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TOWARDS REDUCING THE PROFITABILITY  
OF CORPORATE INSIDER TRADING

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Jesse M. Fried\*

Abstract

Despite recent efforts by Congress and the SEC to crack down on insider trading, corporate insiders -- officers, directors, and large shareholders -- continue to make substantial profits trading on inside information. The available data suggest that access to inside information enables corporate insiders to make \$2 billion per year in "excess profits" by buying and selling the stock of their own companies. The paper identifies the structural limitations of the current regulatory system that enable corporate insiders to make these "excess profits." It then analyzes the empirical data on trading by corporate insiders in order to determine how (and to what extent) insiders exploit these limitations. Next, the paper examines a variety of measures that could be adopted to reduce the ability of corporate insiders to profit from inside information. Three different approaches are considered: (1) rules that would require corporate insiders to reveal their identities and trading intentions before trading; (2) rules that would restrict the timing and/or direction of insiders' trades; and (3) rules that would limit insiders' trading profits. Of the various rules considered, the paper finds most attractive a rule that would require insiders to publicly disclose their intended trades shortly in advance of submitting orders to their brokers. The paper shows that such a rule would substantially reduce corporate insiders' profits from trading on inside information (and in principle could eliminate those profits), would be easy to enforce, and would not impose much cost on insiders (beyond reducing their profits from inside information).

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## I. INTRODUCTION

Very few corporate or securities law issues attract as much public and academic attention as trading on "inside information."<sup>1</sup> There is a widely-held view that it is unfair for insiders to use their special access to inside information to increase their trading profits at the expense of other investors. This consensus is reflected in an elaborate system of civil and criminal laws designed to reduce the profits insiders make from such trading.

However, the government has had only limited effectiveness in reducing the profits insiders make trading on inside information. In fact, both the volume of trading by "corporate insiders"<sup>2</sup> in the stock of their own companies and the profits they make by buying and selling this stock on inside information have increased even as the government has stepped up its efforts to prevent these insiders from exploiting their access to this information.<sup>3</sup> The available data suggest that corporate insiders make at least \$2 billion per year buying and selling their own stock on inside information.<sup>4</sup>

In this paper, I explain why structural problems in the existing approach to

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<sup>1</sup> I use the term "inside information" to refer to information about a corporation that is available only to persons with positions inside the corporation.

<sup>2</sup> In this paper, the term "corporate insiders" (or "insiders") refers to those officers, directors, and shareholders required to file trading reports under Section 16(a) of the Securities Exchange Act of 1934. See *infra* note x and accompanying text.

<sup>3</sup> See Seyhun, *The Effectiveness of Insider Trading Sanctions*, 35 J. L. & ECON. 149, 172-175 (1992) (reporting that the volume of trading by corporate insiders has increased fourfold since 1984 and that "excess" returns per trade have doubled).

<sup>4</sup> See *infra* note x and accompanying text.

regulating trading<sup>5</sup> by corporate insiders severely limit its effectiveness. I also put forward an approach that would substantially reduce (and, in principle, could eliminate completely) corporate insiders' ability to use inside information to increase their trading profits: requiring corporate insiders to disclose publicly their intended trades shortly before submitting orders to their brokers (or negotiating a private transaction).<sup>6</sup> The paper then compares pre-trading disclosure to other possible approaches to reducing corporate insiders' profits from inside information and finds none to be as attractive.

For the past half century, there has been a strong consensus among the public, Congress, and the Securities Exchange Commission (SEC) that trading on inside information is unfair.<sup>7</sup> Persons whose positions give them access to information bearing

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<sup>5</sup> The focus of this paper is on trading by corporate insiders in the stock of their own companies. Thus, unless otherwise indicated, I use the term "trading" to refer to the buying and selling of stock in one's own company.

<sup>6</sup> As explained *supra* note x, the focus of this paper is on trading by corporate insiders in the stock of their own companies. However, the analysis offered by the paper (and the pre-trading disclosure approach it puts forward) could be applied to trading in (and the exercise of) options and other derivative instruments (including employee stock options (ESOs) and stock appreciation rights (SARs)). The use of many of these instruments is already reached by the same provisions that regulate the trading by corporate insiders in the stock of their own companies. See Fox, *Insider Trading Deterrence Versus Managerial Incentives: A Unified Theory of Section 16(b)*, 92 MICH. L. REV. 2088, 2138-2190 (1994).

<sup>7</sup> See Langevoort, *Insider Trading and the Fiduciary Principle: A Post-Chiarella Restatement*, 70 CAL. L. REV. 1, 2 (1982). Congress justified the enactment of the first statute designed to regulate trading by corporate insiders, Section 16(b) of the Securities Exchange Act of 1934 (see *infra* Subsection II.A.1.), on grounds of fairness. According to the statute's own language, the law was enacted to prevent "the unfair use of information which may be obtained by [the statutory insider] by reason of his relationship to the issuer." The SEC used a similar justification in expanding the restrictions on trading by corporate insiders under Rule 10b-5 (the other main provision for regulating trading by corporate insiders. See *infra* Section II.B.1. See also the ABA's *Report of the Task Force on Regulation of Insider Trading: Part I: Regulation Under the Antifraud Provisions of the Securities Exchange Act of 1934*, 41 BUS. LAW. 223, \_\_\_ (1985) (hereinafter *Task Force Report, Part I*) (concluding that the "fair play" basis for

on the value of a corporation's shares are seen as "unjustly enriched" when they trade with those who cannot obtain such information.<sup>8</sup> Trading on inside information is also widely believed to undermine the confidence of public investors in the stock market, thereby interfering with its function of raising capital.<sup>9</sup>

Although there is some disagreement as to how trading by "market insiders" (such as journalists and financial analysts) should be regulated,<sup>10</sup> there is a general consensus among Congress, the SEC, and the courts that trading by officers, directors, and large shareholders on inside information acquired through their relationship with the corporation is improper. Such trading is widely considered to be not only unfair, but also a violation of these corporate insiders' fiduciary duties<sup>11</sup> to the corporation's public shareholders (at

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the regulation of trading by corporate insiders is still sound).

For critical examinations of the fairness justification for regulating trading by corporate insiders, see, e.g., Saul Levmore, *Securities and Secrets: Insider Trading and the Law of Contracts*, 68 VA. L. REV. 117 (1982). HENRY MANNE, *INSIDER TRADING AND THE STOCK MARKET* 1, 2 (New York: 1966); Kenneth E. Scott, *Insider Trading: Rule 10b-5, Disclosure and Corporate Privacy*, J. LEG. STUD. 801, 805-809 (1980).

<sup>8</sup> See Langevoort, *supra* note x, at 2.

<sup>9</sup> See, e.g., *Task Force Report, Part I*, *supra* note x, at 227 ("[P]eople will not entrust their resources to a marketplace they don't believe is fair, any more than a card player will put his chips on the table in a poker game that may be fixed.") See also the comments of Arthur Levitt, Jr., Chairman of the American Stock Exchange, quoted in *Business Week*, April 29, 1985, at 79 ("If the investor thinks he's not getting a fair share, he's not going to invest and that is going to hurt capital formation in the long run").

<sup>10</sup> See Kraakman, *The Legal Theory of Insider Trading Regulation in the United States*, in *EUROPEAN INSIDER DEALING* 40-47 (Klaus J. Hopt and Eddy Wymeersch, eds. 1991).

<sup>11</sup> Shareholders that own enough stock to exercise control over the corporation are considered to have fiduciary duties to public shareholders even though their legal relationship with the public is not the same as that of the corporation's employees. See D. LANGEVOORT, *INSIDER TRADING REGULATION* 72 (1989).

whose expense the profits from such trading are made).<sup>12</sup> Indeed, the purpose of the first statute to regulate trading by corporate insiders (Section 16(b) of the Securities Exchange Act of 1934), which forces these insiders to disgorge any profits made from "short-swing" trading, was seen as establishing a minimum fiduciary standard for officers, directors, and large shareholders.<sup>13</sup>

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<sup>12</sup> A frequently-cited articulation of this view is found in *Diamond v. Oreamuno*, 248 N.E.2d (N.Y. 1969), where the New York Court of Appeals held: "... a person who acquires special knowledge or information by virtue of a ... fiduciary relationship with another is not free to exploit that knowledge or information for his own personal benefit but must account to his principal for any profits derived therefrom. This, in turn is merely a corollary of the broader principles, inherent in the nature of the fiduciary relationship, that prohibit a trustee or agent from extracting secret profits from his position of trust."

