

Good Finance, Bad Economics: An Analysis of the Fraud-on-the-Market Theory

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I. INTRODUCTION

The Supreme Court's endorsement of the fraud-on-the-market theory in *Basic, Inc. v. Levinson*¹ established the efficient capital markets hypothesis (ECMH), a cornerstone of modern finance theory,² as a decisive tool for resolving legal disputes involving securities fraud and matters of corporate disclosure.³ Although the ECMH has long been an integral part of legal scholarship on the nature and purpose of securities regulation,⁴ courts have treated it with suspicion, except when

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1. 485 U.S. 224 (1988). Justices Blackmun, Brennan, Marshall, and Stevens participated in the plurality opinion, with Justices White and O'Connor joining the Court's holding with regard to materiality, but dissenting on the fraud-on-the-market issues discussed in this article. Justices Kennedy and Scalia and Chief Justice Rehnquist did not participate in the disposition of the case.

2. Ronald Gilson has called the efficient capital markets hypothesis "the leading success story of modern finance theory in both its practical and policy guise." RONALD J. GILSON, *THE LAW AND FINANCE OF CORPORATE ACQUISITIONS* 157 (1986).

3. *Basic, Inc. v. Levinson* is the first pronouncement by the Supreme Court after a long line of lower court opinions embracing the fraud-on-the-market theory. See, e.g., *Flamm v. Eberstadt*, 814 F.2d 1169, 1174-80 (7th Cir.), cert. denied, 484 U.S. 853 (1987); *Peil v. Speiser*, 806 F.2d 1154, 1160-63 (3d Cir. 1986); *Harris v. Union Elec. Co.*, 787 F.2d 355, 366-67 (8th Cir.), cert. denied, 479 U.S. 823 (1986); *Metlyn Realty Corp. v. Esmark, Inc.*, 763 F.2d 826, 833-36 (7th Cir. 1985); *Teamsters Local 282 Pension Trust Fund v. Angelos*, 762 F.2d 522, 527-28 (7th Cir. 1985); *Panzirer v. Wolf*, 663 F.2d 365 (2d Cir. 1981), cert. granted sub nom. *Price Waterhouse v. Panzirer*, 458 U.S. 1105, vacated as moot, 459 U.S. 1027 (1982); *Seaboard World Airlines v. Tiger Int'l*, 600 F.2d 355, 360-61 (2d Cir. 1979); *Blackie v. Barrack*, 524 F.2d 891, 905-08 (9th Cir. 1975), cert. denied, 429 U.S. 816 (1976).

4. See, e.g., HOMER KRIPKE, *THE SEC AND CORPORATE DISCLOSURE: REGULATION IN SEARCH OF A PURPOSE* 83-139 (1979); John F. Barty, *The Economics of Outside Information and Rule 10b-5*, 129 U. PA. L. REV. 1307, 1330-54 (1981); Harvey E. Bines, *Modern Portfolio Theory and Investment Management Law: Refinement of Legal Doctrine*, 76 COLUM. L. REV. 721 (1976); Frank H. Easterbrook & Daniel R. Fischel, *Corporate Control Transactions*, 91 YALE L.J. 698, 708 n.28 (1982); Daniel R. Fischel, *Efficient Capital Market Theory, the Market for Corporate Control, and the Regulation of Cash Tender Offers*, 57 TEX. L. REV. 1 (1978); Ronald J. Gilson & Reinier H. Kraak-

ignoring or misapplying it.⁵

In *Basic*, the Court validated a new method by which a plaintiff may show reliance on material misstatements or omissions by the defendant in a lawsuit brought under Rule 10b-5. Specifically, a plaintiff may now show that he was entitled to rely on the "integrity" of the market price for the securities he bought or sold. The market price has integrity if the market is efficient, in the sense that it adjusts rapidly to reflect all new information.⁶ Plaintiffs buying or selling stocks that trade in efficient markets need no longer meet the traditional requirement that they actually read or heard the material containing the relevant misstatement or omission.

This article analyzes the adoption of the ECMH by the Court in *Basic, Inc. v. Levinson*. Although the opinion provides a coherent and internally consistent basis for assigning liability for violations of Rule 10b-5, we will show that it suffers from analytic flaws that threaten to undermine its usefulness. One such flaw stems from the Court's failure to integrate this new basis for assigning liability into any theory of property rights in information. Consequently, the fraud-on-the-market theory can be used to support liability claims in a substantial number of cases in which the defendants were acting in ways entirely consistent with the goal of maximizing investor welfare. Indeed, we show that this may have been the situation in *Basic* itself.

The second flaw arises from the fact that the Court's opinion shifts uneasily from an observation that the ECMH is generally accepted to a declaration that the hypothesis supports the fraud-on-the-market theory. This shift is problematic because the ECMH has not been developed theoretically with nearly the same degree of sophistication as it has been developed empirically. As Professor Beaver has observed, the empirical results supporting the ECMH have not been accompanied by

man, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549 (1984); James H. Lorie, *Insider Trading: Rule 10b-5, Disclosure, and Corporate Privacy: A Comment*, 9 J. LEGAL STUD. 819 (1980).

5. As Ron Gilson and Reinier Kraakman observe in their trenchant article on the ECMH, "the legal culture's remarkably rapid and broad acceptance of an economic concept that did not exist twenty years ago is not matched by an equivalent degree of understanding." Gilson & Kraakman, *supra* note 4, at 550 (citation omitted).

Perhaps the most striking example of the misapplication of finance theory is contained in *Shores v. Sklar*, 647 F.2d 462 (5th Cir. 1981) (en banc), *cert. denied*, 459 U.S. 1102 (1983). The *Sklar* court held that a defendant who sells securities in an initial public offering is not liable under the fraud-on-the-market theory even if it is shown that the securities would have sold at a lower price in the absence of fraud; rather, the plaintiff must show that the securities would never have been marketed at all. *Id.* at 470. The court's wholly artificial distinction between marketable and unmarketable securities ignores the fundamental economic concept of marginal analysis: Any security for which a possibility of a positive return exists can be sold at *some* price. The investment decision revolves around the twin problems of determining the expected flow of income to investors and the probability that the firm will realize that income stream. Thus, the idea that some securities are inherently unmarketable at any price is essentially meaningless in almost all cases.

6. See notes 93-97 *infra* and accompanying text (discussion of competing theories of efficiency).

a formal, conceptual development of market efficiency.⁷ This article demonstrates the importance of understanding the theoretical as well as the empirical underpinnings of the ECMH in order to apply the fraud-on-the-market theory properly. The Court's failure to articulate the theoretical underpinnings of its opinion will make the task of applying the decision difficult for lower courts.

In Part II of this article we argue that, in order to increase social welfare, any finding of liability under the fraud-on-the-market theory as articulated in *Basic* should be consistent with the efficient allocation of property rights in information within the corporation. We do not, however, reject the fraud-on-the-market theory. Rather, we seek to show that a finding that a security trades in an efficient market is a necessary, but not a sufficient, condition for imposing liability on defendants in Rule 10b-5 cases.

In Part II we also show the tension between the ruling announced in *Basic* and the Court's earlier opinions in *Chiarella v. United States*⁸ and *Dirks v. SEC*.⁹ We discuss how earlier Supreme Court opinions, particularly *Chiarella* and *Dirks*, are consistent with an economic theory of property rights in information. In *Chiarella* and *Dirks*, the Court held that a plaintiff may recover in a Rule 10b-5 suit only where the defendant owes him a preexisting fiduciary duty. The establishment of fiduciary duty as a prerequisite for recovery is best explained as a judicial means of allocating property rights in nonpublic corporate information among various corporate actors. As we will show, if a defendant owes no fiduciary duty to the plaintiff bringing suit, then the plaintiff has no property rights in the subject information and thus no right to recover.

We argue that the Court's opinion in *Basic* must be closely wedded to its earlier opinions in order to produce a coherent body of securities law jurisprudence. In *Basic*, the Court held that plaintiffs must prove that a security trades in an efficient market in order to recover under the fraud-on-the-market theory. But the disclosure responsibilities of officers and directors suggested by the Court in *Basic* appear inconsistent with the *Chiarella-Dirks* principle that nonpublic corporate information is simply another form of corporate asset that should be used for the benefit of the firm that owns it. Our goal in Part II is to reconcile the fraud-on-the-market theory with a theory of property rights in information in order to produce a coherent theory of 10b-5 liability that will promote the efficient allocation of nonpublic corporate information.

In Part III we examine the empirical and theoretical underpinnings of the fraud-on-the-market theory in greater detail. We find that the Court's analysis of both of these issues needs significant refinement.

7. William H. Beaver, *Market Efficiency*, 56 ACCT. REV. 23, 23-24 (1981).

8. 445 U.S. 222 (1980).

9. 463 U.S. 646 (1983).

On the empirical front, the Court did not even discuss—much less resolve—the crucial question of what a plaintiff must do in order to show that the security he has purchased or sold traded in an efficient market. In addition, the Court did not explain which *version* of the efficient markets hypothesis it was adopting to reach its result. Because the ECMH comes in a variety of forms, each linked to a different set of empirical tests, knowing precisely which version the Court has in mind when it purports to embrace the hypothesis is important. Different forms not only suggest different standards of conduct for potential defendants in securities fraud cases, but will also require both sides to adduce different sorts of evidence. We show that the Court implicitly adopted the *semi-strong* form¹⁰ of the ECMH.

Moving from the empirical to the theoretical foundations of the Court's opinion, we also show that recognizing which version of the efficient market theory the Court adopts does not resolve the more difficult analytical problems faced by courts attempting to apply the fraud-on-the-market theory to 10b-5 cases. Problems of application abound. To resolve these problems one must begin by recognizing that securities prices do not move to efficient levels by magic. Rather, rivalrous competition among market professionals causes share prices to adjust to semi-strong efficiency. Because market professionals are not equally adroit at processing all types of information, share prices may be more efficient with respect to certain sorts of corporate information than with respect to others. This observation should have profound implications for the application of the fraud-on-the-market theory to particular cases.

Our goal in Part III is to identify those missing elements in the Court's analysis of the fraud-on-the-market theory that will likely plague thoughtful courts in the future and to suggest ways to fill the gaps that are consistent both with the rest of the Court's 10b-5 jurisprudence and with the principles of modern finance theory that the Court appears to embrace.

The picture that emerges from this article is of a Court struggling unsuccessfully with simple economic principles even as it successfully applies the principles of corporate finance. The economic sophistication found in such earlier 10b-5 cases as *Chiarella* and *Dirks* is absent from *Basic*. The irony is that the Court did not purposefully set out to apply economic reasoning when it decided *Chiarella* or *Dirks*; it simply applied well-known common law fiduciary principles to the Rule 10b-5 context. By contrast, the Court in *Basic* did intend to apply finance theory, but in the process generated an opinion that is likely to decrease investor wealth significantly.

