Essay

Insider Abstention

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I. INTRODUCTION

For more than thirty years, supporters and critics of insider trading regulation have agreed on one thing—that insiders can beat the market simply by using nonpublic information to decide when *not* to trade. This shared belief has influenced scholarship on both sides of the insider trading debate. It has led certain proregulation commentators to argue that insider abstention is as unfair as insider trading and that, ideally, both should be restricted. Opponents of insider trading regulation, on the other hand, have cited insiders' unfettered ability to abstain on nonpublic information to support one of their main claims—that any attempt to "level the playing field" between insiders and the public is bound to fail. This Essay explains why the conventional wisdom about insider abstention is wrong. It shows that when insiders cannot trade while in possession of nonpublic information, their ability to abstain based on such information does not enable them to outperform public shareholders. The Essay also explains why insider abstention is much less likely than insider trading to distort

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managers' incentives, and might even improve them. The Essay concludes by describing the implications of its findings for a number of issues in insider trading regulation.

Insider trading continues to attract a considerable amount of attention from economists,¹ legal academics,² the media,³ and government agencies⁴ around the world. Although academics still debate the economic desirability of insider trading, the consensus among the American public, Congress, and the SEC is that insider trading is "unfair" and erodes investor confidence in the market. This consensus has given rise to a set of insider trading laws that attempts to preserve investor confidence in the market and level the playing field between insiders and public shareholders.⁵

The primary mechanism for regulating insider trading is the duty to "disclose or abstain," which arises under Rule 10b-5 of the Securities Exchange Act of 1934.⁶ Under the duty to disclose or abstain, a person in knowing possession (or "aware") of material nonpublic information must either disclose the information or abstain from trading when the other party to the transaction is entitled to know the information because of a fiduciary duty or other relationship of trust and confidence between them.⁷

Although Rule 10b-5 prohibits insiders from trading while in possession of material nonpublic information, it does not prohibit them from using such information to *abstain* from trading. Thus, in certain cases Rule 10b-5 permits insiders to use material nonpublic information to their advantage. For example, a manager of ABC Corp. considering selling ABC shares on Monday afternoon learns, shortly before the planned sale, that

4. See. e.g., Franklin A. Gevurtz, *The Globalization of Insider Trading Prohibitions*, 15 TRANSNAT'L LAW. 63, 65-66 (2002) (describing the dramatic increase in the number of nations adopting insider trading laws during the 1990s).

5. See infra Section II.B.

6. 17 C.F.R. § 240.10b-5 (2003); see also Chiarella v. United States, 445 U.S. 222, 225-30 (1980) (interpreting Rule 10b-5 to impose the duty to "disclose or abstain").

^{1.} E.g., Utpal Bhattacharya & Hazem Daouk, The World Price of Insider Trading, 57 J. FIN. 75 (2002).

^{2.} E.g., Ian Ayres & Joe Bankman, Substitutes for Insider Trading, 54 STAN. L. REV. 235 (2001); Ian Ayres & Stephen Choi, Internalizing Outsider Trading, 101 MICH. L. REV. 313 (2002).

^{3.} E.g., William Lerach & Al Meyerhoff, Editorial, *Why Insiders Get Rich, and the Little Guy Loses*, L.A. TIMES, Jan. 20, 2002, at M2 (discussing stock sales by executives at Enron, Oracle, Cisco, and Sunbeam before their companies' stocks plummeted); Leslie Wayne, *Before Debacle, Enron Insiders Cashed In \$1.1 Billion in Shares*, N.Y. TIMES, Jan. 13, 2002, at A1 ("[S]ome shareholders and lawmakers are setting their sights on . . . the millions that Enron insiders received by selling their shares while the price [of Enron stock] was still high.").

^{7.} Chiarella, 445 U.S. at 225-30. The SEC has ruled that an insider subject to Rule 10b-5 violates the rule by trading "on the basis of material nonpublic information" and has defined a trade "on the basis of" material nonpublic information as one made while "the person making the purchase or sale was aware of the material nonpublic information." § 240.10b5-1(b). In Section IV.A, I examine an alternative version of Rule 10b-5 under which an insider violates the rule only if she uses material inside information in her decision to trade, and I consider how this "use" standard changes the analysis. Until then, however, I assume that the SEC's "knowing possession" or "awareness" standard is in effect.

there is undisclosed good news. That news, to be disclosed Tuesday, is likely to boost ABC's stock price. The manager abstains from selling the stock for \$10 on Monday and instead sells on Wednesday, after the good news has boosted ABC's stock price to \$12. A similarly situated public shareholder, ignorant of the impending good news announcement, sells his stock on Monday afternoon for only \$10 per share, receiving \$2 less per share than the manager.

Because of this "abstention problem," many legal commentatorsincluding both supporters and opponents of insider trading regulationhave concluded that even insiders unable to trade while aware of nonpublic information could still reap greater trading profits than public shareholders. This reasoning has led Henry Manne and other critics of insider trading regulation to argue that insiders' ability to abstain on nonpublic information makes regulating their use of nonpublic information essentially futile.⁸ Those wishing to level the playing field between insiders and public shareholders share Manne's view that insider abstention gives insiders an advantage. For a number of these commentators, however, insider abstention is not an embarrassing gap that casts doubt on the entire enterprise of regulating insiders' use of private information, but rather is an undesirable loophole that can be closed, at least in certain circumstances. One commentator has discussed the possibility of either reading Rule 10b-5 expansively to ban insider abstention, or enacting a new statute targeted specifically at insider abstention.⁹ In most cases it would be difficult to prove that an insider used nonpublic information to abstain from trading. Such evidence might be available, however, if the insider indicated, in writing or in conversation, an intent to buy or sell, and then subsequently did not trade after receiving nonpublic information indicating that the trade would be unfavorable.¹⁰

The main purpose of this Essay is to show that the conventional view of insider abstention is incorrect. Using a simple model, I demonstrate that an insider unable to trade while in possession of nonpublic information cannot systematically earn higher trading profits than a similarly situated public shareholder by using nonpublic information to abstain from trading. As this Essay explains, insider abstention merely compensates the insider for his inability to trade while in possession of nonpublic information that indicates such a trade would be favorable. In fact, an insider prevented from both trading while in possession of nonpublic information and abstaining on

^{8.} See, e.g., Henry G. Manne, Insider Trading and Property Rights in New Information, 4 CATO J. 933, 938 (1985).

^{9.} Stephen R. Salbu, Tipper Credibility, Noninformational Tippee Trading, and Abstention from Trading: An Analysis of Gaps in the Insider Trading Laws, 68 WASH. L. REV. 307, 333-34 (1993).

^{10.} I discuss the issue of regulating insider abstention further in Part IV.

such information would earn lower trading returns than a similarly situated public shareholder, all other things being equal.

To be clear, I am not asserting that insiders are now prevented from trading while in possession of nonpublic information. Indeed, I have argued elsewhere that currently insiders are not always deterred from trading on "material" nonpublic information.¹¹ In addition, they are permitted to trade on various types of private information that are valuable but not considered legally "material."¹² Nor do I wish to argue here that insiders easily can be prevented from trading on nonpublic information.¹³ Rather, my claim is that if insiders are unable to trade while aware of nonpublic information, their ability to abstain from trading on such information does not give them an advantage over public shareholders. In other words, parity between insiders and public shareholders can be achieved even if insiders remain completely free to engage in insider abstention. The Essay also briefly considers the effects of insider abstention on managers' incentives. While a complete study of these effects is beyond the scope of this Essay, a preliminary analysis suggests that insider abstention is much less likely than insider trading to distort managerial behavior, and might even improve managers' incentives.

I then turn to examine two important policy implications of this analysis. The first implication relates to the longstanding "possession versus use" debate under Rule 10b-5. The SEC has ruled that a person trades in violation of Rule 10b-5 if he is in "knowing possession" (or "aware") of material nonpublic information when the trade is executed. Some commentators have argued that there should be no violation of Rule 10b-5 unless the insider "uses" the nonpublic information in deciding whether to trade. The analysis offered in this Essay shows that the SEC's "knowing possession" standard creates a more level playing field between insiders and outsiders than does the "use" standard. The second implication relates to the SEC's safe harbor from Rule 10b-5 liability for insiders executing trades according to prearranged trading plans. Using this Essay's findings, I explain why the SEC's safe harbor allows insiders to profit from material nonpublic information and how it could easily be modified to prohibit insiders from profiting from such information.

Before proceeding, it is worth noting that there are various types of "insiders"—persons who receive nonpublic information bearing on the value of publicly traded securities: For example, there are "corporate

^{11.} See Jesse M. Fried, Reducing the Profitability of Corporate Insider Trading Through Pretrading Disclosure, 71 S. CAL. L. REV. 303, 331-35 (1998).

^{12.} See id. at 335-37.

^{13.} In previous work, however, I have explained why requiring corporate insiders to disclose the details of their trades in advance would substantially reduce, if not eliminate, the ability of insiders as a group to trade profitably on inside information. *See id.* at 348-72.

insiders," the executives and directors of a firm who acquire nonpublic information about the firm through their positions in the corporation; "temporary insiders," the firm's lawyers, accountants, and bankers who acquire such information while providing services to the firm; and "tippees," persons who receive nonpublic information from other insiders. Although the examples and model in this Essay feature a corporate insider, the analysis of that insider's trading returns would apply to any person with nonpublic information about the value of a publicly traded firm's shares. Thus, *any* insider who is unable to trade while in possession of nonpublic information cannot expect to beat the market by abstaining on such information.

The remainder of the Essay proceeds as follows. Part II describes the nature of insiders' informational advantage over public shareholders. It then explains how Rule 10b-5 reduces insiders' ability to exploit this advantage by prohibiting insiders from trading on material nonpublic information. Part III uses a simple model to examine the distributional effects of insiders' use of nonpublic information to abstain from trading, a use of inside information permitted by Rule 10b-5. The model demonstrates that an insider who is prevented from trading while in knowing possession of nonpublic information, but who is free to abstain from trading based on such information, cannot systematically beat the market. It also shows that an insider unable to trade or abstain while aware of nonpublic information will underperform the market. Part III ends by explaining why insider abstention is less likely than insider trading to distort managers' incentives. Part IV discusses the implications of the analysis in Part III for the longstanding "possession versus use" debate under Rule 10b-5 and the regulation of insider selling plans. Part V concludes.