Some commentators have gone further, arguing that corporate insiders owe a fiduciary duty to all investors in the market. See, e.g., ROBERT CLARK, *CORPORATE LAW* (1986). Scholars expressing similar views include Victor Brudney, *Insiders, Outsiders, and Informational Advantages under the Federal Securities Laws*, 93 HARV. L. REV. 322 (1979); Levmore, *supra* note x, at 124-5; Louis Loss, *The Fiduciary Concept as Applied to Trading by Corporate 'Insiders' in the United States*, 33 MOD. L. REV. 34 (1970); William H. Painter, *Rule 10b-5: The Recodification Thicket*, 45 ST. JOHN'S L. REV. 699 (1971); Schotland, *Unsafe At any Price: A Reply to Manne, Insider Trading and the Stock Market*, 53 VA. L. REV. 1425, 1440-2 (1967); Seligman, *The Reformulation of Federal Securities Law Concerning Nonpublic Information*, 73 GEO. L. J. 1083 (1985).

<sup>13</sup> See the ABA's *Report of the Task Force on Regulation of Insider Trading, Part II: Reform of Section 16*, 42 BUS. LAW. 1087, 1092 (1987) (hereinafter *Task Force Report, Part II*). According to the testimony of the draftsman of Section 16(b), the statute "...is simply an application of an old principle of law that if you are an agent and you profit by inside information concerning the affairs of your principal, your profits go to your principal." Stock Exchange Regulation: Hearing on H.R. 7852 and H.R. 8720 before the House Comm. on Interstate and Foreign Commerce, 73rd Cong., 2d Sess. 122, 1934 (statement of Thomas G. Corcoran).

In enacting Section 16(b), Congress criticized the "fragrant betrayal of their fiduciary duties by officers and directors of corporations who used ... the confidential information which came to them in such positions to aid them in their market activities." Senate Banking and Currency Committee, *Stock Exchange Practices*, S. Rep., No. 1455, 73d Cong., 2d Sess. 55 (1934). The committee also criticized the "unscrupulous employment of inside information by large shareholders who, while not directors and officers, exercised sufficient control over the destinies of their companies to enable them to acquire and profit by information not available to others." *Id.*

The consensus against trading by corporate insiders on inside information is reflected in an elaborate system of laws designed to reduce the profits from such trading, one of the world's strictest.<sup>14</sup> This system is based primarily on Section 16(b) of the Securities Exchange Act of 1934 and Rule 10b-5, promulgated by the SEC under Section 10 of that Act. Section 16(b) prohibits insiders from profiting from "short-swing" transactions.<sup>15</sup> Rule 10b-5 requires that any insider with a fiduciary duty to those with whom he or she would trade must refrain from trading if in the possession of "material" nonpublic information.

In response to a number of highly-publicized violations of Rule 10b-5 during the 1980s, Congress and the SEC have taken a tougher stance in enforcing that rule. In 1984, Congress passed the Insider Trading Sanctions Act<sup>16</sup> (ITSA), which sharply increased the penalties for violating Rule 10b-5 by allowing the SEC to seek a civil penalty of treble damages (three times the profit made or loss avoided) in addition to disgorgement.<sup>17</sup> Shortly thereafter, the SEC began stepping up its efforts to investigate and prosecute those

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<sup>14</sup> See Carlton and Fischel, *The Regulation of Insider Trading*, 35 STAN. L. REV. 857, 860 (1983). However, there is evidence that the U.S. approach is spreading to other countries as well. See DONALD C. LANGEVOORT, INSIDER TRADING: REGULATION, ENFORCEMENT, AND PREVENTION 14-1 - 14-39 (1995) (reporting recent adoption of U.S.-style rules for regulating trading by corporate insiders in Europe, Japan, and elsewhere).

<sup>15</sup> The other provisions of Section 16 require that corporate insiders report their trading to the SEC and ban them from engaging in short sales.

<sup>16</sup> 15 USCS. 78u(d)(2).

<sup>17</sup> Prior to 1984, an insider who traded on undisclosed "material" information was required only to disgorge any profits from such trading. See *Elkind v. Liggett & Myers, Inc.* 635 F.2d 156 (2d Cir. 1980).

violating the securities laws. Prison sentences -- which were nonexistent before 1980 -- became commonplace.<sup>18</sup> In 1988, the Insider Trading and Securities Fraud Enforcement Act<sup>19</sup> (ITSFEA) raised the maximum criminal penalty to \$1 million and the maximum prison sentence to 10 years.<sup>20</sup> ITSFEA also imposed penalties on "controlling persons" for knowingly or recklessly failing to enforce procedures for discouraging illegal use of inside information by their employees, which led many companies to take steps to limit insiders' trading.<sup>21</sup>

All of these enforcement measures have had some effect on trading by corporate insiders. Studies of trading by corporate insiders have found that following the adoption of ITSA in 1984, corporate insiders have traded less frequently in the month before earnings results are released or a takeover is announced.<sup>22</sup> In fact, since the passage of ITSA top executives have almost completely stopped trading in the month before a takeover announcement is made.<sup>23</sup>

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<sup>18</sup> See Stuart Taylor, Jr., *Stiffer Penalties*, New York Times, (May 9, 1985 p. D4).

<sup>19</sup> Pub L. No. 100-107, 102 Stat. 4677 (1984).

<sup>20</sup> See Aldave, *The Insider Trading and Securities Fraud Enforcement Act of 1988, An Analysis and Appraisal*, 52 ALBANY L. REV. 893 (1988).

<sup>21</sup> See *infra* Subsection IV.C.1.

<sup>22</sup> See Seyhun, *The Effectiveness of Insider-Trading Sanctions*, 35 J. L. & ECON. 149, 171-172 (1992); Arshadi and Eyssell, *Regulatory Deterrence and Registered Insider Trading: The Case of Tender Offers*, J. FIN. MGMT. 30 (1991). See also Eyssell and Reburn, *The Effects of the Insider Trading Sanctions Act of 1984: The Case of Seasoned Equity Offerings*, 16 J. FIN. RES. 161 (1993) (finding that the tendency of insiders to sell shares prior to price-depressing announcements of equity offerings was reduced following the passage of ITSA in 1984).

<sup>23</sup> See Seyhun, *supra* note x, at 175.

However, even though ITSA and ITSFEA have affected the ability of insiders to make profits trading on certain types of inside information, they appear to have had no effect on the overall volume of trading by corporate insiders and the profits they earn from inside information. In fact, trading by corporate insiders has increased and become more profitable since Congress began its recent crackdown: the volume of such trading has increased fourfold and the average returns per trade attributable to inside information have doubled since 1984.<sup>24</sup>

The magnitude of the total profits corporate insiders make trading on inside information is substantial. Since the mid-1980s, access to inside information has allowed corporate insiders to earn an additional 7% per trade over the following 12 months.<sup>25</sup> Since corporate insiders trade at least \$30 billion worth of their own shares each year,<sup>26</sup> these insiders appear to be making more than \$2 billion annually trading on inside information.

The failure of current law to prevent corporate insiders from using inside information to increase their trading profits reflects limitations inherent in the two provisions relied on to regulate trading by corporate insiders, Section 16(b) and Rule 10(b)-5. Section 16(b) attempts to prevent trading on inside information indirectly by not

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<sup>24</sup> See Seyhun, *supra* note x, at 150-1, 176.

<sup>25</sup> See Seyhun, *supra* note x, at 159.