10. See text accompanying note 96 *infra*.

II. THE FRAUD-ON-THE-MARKET THEORY AND PROPERTY RIGHTS IN INFORMATION

A primary function of assigning and protecting property rights is to ensure that property owners bear all of the costs and enjoy all of the benefits generated by the assets they own.¹¹ Requiring that the owner bear all of the costs associated with owning an asset helps to ensure that third parties do not bear these costs in the form of negative externalities.¹² Allowing the owner to enjoy the benefits associated with owning the asset (including the benefit derived from being able to sell the asset for a profit) ensures that property owners have the appropriate incentives to create and deploy assets in the most productive ways.¹³ This analysis is as true for intangible property, such as nonpublic information, as for tangible property such as land.¹⁴

A. *Assigning Property Rights in Inside Information*

The Supreme Court's opinion in *Chiarella v. United States*¹⁵ laid the foundation for a theory of insider trading liability under Rule 10b-5 that is entirely consistent with a theory of property rights in information. The defendant in this case, Vincent Chiarella, obtained material, nonpublic information in the course of his work as a financial printer. He discovered the identities of firms that were about to be the target of tender offers or merger proposals by deciphering the encoded names in disclosure documents delivered to his printing firm by the companies making the tender offers or merger proposals.¹⁶

The application of economic reasoning to the facts of *Chiarella* is straightforward. The firms making the tender offers and merger proposals clearly owned the information in question.¹⁷ They created the information, and their research investment was going to lead to the increases in wealth associated with these corporate combinations. Prior to the public announcement of an acquisition, secrecy was of the utmost importance to the acquiror—premature disclosure would cause the price of the target firm's stock to increase, thereby making the acquisition more costly and less likely to occur.¹⁸

These acquirors attempted to preserve their property interests in this material, nonpublic corporate information by contractually obligat-

11. Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 348 (1967).

12. *Id.*

13. *See id.* at 349.

14. Frank H. Easterbrook, *Insider Trading, Secret Agents, Evidentiary Privileges, and the Production of Information*, 1981 SUP. CT. REV. 309, 313; Edmund W. Kitch, *The Law and Economics of Rights in Valuable Information*, 9 J. LEGAL STUD. 683 (1980).

15. 445 U.S. 222 (1980).

16. *See* Jonathan R. Macey, *From Fairness to Contract: The New Direction of the Rules Against Insider Trading*, 13 HOFSTRA L. REV. 9, 24-25 (1984).

17. *Id.* at 24-29; Easterbrook, *supra* note 14, at 331.

18. Macey, *supra* note 16, at 25.

ing the printing company to maintain the confidentiality of the information it obtained in the course of its work.¹⁹ The printing company consequently enforced this obligation on its employees.²⁰

The Court's selected method for enforcing property rights in information was a declaration that material, nonpublic information could be protected by a "fiduciary duty" owed to the owners by those in contractual privity with them.²¹ Trading on the basis of this information would violate the fiduciary duty. The Court rejected a Rule 10b-5 violation based on either a breach of some generalized duty to those who sold stock in the target companies or, as the SEC argued, a breach of some generalized fiduciary duty to the trading markets.²² Instead, the Court linked the property rights in inside information to a preexisting contractual obligation that engenders a fiduciary duty.²³ Thus, if Chiarella owed any legal obligation, it was to the acquiring companies whose information he had stolen. As the Solicitor General observed in his brief, the unauthorized use of information by the agents of its rightful owners "can disturb market prices and prematurely reveal acquisition plans, contrary to the interests of acquiring companies."²⁴ While this property rights-oriented theory could not sustain Chiarella's conviction because it had not been considered by the jury, subsequent cases have made it clear that liability for violating Rule 10b-5 will henceforth be based on a business property theory, implemented in turn by a preexisting fiduciary duty test.²⁵

The Supreme Court's opinion in *Dirks v. SEC*²⁶ reinforced the economic underpinnings and the property rights perspective of its *Chiarella* analysis. Raymond Dirks was an investment analyst who obtained nonpublic information about an ongoing fraud of epic proportions at Equity Funding, an insurance holding company.²⁷ Dirks obtained this information from Ronald Secrist, a former officer at Equity Funding, and disclosed it to his clients, in some cases with the expectation of future trading commissions.²⁸

As in *Chiarella*, the Court based its decision on "a theory that recognizes the value to society of protecting property rights in inside information."²⁹ The Court reasoned that investment analysts such as Dirks

19. *Id.* at 28.

20. *Id.*

21. *Chiarella v. United States*, 445 U.S. 222, 228, 235 (1980).

22. *Id.* at 231-35.

23. *See Macey, supra* note 16, at 27-29.

24. Brief for the United States at 16, *Chiarella v. United States*, 445 U.S. 222 (1980) (No. 78-1201).

25. *See, e.g., Moss v. Morgan Stanley, Inc.*, 719 F.2d 5, 10-16 (2d Cir. 1983), *cert. denied*, 465 U.S. 1025 (1984); *United States v. Newman*, 664 F.2d 12, 17-20 (2d Cir. 1981), *cert. denied*, 464 U.S. 863 (1983).

26. 463 U.S. 646 (1983).

27. *Id.* at 648-49.

28. *Id.* at 649 & n.2.

29. *Macey, supra* note 16, at 36.

should be allowed to profit from information they obtain in order to provide them with an incentive to ferret out and disseminate such information. Because Secrist did not wrongfully provide this information to Dirks, the Court held that no liability existed.³⁰

Unlike inside information about the pendency of an acquisition, information about an ongoing fraud does not belong to the corporation that is perpetrating the fraud. Thus, Dirks was free to trade on the information he obtained from Secrist. In *Dirks*, the Court emphasized that the "initial inquiry" in an insider trading case should be "whether there has been a breach of duty by the insider."³¹ This inquiry is, in turn, "nothing less than a judicial allocation of property rights in the information in question."³²

Nonpublic, material information about a publicly traded firm is of value to those who are allowed to use it to make trading profits. As such, the legal rules regulating insider trading *inevitably* involve an allocation of property rights in information. As the Supreme Court has pointed out in a well-known insider trading case, "[c]onfidential business information has long been recognized as property."³³

The allocation of property rights contained in a particular legal rule may be explicit or implicit, but the result is the same. For example, in the early days of 10b-5 jurisprudence, the courts construed Rule 10b-5 to require "some degree of equalization of bargaining position in order" to prevent those with an informational advantage in the securities markets from taking advantage of those less well informed.³⁴ This fairness approach to insider trading issues "assumes *sub silentio* that the legal system should assign the property rights to use insider information to the public at large."³⁵

When the Supreme Court rejected the principle of fairness as the basis for liability in insider trading cases brought under Rule 10b-5 in favor of its present focus on fiduciary duties, it in essence reallocated the property rights in material, nonpublic information. The shift was from an allocation that favored the public at large to one that favors the firm that created the information.³⁶ Thus, for example, the financial

30. *Dirks*, 463 U.S. at 662-67. If Secrist had received a direct or indirect personal benefit from the disclosure, his disclosure would have been wrongful. *Id.* at 663.

31. *Id.* at 663.

32. Macey, *supra* note 16, at 37. Thus, from a property rights perspective, tippee liability can be likened to liability for receiving stolen goods. In both situations, liability of the receiver of goods or information depends on the actions of the person passing the material. If the goods or information were not taken wrongfully, the receiver is not liable.

33. *Carpenter v. United States*, 484 U.S. 19, 26 (1987) (citations omitted) (emphasis added).

34. *Speed v. Transamerica Corp.*, 99 F. Supp. 808, 829 (D. Del. 1951), *reaff'd on later motions*, 100 F. Supp. 461 (D. Del. 1951), 103 F. Supp. 47 (D. Del. 1952), *opinion on damages*, 135 F. Supp. 176 (D. Del. 1955), *modified*, 235 F.2d 369 (3d Cir. 1956) (prejudgment interest increased from 2% to 4%).

35. Macey, *supra* note 16, at 16.

36. *Id.* at 24-29.

printer who trades on inside information about a tender offer he learns about in the course of his employment is no longer guilty because he misappropriates information belonging to the general public, but because he has violated a fiduciary duty to the owner of the information, which is the firm making the tender offer. The court thus assigns property rights to the party to whom the fiduciary duty is owed.

B. *Applying the Court's Property Rights Theory to Basic, Inc. v. Levinson*

In *Basic, Inc. v. Levinson*,³⁷ the Court failed to follow the implications of the sound economic reasoning it developed in *Dirks* and *Chiarella*. In particular, the Court failed to distinguish adequately those situations in which the defendants in a Rule 10b-5 suit *owe* a fiduciary duty to the plaintiffs from the smaller set of situations in which the defendants *breach* that duty. We can illustrate the point with reference to the fact pattern presented in *Basic* itself.

The plaintiffs in *Basic* were one-time shareholders in Basic, a large manufacturing company whose shares traded on the New York Stock Exchange. Beginning in September 1976, Basic's officers and directors were involved in negotiations concerning a possible merger with Combustion Engineering, a manufacturing company in a related field.³⁸ Although Basic made three public statements during 1977 and 1978 denying that it was engaged in merger negotiations, Basic's board of directors announced publicly on December 20, 1978, its approval of Combustion Engineering's tender offer for all of its outstanding shares.³⁹

Shareholders who sold Basic shares between the time of the first public statement denying merger negotiations and the public announcement of the tender offer brought suit claiming that Basic and certain of its officers and directors had violated Rule 10b-5. The plaintiffs alleged that they had been harmed because they sold Basic shares at prices "artificially depressed" by Basic's false and misleading statements about the pendency of serious merger negotiations with Combustion Engineering.⁴⁰

Among the hurdles facing the plaintiffs in this suit was satisfaction of the reliance requirement.⁴¹ In *Basic*, the Court permitted the plaintiffs to employ the fraud-on-the-market theory to meet this requirement.⁴² This theory is

37. 485 U.S. 224 (1988).

38. *Id.* at 227. Basic made chemical refractories for the steel industry, also known as "basic" refractories. Combustion Engineering made "nonbasic" refractories, also known as "acidic" or "alumina" refractories. *Id.* at 226-27 & n.1.

39. *Id.* at 228.

40. *Id.*

41. *Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 206 (1976) (quoting S. REP. NO. 792, 73d Cong., 2d Sess. 12-13 (1934)).

42. *Basic*, 485 U.S. at 250.

based on the hypothesis that, in an open and developed securities market, the price of a company's stock is determined by the available material information regarding the company and its business. . . . Misleading statements will therefore defraud purchasers of stock even if the purchasers do not directly rely on the misstatements. . . .⁴³

The Court's analysis of the fraud-on-the-market theory is remarkably skeletal. After describing the theory in a paragraph, the Court asserts the need for a practical resolution to the problem of showing individual reliance in securities fraud cases, emphasizing the obvious point that adoption of this theory merely substitutes one type of reliance—reliance on the integrity of the market price—for another—reliance on a specific misrepresentation or omission by the defendant.⁴⁴

The abrupt shift from the sophisticated approach to Rule 10b-5 evident in *Chiarella* and *Dirks* is most striking. In particular, those cases emphasized that traders owe no generalized duty to the marketplace.⁴⁵ By contrast, in *Basic*, the Court defended its adoption of a fraud-on-the-market approach on the ground that the theory will protect the securities markets generally.⁴⁶ The Court quotes legislative history to the effect that

[t]he idea of a free and open public market is built upon the theory that competing judgments of buyers and sellers as to the fair price of a security brings [sic] about a situation where the market price reflects as nearly as possible a just price. Just as artificial manipulation tends to upset the true function of an open market, so the hiding and secreting of important information obstructs the operation of the markets as indices of real value.⁴⁷

In fact, however, Rule 10b-5, even as construed by the Court in *Basic*, does not protect the operation of the trading markets. After all, there is no positive obligation to disclose under Rule 10b-5. Moreover, it has never been suggested that any securities law, including 10b-5, requires that the officers and directors of public corporations ensure that the market price for their securities is "just" or "fair."