II. INSIDERS' INFORMATIONAL ADVANTAGE AND THE PROHIBITION AGAINST INSIDER TRADING

A. Insiders' Informational Advantage

Consider the CEO of a publicly traded firm. From time to time, the CEO's position will provide her access to nonpublic information bearing on the value of the firm's stock. This inside information might indicate that the stock price is likely to increase. For example, the CEO might learn before the public that last quarter's earnings were better than expected, that there will be an unanticipated takeover bid, that there has been a significant technological breakthrough, or that an important new customer has been acquired. Alternatively, the inside information could indicate that the stock price is likely to fall. The CEO might learn before the public that earnings

are worse than expected, that a key product has failed, or that impending litigation against the firm is likely to reduce significantly the firm's value.

If permitted to trade freely on nonpublic information, insiders could use it to their advantage. When there is undisclosed good news, insiders can buy stock before the information is released and benefit from the subsequent appreciation. For example, suppose that the CEO of ABC Corp. learns that earnings will exceed expectations and that the release of the information will likely boost the price of the stock, now trading at \$10 per share, to \$12. The CEO could use this information to make a profit of \$2 per share.

When there is undisclosed bad news, insiders can sell the stock before the price falls. For example, suppose that the CEO of ABC Corp. learns that earnings will fall short of expectations and that the release of the information is likely to cause the price of the stock, now \$10, to drop to \$8. By selling the stock now rather than waiting until the bad news is released, the CEO could make a profit (by avoiding a loss) of \$2 per share.

B. The Prohibition Against Insider Trading

Although persons with nonpublic information have an advantage over other shareholders, for more than sixty years there has been a consensus among the public, Congress, government regulators, and many commentators that insiders should not be permitted to profit freely from this advantage.¹⁴ The consensus is reflected in a system that attempts to level the playing field between insiders and public investors. The primary mechanism for regulating trading by insiders is the duty to "disclose or abstain," which arises under Rule 10b-5 of the 1934 Act.¹⁵

^{14.} See, e.g., Comm. on Fed. Regulation of Sec., ABA, Report of the Task Force on Regulation of Insider Trading—Part 1: Regulation Under the Antifraud Provisions of the Securities Exchange Act of 1934, 41 BUS. LAW. 223, 227-28 (1985) (concluding that the "fair play" basis for the regulation of trading by corporate insiders is still sound after fifty years); see also Victor Brudney, Insiders, Outsiders, and Informational Advantages Under the Federal Securities Laws, 93 HARV. L. REV. 322 (1979); Kim Lane Scheppele, "It's Just Not Right": The Ethics of Insider Trading, LAW & CONTEMP. PROBS., Summer 1993, at 123; Alan Strudler & Eric W. Orts, Moral Principle in the Law of Insider Trading, 78 TEX. L. REV. 375 (1999).

^{15.} Insider trading is subject to other federal restrictions as well. Rule 14e-3 under the 1934 Act, 17 C.F.R. § 240.14e-3 (2003), imposes a duty to disclose or abstain on a person who receives material nonpublic information about a tender offer that originates with either the offeror or the target. See WILLIAM K.S. WANG & MARC I. STEINBERG, INSIDER TRADING § 9 (1996). Section 16(b) of the 1934 Act, 15 U.S.C. § 78p(b) (2000), bans short-swing profit taking by corporate insiders. See WANG & STEINBERG, supra, § 15. Section 16(c) of the 1934 Act, 15 U.S.C. § 78p(c), forbids short selling by corporate insiders. See WANG & STEINBERG, supra, § 15.1. In addition, a variety of federal criminal statutes, such as RICO and the mail and wire fraud statutes, have been invoked to enforce Rule 10b-5. See DONALD C. LANGEVOORT, INSIDER TRADING REGULATION § 8.04 (1989); WANG & STEINBERG, supra, § 16. State insider trading law restrictions on trading by insiders. See WANG & STEINBERG, supra, § 16. State insider trading law

Rule 10b-5, which was promulgated by the SEC in 1942, does not expressly prohibit insiders from trading on inside information. In 1961, however, the SEC interpreted Rule 10b-5's prohibition against "any act, practice, or course of business which operates . . . as a fraud or deceit upon any person, in connection with the purchase or sale of any security"¹⁶ to impose the duty to disclose or abstain.¹⁷ According to the SEC,

[T]he obligation [to disclose or abstain] rests on two principal elements; first, the existence of a relationship giving access, directly or indirectly, to information intended to be available only for a corporate purpose and not for the personal benefit of anyone, and second, the inherent unfairness involved where a party takes advantage of such information knowing it is unavailable to those with whom he is dealing.¹⁸

Under the duty to disclose or abstain, a person in possession of "material"¹⁹ nonpublic information must either disclose the information or abstain from trading when the other party to the transaction is entitled to know the information because of a fiduciary duty or similar relationship of trust and confidence.²⁰ The rule applies to corporate insiders trading in their

18. Id. at 912 (footnote omitted). The duty to disclose or abstain was later adopted by the Second Circuit in SEC v. Texas Gulf Sulphur Co., 401 F.2d 833 (2d Cir. 1968), and was acknowledged implicitly by the Supreme Court in Chiarella v. United States, 445 U.S. 222 (1980), which conditioned the duty on the existence of a fiduciary or other special relationship between the parties involved in the transaction.

19. In *Texas Gulf Sulphur Co.*, the Second Circuit held that "material" facts are those to which a "*reasonable* man would attach importance... in determining [whether to buy or sell shares]." 401 F.2d at 849 (internal quotation marks omitted). In interpreting the term "material" under a related statute, the Supreme Court provided a similar definition. *See* TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 449 (1976) (holding that under Rule 14a-9, the general antifraud provisions of the SEC's proxy rules, an omitted fact is material "if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote"). More recently, the Court has indicated that the purpose of the materiality standard is "to filter out essentially useless information that a reasonable investor would not consider significant... in making his investment decision." Basic Inc. v. Levinson, 485 U.S. 224, 234 (1988). As I explain shortly, however, the lower courts continue to interpret "materiality" in a manner that enables insiders to profit legally on certain kinds of valuable nonpublic information.

20. See Chiarella, 445 U.S. at 230-31. The information must indicate that the intended trade would be favorable to the insider. An insider is free to trade while in possession of nonpublic information indicating that the trade would be unfavorable to him. Under the misappropriation theory, the duty to disclose or abstain also applies to a fiduciary who uses inside information belonging to his principal to make trading profits; the fiduciary must either disclose his use of the information to the principal or abstain from trading. See United States v. O'Hagan, 521 U.S. 642, 652 (1997).

largely has been supplanted, however, by federal law. See ROBERT CHARLES CLARK, CORPORATE LAW § 8.2, at 265, § 8.8, at 306-09 (1986).

^{16. 17} C.F.R. § 240.10b-5(c).

^{17.} Cady, Roberts & Co., 40 S.E.C. 907, 911 (1961) ("[I]nsiders must disclose material facts which are known to them by virtue of their position but which are not known to persons with whom they deal and which, if known, would affect their investment judgment.... [If disclosure would be] improper or unrealistic ... the alternative is to forego the transaction.").

firm's shares because they are considered to owe a fiduciary duty to public shareholders.²¹ During the last twenty years, Congress has sharply increased penalties for violating Rule 10b-5.²² There is evidence that these measures have reduced the amount of illegal insider trading.²³

It is worth noting that although Rule 10b-5 prohibits insiders from trading while in possession of "material" nonpublic information, it might not always prevent them from doing so.²⁴ Despite the adoption of tougher penalties, there still could be situations in which the probability of apprehension and punishment is too low to deter illegal trading.²⁵ Moreover, trial courts have been reluctant to find information "material" unless it concerns a "bombshell event"²⁶—such as the definite existence of a takeover offer—whose announcement causes the stock price to move very sharply in one direction or the other.²⁷ Thus, even if Rule 10b-5 could deter insiders from engaging in illegal insider trading on material nonpublic information, it would still allow insiders to trade while in possession of important but "sub-material" nonpublic information.²⁸

For purposes of this Essay, however, these enforcement and materiality gaps in Rule 10b-5 are not important. The Essay's claim is that *if* these gaps were closed, and insiders therefore could not trade while in possession of nonpublic information, the insider abstention permitted by Rule 10b-5 would not enable insiders to beat the market. Thus, in analyzing insiders' trading returns under a regime where insiders cannot trade while in possession of nonpublic information, I assume that (1) the prohibition is enforceable and (2) it applies to all nonpublic information indicating that the shares are worth more or less than the market price. As we will see, such a regime creates a completely level playing field between insiders and public shareholders when insiders remain free to abstain on nonpublic information.

26. Dennis W. Carlton & Daniel R. Fischel, *The Regulation of Insider Trading*, 35 STAN. L. REV. 857, 886-87 (1983).

^{21.} The rule also applies to controlling shareholders, who are considered to owe fiduciary duties to public shareholders even though their legal relationship with the public shareholders is not the same as that of the corporation's employees. *See* LANGEVOORT, *supra* note 15, § 3.02, at 72.

^{22.} See WANG & STEINBERG, supra note 15, § 7.3.3.

^{23.} See Fried, supra note 11, at 310.

^{24.} See id.

^{25.} See *id.* at 332-35; Manne, *supra* note 8, at 937 (noting that the "ability to detect [insider trading] will always be difficult, and when the gains that can be realized from the practice, discounted by the risk of being apprehended, are compared to the potential costs, many people will have the incentive to trade on inside information").

^{27.} See Fried, supra note 11, at 335-37.

^{28.} See Carlton & Fischel, supra note 26, at 886-87; Fried, supra note 11, at 335-37.

III. THE EFFECTS OF INSIDER ABSTENTION

Having examined Rule 10b-5's prohibition against insider trading, we are now ready to consider the implications of insiders' ability, under Rule 10b-5, to engage in insider abstention. The first four Sections of this Part focus on the distributional effects of insider abstention. Section A describes the received wisdom on the subject—that even if insiders are unable to trade while in possession of nonpublic information, they can earn higher returns than public shareholders simply by using nonpublic information to decide when not to trade. Section B offers a numerical example to explain why the received wisdom is incorrect. Section C then uses a simple formal model to demonstrate that insiders prevented from trading while in possession of nonpublic information cannot outperform public shareholders. The model also shows that insiders prevented from both trading and abstaining while in possession of nonpublic information would systematically underperform public shareholders. Section D shows that the model's results are robust under different assumptions about the flow of nonpublic information to insiders. Section E offers a preliminary efficiency analysis of insider abstention.