<sup>26</sup> Insider tracking services report that insiders sell approximately \$24 billion each year. See Bob Gabele, *Inside, Not Out*, Barron's (Aug. 5, 1996 p.15). Since sales are twice as frequent as purchases, see *infra* note x, this suggests that total trading by corporate insiders is on the order of \$36 billion. However, other data suggest that corporate insiders might trade twice as much as that. See *infra* note x.

permitting insiders to profit from a low-price purchase and a high-price sale within six months. As a result, it cannot prevent a corporate insider from buying on inside information when the purchase is not preceded or followed within six months by a sale at a higher price. Likewise, it cannot prevent a corporate insider from selling on inside information when the sale is not preceded or followed within six months by a purchase at a lower price. Rule 10b-5 -- which attempts to regulate trading on inside information directly by requiring that insiders disclose or abstain from trading on "material" nonpublic information -- also permits three different forms of trading on inside information: (1) using ("material" or "nonmaterial") inside information to postpone trading until that information is released and moves the price in a favorable direction; (2) trading on "soft" information;<sup>27</sup> and (3) trading on "hard" information<sup>28</sup> that does not meet the standard of "materiality." In addition, Rule 10b-5 is likely to fail to deter the form of trading on inside information that it does prohibit (namely, trading on undisclosed "material" information) in the many cases where the probability that a violator will be detected and punished is very low. Thus Rule 10b-5 and Section 16(b) fail to proscribe certain forms of insider trading and are not able to deter many others.

In light of the failure of Section 16(b) and Rule 10b-5 to prevent corporate insiders

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<sup>27</sup> I define "soft" information as information whose existence is essentially undiscoverable, such as an insider's intuition, based on all of the information available to him (including "soft" information shared by other insiders), that a particular project will not succeed. *See infra* note x and accompanying text.

<sup>28</sup> I define "hard" information as non-"soft" information: information that is verifiable and therefore potentially disclosable. Such information would include both historical facts as well as any information (projections, etc.) contained in formal written documents.

from making profits trading on inside information, this paper examines a variety of measures that could be used to reduce the profitability of such trading. Three types of approaches are considered: (1) rules that directly or indirectly force insiders to provide information to their trading partners ("information-based rules");<sup>29</sup> (2) rules that restrict the direction or timing of corporate insiders' trading ("trade-restricting rules");<sup>30</sup> and (3) rules that limit insiders' returns from trading ("return-limiting rules").<sup>31</sup> As will be made clear, some of the rules would supplement Section 16(b) and Rule 10b-5 while others would partially or fully replace these provisions.<sup>32</sup>

In examining each rule, the paper considers not only the rule's effectiveness -- which it defines as the ability of the rule to reduce the profits corporate insiders (as a group) make from trading on inside information -- but also two sets of costs that are likely to be associated with any attempt to further regulate trading by corporate insiders. The

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<sup>29</sup> The information-based rules analyzed are (1) the "pre-trading disclosure" rule, which requires that insiders announce publicly their intended trades shortly in advance; and (2) a "face-to-face" rule, which requires that insiders buy or sell in face-to-face transactions off the exchange. *See infra* Part III.

<sup>30</sup> The trade-restricting rules considered are (1) a "no-trade" rule, which forbids a person from trading during the period the person is an insider; (2) two "one-way" rules: a "buy-only" rule, which forbids a person from selling while he or she is an insider, and a "sell-only" rule, which forbids a person from buying while he or she is an insider; (3) and rules which permit insiders to trade only during fixed "trading window" periods. *See infra* Part IV.

<sup>31</sup> The return-limiting rules I examine are (1) a "normal-return" rule, which forces an insider to disgorge any "excess" returns from trading in the stock of its company; (2) a "uniform excess-returns" tax, which imposes a tax on insiders' trades equal to the average "excess" returns made by insiders when they trade; and (3) a "virtual no-trade" rule, which forces an insider to disgorge any returns in excess of what the insider would have earned by simply holding his or her shares during the time he or she was an insider. *See infra* Part V.

<sup>32</sup> However, none of these rules would apply to shareholders not affiliated with management since these shareholders, in principle, would not have access to inside information.

first set of costs I examine are those that the government would incur enforcing the rule, including (1) the cost of implementing the rule, (2) the cost of detecting violations, and (3) the cost of the litigation that is likely to be associated with the rule. Implementation, detection, and litigation costs will generally depend on the complexity of the rule.

The second set of costs I consider are those costs that would arise from imposing additional costs on corporate insiders (beyond the "cost" of reducing their profits from inside information). Corporate insiders' trades are not always motivated by private information. Like other investors, they may desire to buy or sell shares because of changes in their wealth, risk preferences, or consumption needs, etc. Placing additional restrictions on corporate insiders' trading could (a) reduce corporate insiders' liquidity, (b) increase their transaction costs, and/or (c) restrict their investment "flexibility" -- their ability to increase or decrease their shareholdings (for reasons unrelated to inside information).

Everything else equal, imposing liquidity, transaction, and flexibility costs on corporate insiders is undesirable for two reasons. First, these costs would reduce the size of the "pie" that can be shared by corporate insiders and public shareholders. To the extent some or all of the additional cost imposed on employee-insiders requires that they be paid higher compensation, this cost would ultimately be borne by all shareholders. Second, imposing these costs on corporate insiders could indirectly hurt corporate performance by (a) reducing the number of large, affiliated shareholders<sup>33</sup> and (b)

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<sup>33</sup> The presence of large shareholders is generally desirable because they can improve corporate performance by monitoring management more effectively than dispersed public shareholders. See Zeckhauser and Pound, *Are Large Shareholders Effective Monitors?* An

reducing employee-insiders' "voluntary shareholdings" (the shares that employee-insiders choose to own in addition to those that they might be required to hold by employment contract).<sup>34</sup> To the extent there would be a reduction in corporate performance, that cost

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*Investigation of Share Ownership and Corporate Performance, Asymmetric Information*, in CORPORATE FINANCE AND INVESTMENT 149, 177-178 (R.G. Hubbard, ed. 1990)(finding that large shareholders can improve corporate performance). However, as explained, large shareholders that do not have personnel serving as employees of the corporation would be exempted from pre-trading disclosure and all of the other rules considered (since, in principle, they should not have access to inside information).

<sup>34</sup> Managerial share ownership may improve performance by aligning employees' interests with those of shareholders. See, e.g., Jensen and Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure*, 3 J. FIN. ECON. 305, 308 (1976). Thus if imposing costs on employee-insiders reduces the amount of voluntary employee-insider shareholdings, corporate performance could be adversely affected.

However, there are three reasons to believe that the effect on corporate performance of further regulating employee-insiders' trading might not be so detrimental. First, the ownership of large blocks of shares by management may actually be harmful. Ownership of a significant fraction of a company's shares could allow management to thwart attempts by other, better management groups to take over the company. Share ownership could also cause management to engage in inefficiently risky activities. Cf. DeFusco, Johnson, and Zorn, *The Effect of Executive Stock Option Plans on Stockholders and Bondholders*, 45 J. FIN. 617 (1990) (stock option plans cause managers to take on more risk, transferring value from bondholders to equityholders). Thus, whether or not share-ownership by management is desirable is still an open question. In fact, some recent studies find no relationship between managerial share ownership and performance. See e.g., Anup Agrawal and Charles R. Knoeber, *Firm Performance and Mechanisms to Control Agency Problems Between Managers and Shareholders*, \_\_\_\_ J. FIN. QUANTITATIVE ANALYSIS (1996) (finding no relationship between insider shareholdings and firm performance when the influence of other "control mechanisms" is also taken into account).

Second, the effect of imposing restrictions on insiders' trading could be to either increase or decrease their voluntary shareholdings. In larger firms, insiders sell approximately twice as much as they buy (the opposite is true in smaller firms). Overall, there appears to be twice as much insider selling as buying. See Seyhun, *Insiders Profits, Costs of Trading and Market Efficiency*, 16 J. FIN. ECON. 189, 194 (1986); Rozeff and Zaman, *Market Efficiency and Insider Trading: New Evidence*, 61 J. BUS. 25, 42 (1988). Thus to the extent a rule reduces trading generally, it will tend to reduce selling by more than it reduces buying. To be sure, insiders might compensate ex ante by reducing their initial holdings, and this might reduce their average voluntary shareholdings over time. The point is that adoption of any of the rules considered will not necessarily lead to decreased voluntary shareholdings. So if increased voluntary share-ownership is socially desirable, the effect on corporate performance of any of the rules considered here through its effects on managerial shareholdings would still be ambiguous.

Third, to the extent public corporations are run to maximize value, the corporation could

would be borne by all shareholders.

The goal of the paper is to find an approach that would substantially reduce profits from trading on inside information, but which would not be very costly to enforce and would not impose large costs on insiders (beyond reducing the profits they make trading on inside information).