Under *any* test, the officers and directors of *Basic* owed a fiduciary duty to the plaintiffs, because such plaintiffs owned *Basic* shares at the time of the alleged wrongdoing. But the Court did not even consider whether management had *breached* this fiduciary duty. If one returns to the principle established in *Chiarella* and *Dirks* that nonpublic information is a corporate asset, however, resolution of the case becomes much more difficult.

43. *Id.* at 241-42 (quoting *Peil v. Speiser*, 806 F.2d 1154, 1160-61 (3d Cir. 1986)).

44. *Id.* at 242-43.

45. *Dirks v. SEC*, 463 U.S. 646, 654-64 (1983); *Chiarella v. United States*, 445 U.S. 222, 231-33 (1980).

46. *Basic*, 485 U.S. at 245-46.

47. *Id.* at 246 (quoting H.R. REP. NO. 1383, 73d Cong., 2d Sess. 11 (1934)); *see also id.* at 230 (describing philosophy of the Securities Exchange Act as a desire to create "honest markets").

Basic's management clearly would have breached their fiduciary duties to their shareholders had they purchased Basic stock for their own accounts while in possession of inside information about the pending merger with Combustion Engineering. But Basic's officers and directors did not purchase any stock. Their only wrongdoing was issuing a misleading press release. Under these facts, the real issue in *Basic* should have been whether the officers and directors breached a fiduciary duty to Basic's shareholders by falsely denying that Basic was engaged in merger negotiations. As the Court itself appeared to recognize, "[r]easoning backwards from a goal of economic efficiency, . . . 'Rule 10b-5 is about *fraud*, after all, and it is not fraudulent to conduct business in a way that makes investors better off.'"⁴⁸

The economic function of fiduciary duties is regulation of the complex "web of agency relationships" comprising the structure of the corporate enterprise.⁴⁹ Within the modern publicly-held corporation, investors delegate authority to directors, who in turn delegate authority to other agents operating at many levels within the enterprise.⁵⁰ This delegation is efficient because it allows directors and officers to specialize in management and investors to specialize in riskbearing.⁵¹ The fiduciary principle is a relatively low-cost approach, substituting deterrence for costly and ineffective direct supervision of agents' behavior.⁵²

From an economic perspective, fiduciary principles, including the fiduciary principle proscribing insider trading, are simply contractual devices.⁵³ The principle that officers and directors owe a fiduciary duty to shareholders serves as a "standard-form penalty clause" in contracts to which investors are interested parties.⁵⁴ This economic perspective is important because it generates a mechanism by which courts can decide cases. In particular, when scrutinizing managerial behavior, courts should treat an allegation of a breach of fiduciary duty as they would treat any alleged breach of contract. This analytic method often is de-

48. *Id.* at 235 n.11 (quoting *Flamm v. Eberstadt*, 814 F.2d 1169, 1177 (7th Cir.) (Easterbrook, J.), *cert. denied*, 484 U.S. 853 (1987)).

49. Easterbrook & Fischel, *supra* note 4, at 700.

50. *Id.*

51. Eugene F. Fama, *Agency Problems and the Theory of the Firm*, 88 J. POL. ECON. 288 (1980).

52. Easterbrook & Fischel, *supra* note 4, at 702. Of course, fiduciary duties are not the only mechanism available for aligning the interests of management with those of shareholders. Market mechanisms that serve the same purpose include managers' investments in firm-specific human capital, particularly reputational capital; the market for corporate control; the products markets; the intrafirm market for managers; and managerial compensation agreements. See Frank H. Easterbrook, *Managers' Discretion and Investors' Welfare: Theories and Evidence*, 9 DEL. J. CORP. L. 540 (1984).

53. See David D. Haddock & Jonathan R. Macey, *A Coasian Model of Insider Trading*, 80 Nw. U.L. REV. 1449 (1986); Dennis W. Carlton & Daniel R. Fischel, *The Regulation of Insider Trading*, 35 STAN. L. REV. 857 (1983); Frank H. Easterbrook, *Insider Trading as an Agency Problem*, in PRINCIPALS AND AGENTS: THE STRUCTURE OF BUSINESS 81 (J. Pratt & R. Zeckhauser eds. 1985).

54. Easterbrook & Fischel, *supra* note 4, at 702.

scribed as the “hypothetical bargain” approach.⁵⁵ Under this approach to fiduciary duty, courts would evaluate whether the managers’ actions were consistent with the terms of a hypothetical fully specified, contingent contract that informed, value-maximizing investors would have agreed to *ex ante*.⁵⁶ The Court’s analysis in *Basic* is flawed because of its failure to employ this “hypothetical bargain” perspective. It did not consider even briefly whether its decision enhanced or diminished investor welfare.

As is typically the case, the merger that gave rise to the investors’ complaint in *Basic* enabled Basic’s shareholders to sell their shares at a substantial premium above the premerger trading price. Under the hypothetical bargaining approach suggested by a fiduciary duty analysis, the Court should have asked whether a rational shareholder group would have endorsed Basic’s strategy of publicly (and falsely) denying involvement in merger negotiations. It must be emphasized that this hypothetical bargaining approach focuses on whether the shareholders would agree *ex ante*.⁵⁷ The fact that the eventual gains are distributed unevenly among shareholders *ex post* is not relevant in the least.⁵⁸

Combustion Engineering had been involved in discussions with Basic for over ten years prior to the consummation of the merger on December 19, 1978.⁵⁹ The protracted nature of these negotiations suggests that both firms had invested a considerable amount of managerial time, money, and other resources exploring a possible merger. These circumstances make clear why Combustion had a strong desire to keep its negotiations with Basic confidential. News that merger negotiations were in progress would signal to other investors that Basic was an attractive merger prospect, allowing them to “free ride” on Combustion’s investment in information about Basic.⁶⁰ The simple *identity* of valuable takeover targets is information that lends itself to free riding. This is because the identification of a firm such as Basic as a likely takeover target “signals to other investors that undervalued assets have been located. Because the subsequent bidders have incurred no costs to acquire information, they can offer more to target-firm shareholders, forcing the initial bidder to increase her offer or lose the opportunity to acquire the target firm.”⁶¹ The free-rider problem ad-

55. John C. Coffee, Jr., *The Mandatory/Enabling Balance in Corporate Law: An Essay on the Judicial Role*, 89 COLUM. L. REV. 1618, 1622 (1989).

56. See RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 81-85 (3d ed. 1986).

57. Easterbrook & Fischel, *supra* note 4, at 703-04.

58. *Id.* at 704.

59. *Basic, Inc. v. Levinson*, 485 U.S. 224, 226-27 (1988). Antitrust concerns deterred serious negotiations until a regulatory change in 1976. *Id.*

60. See Frank H. Easterbrook & Daniel R. Fischel, *The Proper Role of a Target’s Management in Responding to a Tender Offer*, 94 HARV. L. REV. 1161, 1178-79 (1981); Sanford J. Grossman & Oliver D. Hart, *Takeover Bids, the Free-Rider Problem and the Theory of the Corporation*, 11 BELL J. ECON. 42 (1980).

61. Jonathan R. Macey & Fred S. McChesney, *A Theoretical Analysis of Corporate Greenmail*, 95 YALE L.J. 13, 29 (1985).

versely affects investor wealth maximization to the extent it discourages acquirors who would otherwise pay shareholders a takeover premium for the shares they own. After all,

no firm wants to be the first bidder unless it has some advantage, such as speed, over subsequent bidders to compensate for the fact that only it had to incur monitoring costs. And, of course, if there is no first bidder there will be no later bidders and no tender premium.⁶²

For this reason, among others,⁶³ it is well settled that premature disclosure of merger discussions may thwart the merger, thereby "destroying the source of the value sought to be disclosed."⁶⁴

Nondisclosure of merger negotiations may therefore encourage mergers and increase shareholder wealth. In light of the fact that Basic's management apparently did not buy or sell Combustion's stock, and therefore did not personally profit from what might best be described as strategic misrepresentations, it seems clear that Basic's misleading press releases should enjoy the protection of the business judgment rule.⁶⁵ In any event, the Court should reconcile its decision in *Basic* with its earlier decisions in *Chiarella* and *Dirks*, which emphasize the relationship between culpability under Rule 10b-5 and the breach of a preexisting fiduciary duty to investors.

The closest a court has come to adopting the approach suggested in this article is the Third Circuit's opinion in *Greenfield v. Heublein, Inc.*⁶⁶ The *Greenfield* court held that a firm may falsely deny knowledge of a new corporate development so long as there was neither any indication that nonpublic information had been leaked nor any evidence that insiders were engaged in trading.⁶⁷ Our approach would go farther in two respects. First, we would protect not only false denials of corporate information, but also outright falsehoods, so long as managers and directors stated the falsehoods with the good faith intention of furthering the interests of investors. We see no reason to distinguish the silence condoned in *Greenfield* from the strategic misrepresentations made in *Basic*.

62. Easterbrook & Fischel, *supra* note 60, at 1179 (footnote omitted).

63. See C. Daniel Ewell, *Rule 10b-5 and the Duty to Disclose Merger Negotiations in Corporate Statements*, 96 YALE L.J. 547, 555 (1987) (student author) (collecting reasons and sources).

64. *Flamm v. Eberstadt*, 814 F.2d 1169, 1175 (7th Cir.) (Easterbrook, J.), *cert. denied*, 484 U.S. 853 (1987); see also *Greenfield v. Heublein, Inc.*, 742 F.2d 751, 756-57 (3d Cir. 1984) (premature disclosure "might seriously inhibit . . . acquisitive ventures"), *cert. denied*, 469 U.S. 1215 (1985); *Staffin v. Greenberg*, 672 F.2d 1196, 1204-07 (3d Cir. 1982) ("[D]isclosure of preliminary merger discussions would . . . do more harm than good to shareholders . . .").

65. The business judgment rule creates a presumption that a board of directors is disinterested and has acted on an informed basis, in good faith, and in the honest belief that the action taken was in the best interests of the corporation. See, e.g., *Aronson v. Lewis*, 473 A.2d 805, 812 (Del. 1984); Michael P. Dooley & E. Norman Veasey, *The Role of the Board in Derivative Litigation: Delaware Law and the Current ALI Proposals Compared*, 44 BUS. LAW. 503, 504-05 (1989). But see *Smith v. Van Gorkom*, 488 A.2d 858 (Del. 1985) (directors' gross negligence not protected by business judgment rule).

66. 742 F.2d 751 (3d Cir. 1984), *cert. denied*, 469 U.S. 1215 (1985).

67. *Id.* at 759.

Second, we would permit insiders to make such strategic misrepresentations even in situations where nonpublic information is leaked or where there is trading by insiders. Indeed, it seems clear that in these circumstances, the advantages to shareholders from strategic misrepresentation are even greater than in other cases. The facts of *SEC v. Texas Gulf Sulphur*⁶⁸ well illustrate the point.