A. The Conventional Wisdom

In Section II.B, I explained that Rule 10b-5's disclose-or-abstain requirement does not completely prevent insiders from trading profitably on nonpublic information. Legal commentators have long assumed, however, and in many cases have affirmatively argued, that even if insiders were unable to trade while in possession of nonpublic information, they could still beat the market by using nonpublic information to abstain from trading.²⁹

^{29.} In 1974, Henry Manne wrote:

[[]I]t is very difficult to prove that a person benefited from undisclosed information when all he did was raise his reservation price and *not sell* at the old price. Yet it now seems apparent that this form of insider "trading" may be more common than the type in which a person seeks to *buy* shares. The economic effect, in any event, is the same

Henry G. Manne, Economic Aspects of Required Disclosure Under Federal Securities Law, in WALL STREET IN TRANSITION 21, 78 (Henry G. Manne & Ezra Solomon eds., 1974). This view has persisted in the literature until this day. See, e.g., Boyd Kimball Dyer, Economic Analysis, Insider Trading, and Game Markets, 1992 UTAH L. REV. 1, 23-24 (asserting that "[p]rohibiting insider trading ... does not prevent an insider from obtaining an advantage from inside information by 'not trading,'" and that "[t]he problem of 'insider not trading' is not solvable"); Reinier Kraakman, The Legal Theory of Insider Trading Regulation in the United States, in EUROPEAN INSIDER DEALING 39, 48 (Klaus J. Hopt & Eddy Wymeersch eds., 1991) (asserting that by postponing liquidity trades insiders can earn excess returns); Saul Levmore, Securities and Secrets: Insider Trading and the Law of Contracts, 68 VA. L. REV. 117, 119 (1982) (arguing that "requiring outsiders to take investment risks blindly—while knowledgeable insiders avoid these risks by abstention—may be as unfair as allowing insiders to trade as they wish"); Saikrishna

The example presented in the Introduction can be used to illustrate these commentators' thinking. Suppose that the CEO of ABC Corp. intends to sell one million shares Monday afternoon. On Monday morning, several hours before the planned sale, the CEO learns that last quarter's earnings are substantially higher than expected. The stock is trading at \$10 per share. The earnings announcement, to be released Tuesday, is likely to cause the market price to increase significantly. The CEO abstains from selling until the earnings are released.³⁰ The earnings are released on Tuesday, boosting the stock price to \$12. The CEO then sells her one million shares for \$12 each on Wednesday, receiving a total of \$12 million.

Compare the abstaining CEO to a similarly situated public shareholder who also intends to sell one million shares for \$10 on Monday afternoon but lacks the same inside information. Unaware that the stock price is likely to increase Tuesday, the public shareholder does not abstain from selling the stock on Monday. Instead, he sells his shares for \$10 per share Monday afternoon, receiving a total of \$10 million. Inside information thus enables the CEO to make \$2 million more than the similarly situated public shareholder. The CEO does not violate Rule 10b-5, however, because the CEO is not *trading* while in possession of inside information. She is *abstaining* on inside information, and trades only once the information has been released and has become reflected in the stock price.

Not surprisingly, there is evidence consistent with the hypothesis that insiders use nonpublic information to abstain from unfavorable trades. For example, insiders of over-the-counter (OTC) listed firms who know their shares will be listed shortly on the NYSE or AMEX postpone sales until after the relisting announcement.³¹ Insiders reduce their sales after receiving

Prakash, *Our Dysfunctional Insider Trading Regime*, 99 COLUM. L. REV. 1491, 1503 n.53 (1999) (remarking that insider abstention enables an insider to use her informational superiority to her advantage). Judge Richard Posner also had argued that abstention creates a loophole from which insiders can systematically benefit. *See* RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW § 14.10, at 459-60 (5th ed. 1998). Judge Posner subsequently accepted my analysis after reading a working paper of this Essay, and he cites that working paper in the most recently published edition of his work. *See* RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW § 14.10, at 434 n.3 (6th ed. 2003). In the course of discussing other issues in insider trading, two articles, one by myself and one by Mark Klock, briefly questioned the received wisdom on insider abstention. *See* Fried, *supra* note 11, at 337-40; Mark Klock, *Mainstream Economics and the Case for Prohibiting Inside Trading*, 10 GA. ST. U. L. REV. 297, 332-33 (1994). But neither provided a systematic analysis of the subject.

^{30.} In certain cases, a CEO wishing to sell stock might be able to accelerate the announcement instead of waiting for the good news to be released at the originally scheduled time. This would enable her to sell the shares earlier. There are likely to be cases, however, in which the information cannot be released early. For example, the information might not be compiled completely yet, or competitive reasons might require that the announcement be delayed until a particular date.

^{31.} See, e.g., Asjeet S. Lamba & Walayet A. Khan, Exchange Listings and Delistings: The Role of Insider Information and Insider Trading, 22 J. FIN. RES. 131, 144 (1999).

advance notice of an imminent leveraged buyout offer.³² Managers also sell heavily after making stock-price-boosting earnings forecasts, and buy heavily after making stock-price-depressing earnings forecasts.³³ Generally, insider selling tends to take place after there have been positive abnormal returns, and insider buying tends to take place after there have been negative abnormal returns.³⁴ These trading patterns are consistent with insiders' abstaining on nonpublic information until the information is released and the price becomes more favorable to them.

Because of this "abstention problem," legal commentators—both those favoring insider trading regulation and those opposed to it—have argued that insiders retain an advantage over public shareholders even if the insiders are prevented from trading on nonpublic information. For example, Henry Manne, perhaps the most well-known academic critic of insider trading regulation, has written:

A failure to sell cannot be a violation of the SEC's Rule 10b-5, because there has been no securities transaction....

The upshot of all this is that people can make abnormal profits in the stock market simply by knowing when *not* to buy and when *not* to sell... And this is a form of insider trading that no one can do anything about.³⁵

Similar views have been expressed by commentators favoring even stricter regulation of insiders. For example, according to Professor Stephen Salbu, "'[I]nsider abstention'... is indistinguishable from [insider trading] in terms of fairness and equality of market participation.... Unfortunately... it is both legally and logistically difficult to regulate the use of inside information as a factor in the decision to abstain from trading."³⁶ This view is held outside of the United States as well. A number of German commentators, for example, have argued that insider abstention should be outlawed because it involves as much exploitation of inside information as insider trading.³⁷

^{32.} See, e.g., W.V. Harlow & John S. Howe, Leveraged Buyouts and Insider Nontrading, FIN. MGMT., Spring 1993, at 109, 117-18.

^{33.} See Christopher F. Noe, Voluntary Disclosures and Insider Transactions, 27 J. ACCT. & ECON. 305, 306 (1999).

^{34.} Ji-Chai Lin & John S. Howe, *Insider Trading in the OTC Market*, 45 J. FIN. 1273, 1278 (1990); H. Nejat Seyhun, *Insiders' Profits, Costs of Trading, and Market Efficiency*, 16 J. FIN. ECON. 189, 196 (1986).

^{35.} Manne, supra note 8, at 938.

^{36.} Salbu, supra note 9, at 333-34 (footnote omitted).

^{37.} See, e.g., Hartmut Krause, The German Securities Trading Act (1994): A Ban on Insider Trading and an Issuer's Affirmative Duty To Disclose Material Nonpublic Information, 30 INT'L LAW. 555, 572-73 (1996) (reporting that other commentators have suggested that the German Securities Trading Act's prohibition against exploitation of inside information "also extends to

B. Why the Conventional Wisdom Is Wrong: A Numerical Example

This Section uses a numerical example to explain why the conventional wisdom about insider abstention is wrong. The following Section presents a simple formal model to illustrate the distributional effects of insiders' ability to trade or abstain on nonpublic information in a variety of informational and legal environments.

Consider again the CEO of ABC Corp. and the similarly situated public shareholder, both of whom intend to sell one million shares Monday afternoon. In the example above, the CEO learns Monday morning that earnings are substantially higher than expected and that this good news will be released Tuesday. The market price on Monday is \$10 per share. She abstains from selling until after the good news is released and the price has risen to \$12 per share. She thus makes \$2 million more selling her stock than the similarly situated public shareholder who, not knowing of the imminent announcement, sells his one million shares for \$10 per share. As this example illustrates, an insider planning to sell shares can earn higher returns than the similarly situated public shareholder by abstaining from selling when she learns that *good* news will emerge shortly and boost the stock price.

But suppose the insider intending to sell shares learns that *bad* news will emerge shortly and reduce the stock price. If this information is considered "material," selling those shares while the bad news is not yet public would violate Rule 10b-5. Thus, the insider is prohibited from selling her shares until the bad news has been released and become reflected in the stock price. As a result, the insider must postpone the sale until the bad news is disclosed and sell her shares at the lower, postdisclosure price.³⁸

Suppose, for example, that on Monday morning, the CEO of ABC Corp. learns that last quarter's earnings were substantially lower than expected. The earnings announcement, which is to be released Tuesday, is likely to cause the stock price (currently \$10) to drop significantly. The CEO cannot sell her shares on Monday afternoon while in possession of

insiders who, with full knowledge of the facts, abstain from transactions they would have carried out had they not possessed inside information," but arguing that "there should be no grounds to punish loss-avoiding insider abstention"); Peter M. Memminger, *The New German Insider Law: Introduction and Discussion in Relation to United States Securities Law*, 11 FLA. J. INT'L L. 189, 216 (1996) (asserting that although "it would have been sound from a theoretical point of view to include a provision covering nonselling or nonpurchasing [on inside information], the [German Securities Trading] Act's limitation to affirmative acts seems justifiable [because of enforcement limitations]").

^{38.} Cf. Jon A. Garfinkel, New Evidence on the Effects of Federal Regulations on Insider Trading: The Insider Trading and Securities Fraud Enforcement Act (ITSFEA), 3 J. CORP. FIN. 89 (1997) (reporting that following the toughening of insider trading sanctions in 1988, corporate insiders were more likely to postpone liquidity sales until after negative earnings surprises).

nonpublic information indicating that the stock price will fall. She is forced, therefore, to abstain from selling until the earnings are released. The earnings are released on Tuesday, reducing the stock price to \$8. The CEO then sells her one million shares at a price of \$8 per share for a total of \$8 million.

Compare the CEO to the similarly situated public shareholder who also intends to sell one million shares for \$10 on Monday afternoon but lacks the same inside information. There is no reason for the public shareholder to delay his trade. He sells his shares for \$10 each on Monday afternoon, for a total of \$10 million. The receipt of inside information therefore costs the CEO \$2 million.

