] As research in the consumer market shows, merely making risk information available does not mean that it is comprehensible and processable.[251] Framing the risk in clear, vivid, and unambiguous terms enhances its salience and facilitates a person's cognitive processing of the risk.[252] Therefore, cautionary statements in connection with forward-looking disclosures will not be meaningful to the investment community unless they describe the risks explicitly and plainly. Corporate managers must present the nature and extent of the risks in a concrete manner that investors can grasp.

Another important aspect of the format of effective warning statements is the order in which the risks are presented. Due to the effects of anchoring tendencies, information that is presented first to people has greater impact on the formation of their judgments than information that is presented later.[253] This "primacy effect" has been confirmed repeatedly in psychological research on impression formation.[254] The order in which people receive information has a substantial effect on their perception and ultimate use of the information to reach a decision.[255] In the context of warnings, the most effective warning formats give more significant risks primary and greater emphasis, while lesser risks appear later in the sequence.[256] The sequencing of risk disclosures "inevitably

250. *See* MAGAT & VISCUSI, *supra* note 121, at 133 ("If consumers are to effectively comprehend and use information, it must be presented in a convenient, understandable form."); Young & Lovvoll, *supra* note 245, at 33 (explaining that warning messages must be written in language that is read by the target audience, that is familiar and can be understood by the target audience, and that is coherent); *see also* Bettman et al., *supra* note 125, at 15 ("To facilitate the encoding of information once it is located, the information should be simple and easily understood.").

251. *See* George S. Day, *Assessing the Effects of Information Disclosure Requirements*, 40 J. MARKETING 42, 47–48 (1976) (noting that "[i]nformation availability does not mean comprehension," and information may be available but still not processable); *see also* Bettman & Kakkar, *supra* note 238, at 239 ("Even if information is available, if it is not easily processable it cannot be used by consumers. Thus, information must be not only *available* to consumers, but also *processable*."); Bettman et al., *supra* note 125, at 14.

252. *See* Nordenstam & DiMento, *supra* note 20, at 362 (noting that the clarity with which the source frames or presents the warning message may determine perception and response); *see also* M. Stuart Madden, *The Law Relating to Warnings*, *in* WARNINGS AND RISK COMMUNICATION, *supra* note 109, at 315, 328 ("Warning language that is ambiguous, obtuse, or a hedge of the manufacturer's acknowledgement of the hazards associated with the product will be found to be inadequate to communicate the extent and the seriousness of the harm."). Psychological research indicates that certain factors contribute to the vividness of information and the likelihood that the information will be remembered. For example, information that is emotionally interesting, concrete and imagery-provoking, and proximate in a sensory, temporal, or spatial way, tends to be more vivid and likely to attract a person's attention. *See* NISBETT & ROSS, *supra* note 126, at 45.

253. *See supra* Part IV.C (discussing the anchoring heuristic and the confirmation bias).

254. *See* NISBETT & ROSS, *supra* note 126, at 172 (concluding that several decades of psychological research have shown that primacy effects are overwhelmingly present in people's decision-making processes). The primacy effect in impression formation can be described as the process by which "early-presented information has an undue influence on final judgment." *Id*.

255. *See* Henderson & Twerski, *supra* note 15, at 307. This is partly due to the fact that people cannot process multiple warnings all at once, but rather, "must read warnings sequentially and digest them piecemeal." *Id*.

256. *See* Geistfeld, *supra* note 110, at 326. A poorly designed warning "has no apparent organization and tends to place the least significant risks at the beginning." *Id*. at 325. The problem with such

denotes relative importance and will have an impact on the weight a [person] attaches to the risk."[257]

These primacy effects have important implications for the positioning of risk factors in corporate disclosure documents. The sequencing of the risk information will play a critical role in how investors cognitively process the risks. The earlier investors are exposed to the cautionary language, the greater the likelihood it will factor into the decision-making process and influence how they perceive optimistic forward-looking statements. If cautionary language appears much later in the sequencing of overall information, it is less likely to have an impact on investors' final judgments. This suggests that risk information needs primacy if it is to influence meaningfully the way investors view forward-looking disclosures.[258]

Likewise, anchoring and primacy effects indicate that risks that are discussed first among a cluster of possible risk factors will receive greater attention than those that appear near the end. Therefore, risks that are more important or more likely to materialize should be placed first in the ordering of the risks to be addressed. Not only should the cautionary language as a whole be featured early and prominently in the overall disclosure, but within the risk discussion itself, the more significant risks should appear before risks that are less significant or less likely to occur. Risks should be emphasized in proportion to and in order of their significance.

As time passes, corporations should regularly review, revise, and if necessary, reorder the risk factors they discuss in connection with the forward-looking statements they make. Circumstances may change; risks that were less substantial at one time may become increasingly likely to cause actual results to differ from corporate predictions. Managers who engage in careful and probing consideration of the corporation's risk disclosures on a regular basis can give investors a clearer picture of where the corporation is headed and what obstacles may need to be overcome to get there.