Texas Gulf Sulphur had secretly discovered huge deposits of copper, zinc, and silver in the Timmens field in Canada.⁶⁹ In order to profit from this discovery, Texas Gulf Sulphur had to acquire the mineral rights to the land containing the minerals. Had the firm not kept the information confidential, it would have lost some, if not all, of the value of its discovery, because the landowners could have captured these gains by simply raising the price of the mineral rights, mining the minerals themselves, or selling the mineral rights to competing firms. Insider trading based on this confidential information posed a particular threat to Texas Gulf Sulphur shareholders due to the possibility that market professionals would correctly interpret the significance of such trading, thereby compromising Texas Gulf Sulphur's acquisition program.⁷⁰ When Texas Gulf Sulphur discovered that some of its officers and directors had been involved in insider trading, the need to protect shareholders' interests by denying any rumors about the discovery became even more acute.⁷¹

The same argument holds true where officers and directors learn that a leak of privileged information has occurred. The Third Circuit, in *Greenfield v. Heublein, Inc.*, implied that it would not permit a firm to deny the validity of truthful information that had been leaked to the public.⁷² Suppose, however, that unauthorized disclosure of an ore discovery in *Texas Gulf Sulphur* occurred before Texas Gulf Sulphur's acquisition of the necessary mineral rights. This disclosure clearly would have been a breach of fiduciary duty on the part of the corporate officials responsible for the leaks.⁷³ By parity of reasoning, Texas Gulf Sulphur officials should not remain idle in the face of this premature disclosure, for doing nothing would cause the value of Texas Gulf Sulphur's discovery to disappear. A credible false denial, on the other hand, would reduce the impact of the premature disclosures and thus enhance shareholder wealth by preserving the value of the discovery.

68. 401 F.2d 833 (2d Cir. 1968) (en banc), cert. denied, 394 U.S. 976 (1969).

69. See HENRY G. MANNE, INSIDER TRADING AND THE STOCK MARKET 40-42 (1966) (describing the background of the case).

70. See Macey, *supra* note 16, at 45; see also Easterbrook, *supra* note 14, at 336.

71. This is not to say the insiders would go unpunished; rather, it means the innocent shareholders will not suffer. Insiders would still be subject to prosecution for their insider trading once the information is public. It also seems clear that nontrading insiders would have a fiduciary duty to turn in the insiders involved in the trading.

72. 742 F.2d 751, 759 (3d Cir. 1984), cert. denied, 469 U.S. 1215 (1985).

73. Macey, *supra* note 16, at 45 ("Keeping news of the mineral discovery secret was therefore an implicit part of the employment contracts between TGS and its employees.").

As Judge Cudahy eloquently noted in his concurrence in *Flamm v. Eberstadt*, one problem with the approach suggested here is that “the moral underpinnings of the law are at risk in the sweep of the economic analysis.”⁷⁴ Judge Cudahy recognized that lying to maintain corporate secrecy “may tend to maximize investors’ wealth but it does seem to raise a few old-fashioned questions of corporate morality.”⁷⁵ Problems of corporate morality, however, should be viewed within the context of the corporate setting in which they arise. Misrepresentations that maximize shareholder wealth and do not harm innocent third parties who are unable to protect themselves in the contracting process should not be viewed as immoral. Even in fact patterns such as the one presented in *Basic*, where selling shareholders can argue that they are made worse off by the misrepresentation, the appropriate inquiry is whether the selling shareholders were made better off *ex ante*—that is, at the time they bought their shares—by a legal regime in which managers can make misrepresentations. Where, as in *Basic*, the misrepresentation by management made shareholders better off by increasing the probability that a merger would be consummated, it should not be viewed as immoral.

As noted above, the shareholders are presumed to favor those arrangements that maximize share value when viewed from an *ex ante* perspective.⁷⁶ Note, however, that fair treatment from this *ex ante* perspective does not require that shareholders be treated equally *ex post*. Indeed, it seems clear that unequal treatment of shareholders is sometimes required to maximize share value. In such cases, the only way officers and directors can act consistently with their fiduciary duty is by treating shareholders unequally.⁷⁷

The officers and directors of *Basic* were presented with just such a situation. The false statements about the pendency of merger negotiations increased the probability of the merger. This misrepresentation did not benefit all shareholders equally, because the shareholders who sold their shares between the time of the false statements and the time of the merger were worse off than those who did not sell their shares until after the merger announcement. But all shareholders would have been made worse off if premature disclosure of the merger negotiations caused Combustion Engineering to withdraw its offer.⁷⁸

Even those shareholders who sold their shares between the time of the false statements and the time of the merger announcement may have benefited from the strategic misrepresentation. Investment analysts and other market professionals (particularly arbitrageurs) appear

74. 814 F.2d 1169, 1182 (7th Cir.) (Cudahy, J., concurring), *cert. denied*, 484 U.S. 853 (1987).

75. *Id.*

76. See text accompanying notes 55-58 *supra*.

77. Easterbrook & Fischel, *supra* note 4, at 703-04.

78. See text accompanying notes 59-64 *supra*.

to be extraordinarily adroit at determining whether a takeover is imminent. As these market participants have become more sophisticated at decoding takeover signals, traditional methods of protecting confidentiality have become almost useless, thus creating the need for the sort of strategic misrepresentation employed by Basic. For example, the management of a firm that was involved in a merger discussion would typically issue a "no comment" statement when asked whether it was involved in merger discussions.⁷⁹ As the Court recognized in *Basic*, however, "given current market practices, a 'no comment' statement is tantamount to an admission that merger discussions are underway."⁸⁰ Beyond explicitly rejecting the approach we are advocating and suggesting that firms can abandon the policy of issuing "no comment" statements, the Court offered no alternatives of its own:

There are, of course, other statement policies firms could adopt; we need not now advise issuers as to what kind of practice to follow, within the range permitted by law. Perhaps more importantly, we think that creating an exception to a regulatory scheme founded on a prodisclosure legislative philosophy, because complying with the regulation might be "bad for business," is a role for Congress not this Court.⁸¹

It is misleading to suggest, as the Court did in *Basic*, that the prodisclosure tilt of the securities laws dwarfs all other policy perspectives. As the Court emphasized in *Chiarella* and *Dirks*, Rule 10b-5 is designed to police breaches of fiduciary duty. The rule has never required disclosure; at most it has required that officers and directors either disclose or abstain from trading. Indeed, in certain contexts truthful disclosure would be a breach of management's fiduciary duty and would jeopardize shareholders' welfare far more than would strategic misrepresentation.⁸² In addition, even in the merger context there has never been a policy of immediate and full disclosure. Except in tender offers, purchasers of 5 percent or more of a firm may wait ten days before disclosure.⁸³

Nonetheless, a tension exists between the goal of wealth maximization, which at times can only be achieved through strategic misrepresentation or nondisclosure, and the goal of creating an efficient market. Nondisclosure or misleading disclosures will inhibit an accurate reflection of all information known about the firm. But market efficiency has never been an end unto itself. Efficient markets are beneficial because they allow investors to purchase and sell stock in reliance on market prices. The reliance saves investors' resources because it replaces

79. *Flamm*, 814 F.2d at 1178.

80. *Basic, Inc. v. Levinson*, 485 U.S. 224, 239 n.17 (1988).

81. *Id.*

82. *See Flamm*, 814 F.2d at 1176 (describing situations in which disclosure would harm investors).

83. Securities Exchange Act of 1934, § 13(d)(1), 15 U.S.C. § 78m(d)(1) (1982); Securities Exchange Act Rules, 17 C.F.R. § 240.13-d(1) (1989).

costly research into firm values. Efficient markets also increase allocative efficiency by ensuring that capital flows to its highest valuing users.⁸⁴

It has long been known that investors' ability to diversify their portfolios has reduced the need for concern about the efficiency of particular stocks within the portfolio. As long as an investor's portfolio is not biased in one direction or another, no reason exists to believe that the slight imperfections in market efficiency caused by nondisclosure or strategic misrepresentations will harm investors. As Professor William Beaver has pointed out:

[S]uppose the investor is concerned that the security being purchased is mispriced, relative to the price at which it would sell if additional disclosures were available. From the point of view of the additional disclosure, some of the securities will be overpriced but some will be underpriced. A diversified portfolio will likely contain some of each and their effects will tend to be offsetting.⁸⁵

While a strongly prodisclosure regime would increase market efficiency, shareholder wealth would suffer because fewer mergers would be consummated.⁸⁶ This diminution in mergers would reduce the possibility that shareholders will receive a premium for their shares, thereby reducing shareholder and societal wealth. It seems clear that, given a choice between wealth maximization and market efficiency, investors would gladly exchange efficiency for the opportunity for increased wealth.

The second attribute of market efficiency identified above was the improvement of allocative efficiency. If securities are efficiently priced, prices will accurately reflect all known information about firms' future prospects. Investments will then flow to those firms and projects having the greatest chance of succeeding.⁸⁷ The Supreme Court's opinion in *Basic* heavily favors disclosure as a means of protecting the allocative efficiency of the market. Strategic misrepresentation, as advocated in this article, is not even considered as a possible option for firms faced with a disclosure dilemma. The Court goes so far as to suggest that mere nondisclosure may be as bad as outright manipulation: "Just as artificial manipulation tends to upset the true function of an open market, so the hiding and secreting of important information obstructs the

84. See Alison Grey Anderson, *The Disclosure Process in Federal Securities Regulation: A Brief Review*, 25 HASTINGS L.J. 311, 314 (1974) (efficient markets beneficial because they better allocate capital among competing enterprises); Barry, *supra* note 4, at 1318 (well-informed capital markets "essential" to efficient capital allocation); Gilson & Kraakman, *supra* note 4, at 613 (same).

85. REPORT OF THE ADVISORY COMMITTEE ON CORPORATE DISCLOSURE TO THE SEC, 95TH CONG., 1ST SESS. 643-44 (Comm. Print 1977) (remarks of William H. Beaver).

86. See text accompanying notes 59-64 *supra*.

87. Barry, *supra* note 4, at 1317.

operation of the markets as indices of real value.’ ”⁸⁸

Although efficient markets are clearly important to capital allocation decisions, the policy advocated here does little to harm the capital allocation process. Firms may not engage in nondisclosure or strategic misrepresentations merely at their whim. They must have a compelling reason, such as the need to protect the confidentiality of ongoing merger negotiations or a new corporate discovery or invention. Furthermore, the nondisclosure or misrepresentation may last only so long as necessary to protect shareholder interests.

Moreover, there is little danger of harm to the capital allocation process because the costs of misrepresentations or nondisclosures, in terms of increased capital costs, generally are borne by the firm making the nondisclosures or misrepresentations. For example, to the extent they were believed, the defendants' misrepresentations in *Basic* caused the price of Basic shares to trade at artificially *low* levels, thus raising the costs to Basic of attracting new capital. Similarly, any nondisclosure or misrepresentation within the context of the Texas Gulf Sulphur hypothetical set forth above would raise rather than lower Texas Gulf Sulphur's cost of capital, thus internalizing the costs of the nondisclosure.

The costs of some value-maximizing nondisclosures and misrepresentations will not be internalized by the firms making them. These sorts of nondisclosures and misrepresentations should not be permitted. Suppose, for example, that a firm is not a takeover target, but the directors and officers of the firm are aware of the substantial premiums available to target shareholders and would like to attract an outside bidder. These directors and officers also are aware that bidders are more likely to surface if it becomes known that the firm already is “in play”—that is, it is currently the subject of a merger proposal. These circumstances might tempt management to fabricate rumors that the firm is involved in merger discussions in order to attract outside bidders.