Thus, in the good news scenario, an insider planning to sell shares can make herself better off than a similarly situated public shareholder by abstaining from selling until the good news emerges and boosts the stock price. But in the bad news scenario, the insider is compelled to abstain from selling and thereby is made worse off than the similarly situated outsider, who is free to sell his shares before the price has dropped. In short, the insider's ability to abstain on nonpublic information indicating that a planned trade would be unfavorable merely compensates the insider for her inability to proceed with a trade after learning nonpublic information indicating that the planned trade would be favorable.

Again, I am not claiming that insiders currently are unable to trade while in possession of inside information. As I explained earlier, Rule 10b-5 does not always deter insiders from trading illegally on material inside information. Moreover, Rule 10b-5 permits trading while in possession of important but "sub-material" information. Rather, my purpose is to attack the conventional wisdom about insider abstention—that even insiders unable to trade while in possession of nonpublic information could beat the market by using nonpublic information to decide when not to trade. Debunking the conventional wisdom requires me to show only that insiders unable to trade while in possession of inside information could not outperform public shareholders through insider abstention.

C. The Model

I now present a model for analyzing insiders' expected returns under a variety of assumptions about insiders' access to nonpublic information and their ability to trade and abstain while aware of inside information. I first use the model to examine an insider's expected trading returns when she is unaware of nonpublic information at the time she decides whether or not to go forward with a previously planned trade. I then assume that the insider becomes aware of nonpublic information before executing the previously planned trade, and analyze her expected returns under three trading environments: (1) where the insider is able either to trade or to abstain while aware of nonpublic information, (2) where the insider is able to abstain but not to trade while aware of nonpublic information, and (3) where the insider is able neither to abstain nor to trade while aware of nonpublic information.

1. Framework of Analysis

Consider a corporation, ABC, that has a single insider, CEO. At time T_0 , CEO decides tentatively to sell (or to buy) ABC shares. The trade would be effected at time T_2 . Whether or not at time T_2 CEO sells (or buys) ABC shares depends on two factors: (1) the nonpublic information, if any, CEO receives beforehand at time T_1 ; and (2) the legal restrictions, if any, on CEO's ability to trade (or abstain from trading) in ABC shares at time T_2 .³⁹

If CEO sells ABC shares at time T_2 , she uses the proceeds to buy shares of a market-wide index fund. She then holds those fund shares until she liquidates them at time T_3 .⁴⁰ If CEO abstains from selling ABC shares at time T_2 , she holds those shares until time T_3 . If CEO buys ABC shares at time T_2 , she sells shares in the market-wide index fund to finance the purchase and holds ABC shares until she sells them at time T_3 . If CEO abstains from buying ABC shares, she holds the market-wide index fund shares (that she would have sold to purchase ABC shares) until time T_3 . The sequence of events is depicted in the following timeline.

FIGURE 1. SEQUENCE OF EVENTS



Denote as M the expected return of the market (and of the market-wide index fund) between times T_2 and T_3 . If CEO becomes aware of nonpublic information at time T_1 , that nonpublic information will indicate whether ABC shares are likely to outperform (or underperform) the market between

^{39.} The results would be the same if times T_0 and T_1 were reversed (e.g., CEO first learns inside information and then learns of an investment opportunity that requires her to sell ABC shares), or if times T_0 , T_1 , and T_2 were all collapsed into a single point in time.

^{40.} I assume that CEO's trading is anonymous and does not affect the market price of any securities.

times T_2 and T_3 .⁴¹ For ease of exposition, I assume the information, if any, indicates with certainty whether ABC shares will outperform or will underperform the market.⁴²

Denote the ex ante likelihood (as of time T_0) that ABC shares will outperform the market between times T_2 and T_3 as p, where 0 . Theex ante likelihood that ABC shares will underperform the market between $times <math>T_2$ and T_3 is therefore denoted as 1 - p. When ABC outperforms the market, the expected "abnormal" positive return (the degree to which ABC is expected to beat the market) is denoted as x, where x > 0. When ABC underperforms the market, the expected abnormal negative return (the degree to which ABC is expected to underperform the market) is denoted as y, where y > 0. I assume that at time T_0 , ABC's expected return between time T_2 and time T_3 is neither lower nor higher than the market's expected return during that period.⁴³ That is, p(M + x) + (1 - p)(M - y) = M or, equivalently, px = (1 - p)y.

Below, I examine CEO's expected return at time T_0 under varying assumptions about her information set and her ability to trade and abstain while aware of inside information.

2. CEO Lacks Inside Information

I begin by considering the scenario in which CEO does not have any nonpublic information bearing on the value of ABC shares when deciding at time T_2 whether to go forward with her trade. In other words, CEO is in the same position as the typical public shareholder trading in ABC shares. Under these conditions, CEO should not be able to beat the market.

We first examine the case in which CEO intends to sell, and then the scenario in which she intends to buy.

^{41.} There could be a third possibility: The nonpublic information indicates that ABC shares are likely to generate the market return. Omitting this possibility does not affect any of the analysis.

^{42.} The assumption of certainty is made only for simplicity and is not necessary for the results generated by the model. The results would be the same if the information were merely probabilistic. For example, the results would be the same if the "good news" information indicated that there was a 70% chance that ABC would outperform the market and a 30% chance that ABC would underperform the market, and the "bad news" information indicated that there was a 70% likelihood that ABC would underperform the market and a 30% likelihood that ABC would outperform the market. The results also would be the same if an insider's ability to process the inside information were limited and, as a result, the insider were not always correct in her assessment as to whether or not ABC would outperform the market.

^{43.} If ABC's expected return, based on public information, were either higher or lower than the market return, investors would either bid up or bid down the stock price until the price was such that ABC's expected return equaled that of the market. For convenience, I assume that investors are risk-neutral, and therefore are interested only in the expected returns of investments. Adjusting the expected return of ABC shares for risk would not change the overall result.

Selling. Suppose at time T_0 CEO decides to sell ABC shares at time T_2 . Lacking any inside information at time T_1 indicating that she should not sell ABC shares, CEO goes forward with the sale at time T_2 and invests the sale proceeds in the market-wide index fund. Accordingly, CEO expects to earn M, the market return, between times T_2 and T_3 .

	CEO's trades	Expected return
ABC to outperform	Sells ABC Buys market index	М
ABC to underperform	Sells ABC Buys market index	М

TABLE 1. CE	O SELLS	WITHOUT	INSIDE	INFORM	ATION
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Buying. Next consider the case in which, at time T_0 , CEO becomes inclined to buy ABC shares at time T_2 . In the absence of any inside information at time T_1 indicating that she should abstain from the purchase, CEO sells index fund shares and buys ABC shares. If ABC outperforms the market, CEO will expect to earn a return of M + x. If ABC underperforms the market, CEO will expect to earn a return of M - y. By assumption, at time T_0 ABC's expected return between times T_2 and T_3 is that of the market. CEO therefore expects to earn the market return between times T_2 and T_3 on the ABC shares she purchases.

	CEO's trades	Expected return
ABC to outperform	Sells market index Buys ABC	M + x
ABC to underperform	Sells market index Buys ABC	<i>M</i> - <i>y</i>

TABLE 2. CEO BUYS WITHOUT INSIDE INFORMATION

Thus, when CEO is unaware of any inside information, her expected return from either buying or selling ABC shares at time T_2 equals M, the expected market return. This result is not surprising. Insiders trading

3. CEO Abstains and Trades While Aware of Inside Information

Now suppose CEO receives nonpublic information at time T_1 bearing on the expected performance of ABC shares between times T_2 and T_3 . Under the assumption that CEO receives nonpublic information, I will examine CEO's expected return under three trading environments: (1) where CEO is able either to trade or to abstain while aware of nonpublic information, (2) where CEO is able to abstain but not to trade while aware of nonpublic information, and (3) where CEO can neither abstain nor trade while aware of such information. In each scenario, I assume that at time T_1 CEO always receives nonpublic information indicating either that ABC shares will outperform the market between times T_2 and T_3 or that ABC shares will underperform the market during that period. (The results of the analysis would not change if in each of these scenarios CEO sometimes received no inside information at time T_1 bearing on the expected return of ABC shares. For ease of exposition, I therefore omit this possibility.)

This Subsection examines CEO's expected returns from trading in a world where CEO can either trade or abstain from trading ABC shares at time T_2 while aware of nonpublic information bearing on ABC's expected return between times T_2 and T_3 . Currently, there are likely to be many circumstances where insiders trade while in possession of nonpublic information. As noted in Section II.B, Rule 10b-5 permits an insider to trade while in possession of valuable nonpublic information as long as that information is not considered "material." In addition, Rule 10b-5 may fail to deter an insider from trading while in possession of "material" nonpublic information when the likelihood of apprehension is very low. For purposes of this analysis, however, it does not matter why CEO is able to trade while aware of inside information. I simply assume that CEO is able both to trade and to abstain while aware of nonpublic information, and examine her expected returns under such a scenario.

Selling. Consider first the case in which CEO intends to sell ABC shares. If CEO learns at time T_1 that ABC will outperform the market between times T_2 and T_3 , she will not effect her planned sale of ABC shares at time T_2 . Instead, she will retain those shares and sell them at time T_3 , after ABC has outperformed the market. Her expected return between times T_2 and T_3 is therefore M + x.

If, on the other hand, CEO learns at time T_1 that ABC will underperform the market, at time T_2 she will sell her ABC shares as she had intended at time T_0 and buy shares in the market-wide index fund. Consequently, her expected return between times T_2 and T_3 is M, the expected market return.

	CEO's trades	Expected return
ABC to outperform	Cancels sale of ABC Holds ABC	M + x
ABC to underperform	Sells ABC Buys market index	М

TABLE 3. CEO CAN ABSTAIN OR SELL ON INSIDE INFORMATION

Recall that the probability that ABC will outperform the market is p. Thus, in a scenario where CEO learns inside information about ABC before carrying out an intended sale of ABC shares, and is able to abstain or trade while aware of that inside information, her expected return as of time T_0 is M + px,⁴⁴ which is higher than the expected market return.

Note that if CEO learns that ABC will outperform the market, she might not only cancel her sale of ABC shares but also buy additional shares (or call options on ABC stock). These purchases would further boost her trading profits. Similarly, if CEO learns that ABC will underperform the market, she might not only go through with her planned sale of ABC shares but also sell additional shares.⁴⁵ The important point, however, is that if CEO merely abstains from selling when she learns good news and effects her previously planned sale when she learns bad news, she will expect, on average, to beat the market.

Buying. Next consider the case in which at time T_0 CEO intends to buy ABC shares at time T_2 . If, at time T_1 , CEO learns ABC will outperform the market, she proceeds to buy the stock and expects a return of M + x. If, on the other hand, CEO learns that ABC will underperform the market, she abstains from purchasing the stock and remains invested in the market-wide index fund. In this case, her expected return between times T_2 and T_3 is M.