Of the various rules considered, the paper finds one of the information-based approaches -- the "pre-trading disclosure" rule -- to be the most attractive. Under the pre-trading disclosure rule, a corporate insider would be required to disclose publicly her intended trade shortly before submitting an order to her broker (or completing a negotiated trade off the exchange). Market makers, dealers, and public investors (including the substantial number of professional and amateur investors who currently base their investment decisions on trading activity by corporate insiders) would then adjust the price at which they are willing to buy or sell in light of the insider's announcement (taking into account, for example, trading by insiders of that corporation, previous trading by this particular insider, and other information that they believe is relevant).

Since traders would not know what, if any, inside information the insider is trading on, the adjustment would not reflect the actual "value" of the information transmitted by the disclosure, but rather only its "expected value." For example, if traders believe (correctly) that there is a 50% probability that a large sell order is motivated solely by the

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require that managers own a specific number of shares or provide compensation based on stock performance in order to provide managers with an incentive to act efficiently. See Carlton and Fischel, *supra* note x, at 864-865. Thus if adoption of these rules would otherwise undesirably affect voluntary shareholdings, the corporation could take steps to mitigate or offset those effects.

insider's need to raise cash (in which case the order would not signal any information to the market) and a 50% probability that the order reflects the insider's belief that the stock is overvalued by, say 10%, traders might reduce the price at which they are willing to buy and stock by 5% (50% of 10%). Thus, the adjustment would not prevent the insider from making 5% (10% - 5%) profits trading on inside information when she is, in fact, selling on inside information. It would also have the effect of imposing a 5% cost on her when she is not. Nevertheless, over time the adjustments would tend to eliminate the profits the insider makes from those trades that are based on inside information.

As will be explained, such an approach would substantially reduce corporate insiders' ability as a group to make profits trading on inside information, and should, at least in principle, eliminate those profits. Pre-trading disclosure would also be both simple to enforce and impose only minimal cost on corporate insiders.

Before proceeding, it should be noted that the paper takes as its premise that the goal of reducing corporate insiders' profits from trading on inside information is one that is worth pursuing. It is a goal that is supported by many (but not all) of the academic commentators who have written on the subject. The analysis of these commentators suggests a number of reasons why it may well be desirable to reduce these profits. First, reducing insiders' profits from trading on inside information is likely to increase desirable investment in public corporations.<sup>35</sup> Second, reducing these profits may improve

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<sup>35</sup> See Brudney, *Insiders, Outsiders, and Informational Advantages under the Federal Securities Laws*, 93 HARV. L. REV. 322, 489 (1979); (trading on inside information increases cost of capital); Manove, *The Harm from Insider Trading and Informed Speculation*, \_\_\_\_ QUARTERLY J. ECON. 823 (1989) (trading on inside information reduces market liquidity and raises cost of capital); Kraakman, *supra* note x, at \_\_\_\_ (same).

managers' incentives (although there is debate on this issue).<sup>36</sup> Finally, there are

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For discussions of the link between trading on inside information and stock price efficiency, see Fishman and Hagerty, *Insider trading and the efficiency of stock prices*, 23 RAND J. ECON. 106 (1992) (offering model demonstrating that trading on inside information may lead to more or less stock price efficiency); John and Mishra, *Information Content of Insider Trading Around Corporate Announcements: The Case of Capital Expenditures*, 45 J. FIN. 835 (1990) (arguing that trading on inside information in conjunction with capital expenditure announcements conveys information to the market); Kahan, *Securities Laws and the Social Costs of "Inaccurate" Stock Prices*, 1992 DUKE L. J. 977 (any resulting increased stock price accuracy does not provide a basis for permitting trading on inside information).

<sup>36</sup> For discussions of the possible adverse effects of permitting corporate insiders to trade on inside information on managerial behavior and compensation, including the effect of insider trading on managerial effort, project choice, the level of investment, internal communications within the firm, the incentive of managers to disclose information, and the amount needed to compensate managers, see Bagnoli and Khanna, *Insider Trading in Financial Signalling Models*, 47 J. FIN. 1905 (1992) (management might have an incentive to act inefficiently to earn trading profits); Bebchuk and Fershtman, *Can Insider Trading Lead Insiders to "Waste" Corporate Value?*, Mimeo, HARVARD LAW SCHOOL (1996) (the ability to trade on inside information can cause insiders to pass up good opportunities for the company); Cox, *Insider Trading and Contracting: A Critical Response to the "Chicago School,"* 1986 DUKE L.J. 628 (the ability to trade on inside information may discourage managerial effort by permitting managers to profit even when news is bad); Easterbrook, *Insider Trading, Secret Agents, Evidentiary Privileges, and the Production of Information*, 1981 SUP. CT. L. REV. 309 (the ability to trade on inside information may encourage managers to engage in overly risky projects and is an inefficient way to compensate managers); Haft, *The Effect of Insider Trading Rules on the Internal Efficiency of Large Corporations*, 80 MICH. L. REV. 1051, 1064 (1982) (the ability to trade on inside information interferes with internal firm communications); Levmore, *supra* note x, at 149 (the ability to trade on inside information could reduce managerial effort); Mendelson, *Book Review*, 117 U. PA. L. REV. 470, 489-90 (1969) (the ability to trade on inside information could reduce managerial effort and delay disclosure); Schotland, *Unsafe at any Price: A Reply to Manne, "Insider Trading and the Stock Market"*, 53 VA. L. REV. 1425, 1448-89 (managers permitted to trade on inside information will run company in order to maximize insider trading opportunities rather than to maximize shareholder value; managers will also have an incentive to delay disclosure); Scott, *supra* note x, at 805 (trading on inside information might cause too much disclosure by drawing attention to secret corporate projects and raise investment costs). See also Bebchuk and Fershtman, 9 EUR. J. POL. ECON. 469 (1993) (trading on inside information may increase managerial productivity in good times but decrease it in bad times); Bebchuk and Fershtman, *Insider Trading and the Managerial Choice Among Risky Projects*, 29 J. FIN. QUANTITATIVE ANALY. 1, 13 (1994) (the ability to trade on inside information may improve or worsen project choices; total compensation paid to insiders must be increased when such trading is permitted).

There are only a few studies that have attempted to assess the overall desirability of permitting corporate insiders to trade on inside information. For an empirical analysis of the

fairness arguments for limiting corporate insiders' ability to earn trading profits at the expense of public shareholders.<sup>37</sup> While there are commentators who do not support the goal of reducing insiders' profits from trading on inside information,<sup>38</sup> my own view, for the reasons presented in the literature, is that it would be desirable to reduce such profits. In this paper, however, I do not seek to contribute to the analysis of the harms produced by trading on inside information. Instead, I will take as given the goal that has guided

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effect of the level of insiders' trading on total firm value, see Masson and Madhavan, *Insider Trading and the Value of the Firm*, 39 J. INDUSTRIAL ECON. 333 (1991) (finding empirically that trading by insiders is associated with lower firm value). For a theoretical analysis of the overall desirability of permitting corporate insiders to trade on inside information, see Leland, *Insider Trading: Should it be Prohibited?*, 100 J. POL. ECON. 859 (1992) (offering a model showing that stock prices will be more accurate and higher, real investment will be higher, markets will be less liquid, overall welfare may increase or decrease when corporate insiders are permitted to trade on inside information).

For discussions of whether the regulation of corporate insiders' trading should be imposed by the government or left to the discretion of individual companies, see Bradley, Khanna, and Slezak, *Insider Trading, Outside Search, and Resource Allocation: Why Firms and Society May Disagree on Insider Trading Restrictions*, 7 REV. FIN. STUD. 575 (1994) (presenting model showing that although trading on inside information reduces price efficiency and allocational decisions of firm, entrepreneur may be able to get a higher initial offering price if such trading is allowed); Fischer, *Optimal Contracting and Insider Trading Restrictions*, 47 J. FIN. 673 (1992) (offering model showing that informational costs will lead shareholders to assume trading on inside information is permitted by firm, and thus raise cost of capital unless it is prohibited by government); Fishman and Hagerty, *supra* (shareholders may not opt for restrictions on insiders' trading because they do not internalize all of the benefits of the resulting efficient pricing); and O'Connor, *Toward a More Efficient Deterrence of Insider Trading: The Repeal of Section 16(b)*, 58 FORDHAM L. REV. 309, 345 (1989) (free-rider and high transaction costs make it difficult for shareholders to contract for trading restrictions with managers).