Although these misrepresentations might increase shareholder wealth, they should not be permitted, because they reduce allocative efficiency in ways that are not internalized by the relevant firms and create negative externalities. Potential bidders will waste resources sifting through the false information being disseminated by would-be takeover targets.⁸⁹ Investors would also be disadvantaged because of the distortions created by these sorts of misrepresentations.⁹⁰ Thus, only nondisclosures and misrepresentations the costs of which are internal-

88. *Basic, Inc. v. Levinson*, 485 U.S. 224, 246 (quoting H.R. REP. NO. 1383, 73d Cong., 2d Sess. 11 (1934)).

89. In addition, firms can signal their willingness to be acquired in other, more benign ways. See David D. Haddock, Jonathan R. Macey & Fred S. McChesney, *Property Rights in Assets and Resistance to Tender Offers*, 73 VA. L. REV. 701, 726-33 (1987).

90. The misrepresentation may harm investors by inducing them to pay too much for shares of the firm about whom the overly optimistic misrepresentations are being made.

ized by the firms making such nondisclosures and misrepresentations should be permitted. These will typically be strategic misrepresentations that cause shares to trade at artificially low rather than artificially high prices. Misrepresentations that cause a firm's share prices to shift from an efficient level to an inefficient level will cause negative externalities and should be discouraged. On the other hand, misrepresentations or nondisclosures that allow the price of a firm's share to continue to trade at an inefficient level in order to preserve the confidentiality of corporate information should not be discouraged.

In modern, sophisticated financial markets, officers and directors of public corporations must occasionally employ subterfuges such as non-disclosure and misrepresentation in order to protect the value of their firms' investments. *Texas Gulf Sulphur* shows that the need for such subterfuge is not confined to the realm of takeovers. It should also be clear, however, that misrepresentations should only be permissible where necessary to protect existing investments or legitimate corporate opportunities. Otherwise, such misrepresentations create the negative externalities and allocative inefficiencies described above. Thus our theory does not condone or justify strategic misrepresentations, except in those limited situations where such misrepresentations are necessary in order to facilitate transactions that are themselves socially beneficial.

Finally, we wish to emphasize that our rule, which would permit strategic misrepresentations where such misrepresentations are consistent with the fiduciary duty of management to shareholders, is not meant to replace the fraud-on-the-market theory. Plaintiffs could still use the theory, as articulated by the Court in *Basic*, to show reliance. Recovery, however, should only be allowed where the defendants also breached a fiduciary duty by their misrepresentations. In cases such as *Basic*, where the misrepresentations were *in furtherance* of a fiduciary duty, plaintiffs should not recover.

III. APPLICATION OF THE EFFICIENT CAPITAL MARKETS HYPOTHESIS IN SECURITIES LITIGATION UNDER THE FRAUD-ON-THE-MARKET THEORY

An efficient capital market is one in which the current price of a security is the best estimate of what the price of that security will be in the future.⁹¹ The current price of a security in an efficient capital market will be the best estimate of the future price because the current price will "fully reflect all available information."⁹² And, since the price of a security is the present value of the expected future income

91. Daniel R. Fischel, *Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities*, 38 BUS. LAW. 1, 4 n.9 (1982).

92. Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. FIN. 383, 383 (1970). "Market efficiency requires that in setting the prices of securities at any time . . . the market correctly uses all available information." Eugene F. Fama, *Reply*, 31 J. FIN. 143, 143 (1976).

stream generated by the underlying pool of assets, the price of a security in an efficient market will be the best—the most accurate—estimate of this future net income flow to security holders.

A. *Competing Versions of the ECMH*

In *Basic, Inc. v. Levinson*, the Supreme Court held that plaintiffs could use the fraud-on-the-market theory to show that they had relied on misstatements or omissions in cases brought under Rule 10b-5. The opinion was vague as to how the theory should be applied in future cases. Because the Court itself lacked a good understanding of the nature of the economic hypothesis it was purportedly adopting, its decision gives little guidance to future litigants.

The Court's confusion became transparent during its discussion of which version of the ECMH it was embracing. The majority noted that, although it was accepting the fraud-on-the-market theory as creating a rebuttable presumption of reliance in 10b-5 cases, "we do not intend conclusively to adopt any *particular theory* of how quickly and completely publicly available information is reflected in market price."⁹³ Despite this disclaimer, the Court was adopting the semi-strong version of the efficient capital markets hypothesis, whether it was aware it was doing so or not.

The ECMH has been subdivided into what are, in effect, three competing theories of market efficiency: weak form efficiency, semi-strong form efficiency, and strong form efficiency.⁹⁴ The weak form of the ECMH postulates that a stock's price is at least substantially independent of past price performance; whatever information is inherent in the historic progression of a stock's price is reflected in the current price. Thus, "an investor cannot enhance his/her ability to select stocks by knowing the history of successive prices and the results of analyzing them in all possible ways."⁹⁵ The semi-strong form goes further, claiming "that current prices fully reflect public knowledge . . . and that efforts to acquire and analyze this knowledge cannot be expected to produce superior investment results."⁹⁶ Finally, the strong form takes the market idea to its limit and asserts that both public and private information are fully reflected in the price of a stock. Thus, no investor should be able to outperform the market systematically, because the market incorporates all possible information into the stock price.

93. *Basic, Inc. v. Levinson*, 485 U.S. 224, 248 n.28 (1988) (emphasis added).

94. Eugene Fama's famous 1970 review article first suggested this now-familiar taxonomy. Fama, *Efficient Capital Markets*, *supra* note 92, at 383; see also ROBERT CHARLES CLARK, *CORPORATE LAW* 281 n.2 (1986); Gilson & Kraakman, *supra* note 4, at 555-56.

95. JAMES H. LORIE, PETER DODD & MARY HAMILTON KIMPTON, *THE STOCK MARKET: THEORIES AND EVIDENCE* 56 (2d ed. 1985). The weak form of the ECMH is also known as the "random walk" theory because it implies that successive price movements of a security are independent of each other, and therefore security prices follow a random walk. *Id.* at 56-57.

96. *Id.* at 56.

Under this theory, even inside traders cannot outperform investors as a group.

Isolating the particular version of the ECMH employed by the Court is important for at least two reasons. First, future plaintiffs will have to prove that the market for the shares they traded was efficient in order to recover in a cause of action based on the fraud-on-the-market theory.⁹⁷ The nature of the evidence that plaintiffs must introduce in order to demonstrate that their shares traded in an efficient market will differ considerably depending on the version of the ECMH being applied. Second, recognition that the Court embraced the semi-strong form of the ECMH reinforces the analysis presented in Part II above regarding the relationship between the fraud-on-the-market theory and the necessity that Rule 10b-5 plaintiffs demonstrate that the defendants breached a fiduciary duty to disclose the information in question.

It is clear that the Supreme Court implicitly applied the semi-strong form of the ECMH in *Basic*. Plaintiff shareholders claimed in *Basic* that three misleading public statements about potential merger prospects depressed the value of their stock relative to its "true" value.⁹⁸ In holding for the plaintiffs, the Court unambiguously rejected the strong form of the ECMH: If the market were strong-form efficient, *Basic's* share price would have adjusted to reflect *all* relevant information, including the fact that the statements issued by *Basic* were false.⁹⁹ In other words, the strong form of the ECMH and the fraud-on-the-market theory are fundamentally incompatible. Critical to the strong form of the ECMH is the assumption that the stock market cannot be fooled because it always accurately reflects all corporate information relevant to the pricing of a security.¹⁰⁰ Critical to the fraud-on-the-market the-

97. Specifically, the Court held that plaintiffs may invoke the presumption that they relied on the integrity of the market for a particular stock only where they "allege and prove . . . that the shares were traded on an efficient market . . ." *Basic*, 485 U.S. at 248 n.27 (adopting the holding below in *Levinson v. Basic, Inc.*, 786 F.2d 741, 750 (6th Cir. 1986)).

98. *Id.* at 227.

99. See Beaver, *supra* note 7, at 28. Another succinct formulation of the strong form of the ECMH is that "not even those with privileged information can make use of it to secure superior investment results." J. LORIE, P. DODD & M. KIMPTON, *supra* note 95, at 56.

100. While there is substantial empirical support for the weak and semi-strong forms of the ECMH, it seems clear that market prices do not conform to the strong form of the ECMH. If the market were strong-form efficient, insiders would not be able to earn abnormal returns on the basis of inside information, because share prices would adjust to reflect such information before even the insiders could trade. But a substantial number of studies of profits from the reported trades of insiders show that such insiders can in fact earn abnormally high returns. See Jerome B. Baesel & Garry R. Stein, *The Value of Information: Inferences From the Profitability of Insider Trading*, 14 J. FIN. & QUANT. ANALYSIS 553 (1979); Joseph S. Finnerty, *Insiders and Market Efficiency*, 31 J. FIN. 1141 (1976); Gregg A. Jarrell & Annette B. Poulsen, *Stock Trading Before the Announcement of Takeovers: Inside Information or Market Anticipation?*, 5 J.L. ECON. & ORG. 225 (1989); Arthur J. Keown & John M. Pinkerton, *Merger Announcements and Insider Trading Activity: An Empirical Investigation*, 36 J. FIN. 855 (1981); James H. Lorie & Victor Niederhoffer, *Predictive and Statistical Properties of Insider Trading*, 11 J.L. & ECON. 35 (1968); Stephen H. Penman, *Insider Trading and the Dissemination of Firms' Forecast Information*, 55 J. Bus. 479 (1982). It seems safe to assume that returns to insiders from unreported trades are even higher than returns from reported trades.

ory is the assumption that the market can trade at "incorrect" prices due to "artificial" distortions caused by misstatements or omissions.

Similarly, weak-form efficiency and the fraud-on-the-market theory as adopted by the Court are incompatible. The Court's version of the ECMH assumes that "the market price of shares traded on well-developed markets reflects all publicly available information, and, hence, any material misrepresentations."¹⁰¹ The weak form of the ECMH assumes merely that current share prices fully reflect whatever information is implied by historical share prices.¹⁰² If the market were only weak-form efficient, plaintiffs could not reasonably rely on the market price of a security to reflect all publicly available information about the relevant firm.

Thus, if the market were as efficient as implied by the strong form of the ECMH, plaintiffs could never be injured by relying on market prices, because such share prices would accurately reflect both public and nonpublic information. Similarly, if the market were only weak-form efficient, plaintiffs would not be entitled to the presumption of reliance provided by the fraud-on-the-market theory, because the weak form of the ECMH presumes that only historical information is incorporated in a firm's share prices; it does not presume that share prices reflect current public information. Thus, it seems clear that in *Basic* the Court, knowingly or not, embraced the semi-strong form of the ECMH. Several statements in the opinion echo phraseology of the semi-strong form of the ECMH and reinforce this conclusion.¹⁰³

B. *Proving Market Efficiency Under Basic*

Traditionally, plaintiffs in securities fraud cases have been required to prove that they actually relied on the misstatements or omissions by the defendant in order to recover. If *Basic* shareholders had been unable to prove that they actually read or heard about the misleading press releases issued by the defendants, for example, they would have been unable to recover. Before the adoption of the fraud-on-the-market theory, the reliance requirement was an almost insurmountable burden for plaintiffs, because requiring proof of individualized reliance generally would have prevented plaintiffs from "proceeding with a class action, since individual issues would then have overwhelmed common

101. *Basic*, 485 U.S. at 246.