^{44.} CEO's expected return before knowing whether the news is good or bad is p(M+x) + (1-p)M, which simplifies to M + px.

^{45.} In the United States, a CEO or any other high-ranking officer or director is not permitted to sell short shares of her firm or to buy put options on its stock. *See* Securities Exchange Act of 1934 § 16(c), 15 U.S.C. § 78p(c) (2000). But other types of insiders (such as lower-level employees) do not face this per se prohibition.

	CEO's trades	Expected return
ABC to outperform	Sells market index Buys ABC	M + x
ABC to underperform	Cancels purchase of ABC Holds market index	М

TABLE 4. CEO CAN ABSTAIN OR BUY ON INSIDE INFORMATION

Thus, after tentatively deciding to buy but before learning whether ABC will outperform or underperform the market, CEO expects a return of M + px between times T_2 and T_3 , which is higher than the expected market return (and, incidentally, equal to her expected return when she intends to sell rather than buy ABC stock).

Of course, if CEO plans to buy stock and then learns good news, she might consider buying even more stock or call options. Similarly, if she learns bad news, she might not only abandon her plan to buy shares, but might also sell other shares. The critical point here is that if an insider who had planned to buy stock simply abstains from or proceeds with the purchase based on subsequently acquired nonpublic information, she will expect to beat the market.

4. CEO Abstains but Cannot Trade While Aware of Inside Information

I now consider CEO's trading performance under a regime in which she is able to abstain but not trade while aware of inside information. According to the conventional wisdom, insiders could still outperform public shareholders under such a regime because of their ability to abstain on nonpublic information. As the model now demonstrates, the conventional wisdom is wrong: Insiders who can abstain but not trade while in possession of nonpublic information cannot systematically beat the market.

Selling. Begin with the situation in which CEO plans, at time T_0 , to sell ABC shares at time T_2 . At time T_1 , she receives inside information indicating either that ABC will outperform the market or that it will underperform the market. If she receives information indicating ABC will outperform the market, CEO abstains from selling ABC shares and expects to earn a return of M + x on those shares between times T_2 and T_3 .

If she instead learns bad news, CEO will wish to proceed with her planned sale but cannot because she is aware of inside information indicating the stock price will soon fall. Forced to retain her ABC shares, CEO will expect to earn a return of M-y.



	CEO's trades	Expected return
ABC to outperform	Cancels sale of ABC Holds ABC	M + x
ABC to underperform	Must cancel sale of ABC Holds ABC	M-y

Under this abstain/no-trade regime, when CEO learns inside information after deciding to sell ABC shares, she will either choose or be forced to retain those shares. Because by assumption the expected return on ABC shares at time T_0 equals the expected market return, CEO expects, as of time T_0 , to earn the market return.⁴⁶

Buying. Next consider the case in which CEO plans, at time T_0 , to buy ABC shares. If she learns good news—that ABC will outperform the market—she cannot effect her planned purchase under a regime prohibiting trading while aware of inside information. As a result, CEO must hold on to the shares in the market-wide index fund that she would have sold to

^{46.} One might ask why CEO would ever plan to sell ABC shares under a regime that prohibits trading while aware of inside information. If CEO learns good news before selling, she will choose to hold her shares. If she learns bad news, she will be prohibited from selling her shares. In either scenario, CEO will abandon the intended sale. It thus does not seem rational for CEO to plan to sell ABC shares in the first instance.

This inconsistency arises from the simplifying assumption that CEO either (1) learns good news or (2) learns bad news. One could eliminate this inconsistency, and make the model more realistic, by incorporating a third possibility—that CEO receives no nonpublic information bearing on the value of ABC shares. That is, CEO receives (1) good news, (2) bad news, or (3) no news. Under a regime prohibiting trading while aware of inside information, CEO would neither choose nor be forced to abandon her planned sale of ABC shares in the scenario where she receives no news. Thus, as long as there is a possibility that CEO receives no news, it will be rational for her to form a plan to sell shares under such a regime.

As I noted earlier, incorporating this third possibility—that the insider receives no nonpublic information bearing on the value of her firm's shares—would not change the results under any of the trading environments being studied. Thus, under a regime where an insider can abstain but not trade while aware of uonpublic information, the insider still would expect to earn the market return in selling her shares. Incorporating this third possibility into the buying scenario, which I discuss shortly, also would have no effect on the result.

finance the purchase of ABC shares. She therefore anticipates earning the expected market return, M.

If CEO learns bad news about ABC, she will choose to abstain from purchasing ABC shares. She will hold her index fund shares and expect to earn M. Thus, under a regime that prevents trading while in possession of inside information but permits insider abstention, when CEO is inclined to buy shares she will expect to earn M, both when she learns good news and when she learns bad news.

	CEO's trades	Expected return
ABC to outperform	Must cancel purchase of ABC Holds market index	М
ABC to underperform	Cancels purchase of ABC Holds market index	М

TABLE 6. CEO CAN ABSTAIN BUT NOT BUY ON INSIDE INFORMATION

Consequently, an insider who can abstain but not trade while in possession of nonpublic information cannot expect to beat the market, whether the insider is inclined to sell shares or to buy them. The widely held belief that insiders can earn higher trading returns than public shareholders merely by abstaining on nonpublic information is incorrect. To outperform public shareholders, insiders must be able to trade while in possession of nonpublic information.

It is worth noting the difference between the trading environment studied here—one in which insiders can abstain but not trade while aware of nonpublic information—and Rule 10b-5, the regime that currently governs insider trading. Although insiders in this trading environment can abstain but not trade while aware of *any* nonpublic information, Rule 10b-5 prohibits trading only if the person is aware of "material" inside information. Consequently, Rule 10b-5 permits an insider to abstain but not to trade while aware of "material" nonpublic information, and thus prevents insiders from beating the market by using such information. If the materiality standard were low enough to cover all nonpublic information indicating that the stock would beat or underperform the market, and if Rule 10b-5 could be fully enforced, it would have the same effect as the trading environment studied here: Insiders prevented from trading on material nonpublic information could not beat the market.

5. CEO Can Neither Abstain nor Trade While Aware of Inside Information

As we saw in Section A, commentators on both sides of the insider trading debate have concluded that even if insiders were unable to trade while in possession of nonpublic information, their ability to engage in insider abstention would enable them to outperform public shareholders. Indeed, commentators critical of insider trading have argued that it would be desirable, at least in principle, to prevent insiders from engaging both in insider trading and in insider abstention.⁴⁷ I have just shown that if insiders cannot trade while aware of nonpublic information, insider abstention does not enable them to beat the market over time. I now use the model to show that if insiders can neither trade *nor* abstain while aware of nonpublic information, they will systematically earn below-market returns.

Selling. Suppose at time T_0 CEO plans to sell ABC shares at time T_2 . If she learns good news about ABC at time T_1 , she will wish to abstain from selling her ABC shares at time T_2 . But under a no-abstain/no-trade regime, she is not permitted to abstain on such information. As a result, she is forced to sell her shares. She invests the proceeds in the market-wide index fund and expects to earn a return of M, the expected market return. If at time T_1 she learns bad news about ABC, she cannot sell the shares because she is aware of inside information indicating the trade would be favorable. Forced to hold the shares, she expects a return of only M - y.

TABLE 7. CEO CANNOT ABSTAIN OR SELL	WHILE AWARE
OF INSIDE INFORMATION	

	CEO's trades	Expected return
ABC to outperform	Must sell ABC Buys market index	М
ABC to underperform	Must cancel sale of ABC Holds ABC	M– y

Before knowing whether there is good or bad news, CEO thus expects to earn a return of M - (1 - p)y,⁴⁸ which is less than the expected market return. The reason CEO expects to earn a below-market return is that the

^{47.} See, e.g., Memminger, supra note 37, at 215-16; Salbu, supra note 9, at 333-34.

^{48.} Because the probability that ABC will outperform the market is p, CEO expects a return of pM + (1-p)(M-y), which simplifies to M - (1-p)y.

no-abstain/no-trade regime prevents her from going forward with a sale of ABC shares when she learns bad news, and fails to compensate by allowing her to abstain from the sale when she learns good news.

Buying. Now suppose that at time T_0 CEO plans to buy ABC shares at time T_2 . If CEO learns good news about ABC at time T_1 , she will want to proceed with the purchase. Under the no-abstain/no-trade regime, however, she will not be permitted to buy ABC shares while aware of good news. As a result, CEO will hold her shares in the market-wide index fund and expect to earn a return of M.

If she learns bad news about ABC at time T_1 , she will wish to abstain from the purchase. But under the no-abstain component of the no-abstain/no-trade regime, she will be forced to purchase the stock. She will thus expect to earn a return of M-y.

 TABLE 8. CEO CANNOT ABSTAIN OR BUY WHILE AWARE

 OF INSIDE INFORMATION

	CEO's trades	Expected return
ABC to outperform	Cancels purchase of ABC Holds market index	М
ABC to underperform	Must purchase Sells market index	M-y

Before knowing whether there is good news or bad news, CEO expects to earn a return of M - (1 - p)y, the same expected return as in the selling scenario. Thus, as is the case of an insider intending to sell shares, an insider intending to buy shares in the no-abstain/no-trade regime expects to underperform the market.

D. Possible Asymmetry in Receipt of Inside Information

The analysis presented in Sections B and C made certain assumptions about the flow of nonpublic information to an insider. In particular, it assumed that when the insider has access to nonpublic information, she learns either good news (that her firm's stock will outperform the market) or bad news (that the stock will underperform the market). This Section responds to a possible objection to this informational assumption—that corporate insiders might be more likely to learn of good news (when such news exists) than to learn of bad news (when such news exists), or vice versa.

The numerical example in Section B and the model presented in Section C both assumed that ABC's CEO receives inside information before effecting an intended purchase or sale of ABC shares. That information indicates either that (1) ABC is likely to outperform the market, or (2) ABC is likely to underperform the market. CEO then acts on this information (subject to any restrictions on trading or abstaining while aware of inside information). Under this informational assumption, we have seen that when CEO is unable to trade while in possession of inside information, she cannot expect to beat the market by using inside information to abstain from trading. One might argue, however, that insiders are more likely to receive one type of news than the other. For example, insiders might be more likely to learn of good news (when such news exists) than to learn of bad news (when such news exists). As I explain below, such an asymmetry in nonpublic information, combined with an asymmetry in trading (an insider sells more than he buys, or vice versa), would appear to enable the insider to beat the market merely by abstaining on nonpublic information.