<sup>37</sup> See *supra* note x.

<sup>38</sup> See Henry Manne, *Insider Trading and the Stock Market* 30-31 (1966); Manne, *In Defense of Insider Trading*, 44 HARV. BUS. REV. 113 (1966). Henry Manne, *Insider Trading and the Law Professors*, 23 VAND. L. REV. 547 (1970). Other critics of regulating trading by corporate insiders have included Dennis Carlton & Daniel Fischel, *The Regulation of Insider Trading*, 35 STAN. L. REV. 857 (1983); Wu, *An Economist Looks at Section 16 of the Securities Exchange Act of 1934*, 68 COLUM. L. REV. 260 (1968).

Congress and the SEC for over 30 years -- reducing corporate insiders' ability to profit from trading on inside information.<sup>39</sup> My aim is solely to examine how this goal, however worthy, might be pursued more successfully.

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<sup>39</sup> One could argue that the failure of Rule 10b-5 and Section 16(b) to prohibit certain forms of trading on inside information indicates that the consensus that exists in favor of reducing corporate insiders' ability to profit from trading on inside information does not extend to all forms of such trading. As a result, the ability of insiders to make profits trading legally on inside information does not indicate a limitation in the existing approach that needs to be addressed.

One problem with this argument is that, from the perspective of public shareholders, there is usually little difference between legal and illegal trading on inside information, a point that has been recognized by participants on both sides of the debate over such trading. *See, e.g.,* Carlton and Fischel, *supra* note x, at 861; Kraakman, *supra* note x, at 48. For example, consider the case in which insider A, expecting that a favorable earnings report will sharply lift the stock price, buys shares in advance of the announcement and makes \$100,000. Now suppose instead that insider A must sell shares and, expecting that the same favorable earnings report will lift the stock price, makes an extra \$100,000 by waiting until after the report is announced before selling its shares. In both cases, insider A has used the same inside information to increase his trading profits by \$100,000 at the expense of other shareholders, although in the first case there is a violation of Rule 10-5 and in the second there is not. And an insider who earns \$100,000 trading on inside information that would be considered legally "material" and one who also earns \$100,000 under similar circumstances, except that the information is for some reason not considered legally "material", have both used inside information to reduce other shareholders' returns by the exact same degree.

Another problem with the argument that the provisions enacted by Congress reflect disapproval for some forms of trading on inside information but not others is that the difference between what is legal and what is illegal seems very arbitrary. For example, it is unlikely that the underinclusiveness of Section 16(b) reflects Congress' approval of trading on inside information when the trades are spaced more than 6 months apart.

A more plausible explanation for the limited scope of Section 16(b) and Rule 10b-5 is that, as we will see, both the "no-profit" and disclose-or-abstain approaches have inherent limitations that make them unsuitable for prohibiting all forms of trading on inside information. The limited scope of both rules is unlikely to reflect a deliberate decision to permit certain types of trading on inside information because they are acceptable, just as the overinclusiveness of Section 16(b) does not reflect Congress' abhorrence for short-term profits *per se*, but rather the difficulty of proving the deliberate use of inside information. *Cf.* Proposed Amendments to the Securities Act of 1933 and to the Securities Exchange Act of 1934: Hearings on H.R. 4344, H.R. 5065, H.R. 5832 Before House Comm. on Interstate & Foreign Commerce, 77th Cong., 1st Sess. 1248 (1941) ("Principally because of the intangible nature of the offense against which the law is directed, the old problem of trying to legislate honesty into man, it has proven impossible satisfactorily to write an exact prohibition.") (statement of George P. Rea, President of the New York Stock Exchange).

The remainder of the paper is organized as follows. Part II describes the current approach to regulating trading by corporate insiders, presents empirical and anecdotal evidence indicating that corporate insiders continue to make substantial profits trading on inside information, and explains why extending either Section 16(b) or Rule 10b-5 would not be a desirable approach to reducing profits from trading on inside information. Part III presents the two information-based rules, including the pre-trading disclosure rule that the paper finds most attractive. Part IV examines various trade-restricting rules that might be used to further reduce the profitability of trading on inside information. Part V considers the return-limiting approach. Part VI concludes.

## II. THE CURRENT REGULATION OF INSIDERS' TRADING AND ITS LIMITATIONS

This Part describes the regulation of trading by corporate insiders under federal securities law<sup>40</sup> and explains why its effectiveness at preventing these insiders from profiting from their access to inside information is inherently limited. There are two main approaches used to regulate trading by corporate insiders: (1) a ban on short-swing profit-taking by corporate insiders under Section 16(b) of the Securities Exchange Act of 1934 ("the 1934 Act"); and (2) the duty of "disclose-or-abstain" rule under Rule 10b-5, which was promulgated by the SEC under Section 10(b) of the 1934 Act.<sup>41</sup> Section A describes the operation of Section 16(b) and explains why it is underinclusive. Section B describes Rule 10(b) and shows that it also fails to prohibit all forms of trading on inside information, and that Rule 10b-5 may often not deter the forms of such trading that it does prohibit. Section C provides evidence that corporate insiders do in fact trade on inside information and offers an estimate of the profits corporate insiders make from the use of such information. Finally, Section D explains why expanding the reach of either Section 16(b) or Rule 10b-5 would not be a desirable approach to reducing profits from trading on

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<sup>40</sup> There are also state corporate-law restrictions on trading by insiders. See Langevoort, *Insider Trading and the Fiduciary Principle: A Post Chiarella Restatement*, 70 CAL. L. REV. 1, 2 n.5 (1982) (collecting cases). However, since federal law has largely supplanted state law in this area, see CLARK, *supra* note x, at \_\_\_\_, my focus is on the federal regulation of such trading.

<sup>41</sup> Other federal rules and provisions regulating trading by corporate insiders include Rule 14e-3 under the 1934 Act (imposing a duty to disclose or abstain on a person who receives "material" non-public information about a tender offer that originates with either offeror or target) and Section 16(c) of the 1934 Act (forbidding short-selling by insiders). A variety of federal criminal statutes, such as RICO and the mail and wire fraud statutes, have also been invoked to enforce Rule 10b-5. See O'Connor, *supra* note x, at 339-341.

inside information.

## A. Section 16(b) and its Limitations

### 1. The Operation of Section 16(b)

Section 16(b), which applies to virtually all directors, officers, and 10% beneficial owners<sup>42</sup> of publicly traded companies<sup>43</sup> -- prohibits these particular insiders from profiting from a purchase and a sale (or a sale followed by a purchase) that take place within any six-month period. The corporation or another shareholder may compel the insider to disgorge any "Section 16(b) profits" to the corporation.<sup>44</sup>

According to Congress, Section 16(b) was enacted to "... prevent ... the unfair use of information which may be obtained by [the statutory insider] by reason of his relationship to the issuer."<sup>45</sup> Congress apparently believed that the possibility of the

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<sup>42</sup> A 10% beneficial owner is a person who directly or indirectly owns more than 10% of any class of the corporation's shares which is registered under Section 12 of the 1934 Act (other than certain exempted classes of shares). See Section 16(a).

<sup>43</sup> Section 16(b) applies to directors, officers, and 10% beneficial owners of more than 10% of any class of equity securities of companies whose shares trade on national security exchanges like the NYSE, ASE, Pacific Coast Stock Exchange, and other regional exchanges, as well as corporations with assets in excess of \$3 million and a class of equity security held of record by 500 or more persons. See CLARK, *supra* note x, at \_\_\_\_.

<sup>44</sup> See STEINBERG, *SECURITIES LAW* 280 (2nd ed. 1995). Actions are generally brought by lawyers who monitor insider trading reports looking for possible violations (and who typically receive a percentage of any profits the insider is forced to disgorge). See A. Agrawal and J.F. Jaffe, *Does Section 16b Deter Insider Trading by Target Managers?*, 39 J. FIN. ECON. 295, 296-7 (1995).