102. J. LORIE, P. DODD & M. KIMPTON, *supra* note 95, at 56.

103. *See, e.g., Basic*, 485 U.S. at 246 ("the market price of shares traded on well-developed markets reflects all publicly available information"); *id.* at 247 ("most publicly available information is reflected in market price"); *id.* at 246 n.24 ("market professionals generally consider most publicly announced material statements about companies, thereby affecting stock market prices"). These statements, while not explicitly ruling out the possibility that the Court had a strong form of the efficient market in mind, suggest that in their use of the efficient market as an information processor, the Court was thinking only of publicly available information. When coupled with the inconsistency of the holding with a strong form of efficient market, the Court is apparently using the semi-strong formulation.

ones."¹⁰⁴

In *Basic*, however, the Court embraced the idea that "it is not inappropriate to apply a presumption of reliance supported by the fraud-on-the-market theory."¹⁰⁵ This holding does not eliminate the requirement that a plaintiff asserting a claim under Rule 10b-5 prove reliance.¹⁰⁶ Rather, the Court unambiguously affirmed that adoption of a fraud-on-the-market theory does not change the well-established fact that "reliance is an element of a Rule 10b-5 cause of action."¹⁰⁷ A finding of reliance is not automatic in a case involving the fraud-on-the-market theory. As shown above,¹⁰⁸ plaintiffs must still prove that the market in which they traded their stock is semi-strong efficient in order to show justifiable reliance. And, as indicated above, tests of weak- and strong-form efficiency differ dramatically from tests of semi-strong form efficiency. One must necessarily understand the former in order to restrict properly the evidence admissible regarding the latter.

1. *Proof of weak-form efficiency.*

The weak form of the ECMH modestly claims that one cannot make profits by securities trading based on the history of security price movements. This claim can be proven by studying the serial correlation between successive price changes,¹⁰⁹ which shows that price movements are random.¹¹⁰ Another, more sophisticated test of weak-form efficiency is the so-called filter technique, which devises complex trading strategies based on historical price movements and then tests the strategies to determine if they yield abnormal returns.¹¹¹ This research has led to general agreement that previous price changes cannot be used to predict future changes.¹¹²

104. *Id.* at 224. The requirement that common issues dominate individual issues in a class action lawsuit comes from the Federal Rules of Civil Procedure. FED. R. CIV. P. 23(a)(2), 23(b)(3).

105. *Basic*, 485 U.S. at 250.

106. *But see* Fischel, *supra* note 91, at 11 ("The logic of the fraud on the market theory dictates that the reliance requirement as conventionally interpreted be discarded altogether.").

107. *Basic*, 485 U.S. at 243. The Court reaffirmed the reliance requirement because "[r]eliance provides the requisite causal connection between a defendant's misrepresentations and a plaintiff's injury." *Id.*

108. *See* text accompanying notes 97-103 *supra*.

109. A serial correlation measures the relationship between the unexplained portion of a change in a variable in one period (such as a change in the price of a share of stock) and the unexplained portion of the change in the variable in a previous period (such as the previous change in the price of a share of stock). THOMAS R. DYCKMAN & DALE MORSE, *EFFICIENT CAPITAL MARKETS AND ACCOUNTING: A CRITICAL ANALYSIS* 28-29 (1986).

110. Arnold B. Moore, *Some Characteristics of Changes in Common Stock Prices*, in *THE RANDOM CHARACTER OF STOCK MARKET PRICES* 139 (P. Cootner rev. ed. 1967).

111. One such trading strategy was to "[w]ait until stock prices have advanced by *x* percent from some trough and then buy stocks; next, hold those stocks until they have declined *y* percent from some subsequent peak, and then sell them or sell them short. Continue the process until bankrupt or satisfied." J. LORIE, P. DODD & M. KIMPTON, *supra* note 95, at 60.

112. *See id.* at 59, 63 ("general agreement" that stock price movements are random in

This overwhelming empirical support for weak-form efficiency is of little concern to us, because the Court did not adopt this version of the ECMH. Two points are worth noting, however. First, the serial correlation and filter technique tests used to test for weak-form efficiency are inappropriate for plaintiffs to use in fraud-on-the-market cases since these tests do not purport to show that the market reflects publicly available information.

Second, and equally significant, the weak form of the ECMH differs from the other two forms of market efficiency in one fundamental respect that is important to this analysis. It is the only hypothesis of market efficiency that distinguishes among the various kinds of information for which stock prices may be efficient. The weak-form tests share price reaction to only one sort of information: historical price movements. It does not suggest that share prices are responsive to other kinds of information. By contrast, the strong and semi-strong forms of the ECMH are far bolder, making only very crude distinctions among various sorts of corporate information. As we will show, this lack of precision in defining the sorts of information being referred to in the semi-strong form of the ECMH is bound to create difficulties for future courts attempting to apply the fraud-on-the-market theory.¹¹³

2. *Proof of strong-form efficiency.*

If the market for a security is strong-form efficient, then not even investors with access to inside information will be able to profit from the possession of that information. The evidence denying that the stock market is strong-form efficient is every bit as substantial as the evidence confirming that the market is weak-form efficient. Indeed, in light of studies showing that corporate insiders, such as officers, directors, and holders of major blocks of shares, routinely outperform the market,¹¹⁴ one of the most respected basic texts in finance theory describes the strong form of the efficient market hypothesis as “clearly

the sense that successive movements are so close to independent that such low serial correlations as exist would be swamped by transaction costs); Gilson & Kraakman, *supra* note 4, at 555 n.25 (“Numerous weak-form tests support the hypothesis that the history of securities prices does not yield exploitable trading opportunities”); *see also* Eugene F. Fama & Marshall E. Blume, *Filter Rules and Stock Market Trading*, 39 J. Bus. 226 (1966); Eugene F. Fama, *The Behavior of Stock Market Prices*, 38 J. Bus. 34 (1965) (employing serial correlation test and filter technique); Clive W.J. Granger & Oskar Morgenstern, *Spectral Analysis of New York Stock Market Prices*, 16 KYKLOS 1 (1963) (analyzing serial correlation); Moore, *supra* note 110, at 157 (employing serial correlation test).

113. *See* text accompanying notes 127-133 *infra*.

114. James R. Vertin, *Passive Equity Management Strategies*, in READINGS IN INVESTMENT MANAGEMENT 113 (F. Fabozzi ed. 1983); Baesel & Stein, *supra* note 100; James M. Patell, *Corporate Forecasts of Earnings per Share and Stock Price Behavior: Empirical Tests*, 14 J. ACCT. RES. 246 (1976). In a related test of the strong form of the ECMH, it has been found that mutual fund managers outperform the market only by a margin sufficient to permit them to cover their administrative and transactions costs. J. LORIE, P. DODD & M. KIMPTON, *supra* note 95, at 73-76; Gilson & Kraakman, *supra* note 4, at 556 n.27.

refuted."¹¹⁵ Note that the key difference between the strong and weak forms is not the *speed* with which the market changes to reflect new information, but rather the *type* of information being reflected in share prices. The strong form does not distinguish among the types of events to which the market is said to be efficient; the weak form limits its predictive power to one sort of information: historical price movements.

3. *Proof of semi-strong form efficiency.*

Although the evidence regarding the semi-strong form of the ECMH is not as unambiguous as that regarding the weak and strong forms, it is sufficiently persuasive that the semi-strong form of "market efficiency is now an accepted working assumption in financial economics research."¹¹⁶ A variety of methodologies have been employed to test the semi-strong form of the ECMH. These empirical tests generally look at the speed of adjustment of share prices to particular events or to new information.

Early studies, for example, measured the effects of stock splits on stock prices.¹¹⁷ Driving these studies was the assumption that a stock split should not affect the aggregate value of the relevant shares unless the stock split contained new information about firm earnings.¹¹⁸ Consistent with the semi-strong form of the ECMH, it appears that the market anticipates that some favorable news, such as an increase in dividends, will follow stock splits. The dividend increase, however, is not a certainty. If it later turns out that no positive announcement or dividend increase will occur, the stock price falls.¹¹⁹ Of even greater significance in supporting the semi-strong form of the ECMH was the fact that the stock split studies showed that share prices began increasing well in advance of the public announcement of stock splits and that, by the end of the day after a stock split is announced, the market had adjusted to reflect the information conveyed by the split.¹²⁰

Another important study supporting the semi-strong form of the ECMH examined the effects of large block trades on stock prices.¹²¹ Large block trades frequently convey information about share prices, particularly when such trades are made by corporate insiders or market

115. J. LORIE, P. DODD & M. KIMPTON, *supra* note 95, at 76 (summarizing empirical evidence).

116. *Id.* at 73.

117. Eugene F. Fama, Lawrence Fisher, Michael C. Jensen & Richard Roll, *The Adjustment of Stock Prices to New Information*, 10 INT'L ECON. REV. 1 (1969); Frank K. Reilly & Eugene F. Drzycimski, *Short Run Profits From Stock Splits*, 10 FIN. MGMT. 64 (1981).

118. RICHARD A. BREALEY & STEWART C. MYERS, *PRINCIPLES OF CORPORATE FINANCE* 294 (3d ed. 1988).

119. Fama, Fisher, Jensen & Roll, *supra* note 117, at 170.

120. *Id.* at 18 (citing 1946-1956 study showing price movements completed by the day after the announcement); Reilly & Drzycimski, *supra* note 117, at 67 (almost complete adjustment by end of day following announcement).

121. Larry Y. Dann, David Mayers & Robert J. Raab, *Trading Rules, Large Blocks, and the Speed of Adjustment*, 4 J. FIN. ECON. 3 (1977).

professionals. If the stock market is efficient, share prices should adjust quickly to reflect any new information contained in the sale of a block of stock. The study found that virtually all of the share price adjustment took place within the first five minutes of the block sale. After the first five minutes, the price adjusted slightly, but not enough to compensate traders for their transaction costs.¹²² Share prices had adjusted completely within fifteen minutes.¹²³ Other studies of such diverse events as takeover attempts,¹²⁴ changes in accounting procedures,¹²⁵ and changes in Federal Reserve Board policy confirm these results.¹²⁶

4. *Towards a more complete taxonomy of market efficiency.*

Different types of information. The point of this literature review has not been simply to establish that the semi-strong form of the ECMH enjoys considerable support; the limitations of these studies must also be emphasized. The studies only test whether the prices of securities adjust rapidly to reflect particular kinds of information—for example, stock splits or block trades. As for other events, the market may in fact not be efficient. For example, the market does not appear to respond particularly quickly to changes in quarterly earnings announcements.¹²⁷

It stands to reason that the market price of a security will not be uniformly efficient as to all types of information. Market participants will find some types of information more costly to obtain and assimilate than others. And, since rivalrous competition among market participants drives securities prices to their correct level under the semi-strong form of the ECMH, the more difficult it is for those participants to internalize a particular bit of information, the less efficient the market is likely to be with respect to that piece of data.¹²⁸

These insights have important implications for the fraud-on-the-market theory. Plaintiffs must prove that the particular shares they

122. *Id.* at 16.

123. *Id.*

124. Gregg A. Jarrell & Annette B. Poulsen, *Stock Trading Before the Announcement of Tender Offers: Insider Trading or Market Anticipation?*, 5 J.L. ECON. & ORG. 225, 244 (1989) (arguing that, even absent insider trading, target firm's share prices adjust to reflect outside bids even before such bids are publicly announced).