Suppose, for example, that CEO sells shares but never buys them. Assume also, for simplicity, that there is always nonpublic information bearing on the value of ABC shares. That information indicates either that ABC will beat the market (good news) or that ABC will underperform the market (bad news). Finally, assume that CEO learns all undisclosed good news but never learns bad news before it is disclosed. For example, imagine CEO receives all of her information through a loyal assistant. Before selling any shares, CEO instructs the assistant to gather from high-level managers any nonpublic information bearing on the value of the firm's stock. CEO tells the assistant to reveal the information to CEO if, and only if, it indicates ABC will outperform the market. Otherwise, the assistant should remain silent. If the assistant reports that ABC will outperform the market, CEO abstains from selling the ABC shares and expects to earn an abnormal positive return holding those shares. If the assistant is silent, CEO sells the stock, buys shares in a market-wide index fund, and expects to earn the market return.

TABLE 9. CEO CAN ABSTAIN BUT NOT SELL ON INSIDE INFORMATION (AND HER ASSISTANT DISCLOSES ONLY GOOD NEWS)

	CEO's trades	Expected return
Assistant discloses ABC will outperform	Cancels sale of ABC Holds ABC	M + x
Assistant is silent	Sells ABC Buys market index	М

It would appear in this case that CEO could expect to beat the market simply by insider abstention. If CEO plans to sell her ABC shares and then learns good news, she abstains until the good news is announced and sells for a higher price. If CEO intends to sell and the assistant reveals no good news, she can, it would seem, proceed with her sale, even though there may be undisclosed bad news. If so, CEO would benefit by abstaining on good news, and would not be burdened by the inability to sell when there is bad news. Under these circumstances, she would beat the market on average.

Under an abstain/no-trade regime, however, CEO would not be permitted to sell ABC shares when the assistant is silent. If CEO's assistant provides CEO with nonpublic information whenever that information indicates ABC will outperform the market, the assistant's silence implies that there is no undisclosed information that ABC will outperform the market. This leaves only one possibility: that there is nonpublic information indicating that ABC will underperform the market. CEO can thus infer from the assistant's silence that there is bad news. In other words, the assistant's silence itself is nonpublic information bearing on the expected return of ABC's shares. Under a regime where CEO is unable to trade while aware of nonpublic information indicating that the trade will be favorable, CEO must therefore abstain from selling ABC shares when her assistant is silent, CEO must hold the ABC shares and will expect to earn a below-market return.

The example assumed that CEO always learns of undisclosed good news. But the result is the same if CEO learns good news at some times but not at other times. Suppose, for example, that (1) when there is good news (that ABC will outperform the market), there is only a probability g (where 0 < g < 1) that CEO will learn of that good news from the assistant; and (2) when there is bad news (that ABC will underperform the market), CEO never learns the underlying information until it is made public. And suppose, as in the model, that the likelihood there is good news is p; the likelihood there is bad news is 1 - p; the good news causes ABC to beat the market by x; and the bad news causes ABC to underperform the market by y (where px = (1 - p)y). Now, CEO cannot infer from the assistant's silence that ABC will underperform the market, because there is some likelihood that there is good news of which CEO is not aware.

But the absence of good news from the assistant still provides nonpublic information about the expected return of ABC: that, on an expectation basis, ABC will underperform the market. In particular, the expected return of ABC relative to the market, conditional on the assistant not revealing good news, is -pgx/(1-pg).⁴⁹ As a result, CEO still has inside information indicating that, on an expectation basis, she will earn a higher return by selling her shares than by keeping them. And in a regime where insiders cannot sell shares while aware of any nonpublic information indicating that the stock is likely to underperform the market, CEO could not go forward with her sale. Rather, she would have to hold on to her shares until she no longer had inside information indicating the sale would be favorable. One could make the example more complex by assuming that CEO sometimes learns of bad news and that sometimes there is no inside information bearing on the value of ABC's shares. But the result would be the same: CEO could not expect to beat the market simply by abstaining on nonpublic information.

To be clear, I am not claiming that the assistant's silence in this example would be considered "material" nonpublic information under Rule 10b-5. Nor am I advocating that such information *should* be considered "material" under Rule 10b-5. My claim is only that if insiders cannot sell (or buy) while in possession of any nonpublic information indicating that the stock is likely to underperform (or outperform) the market, they cannot beat the market even if they can abstain on nonpublic information. Put differently, insiders who abstain on nonpublic information can beat the market only if they also are able to trade while aware of nonpublic information indicating that the trade is favorable to them.

$$\frac{p(1-g)}{P_n}x-\frac{(1-p)}{P_n}y.$$

Call this expected abnormal return E_n . Because by assumption the expected return of ABC is that of the market, and thus px = (1 - p)y, the second term of E_n is equivalent to px/P_n . E_n can then be simplified to

$$\frac{p(1-g)}{P_n}x-\frac{p}{P_n}x,$$

which in turn can be reduced to $-pgx/P_n$ or -pgx/(1 - pg).

^{49.} ABC's expected return, conditional on the assistant's silence, is calculated as follows. The probability that the assistant is silent is p(1-g) + (1-p), which equals 1 - pg. Call this probability P_n . The probability that there is good news even though the assistant is silent is $p(1-g)/P_n$. The probability that there is bad news when the assistant is silent is $(1-p)/P_n$. The expected abnormal return of ABC shares, given the assistant's silence, is therefore

E. The Effects of Insider Abstention on Managers' Incentives

Although a complete study of the effects of insider abstention on managers' incentives is beyond the scope of this Essay, a preliminary analysis suggests that managerial incentives are unlikely to be distorted if managers are able to abstain (but not trade) while aware of inside information. Indeed, as I explain below, managers' ability to abstain on inside information is likely to improve their incentives. Thus, reducing managers' ability to abstain on inside information is unlikely to generate efficiency benefits and may well impose efficiency costs.

Supporters of insider trading regulation have argued that insider trading can distort managerial incentives in at least four different ways: (1) by inducing managers to engage in overly risky projects designed to generate large price swings,⁵⁰ (2) by giving managers an incentive not to share information internally within the firm,⁵¹ (3) by giving managers an incentive to delay disclosure of news to the market and to generate rumors,⁵² and (4) by reducing managers' incentives to exert effort.⁵³

As I explain below, each of these four distortions is likely to arise only if managers are able to buy or sell shares at a price that does not reflect their nonpublic information. Insider abstention does not give managers this opportunity. If a manager abstains from trading until nonpublic information

^{50.} See, e.g., Frank H. Easterbrook, Insider Trading, Secret Agents, Evidentiary Privileges, and the Production of Information, 1981 SUP. CT. REV. 309, 332; see also Mark Bagnoli & Naveen Khanna, Insider Trading in Financial Signaling Models, 47 J. FIN. 1905, 1909 (1992) (explaining that management may have an incentive to act inefficiently to make insider trading profits); Roy A. Schotland, Unsafe at Any Price: A Reply to Manne, Insider Trading and the Stock Market, 53 VA. L. REV. 1425, 1448-57 (1967) (arguing that managers permitted to trade on inside information will run the company to maximize insider trading opportunities rather than to maximize shareholder value). Other commentators, however, have argued that the prospect of insider trading profits could improve risk-averse managers' project choices by rewarding them for choosing higher-risk, higher-value projects. See, e.g., Lucian Arye Bebchuk & Chaim Fershtman, Insider Trading and the Managerial Choice Among Risky Projects, 29 J. FIN. & QUANTITATIVE ANALYSIS 1 (1994) (presenting a model in which insider trading can either worsen or improve risk-averse managers' project choices).

^{51.} See, e.g., WANG & STEINBERG, supra note 15, § 2.3.2, at 34; Robert J. Haft, *The Effect of Insider Trading Rules on the Internal Efficiency of the Large Corporation*, 80 MICH. L. REV. 1051, 1064 (1982) (arguing that the ability to trade on inside information could interfere with internal firm decisionmaking processes).

^{52.} See WANG & STEINBERG, supra note 15, § 2.3.1, at 32 n.8; Stephen Bainbridge, The Insider Trading Prohibition: A Legal and Economic Enigma, 38 U. FLA. L. REV. 35, 53-54 (1986); Dyer, supra note 29, at 21.

^{53.} See, e.g., James D. Cox, Insider Trading and Contracting: A Critical Response to the "Chicago School," 1986 DUKE L.J. 628 (observing that the ability to trade on inside information might discourage managerial effort by permitting managers to profit even when news is bad); Morris Mendelson, The Economics of Insider Trading Reconsidered, 117 U. PA. L. REV. 470, 489-90 (1969) (reviewing HENRY G. MANNE, INSIDER TRADING AND THE STOCK MARKET (1966)) (same). But see Lucian Arye Bebchuk & Chaim Fershtman, The Effects of Insider Trading on Insiders' Effort in Good and Bad Times, 9 EUR. J. POL. ECON. 469 (1993) (finding that managerial effort will increase when managers get good news because they will buy more stock and will decrease when managers get bad news because they will sell stock).

emerges, the postponed purchase or sale will take place at a price that reflects that information. As a result, insider abstention is less likely than insider trading to generate these distortions.

Consider first managers' incentives to engage in excessively risky projects. Under a regime that enables managers to trade on inside information, the prospect of insider trading profits might induce managers to engage in low present value projects that have large upside potential. If managers have nonpublic information indicating that such a project will succeed, they can buy shares before the information is disclosed and sell those shares for a large profit after the news is released. If the managers have nonpublic information indicating that the project will fail, the managers can sell their shares before the information about the failure is made public. Such sales reduce the cost to managers of the project's failure. By increasing managers' payoffs from large stock price increases and protecting managers from large share price declines, insider trading might induce managers to forego good projects in favor of less desirable projects with greater variance in outcomes. In essence, insider trading might distort managers' choices of projects because it enables them to decouple their financial fate from that of the firm's shareholders.

A regime in which managers can abstain but not trade while aware of inside information is unlikely to have such effects. If managers know that a project will succeed, they can abstain from selling their shares until after the good news is released, and thus receive a price for their shares that reflects the value created by the project. But insider abstention, unlike insider trading, does not enable managers to boost their profits by buying shares shortly before the good news is released. Thus, the payoff to equity-owning managers from a good outcome is no more and no less than their pro rata share of the increase in the equity value of the firm.