<sup>45</sup> Section 16(b). It is the only provision in the federal securities laws designed explicitly to control the use of inside information by corporate insiders. The other provisions of the federal securities laws that are used to regulate trading by insiders, including Section 10 of the Securities

abuse of inside information was greatest in short-swing trading situations (or that short-swing trading was especially likely to be based on inside information).<sup>46</sup> Of course, Section 16(b)'s flat prohibition on short-swing profits means that insiders are also prevented from making short-swing profits based on non-inside information. The rule is therefore overinclusive. However, a flat prohibition on such profits was considered necessary because Congress believed that it would be difficult to prove an insider's motivation for trading.<sup>47</sup>

To ensure that an insider does not hide a profitable "unfair" trade among a series of unprofitable trades, the courts have adopted a "lowest in -- highest out" approach to computing profits for purposes of Section 16(b): that is, highest price sales are matched against the lowest price purchases within any six month period in order to calculate the insider's Section 16(b) profits. Consequently, the penalty is imposed even if the insider sustains an overall trading loss during the relevant six month period. To facilitate enforcement of Section 16(b), Section 16(a) requires that statutory insiders report trades in

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Exchange Act of 1934, under which Rule 10b-5 was promulgated, are general antifraud provisions.

<sup>46</sup> See, e.g., *Foremost-McKesson, Inc. v. Provident Secs. Co.*, 423 U.S. 232, 243 (1976) ("In Section 16(b) Congress to 'curb the evils of insider trading [by] ... taking the profits out of class of transactions in which the possibility of abuse was believed to be intolerably great)." (citing *Reliance Electric CO. v. Emerson Electric. Co.*, 404 U.S. 418, 422 (1972))).

<sup>47</sup> See O'Connor, *supra* note x, at 321. According to the testimony of the draftsman of Section 16(b), "You hold the director, irrespective of any intention or expectation to sell the security within six months after, because it will be absolutely impossible to prove the existence of such intention or expectation, and you have to have this crude rule of thumb..." Stock Exchange Practices, Hearings on Senate Res. 56 and 97 Before the Senate Comm. on Banking and Currency, 73rd Cong., 2d. Sess. 6557 (1934) (statement of Thomas G. Corcoran).

their companies' shares no later than the tenth day of the month following the month in which they make the trade.<sup>48</sup>

## **2. The Limited Effectiveness of Section 16(b)**

Section 16(b) imposes a penalty on insiders buying on inside information only if either (1) the insider sells at a higher price within 6 months or (2) the insider has sold at a higher price during the previous six months. Similarly, Section 16(b) imposes a penalty on insiders selling on inside information only if either (1) the insider buys at a lower price within the next 6 months or (2) the insider has bought shares at a lower price within the last six months. Thus only if the insider has made certain trades in the past 6 months or expects to make certain trades in the following six months does Section 16(b) deter trading on inside information.

However, Section 16(b) does not impose a penalty on an insider buying on inside information as long as there has not been (and will not be) a higher-price sale within 6 months. Likewise, Section 16(b) does not impose a cost when an insider sells on inside information as long as there has not been (and will not be) a lower-price purchase within 6 months. Thus, Section 16(b)'s overall ability to prevent insiders from profiting from their

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<sup>48</sup> Section 16(a) requires that a person who is an officer, director, or 10% beneficial owner file a statement on Form 3 with the SEC indicating that they have become a Section 16(a) insider within 10 days of acquiring that status. Except for specified de minimis transactions, any insider who has filed a Form 3 must then file a Form 4 within 10 days of the end of any month in which there has been a change in share ownership. Thus, for example, trades made from March 1 through March 31 must be reported to the SEC by April 10th. An insider must report trades by himself, a family member, or an intermediary acting on his behalf.

access to information is rather limited.<sup>49</sup>

## B. Rule 10b-5 and its Limitations

### 1. The Operation of Rule 10b-5

Because of Section 16(b)'s limited scope, *see supra* Section II.A.2, the primary mechanism for regulating trading by corporate insiders has become the duty of "disclose or abstain," which arises under Rule 10b-5 of the Securities Exchange Act of 1934. Under the duty of disclose-or-abstain, a person in possession of "material"<sup>50</sup> nonpublic information must either disclose the information or abstain from trading when the other party is entitled to know the information because of a fiduciary duty or other similar relation of trust and confidence between them.<sup>51</sup> The rule applies to corporate insiders

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<sup>49</sup> See, e.g., O'Connor, *supra* note x, at \_\_\_\_; Agrawal and Jaffe, *supra* note x, at 297. Cf. Fox, *Insider Trading Deterrence Versus Managerial Incentives: A Unified Theory of Section 16(b)*, 92 MICH. L. REV. 2088 (1994) (describing how the six-month "swing period" generally reduces insiders' incentives to buy or sell on inside information by forcing them to wait 6 months before they can rebalance their portfolios).

<sup>50</sup> Material facts are "...those to which a reasonable man would attach importance in determining [whether to buy or sell shares]..." SEC v. Texas Gulf Sulphur, 401 F.2d at 848-849. The Supreme Court provided the same definition of "material" when interpreting the term under the proxy rules of Section 14 of the 1934 Act. According to the Supreme Court, "... an omitted fact is "material" if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote ... Put another way, there must be a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of information made available." TSC Industries v. Northway, 426 U.S. 438, 449 (1976). See generally CLARK, *supra* note x, at §8.10.4, and n.25

<sup>51</sup> See Chiarella, 445 U.S. at 230, 231. As of 1987, abstain-or-disclose rules were used in 28 of the 38 world's largest stock markets. See Kose and Mishra, *Information Content of Insider Trading Around Corporate Announcements: The Case of Capital Expenditures*, 45 J.FIN. 835 (1990).

trading in their corporation's shares because they owe a fiduciary duty to public shareholders.<sup>52</sup>

Rule 10b-5, which was promulgated by the SEC in 1942, does not expressly bar corporate insiders from trading on inside information. However, its 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" was interpreted by the SEC in 1961 to impose the duty of disclose-or-abstain.<sup>53</sup> According to the SEC:

"...the 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 that it is unavailable to those with whom he is dealing."<sup>54</sup>

During the last 15 years, the penalties for violating Rule 10b-5 have been sharply increased. Prior to 1984, a person violating Rule 10b-5 was required only to disgorge any profits made or loss avoided by the illegal trade.<sup>55</sup> In 1984, Congress passed the Insider Trading Sanctions Act (ITSA), which gave the SEC the discretion to seek civil penalties in

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<sup>52</sup> See *supra* note x and accompanying text.

<sup>53</sup> In the matter of 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 insider must] forego the transaction.").

<sup>54</sup> *Id.*, at 912. The duty of "disclose-or-abstain" was later adopted by the Second Circuit in *SEC v. Texas Gulf Sulphur*, 401 F.2d 833 (2d Cir. 1968), *cert. denied*, 394 U.S. 976 (1969), and was implicitly acknowledged 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.

<sup>55</sup> See *Elkind v. Liggett & Myers, Inc.*, 635 F.2d 156, 172 (2d Cir. 1980); STEINBERG, *supra* note x, at 277.

Rule 10b-5 cases of up to three times the profit made or loss avoided (in addition to disgorgement), as well as increased criminal penalties (for natural persons) tenfold from \$10,000 to \$100,000.<sup>56</sup> In 1988, Congress approved the Insider Trading and Securities Fraud Enforcement Act (ITSFEA), which increased criminal penalties (for natural persons) from \$100,000 to \$1 million and raised maximum prison sentences from 5 to 10 years.<sup>57</sup>

To facilitate enforcement of Rule 10b-5, ITSFEA also imposed penalties on employers and other "controlling persons" that failed to take steps to prevent illegal insider trading, and created a bounty system to encourage the reporting of illegal insider trading by others.<sup>58</sup> As a result, many corporations have taken steps to prevent such trading, including the use of trading-window rules aimed at limiting insiders' ability to trade before important corporate news is announced.<sup>59</sup>

## **2. Legal Trading on Inside Information under Rule 10b-5**

As explained, Section 16(b)'s limited effectiveness means that the SEC must rely primarily on Rule 10b-5 to regulate corporate insiders' trading. However, Rule 10b-5 does not prohibit all of the forms of trading on inside information permitted by Section 16(b). (Nor, as we will see in the next Subsection, does it deter all of the forms of trading on inside information that it does prohibit.) In this Subsection I describe how corporate

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<sup>56</sup> 15 U.S.C. Section 78u-1(a)(2).