125. Robert S. Kaplan, *The Information Content of Financial Accounting Numbers: A Survey of Empirical Evidence*, in *THE IMPACT OF ACCOUNTING RESEARCH ON PRACTICE AND DISCLOSURE* 134, 167 (A. Abdel-khalik & T. Keller eds. 1978).

126. Gilson & Kraakman, *supra* note 4, at 555 n.26 (summarizing studies indicating "efficient price responses" in all these areas).

127. Dan Givoly & Josef Lakonishok, *The Information Content of Financial Analysts' Forecasts of Earnings: Some Evidence on Semi-Strong Efficiency*, 1 J. ACCT. & ECON. 165 (1979); Ross L. Watts, *Systematic 'Abnormal' Returns After Quarterly Earnings Announcements*, 6 J. FIN. ECON. 127 (1978).

128. Gilson & Kraakman, *supra* note 4, at 612-13 (tripartite division is really one of information sets in which differentiated efficient responses occur due to varying levels of information accessibility and diffusion).

bought or sold traded in an efficient market,¹²⁹ because the market for some types of securities is less efficient than the market for other types of securities.¹³⁰ But courts have never considered the fact that the securities markets may be less efficient with regard to some types of public information than others. For example, the Court in *Basic* considered it dispositive on the issue of efficiency that *Basic*'s shares were listed and traded on the New York Stock Exchange, where an exchange specialist devoted his attention and considerable capital resources to maintaining an efficient market for the stock.¹³¹

But, just as courts inappropriately presume that any and all securities, regardless of their characteristics, are efficiently priced and traded, so too is it inappropriate for courts to presume that a particular security exhibits the same efficiency characteristics for all types of information. Thus, plaintiffs must prove to courts applying the fraud-on-the-market theory not only that a security trades in an efficient market, but also that the particular misrepresentation or omission pertained to the kind of information that the market finds worthwhile to decode.

Just as a security whose price adjusts quickly to most information may adjust more slowly to a certain sort of information, a security whose price adjusts slowly to most information may adjust quickly to some news. For example, securities traded in very thick markets may react slowly to unexpected news about quarterly earnings.¹³² By the same token, however, the prices of securities traded in very thin markets may adjust quickly to a takeover announcement,¹³³ because many investors specialize in decoding takeover news. In addition, investment analysts and arbitrageurs who have never followed a particular stock will shift their attention to it on news of a takeover attempt—the large gains associated with such transactions assure these investors that investigation of the occurrence is likely to be well rewarded. By contrast, news of a change in quarterly earnings will require a large investment in information-gathering to decode. Although shareholders might reasonably rely on the efficiency of the market to correctly price even a

129. *Basic, Inc. v. Levinson*, 485 U.S. 224, 248 n.27 (1988).

130. See, e.g., Levi A. Kochin & Richard W. Parks, *Was the Tax-Exempt Bond Market Inefficient or Were Future Expected Tax Rates Negative?*, 43 J. FIN. 913 (1988) (unexploited tax arbitrage opportunities in municipal bonds); BURTON G. MALKIEL, *A RANDOM WALK DOWN WALL STREET* 176-80 (4th ed. 1985) (small-firm effect is soft spot in ECMH); S. Basu, *Investment Performance of Common Stocks in Relation to Their Price-Earnings Ratios: A Test of the Efficient Market Hypothesis*, 32 J. FIN. 663 (1977) (low P/E stocks earn slightly higher returns because P/E information apparently not fully reflected rapidly in prices). But see Richard Roll, *A Possible Explanation of the Small Firm Effect*, 36 J. FIN. 879 (1981) (small firm effect is illusory, a product of risk mismeasurement in calculating estimates of returns).

131. *Basic*, 485 U.S. at 244-47.

132. See note 127 *supra*.

133. J. LORIE, P. DODD & M. KIMPTON, *supra* note 95, at 70-73; Jarrell & Poulsen, *supra* note 124; Mark L. Mitchell & Jeffrey M. Netter, *Triggering the 1987 Stock Market Crash: Antitakeover Provisions in the Proposed House Ways and Means Tax Bill?*, 24 J. FIN. ECON. 37, 50 (1989) (the stock market reacted within 90 minutes to news about proposed tax legislation concerning takeovers).

very thinly traded stock with regard to the likelihood of a takeover, it might not be reasonable for shareholders to rely on the efficiency of the market to price correctly a security traded in a very thick market, such as the New York Stock Exchange, for information that is very costly to obtain and analyze. Thus, in a securities fraud case brought under the fraud-on-the-market theory, courts should not consider the question of whether a security is traded in an efficient market in isolation from the particular disclosure issue being litigated.

This argument is not meant to imply that market efficiency is a haphazard affair. Rather, the point is simply that market professionals will only search out and analyze new information about a firm until an additional \$1.00 expenditure on searching and analyzing is expected to produce an additional \$1.00 in trading profits. Because obtaining and analyzing certain sorts of information is more costly than others, the market will not adjust at the same speed for all information. Where the payoff from new information is very high or the costs of obtaining new information are very low, market prices will adjust quickly. But share prices will adjust more slowly to reflect information where high costs are involved in obtaining and analyzing the information. In other words, the market will be "efficiently inefficient" for information that is costly to obtain.

Different types of securities. Just as securities markets will not be equally efficient in terms of their ability to process all types of information, they will not be equally efficient as to all types of securities. Investment bankers often remark on the market's reluctance to purchase "offbeat" or peculiar new investment vehicles. Thus, the market may discount securities with unusual call provisions, unique sinking funds, complicated put provisions, or conversion features due to the high cost of evaluating and pricing these special features.¹³⁴

Similarly, it seems clear that not all corporate information will affect all securities of a given issuer in the same way. Debt securities will be more insulated from the shocks associated with bad news than will equity securities. Securities with put provisions permitting the owner of the security to sell it back to the corporation at a specified price upon the occurrence of certain events will provide even more protection for investors. The court should therefore take into account the characteristics of the plaintiff's security when assigning damages under the fraud-on-the-market theory. For example, debt securities with put option provisions triggered by the announcement of a merger or major corporate restructuring are becoming increasingly common. It is even more common for debt securities to be issued as convertible bonds. Such bonds provide their owners with the right to exchange them for a speci-

134. Where the savings to the issuer from creating a unique or hybrid type of security is greater than the cost of the market discount for such securities, issuers will find it advantageous to issue unusual securities, despite an anticipated market discount.

fied quantity of equity securities at any time. These features provide investors with protection against many future contingencies. Courts should take their existence into account in assessing claims brought under the fraud-on-the-market theory.

The issuer's identity and the market in which its securities trade. Thus far we have identified three different variables that will have important effects on market efficiency: the type of firm-specific information being released, the market in which the security is traded, and the type of security being traded. Only one of these variables—the market in which the security is being traded—was considered relevant by the Court in *Basic*. There, the Court presumed that Basic's shares traded in an efficient market simply because they traded on the New York Stock Exchange. This analysis, although probably correct for most securities, is somewhat misleading because it suggests that the source of market liquidity for a firm is the market on which the firm's shares trade. In fact, market liquidity does not come from exogenous sources such as the New York Stock Exchange, but from endogenous characteristics of the firm itself.

Rivalrous competition among market professionals drives securities prices to their efficient levels.¹³⁵ These professionals will follow firms with large numbers of shares outstanding and firms about which significant information is likely to be generated. They cannot earn adequate returns on their investment by searching for information about firms with only a small float of outstanding securities, about firms that have exceptionally stable earnings, or about firms for which they expect little new information. Put another way, it is clear that the market for some firms that are traded over the counter, such as Apple Computer or MCI, will be far more efficient than the market for other firms that are traded on the New York Stock Exchange. The endogenous characteristics of the companies, not the identity of the secondary market, will be the key factor in determining whether the market for the security is efficient.

Exchanges only facilitate liquidity by serving as central information processors and disseminators of information and as a place at which purchasers and sellers of securities can locate one another quickly.¹³⁶ As information technology has advanced, the over-the-counter markets have become increasingly close substitutes for the organized exchanges, because the need for a physical location to process and disseminate information has declined.¹³⁷ Thus, despite the rhetoric of the Supreme Court in *Basic*, the identity of the issuer of a particular security, rather than the market on which it trades, will determine whether one can expect the price of the security to be efficient. Courts have yet

135. Jonathan Macey & Hideki Kanda, *The Stock Exchange as a Firm: The Emergence of Close Substitutes for the New York and Tokyo Stock Exchanges* 15-16 (Fall 1989) (unpublished manuscript) (on file with the *Stanford Law Review*).

136. *Id.* at 21-26.

137. *Id.* at 25-26.

to recognize this point. Some opinions contain language suggesting that the fraud-on-the-market theory does not apply to stocks trading over the counter.¹³⁸ Other courts conclude that the over-the-counter markets are efficient without regard to the specific characteristics of the firm whose shares are at issue.¹³⁹

C. *Determining Whether the Market Has Been Misinformed: An Additional Problem for Courts*

From the above discussion it should be clear that courts attempting to apply the fraud-on-the-market theory to securities fraud cases must concern themselves with whether a particular misstatement or material omission fooled the market. This is because, as the Court recognized in *Basic*, "if, despite [an] allegedly fraudulent attempt to manipulate [the] market price [of a security], news of the [event] credibly entered the market and dissipated the effects of the misstatements, those who traded . . . shares after the corrective statements would have no direct or indirect connection with the fraud."¹⁴⁰ In other words, if share prices at the time of the misstatement or omission reflected the information that was allegedly misstated or not disclosed, then plaintiffs should not be able to recover.

, This potential bar to recovery is a logical extension of plaintiffs' reliance on the integrity of the market. If a particular nondisclosure did not fool the market, then plaintiff's reliance on the market's integrity was not misplaced.¹⁴¹ The problem is that in many instances it will not be possible to determine whether the market was fooled or not.

Again, the facts of *Basic* itself provide a useful illustration. After announcement of the merger with Combustion Engineering, *Basic*'s shares increased dramatically in price. It might be tempting to follow the lead of Professor Fischel and conclude that this change in price, if not explainable by general market movements, illustrates that the market was fooled.¹⁴² But this conclusion would be wrong, particularly in a

138. *Epstein v. American Reserve Corp.*, No. 79-C-4767 (N.D. Ill. Apr. 21, 1988) (LEXIS, Genfed library, Dist file); *In re Data Access Sys. Sec. Litig.*, 103 F.R.D. 130, 138 (D.N.J. 1984) (dicta), *rev'd on other grounds*, 843 F.2d 1537 (3d Cir.), *cert. denied*, 109 S. Ct. 131 (1988).

139. *Finkel v. Docutel/Olivetti Corp.*, 817 F.2d 356, 364 (5th Cir. 1987), *cert. denied*, 485 U.S. 959 (1988); *Teichler v. DSC Communications Corp.*, No. CA3-85-2005-T (N.D. Tex. Apr. 26, 1988) (LEXIS, Genfed library, Dist file); *Gavron v. Blinder Robinson & Co.*, 115 F.R.D. 318 (E.D. Pa. 1987); *Klein v. A.G. Becker Paribas Inc.*, 109 F.R.D. 646 (S.D.N.Y. 1986); *Mottoros v. Abrams*, 524 F. Supp. 254 (N.D. Ill. 1981). All of these cases indicated that plaintiffs could rely on the fraud-on-the-market theory for securities trading in the over-the-counter market. *But see Cammer v. Bloom*, 711 F. Supp. 1264, 1277-79, 1280-87 (D.N.J. 1989) (examining market efficiency of particular securities being traded).