Moreover, insider abstention, unlike insider trading, fails to offer managers protection on the downside. If the managers know that the project will fail, they cannot sell their shares before the bad news emerges and the stock price falls. As a result, managers bear their pro rata share of the decrease in the firm's equity value resulting from the project's failure. When the managers know the project will fail, their ability to abstain on that information enables them only to avoid the additional losses they would incur from buying more shares at a price that exceeds their actual value. Because insider abstention neither increases the payoff to managers from good outcomes nor reduces the cost to managers of bad outcomes, it is much less likely than insider trading to induce managers to choose lowvalue projects with large upsides.

Next consider the second and third potential distortions associated with insider trading—that insider trading might interfere with internal firm communications and delay disclosure to the market. The prospect of insider

trading profits might give managers an incentive to hoard and trade on inside information before revealing it to others in and outside the firm. Insider abstention does not have these adverse effects. A manager who abstains from trading until certain nonpublic information is released has no interest in delaying the release of that information to others within the firm or to the market. On the contrary, because the manager prefers to trade as soon as possible at the better price, she has an incentive to hasten the information's incorporation into the stock price by immediately transmitting the information to others.

The fourth possible distortion is that managers' ability to engage in insider trading might cause them to inefficiently reduce their level of effort. Managers learning bad news can sell their shares before that information is released and the stock price falls. The ability to sell on bad news thus reduces the cost to managers of poor performance. Consequently, managers might have less incentive to exert effort to avoid such an outcome.

Under a regime that prevents managers from trading while in possession of nonpublic information, managers' ability to abstain on such information is unlikely to reduce their incentives to exert effort. If managers exert too little effort, thereby generating bad news, they cannot sell their shares until the bad news is released. As a result, managers must bear their pro rata share of the reduction in equity value caused by their reduced effort. The cost to managers of reducing effort is thus much greater than when they are free to sell on bad news.

Indeed, insider abstention may well improve managers' incentives to exert effort by enabling managers to trade at prices that better reflect the actual value of their firms' shares. For example, suppose a CEO generates value for shareholders by increasing the firm's earnings. The earnings information has not yet been disclosed to the market. Suppose further that the CEO is planning to sell shares and wishes to sell at a price that reflects the higher earnings. The announcement of the good news, however, must be delayed. If the CEO cannot abstain on inside information, she must sell her shares at a price below their actual value. Anticipating this possibility, she has less incentive to create that value in the first instance. If the CEO can abstain until the information about the earnings is made public, she can derive greater benefit from the value she created, and thus has more incentive to create that value ex ante.

A complete study of the effects of insider abstention on managerial behavior would require a systematic comparison between the incentives created when managers can abstain but not trade while in possession of inside information and the incentives created when managers can neither abstain nor trade while aware of inside information. But the preliminary analysis offered here suggests that insider abstention is much less likely to distort managers' incentives than insider trading, and might even improve them.

F. Summary

This Part has systematically considered the distributional consequences of insider abstention and offered a preliminary examination of the effects of insider abstention on managers' incentives. As is well understood, insiders who can both abstain and trade while aware of nonpublic information are able to outperform the market. But contrary to the conventional wisdom, insiders who can abstain but not trade while in possession of nonpublic information cannot systematically outperform public shareholders. Indeed, insiders who could neither abstain nor trade while aware of nonpublic information would underperform the market. Accordingly, leveling the playing field between insiders and public shareholders does not require eliminating insider abstention. Rather, it requires only eliminating insiders' ability to trade while in possession of nonpublic information. Turning to the efficiency effects of insider abstention. Section E's preliminary examination of insider abstention's effects on managers' incentives suggests that the potential distortions caused by insider trading are unlikely to arise as a result of insider abstention. Thus, there appears to be no efficiency benefit to reducing insider abstention by managers. We are now ready to consider the policy implications of this Part's analysis.

IV. POLICY IMPLICATIONS

A. The "Possession Versus Use" Debate Under Rule 10b-5

The analysis offered above can shed useful light on the "possession versus use" debate surrounding Rule 10b-5, a debate involving the SEC, the courts, and various commentators.⁵⁴ The "possession versus use" debate concerns the mental state needed to trigger a violation of Rule 10b-5. To establish liability, is it sufficient that, at the time of the trade, the insider knowingly *possess* material nonpublic information indicating the trade would be favorable? Or must the insider *use* that information in deciding to trade?

^{54.} E.g., Allan Horwich, Possession Versus Use: Is There a Causation Element in the Prohibition on Insider Trading?, 52 BUS. LAW. 1235 (1997); Karen Schoen, Insider Trading: The "Possession Versus Use" Debate, 148 U. PA. L. REV. 239 (1999); Stuart Sinai, Rumors, Possession v. Use, Fiduciary Duty and Other Current Insider Trading Considerations, 55 BUS. LAW. 743 (2000); Lacey S. Calhoun, Note, Moving Toward a Clearer Definition of Insider Trading: Why Adoption of the Possession Standard Protects Investors, 32 U. MICH. J.L. REFORM 1119 (1999); David W. Jolly, Casenote, Knowing Possession vs. Actual Use: Due Process and Social Costs in Civil Insider Trading Actions, 8 GEO. MASON L. REV. 233 (1999).

Suppose, for example, that the CEO of ABC Corp. decides on Monday morning, when the stock is trading at \$10, to sell one million ABC shares that afternoon. Shortly before selling the shares on Monday afternoon, the CEO learns that earnings will be much lower than expected and that once this information emerges on Tuesday the stock price is likely to fall. The CEO goes ahead with her plan to sell one million shares of her stock at \$10 each. On Tuesday, the bad news emerges, and the stock price plunges to \$8. Has the CEO violated Rule 10b-5?

According to the SEC⁵⁵ and the Second Circuit,⁵⁶ trading while in knowing possession of material inside information is sufficient to give rise to a violation of Rule 10b-5.⁵⁷ But according to the Seventh, Ninth, and Eleventh Circuits, mere knowing possession is not sufficient for Rule 10b-5 liability.⁵⁸ Instead, the government must demonstrate that the insider used the information in making the decision to trade. Proof of knowing possession can, however, create a strong inference of use.⁵⁹

Participants in the "possession versus use" debate have advanced a number of policy rationales in favor of each approach.⁶⁰ In defense of the possession standard, the SEC and others have offered two main arguments against the use standard. First, the term "use" is ambiguous. To what extent must material inside information, as opposed to other factors, motivate the decision to trade for there to be "use"?⁶¹ Second, however "use" is defined, proving that an insider used a particular item of information in making a decision to trade is extremely difficult.⁶² Proponents of the "use" standard, on the other hand, argue that the "possession" standard is unfair because it penalizes traders who lack intent to defraud.⁶³

I do not intend here to establish which is the better standard overall. Rather, the purpose of this Section is to use Part III's analysis to describe the distributional effects of each standard, given that Rule 10b-5 permits insiders to abstain on material nonpublic information.

As Subsection III.C.4 demonstrated, a regime in which insiders are able to abstain on nonpublic information, but unable to trade while in possession of such information, levels the playing field between insiders and public

^{55.} See 17 C.F.R. § 240.10b5-1 (2003).

^{56.} See United States v. Teicher, 987 F.2d 112, 120-21 (2d Cir. 1993).

^{57.} An example of an insider trading statute that specifically adopts the "possession" standard is California's, which defines insider trading as buying or selling a security at a time when the insider knows material nonpublic information. *See* CAL. CORP. CODE § 25,402 (West 1977).

^{58.} See SEC v. Lipson, 278 F.3d 656, 660 (7th Cir. 2002); United States v. Smith, 155 F.3d 1051, 1066-67 (9th Cir. 1998); SEC v. Adler, 137 F.3d 1325, 1337 (11th Cir. 1998).

^{59.} See Adler, 137 F.3d at 1340.

^{60.} Participants in the debate have also advanced doctrinal arguments in favor of each approach, which I will not repeat here.

^{61.} See Teicher, 987 F.2d at 120; Schoen, supra note 54, at 281-82.

^{62.} See Schoen, supra note 54, at 279-80.

^{63.} See Jolly, supra note 54, at 249-50.

shareholders. Under such a regime, insiders could not exploit nonpublic information to beat the market. If a "use" standard were in effect, insiders would be permitted to trade while in possession of material nonpublic information indicating that the trade would be favorable—at least in those cases where the insiders were not considered to be "using" the information to trade. A regime that prohibits insiders from "using" material nonpublic information to trade but otherwise permits them both to abstain and trade while aware of material nonpublic information would enable insiders to profit from their access to material nonpublic information. Under such a regime, insiders could use material nonpublic information to beat the market and earn higher trading returns than public shareholders.

Of course, Rule 10b-5 prohibits trading on inside information only if the information is "material." Even under a "possession" standard, insiders are permitted to abstain and to trade while in possession of valuable but "sub-material" nonpublic information, and to "use" such information in deciding to trade. As a result, the possession standard still provides insiders a substantial advantage over public shareholders. But the "use" standard tilts the playing field even more sharply in favor of insiders by permitting them also to abstain and to trade while aware of *material* nonpublic information (as long as that information is not "used" in the decision to trade). To the extent greater parity between insiders and public shareholders is desirable, the "possession" standard is thus superior to the "use" standard.

B. The SEC's Rule 10b-5 Safe Harbor

Most managers of publicly traded firms receive stock options as part of their compensation. These options give managers the right to purchase their corporations' shares at a particular price. After exercising the options and purchasing shares, managers may decide to hold the stock in their portfolios. For liquidity and diversification reasons, however, they frequently sell the shares acquired upon exercising their options.

As Section A explained, the SEC takes the position that Rule 10b-5 does not require proof that insiders—including managers—actually "use" material nonpublic information in their trading decisions. Instead, proof that the insider has "knowing possession" (or "awareness") is sufficient to establish liability.⁶⁴

Because managers are often aware of material inside information, however, the SEC's interpretation of Rule 10b-5 would drastically reduce managers' ability to sell shares, including shares received as part of their

^{64.} The SEC has formally codified this position in Rule 10b5-1, 17 C.F.R. § 240.10b5-1 (2003).

compensation, for liquidity or diversification reasons. As a result, the SEC created a "safe harbor" from Rule 10b-5 liability for insiders trading (buying or selling) pursuant to a prearranged plan, irrevocable instructions to a third party, or a binding contract.⁶⁵ Under this safe harbor, insiders are allowed to trade while in possession of material nonpublic information as long as the trade is made according to a plan, irrevocable instructions, or a binding contract created at a time when the insider was not in possession of material nonpublic information. The SEC has ruled that terminating a trading plan while in possession of material inside information does not result in a loss of the safe harbor for past transactions, unless the plan termination indicates the person was not acting in good faith when he created the plan.⁶⁶

The analytical framework presented in Part III can be used to study the distributional consequences of the SEC's safe harbor. I first examine the case in which an insider enters the safe harbor through the use of either irrevocable instructions to a third party or a binding contract. I then examine the case in which the safe harbor protects the insider because the trade is made pursuant to a prearranged plan. As we will see, when an insider qualifies for the safe harbor by employing irrevocable instructions or a binding contract, she cannot outperform public shareholders through the use of material inside information. On the other hand, when an insider enters the SEC's safe harbor by employing a prearranged plan, the ability to terminate the plan while aware of material nonpublic information permits her to use material nonpublic information to increase her trading profits. This Section concludes by explaining how the SEC's safe harbor could easily be modified to prevent insiders with prearranged trading plans from using material inside information to increase their trading profits.