<sup>57</sup> See O'Connor, *supra* note x, at 339; Section 32(a) of the 1934 Act, 15 U.S.C. § 78ff(a).

<sup>58</sup> See O'Connor, *supra* note x, at 336-337.

<sup>59</sup> See *infra* Section IV.C.

insiders can and do profit legally from their access to inside information despite Rule 10b-5 (and Section 16(b)). First, an insider is permitted to use inside information to choose to postpone a trade until "material" (or nonmaterial) inside information is disclosed in order to take advantage of the price movement that is expected to follow. Second, an insider can profit by trading on "soft" information (which I define as any information that is essentially undiscoverable<sup>60</sup>). Third, an insider can make profits trading on the basis of "hard" (non-"soft") inside information that does not meet the standard of "materiality."

#### **a. Postponing Trading Until "Material" Information is Announced**

By requiring insiders to disclose or abstain, Rule 10b-5 prohibits insiders from trading on undisclosed "material" information. But, as is well known, Rule 10b-5 does not prohibit an insider from using "material" inside information to decide *not* to trade, or to decide to postpone his or her trade.<sup>61</sup>

For example, suppose that insider A must sell \$1000 of his investments by the end of the month in order to meet various expenses. Suppose further that A has a choice between selling shares in his own company and selling mutual fund shares, and begins planning to sell company shares. However, before selling the shares A learns that surprising earnings results will be reported at the beginning of the following month.

First consider the case in which A knows that the earnings report will be very disappointing and that its disclosure is likely to cause the share price to drop 25%.

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<sup>60</sup> See *infra* note x and accompanying text.

<sup>61</sup> See e.g., Kraakman, *supra* note x, at 48.

Everything else equal, A would prefer to sell his shares in the company rather than shares in the mutual fund because A can avoid a loss of \$250 (25% of \$1000) by doing the former. However, such a sale would violate Rule 10b-5 because A is in possession of "material" inside information.<sup>62</sup> Thus, if A is deterred from violating Rule 10b-5, A will change course and sell the mutual fund shares rather than the shares in A's company.<sup>63</sup> In that case, Rule 10b-5 will have prevented A from making \$250 from A's access to inside information.

However, consider the case in which A learns that the earnings report will substantially exceed the market's expectation and that its release is likely to lead to a 25% increase in the share price. Now A would prefer to change plans and sell the mutual fund shares since selling \$1000 in company shares will cost him \$250 in foregone appreciation. Selling shares in the mutual fund shares is not prohibited because Rule 10b-5 does not prohibit an insider from using "material" inside information to make a decision not to trade in the shares of his or her company. Thus, without violating Rule 10b-5, A can use access to inside information to make himself or herself \$250 better off.

Finally, consider the case in which A must raise cash to meet certain expenses, but is able to postpone the trading until after the next earnings report is released. Suppose that the earnings report will exceed expectations. A can profit from his access to "material" inside information by deciding to postpone the sale of company shares until the report is

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<sup>62</sup> I am assuming that such information is legally "material." If it is not, then A could legally use "non-material" inside information to make profits. See *infra* Subsection II.B.2.c.

<sup>63</sup> In fact, insiders are often not deterred from trading on information about subsequent earnings announcements. See *infra* Subsection II.C.1.b.

released and the share price increases. Since A will trade after the "material" information is disclosed to the market, A will not be in violation of Rule 10b-5. Thus Rule 10b-5 also allows A to use inside information to postpone trading shares in his own company until after unexpected news is released.<sup>64</sup> As these examples indicate, Rule 10b-5 permits insiders to use inside information to profit by not trading in shares of their company --- or by postponing trading in those shares.

#### **b. Using "Soft" Information to Exploit Market Mispricing**

In many cases, disclosure of information will all but eliminate insiders' ability to profit from access to the information. For example, suppose that the information made public is that the management has just completed negotiating a merger in which shareholders would receive a premium of 25% over the current market price for their shares. In that case, the market will understand that the share are worth 25% more than what they were trading for the day before, discounted for the possibility that the merger would for some reason not be completed. The market price will quickly adjust to this new price. Since the market can easily assess the meaning of this information, disclosure takes away the insiders' informational advantage and makes it all but impossible for them to make meaningful profits trading on the information.

But in other cases, insiders will still be able to profitably trade on the information even after they have disclosed it because the market lacks the "soft" information necessary

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<sup>64</sup> Similarly, when insider A intends to buy he may be able to take advantage of inside information to postpone the trade until the bad news is released and the price falls.

to assess it fully.<sup>65</sup> As the ABA Task Force on Insider Trading recognized,

"Rule 10b-5 permits the use of softer information of the type that insiders often have but that members of the investing public do not: the ability to make better informed guesses as to the success of new products, the likely results of negotiations, and the real risks of contingencies and the other uncertainties, the underlying facts of which have been publicly disclosed."<sup>66</sup>

For example, suppose that the information that is disclosed is that the development of a key product is going faster and better than expected; that the company is negotiating to sell the product to three large customers; and that earnings are projected to increase by more than was anticipated. Suppose that "soft" information leads insiders to believe that -- based on the expected appreciation in the price of the stock over the next five years -- the stock is currently worth 25% more than its current market price.

Without access to this "soft" information, the market is unlikely to be able to properly incorporate the news in the share price. First, unlike information about a takeover offer or earnings -- which is easy to assess and will attract attention no matter how it is presented -- information that either concerns future prospects or that is not denominated in dollars may not be widely noticed if it is presented with many other items

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<sup>65</sup> I use the term "soft information" to refer to information that a person could not be made to disclose because it is essentially undiscoverable. Examples of soft information would be an insider's conjectures, beliefs, or opinions about the future based on the person's analysis of the relevant information available to him and conversations with other insiders. (The information contained in formal written documents would not be considered soft information to the extent these documents are known to exist). Any rule that allows insiders to trade cannot effectively prohibit them from trading on such information. Others have used the term "soft information" more broadly to describe all future-oriented information, including written projections and estimates (which, under current law, can sometimes be considered legally "material"). See Brudney, *A Note on Materiality and Soft Information under the Federal Securities Laws*, 75 VA. L. REV. 723, \_\_ (1989).

<sup>66</sup> Task Force Report, Part II, *supra* note x, at 1092.

of information, or may be noticed but dismissed as mere puffery.

Second, even if the market focuses on this information and understands that it is important, it may be difficult for the market to translate the information into a "bottom-line" amount. As a result, the market may underestimate the impact of these developments on the company's future, and not move the price up far enough (*e.g.*, the market may increase the price by only 10%, permitting insiders to buy the stock cheaply even after the favorable information has been disclosed). Or, the market may overestimate the impact of these developments on the company, and bid the price up too high (*e.g.*, the market may increase the price by 40%, giving insiders an opportunity to sell high before the market realizes it has overvalued the stock). In either case, insiders can take advantage of the market's mispricing.

### **c. Trading on Undisclosed Hard "Nonmaterial" Information**

Rule 10b-5 bans trading on inside information only if it is "material." Trading on inside information that is not legally "material" is therefore permitted by Rule 10b-5.

In the important case of *SEC v. Texas Gulf Sulphur Co.*,<sup>67</sup> the Second Circuit held that facts were "material" if a reasonable investor would find them important in determining whether to buy or sell the company's shares. In interpreting the term "material" under a related statute, the Supreme Court provided a similar definition.<sup>68</sup>

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<sup>67</sup> 401 F.2d 833, 848-49 (2d Cir. 1968), *cert. denied*, 394 U.S. 976 (1969).

<sup>68</sup> See *TSC Industries, Inc. v. Northway Inc.*, 426 U.S. 438 (1976) (holding that under Rule 14e-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

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."<sup>69</sup> Since a reasonable investor would presumably consider "significant" or "important" any information that could be used to increase trading profits, this language might suggest that any information that an insider could use to increase his or her trading profits would be legally "material."

However, in one of the same cases the Supreme Court also held that information does not become legally "material" merely because an insider can earn profits trading on it.<sup>70</sup> And in practice, lower courts have been reluctant to find information "material" unless it concerns a "bombshell event"<sup>71</sup> -- such as the existence of a takeover offer -- the whose announcement causes the stock price to move sharply in one direction or the other. As a result, information that is important but whose significance is more difficult to assess is not usually considered "material."<sup>72</sup> Thus, as many commentators have recognized, the threshold of materiality that is used by the courts means that Rule 10b-5 (even if it could be adequately enforced, *see infra* Subsection II.B.3) enables corporate insiders to make

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deciding how to vote").