140. *Basic, Inc. v. Levinson*, 485 U.S. 224, 248-49 (1988).

141. We are grateful to Mr. Mark Mitchell of the Office of Economic Analysis of the SEC for this point.

142. See Daniel R. Fischel, *Efficient Capital Markets, The Crash, and the Fraud on the Market Theory*, 74 CORNELL L. REV. 907 (1990). Professor Fischel uses the following example to illustrate his point. He posits that a corporation called Waste, Inc., issues a press release an-

case like *Basic*, where the plaintiffs alleged that certain Basic officers and directors lied about whether they were engaged in merger negotiations. The fact that they were lying became known when the firm publicly announced that it had approved a tender offer for all of its outstanding shares. But the fact that the share price of Basic stock increased significantly does not prove that the market was fooled by the earlier misstatements. At the time of the earlier misstatements, the probability of a merger actually being completed was positive, but something less than 100 percent. Once the merger was announced, of course, the probability of a merger being consummated became a near certainty—that is, approached 100 percent. Thus, even if the market had not been fooled by the earlier lies, Basic stock still would not have traded at the anticipated merger price. It would have traded at the anticipated merger price discounted by the probability that the merger would not occur.

Upon the formal announcement by Basic of its merger agreement with Combustion, the market's probability assessment would be revised upward. Even in a perfectly efficient market; this revised probability assessment would cause Basic's shares to increase in value. In other words, there simply is no way to tell from share price movements alone whether the market was fooled in a case like *Basic*, because the misstatement concerned a corporate event—the eventual merger—the ultimate occurrence of which would always be discounted by the market until the formal announcement made it a virtual certainty.

The fact that the share price adjusted when the event actually occurred does not demonstrate that the denial of negotiations fooled the market. The adjustment might only show that the market does not value a merger negotiation as highly as a merger agreement. To illustrate the point, suppose that absent any possibility of a merger Basic stock is worth \$20.00 per share. Upon the announcement that preliminary, nonbinding merger negotiations had begun, the price rises to \$35.00 per share. There has been no fraud-on-the-market if the market price of \$35.00 reflected the fact that, at the time of the misstatement

nouncing that it has a three-year contract with Saudi Arabia to provide waste management services. The press release fails to mention a provision that allows Saudi Arabia to terminate the contract. Ten months later, when Waste announces that Saudi Arabia has terminated the contract, its stock price falls from \$30.00 to \$20.00; investors sue, claiming that Waste made a material omission in violation of Rule 10b-5 by failing to disclose that the Saudis had a termination clause in the contract.

Under the fraud-on-the-market theory, investors can satisfy the reliance requirement without having read the press release. But they must show that the market was fooled in order to recover. Fischel argues that this "can be tested directly . . . by analyzing the relevant stock price movements and other information available to investors." *Id.* at 910. But the fact that the share prices move does not mean that the market was fooled. Even if the market *knew* that Saudi Arabia had a termination clause, it would not know that the Saudis were definitely going to terminate the agreement until they announced they were doing so. Thus Waste's share price of \$30.00 may have reflected the fact that there was a termination agreement: If the market had been fooled, the price of the stock might have been even higher. Once again, we are grateful to Mark Mitchell for this insight.

the market knew there were merger negotiations in progress, but calculated that there was only a 75 percent probability that the merger would occur. In this case, an efficient market would price the stock at \$35.00¹⁴³ until some event (such as a finalized merger agreement) changed the market's assessment of the relevant probabilities.

Of course, if the market price of Basic stock changed after a later announcement that Basic's first announcement was false, and that Basic was, in fact, involved in merger negotiations, then the fraud-on-the-market theory unquestionably could support a suit by shareholders who sold Basic stock between the two announcements. But in cases like *Basic* itself, courts will have to *decode* which part of a stock's price movement is due to the fraud and which part is due to the market's changing probability assessment. Finance theory provides no guidance as to how this decoding might be accomplished.

D. *The Semi-strong Version of the ECMH and Property Rights in Information*

Still another implication of the observation that securities prices conform to the semi-strong version of the ECMH is apparent once one recognizes precisely *how* securities prices become semi-strong-efficient. In general, share prices become semi-strong-efficient due to rivalrous competition among market professionals. As Gilson and Kraakman have observed:

In today's securities markets, the dominant minority of informed traders is the community of market professionals, such as arbitrageurs, researchers, brokers and portfolio managers, who devote their careers to acquiring information and honing evaluative skills. . . .

. . . [P]rofessionally informed trading . . . explains why any information that is accessible to significant portions of the analyst community is properly called 'public,' even though it manifestly is not. Such information is rapidly assimilated into price, with only minimal abnormal returns to its professional recipients. And it is these characteristics, we submit, that largely convey the meaning of a 'semi-strong form' market response.¹⁴⁴

Thus, when courts declare that plaintiffs are entitled to a presumption of reliance in fraud-on-the-market theory cases, what they actually mean is that plaintiffs are entitled to rely on the price decoding and setting mechanisms of market professionals.

143. That is, the price would be the value of the firm in the hands of its current management (say \$20.00 per share) discounted by the probability that the firm will remain in the hands of the current management (25%), *plus* the value of the firm in the event of a merger (\$40.00) discounted by the probability that the merger would occur (75%). Mathematically, $(\$20 \times .25) + (\$40 \times .75) = \$35.00$.

144. Gilson & Kraakman, *supra* note 4, at 571-72.

It is efficient for nonprofessional investors to rely on professionals because such professionals

have a comparative advantage in obtaining and interpreting relevant information. . . . [A]ctors in this class have an incentive to invest in gathering and analyzing information and to take actions to affect the market price. . . .

. . . [M]arket professionals . . . have an incentive to secure information until a marginal dollar invested in processing information equals the profits to be made from trading based on superior forecasting.¹⁴⁵

But the fraud-on-the-market theory does not punish market professionals for mispricing securities, because these professionals have no legal obligation to drive securities prices to their efficient levels. Their only incentive is economic. Rather, the fraud-on-the-market theory punishes *insiders* in situations in which market professionals fail to uncover and decode all relevant information about a particular security. It is not at all obvious why insiders should be held responsible for the pricing errors of market professionals, particularly where the insiders have breached no fiduciary duties to shareholders by failing to disclose the information in question.¹⁴⁶

The purpose of this section has been to show that the fraud-on-the-market theory implicitly presumes that shares trade in an inefficient market. Isolating the version of the ECMH being utilized by the theory is of interest because it will determine the sorts of tests that are relevant in showing market efficiency. In addition, isolating the version of the ECMH being used by the Court is important because it provides insights into how the fraud-on-the-market theory might be refined. In particular, courts cannot satisfy themselves by asking whether a particular security trades in an efficient market. They must also consider whether the particular information at issue in the lawsuit is likely to be

145. Fischel, *supra* note 91, at 4.

146. Admittedly, the mere fact that insider defendants in fraud-on-the-market suits are not the market professionals who actually cause the share prices to trade at efficient levels is not a reason to abandon the fraud-on-the-market theory as a basis for recovery. Nonetheless, applying the fraud-on-the-market theory to particular cases can produce strange results. Imagine that insiders in competing companies make precisely the same misstatement at exactly the same time about their respective companies. Shareholders of each firm bring suit. Despite the fact that the misstatements are identical, if the shares of one firm trade in an efficient market and the shares of the other firm trade in an inefficient market, only the shareholders of the company whose shares traded in the efficient market will be able to prove liability.

This result may at first appear to be unfair to the shareholders of the firm whose shares traded in an inefficient market, but in fact it is not. Shareholders in firms that trade in inefficient markets demand and obtain a risk premium for owning such shares. See RICHARD A. BREALEY, AN INTRODUCTION TO RISK AND RETURN FROM COMMON STOCKS 48-54 (1969) (observing that high-risk stocks are "overpriced"). These investors are therefore compensated *ex ante* for the greater risks they are incurring by buying shares that trade in such markets. This compensation includes the increased risk of fraud. Thus, it is not surprising that a firm's shares rise almost 3% in value when those shares are selected for inclusion on the Standard and Poor's 500 Index. Andrei Shleifer, *Do Demand Curves for Stocks Slope Down?*, 41 J. FIN. 579, 583 (1986).

rapidly incorporated into a firm's share price, regardless of where those shares are traded.

IV. CONCLUSION

This article has shown that the fraud-on-the-market theory is unlikely to benefit investors until courts make the theory compatible with the efficient allocation of property rights in information within the corporation. This article also has shown that this reconciliation could easily be accomplished by combining the fraud-on-the-market theory with the theory of fiduciary duties of disclosure developed here. In particular, valuable corporate information should not be disclosed if, in the business judgment of the officers and directors involved, such disclosure would jeopardize the aggregate value of the firm's shares. So, for example, if management legitimately believes that disclosure of preliminary merger negotiations would threaten the success of such negotiations, then it should not be compelled to make such a disclosure, regardless of the materiality of those negotiations, until the merger is complete. Similarly, management should be allowed to deny rumors which it knows to be correct and even to make affirmative misstatements if doing so is necessary to protect aggregate share value. These strategic misrepresentations should not be punished where management commits them in furtherance of its fiduciary duty to shareholders. As the information processors within the capital markets have become more sophisticated, the old fashioned "no comment" statements that management used to make in order to protect confidential information no longer suffice to protect shareholder wealth. In light of current decoding techniques among market professionals, management must be free to take bolder steps. An exception to this policy of permitting certain corporate misrepresentations would be applied to cases in which the firm making the false statements does not internalize the costs to the capital market associated with such misstatements. This exception will eliminate any distortions to the capital allocation process caused by the general rule favoring strategic misrepresentations.

Thus, plaintiffs should be allowed to recover under the fraud-on-the-market theory only under two circumstances. The first is in cases where the officers and directors making the material omission or misrepresentation breached a fiduciary duty in doing so. The second is where the firm about which the misrepresentations were made is not seeking to protect a preexisting property right in information, so that it does not internalize the costs associated with the misrepresentation.

This article suggested further refinements to the fraud-on-the-market theory in Part III, based on the observation that the fraud-on-the-market theory adopted by the Court in *Basic, Inc. v. Levinson* implicitly assumed that securities markets are semi-strong-efficient. The article then analyzed the legal implications of this judicial recognition of semi-

strong efficiency. It concluded that certain well-known tests of market efficiency should not be used in fraud-on-the-market cases since those tests measure whether the market is weak- or strong-form efficient, and therefore are inappropriate. In addition, Part III examined the Court's observation that plaintiffs must prove that securities were traded in an efficient market in order to recover under the fraud-on-the-market theory. This article has shown that this requirement as applied by the Court is both underinclusive and overinclusive from an economic perspective. It is overinclusive because stock prices of some firms may be highly efficient with regard to some information, but inefficient with regard to other information. For example, a widely traded stock may respond promptly to information about a stock split, but slowly to information about a change in projected quarterly earnings. The Court's application of the efficiency test is underinclusive, because even stock that exhibits low levels of information efficiency with respect to most information may respond in a highly efficient manner to some types of information, such as news about a pending hostile takeover.

We do not advocate abandonment of the fraud-on-the-market theory by the courts. Rather, we suggest that the judiciary's application of finance theory should be refined to make it conform to principles of economic theory. The fraud-on-the-market theory can be both good finance *and* good economics.