1. Trades Pursuant to Irrevocable Instructions or a Binding Contract

Let us consider the distributional effects of the SEC's safe harbor when an insider gives irrevocable instructions to a third party to effect a particular trade or enters into a binding contract to effect such a trade. Returning to the analytical framework introduced in Section III.C, suppose that CEO, lacking material inside information bearing on the value of ABC's shares, either gives irrevocable trading instructions to a third party or enters into a binding contract to sell ABC shares. The proceeds of the sale are to be invested in a market-wide index fund. Suppose further that after CEO gives these instructions or enters into the contract, but before any trade occurs,

^{65.} Id. § 240.10b5-1(c).

^{66.} See DIV. OF CORP. FIN., SEC, MANUAL OF PUBLICLY AVAILABLE TELEPHONE INTERPRETATIONS ex. 15(b) (Supp. IV 2001) (May 2001 interpretations), http://www.sec.gov/interps/telephone/phonesupplement4.htm.

CEO learns material nonpublic information bearing on the value of ABC shares.

If CEO learns material nonpublic information indicating that ABC will outperform the market, CEO would prefer to cancel the sale and retain the shares until the good news emerges. But if CEO has given truly irrevocable trading instructions to a third party, the third party will sell the shares. Similarly, if CEO has entered into a binding contract to sell the shares, she will be required to sell the shares.⁶⁷ The proceeds of the sale are invested in the market-wide index fund. CEO subsequently expects to earn the market return, M, on those funds.

If, on the other hand, CEO learns material nonpublic information indicating that ABC will underperform the market, the safe harbor protects CEO: The subsequent sale of ABC stock (by CEO or by a third party) does not create Rule 10b-5 liability for CEO, even though CEO trades while in possession of material nonpublic information bearing on the value of her shares. Thus, the safe harbor benefits CEO by enabling her to go forward with a trade that the SEC would otherwise consider to be in violation of Rule 10b-5. CEO then invests the proceeds of the sale in the market-wide index fund and expects to earn the market return, M, during the subsequent period.

in an	CEO's trades	Expected return
ABC to outperform	Sells ABC Buys market index	М
ABC to underperform	Sells ABC Buys market index	М

TABLE 10. SALE PURSUANT TO INSTRUCTIONS/CONTRACT

Thus, whether CEO receives material inside information indicating that ABC will outperform the market or material inside information indicating that ABC will underperform the market, CEO's shares are sold pursuant to the irrevocable instructions or binding contract. In either case, CEO expects to earn the market return, M, on her postsale portfolio. Thus, if CEO enters the safe harbor through the use of irrevocable instructions or a binding

^{67.} If CEO were to breach the contract by not selling the shares to her counterparty, the counterparty could sue for damages and recover whatever gains CEO would reap from breach. Accordingly, CEO has no incentive to breach the contract.

contract, she cannot expect to beat the market using material inside information.

Why in this case is an insider who trades while in possession of material nonpublic information unable to use such information to beat the market? The reason is as follows: The irrevocable instructions or binding contract used by the insider to qualify for the safe harbor prevent her from abstaining from a trade when material nonpublic information indicates that the trade is unfavorable. In a regime where insiders are able to abstain but not trade while aware of material nonpublic information, the expected cost to an insider of being unable to proceed with a trade after receiving material nonpublic information indicating that the trade would be favorable equals the expected benefit from being able to abstain on such information. Because the expected cost associated with required trade cancellations the expected benefit associated with self-interested trade offsets cancellations, insiders under such a regime cannot expect to outperform public shareholders using material inside information.

By allowing insiders to trade while in possession of material nonpublic information, the safe harbor eliminates the expected cost to insiders associated with required trade cancellations. All else equal, eliminating this cost would enable insiders to beat the market.

But because the insiders have entered the safe harbor through the use of irrevocable instructions or a binding contract, everything else is not equal. In particular, the irrevocable instructions or binding contract prevent insiders from abstaining on material nonpublic information. Thus, what the safe harbor gives insiders by eliminating the expected cost associated with required trade cancellations, irrevocable instructions or binding contracts take away by eliminating the expected benefit associated with self-interested trade cancellations. As a result, insiders using irrevocable instructions or binding contracts to enter the safe harbor are no better off than under a regime where insiders can abstain but not trade while in possession of nonpublic information.

In essence, the regime created when an insider uses irrevocable instructions or a binding contract to enter the safe harbor is the mirror image of Rule 10b-5. Rule 10b-5, according to the SEC, does not allow an insider to trade while aware of material nonpublic information but permits the insider to abstain on such information. This safe harbor regime permits the insider to trade while aware of material nonpublic information (as long as the trade is effected pursuant to irrevocable instructions or a binding agreement) but does not permit the insider to abstain from trading by canceling the intended trade. In either case, an insider cannot expect to beat the market using material nonpublic information.

2. Trades Pursuant to a Prearranged Plan

Let us now consider the distributional effects of the SEC's safe harbor when an insider trades according to a prearranged plan. As noted earlier, the SEC permits insiders to cancel their prearranged plans while in possession of material nonpublic information. As I explain, insiders' ability to trade while in possession of material nonpublic information when the trade is made pursuant to a prearranged plan, combined with the ability to cancel the trading plan while in possession of nonpublic information, enables insiders to outperform the market using material nonpublic information.

Returning again to Section III.C's analytical framework, suppose that CEO, lacking material inside information bearing on the value of ABC's shares, commits to selling shares according to a prearranged plan. The proceeds of the sale are to be invested in a market-wide index fund. Suppose further that after CEO creates this trading plan but before any planned trade occurs, CEO learns material nonpublic information bearing on the value of ABC shares.

If CEO learns material nonpublic information indicating that ABC will outperform the market, CEO can cancel the prearranged trading plan before the planned sale and retain the shares until the good news emerges. During this period, CEO expects to earn a return of M+x on the shares.

If, on the other hand, CEO learns material nonpublic information indicating that ABC will underperform the market, CEO can enjoy the benefit of the safe harbor: The subsequent sale of ABC stock according to the prearranged plan does not create Rule 10b-5 liability for CEO, even though CEO trades while in possession of material nonpublic information bearing on the value of those shares. CEO then invests the proceeds of the sale in the market-wide index fund and expects to earn the market return, M, during the subsequent period.

	CEO's trades	Expected return
ABC to outperform	Cancels sale of ABC Holds ABC	M + x
ABC to underperform	Sells ABC Buys market index	М

TABLE 11. SALE PURSUANT TO PREARRANGED PLAN

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In Section III.C, we assumed that there is a probability p that ABC will outperform the market. Thus CEO's expected return, as of the time she creates the prearranged plan, is M + px, which exceeds the expected market return. This result should not be surprising. As Subsection III.C.3 showed, if an insider can both trade while in possession of nonpublic information and abstain on such information, she will on average outperform the market and public shareholders.

To the extent the SEC wishes to prevent insiders from profiting from their access to material nonpublic information, permitting them to cancel prearranged trading plans while aware of such information does not serve this objective. To be sure, there is probably a limit to an insider's ability to abstain on material nonpublic information within the SEC's safe harbor. Presumably, an insider who cancels trading plans repeatedly would lose the benefit of the safe harbor.

But there seems to be little cost (in terms of inconvenience to insiders) to requiring insiders wishing to avail themselves of the safe harbor through the use of prearranged trading plans to wait until they are unaware of material nonpublic information before canceling their trading plans. Most plans involve selling small amounts of shares on a regular basis. Accordingly, there should be few liquidity or diversification costs to preventing insiders from canceling prearranged trades when they have information indicating that the trades would be unfavorable. To the extent a more level playing field between insiders and public shareholders is desired, such a waiting requirement might therefore be worth adopting.⁶⁸

V. CONCLUSION

Scholars writing on insider trading have long believed that insiders can beat the market simply by using nonpublic information to decide when *not* to trade. Using a simple model, this Essay has shown that the conventional wisdom is wrong. Insiders prevented from trading while in possession of nonpublic information cannot outperform public shareholders, even if they can use such information to abstain from trading. In fact, insiders unable to trade or abstain while in possession of nonpublic information would systematically earn lower trading profits than public shareholders.

The Essay has also offered a preliminary analysis of the effects of insider abstention on managers' incentives. It explained why insider

^{68.} As discussed in Section III.E, insider abstention by managers may well provide efficiency benefits by better aligning the interests of managers and shareholders. In particular, enabling managers to abstain from selling on good news allows them to profit fully from the value that they create for shareholders, increasing their incentives to generate such value. Preventing managers from canceling prearranged sales might reduce any such benefits. This potential cost should be considered in determining the desirability of reversing the SEC's position.

abstention is unlikely to create the same types of potential distortions as insider trading. Indeed, insider abstention tends to align managers' interests with those of shareholders, and is therefore likely to improve managers' incentives.

This Essay's analysis has important implications for current issues in insider trading regulation. First, the analysis contributes to the "possession versus use" debate by demonstrating that the "possession" standard for Rule 10b-5 liability achieves greater parity between insiders and outsiders than does the "use" standard. Second, the SEC's safe harbor permitting insiders to buy or sell shares pursuant to prearranged trading plans while in possession of material nonpublic information and to cancel the plans while aware of material nonpublic information enables insiders to profit from their access to such information. The SEC could easily eliminate insiders' advantages over public shareholders by not allowing insiders to cancel their plans after becoming aware of material nonpublic information.

More fundamentally, the analysis calls for reconsideration of established positions in the larger debate over insider trading. This Essay has shown that the failure of Rule 10b-5 to prevent insiders from using nonpublic information to abstain from trading should be seen neither as an undesirable "loophole" that needs to be closed nor as an embarrassing gap that proves the futility of insider trading regulation. I hope this work removes the shadow cast by insider abstention over the insider trading debate and helps refocus attention on the most important policy issue: the optimal regulation of insider *trading*.