C. Purpose

The ostensible goal in the foregoing measures, which are designed to refine the content and form of risk disclosures in the forward-looking

warnings is that readers may decide that reading the entire warning is not worth their time and therefore may not ever get to the explanation of the most significant risks. *Id.* at 326. When warnings about relatively trivial risks are given greater emphasis than or equal prominence with warnings about more significant problems, people have difficulty distinguishing between the important and unimportant risks. Noah, *supra* note 114, at 384.

257. Henderson & Twerski, *supra* note 15, at 308.

258. *Cf.* Langevoort, *supra* note 185, at 765 (suggesting that, in the context of electronic prospectuses, enhanced risk disclosure should be presented as prominently and conspicuously as possible *before* scanning options are presented to investors).

statement context, is to provide corporations a means to make projections and forecasts with the assurance that the Safe Harbor will protect them if their predictions turn out to be wrong. If the accompanying cautionary language is meaningful, investors should have no claim against corporations when investors decide to purchase shares in spite of the risks.

It is also important to consider the larger goals that can be achieved by requiring corporations to provide investors with truly meaningful risk disclosure. The purpose of securities regulation is to promote the formation of capital, to maintain confidence in the securities markets, and ultimately to protect investors by ensuring information is available to them to make fully informed decisions. Making those informed choices can be difficult at times because of investors' unavoidably bounded rationality and their cognitive and motivational biases. Investors' overconfident optimism, and their tendency to dismiss information that does not correlate with such optimism, can make them vulnerable to forward-looking disclosures that suffer from the same unduly optimistic outlook.

Effective risk disclosure can help, in part, to overcome some of the cognitive and motivational tendencies that might otherwise lead investors to rush headlong into investments without first confronting the downside potential. Cautionary language that is sufficient in form and content to catch the market's attention, maintain that attention, and turn it toward a serious consideration of the risks provides a much-needed check on the market's collective inclination to accept overly rosy forward-looking information.

The point of requiring corporations to provide warnings that are truly meaningful is not merely to immunize corporations from liability. Corporate managers and their lawyers who draft risk disclosures must get past the idea that these disclosures are simply a means of limiting corporations' liability exposure. That mentality produces exhaustive lists of formulaic risk warnings that are dismissed by investors as trivial boilerplate intended only to protect corporations from lawsuits. Rather, corporate managers and investors should view meaningful risk disclosure as an opportunity to encourage thoughtful deliberation on both ends—deliberation from managers who must craft cautionary language after sitting down and considering the real possibility that their optimistic forecasts may not come true, and deliberation from investors who must confront the fact that there may be very good reasons not to purchase the shares of a company, notwithstanding its favorable predictions for the future.

If cautionary language is viewed with these broader, big-picture goals in mind, risk disclosures take on greater meaning and efficacy. Corporations are protected because they make forward-looking statements that have genuinely meaningful discussions of the possible risks, and investors are protected because the cautionary language allows them

to make truly informed investment choices that affect their financial future.

VII. CONCLUSION

The value of a corporation and its securities is largely dependent upon the future; therefore, any decision to purchase stock is always made under conditions of uncertainty. Investors in the stock market bet on the future every day, and they seek as much forward-looking information a corporation can give them to help them make smarter bets. The cautionary language that corporations attach to those predictive statements provides corporations with a significant amount of protection, safely harboring them from legal attack even when they know their predictions will not come true. Meaningful cautionary language warns the market that significant risks may lie ahead.

To assume, however, that people rationally and efficiently construct and process such cautionary warnings on a consistent basis is misguided. The cognitive and motivational biases that tend to constrain the decision-making processes of all individuals—whether corporate managers, sophisticated market professionals, or unsophisticated individual investors—can weaken the effects of risk disclosures and render them less "meaningful" than supposed. The bounded rationality of the market and of its participants creates inefficiencies that are not always easy to overcome. When drafting and interpreting securities rules, legislatures and courts should not ignore the accumulating psychological research on how consumers and investors process warnings and the ways in which the content and form of warning presentations can significantly affect decision making.

Society cannot expect to have "fail-proof" securities investments. There are no "sure bets" in the stock market, in spite of what some overly confident, unduly optimistic, cognitively constrained, and motivationally biased, corporate managers or brokers might say. Nonetheless, there are many "good bets" available in the market today, and investors who wish to stake their money on them should have access to meaningful information about those opportunities. When corporations provide investors with helpful forward-looking information and thoughtfully prepared cautionary language, it increases the likelihood that investors' bets will be informed ones. That is ultimately the most the securities markets can hope for, and it is exactly what securities regulation is intended to accomplish. The Safe Harbor for forward-looking statements may ostensibly be intended to protect corporations, but if corporations provide the kind of risk disclosure that can prompt investors to deliberate carefully before buying, then the Safe Harbor provides a measure of protection for investors as well. Thus, corporations and investors can together feel "safer" when taking shots at predicting the future.