<sup>69</sup> Basic v. Levinson, 108 S.Ct. 978, 985-86 (1988).

<sup>70</sup> See, e.g., Basic v. Levinson, 108 S.Ct. 978, 988, citing Pavlidis v. New England Patriots Football Club, Inc. 737 F.2d 1227, 1231 (1st Cir. 1984).

<sup>71</sup> The term is that of Carlton and Fischel, *supra* note x, at \_\_\_\_ .

<sup>72</sup> Lower courts have been reluctant to find a piece of information "material" unless it is the type of information that would be considered important by an investor in any context. See Brudney, *A Note on Materiality and Soft Information under the Federal Securities Laws*, 75 VA. L. REV. 723, 753-59 (1989).

profits trading on non-material hard information.<sup>73</sup>

### 3. Illegal Trading on Undisclosed "Material" Information

In Subsection II.B.2, we saw that Rule 10b-5 permits corporate insiders to trade legally on inside information in a wide variety of cases. The only cases in which Rule 10b-5 does not permit trading on inside information are those in which the information is undisclosed and meets the high "materiality" standard. However, in many of these cases corporate insiders will not be deterred from trading on inside information. For although the penalty for violating Rule 10b-5 can be quite steep, there are many cases in which the probability of apprehension and punishment is very low.

In investigating potential violations of Rule 10b-5, the SEC faces two major problems. First, corporate insiders engage in hundreds of thousands of trades each year. Any of these trades could be motivated by "material" inside information and thus be in violation of Rule 10b-5. However, the SEC and the stock exchanges (which also monitor for insider trading) are able to look into but a small fraction of these trades.<sup>74</sup> As a result, most potential violations of Rule 10b-5 cannot be investigated.

Second, proving that an insider has violated Rule 10b-5 requires showing that the person knew the information traded on was both "material" and nonpublic.<sup>75</sup> That is, the

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<sup>73</sup> See Carlton and Fischel, *supra* note x, at 887.

<sup>74</sup> The SEC lacks the resources even to follow up on all of the tips it receives. See O'Connor, *supra* note x, at 366-367.

<sup>75</sup> See *Ernst & Ernst*, 425 U.S. 185 (1976).

government must (1) identify the information that the insider traded on; (2) show that the insider traded on that information; (3) demonstrate that the information was "material" and nonpublic; and (4) prove that the insider knew the information to be "material" and nonpublic.<sup>76</sup> When, as is often the case, there is nobody available to testify as to the insider's state of mind,<sup>77</sup> the government must build its case solely on circumstantial evidence.<sup>78</sup>

Since there are thousands of potential cases of illegal insider trading, and violations of Rule 10b-5 are usually difficult to prove, the SEC uses its limited enforcement resources<sup>79</sup> to focus on cases in which a violation of Rule 10b-5 is most likely to have occurred and will be easiest to prove.<sup>80</sup> The cases in which a violation of Rule 10b-5 is most likely to have occurred and will be easiest to prove are those where (1) there is an announcement that leads to a sharp movement in share price,<sup>81</sup> (2) there is a significant

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<sup>76</sup> Although private persons sometimes have the right to bring suit under Rule 10b-5, they lack the police power and resources available to the SEC. Thus most cases are brought by the SEC. See Dooley, *supra* note x, at 20.

<sup>77</sup> Most defendants in SEC enforcement actions have not disclosed the inside information to others. See Meulbroek, *supra* note x, at 1668.

<sup>78</sup> See *Proof Eludes SEC in Battling Insider Trades*, The Wall Street Journal (Aug. 13, 1980 p. 31).

<sup>79</sup> Most of the SEC's resources are allocated to reviewing registrations and reports, monitoring the markets, and rulemaking. See Dooley, *supra* note x, at 18; Seyhun, *supra* note x, at 155.

<sup>80</sup> See O'Connor, *supra* note x, at 368.

<sup>81</sup> See Dooley, *supra* note x, at 19.

change in a person's holdings shortly before the announcement;<sup>82</sup> and (3) the information contained in the announcement was clearly legally "material" (and nonpublic) at the time of the person's trading,<sup>83</sup> -- that is, the cases where the illegal use of private information appears to have been the most blatant. Consequently, most of the insider trading cases brought by the SEC involve trading shortly before earnings or takeover announcements<sup>84</sup> -- where the case law makes it clear that such information is "material" -- and there is often strong circumstantial evidence suggesting that the insider was trading on information about the forthcoming announcement.<sup>85</sup>

The SEC's focus on such cases has, to a certain extent, paid off. Following the passage of ITSA in 1984, which sharply increased the penalties for violating Rule 10b-5 and other securities laws, there has been a decrease in trading by corporate insiders prior to announcements of tender offers, merger bids, and earnings announcements.<sup>86</sup> Insiders have also reduced their selling prior to price-depressing announcements of equity

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<sup>82</sup> By itself, a large change in insider holdings is likely to be disregarded as a random fluctuation. See Dooley, *supra* note x, at 19.

<sup>83</sup> See O'Connor, *supra* note x, at 364.

<sup>84</sup> See Dooley, *supra* note x, at \_\_\_\_\_. Approximately 80% of the insider trading cases brought by the SEC involve corporate control transactions -- tender offers, mergers, LBOs, etc. -- and the remainder involve earnings announcements, bankruptcies, financial fraud, and other news. See Meulbroek, *supra* note x, at 1669.

<sup>85</sup> See Elliott, Morse, and Richardson, *supra* note x, at 523 (noting that, as of 1984, successful litigation had only occurred in cases where there was blatant use of private information).

<sup>86</sup> Arsadi and Eysell, *supra* note x, at 38; Seyhun, *supra* note x, at \_\_\_\_.

offerings.<sup>87</sup> The decrease in such trading by the highest-visibility insiders is the most pronounced.<sup>88</sup> Indeed, one study found that the highest ranking insiders almost stopped trading altogether in the month prior to a takeover announcement.<sup>89</sup> These studies demonstrate that corporate insiders have been deterred or prevented from trading on certain types of inside information.

However, the SEC's focus on the most blatant cases means that a corporate insider that trades profitably on "material" inside information (1) in the absence of a sharp movement in price; (2) in the absence of a sharp movement in price that shortly follows the trade; or (3) without dramatically changing its shareholdings, is unlikely to be detected and even less likely to be punished for violating Rule 10b-5.

For example, suppose that in January a CEO is presented with information by her managers that the development of a key product is ahead of schedule, that major customers have indicated that they plan to purchase in much larger quantities than expected, and therefore that profits during the coming year should be twice as great as had been anticipated. Suppose that if this information were released, the stock price would increase by 50% within several days (*i.e.*, the information is legally "material"<sup>90</sup>). However, the

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<sup>87</sup> Eysell and Reburn, *supra* note x, at 168.

<sup>88</sup> See Eysell and Reburn, *supra* note x, at 168 (high-information/high-visibility insiders -- inside directors and officers -- reduced their trading prior to price-reducing announcements of equity offerings by more than other insiders -- outside directors and large shareholders, following the passage of ITSA in 1984).

<sup>89</sup> See Seyhun, *supra* note x, at 175.

<sup>90</sup> I am assuming that such information would be considered legally "material." If not, then this example illustrates how an insider could legally profit from her access to important but "non-

information is not disclosed and the CEO purchases shares, tripling her investment in the company. Over the year, the stock price climbs 50% as more good news (higher than-expected sales, higher profits, *etc.*) is released each quarter.

There is no sharp increase in the price of the stock to focus the SEC's attention on her trading. And even if the SEC's attention were to be drawn to the fact the CEO had tripled her shareholdings at the beginning of a 12-month period in which the stock price rose 50%, they are unlikely to use their limited resources to investigate her trading when there are other cases to be pursued in which the likelihood of prevailing is much greater. Thus a person in a position similar to that of the CEO in this example -- that is, a corporate insider who believes that the "material" inside information he or she possesses will be released only gradually -- is unlikely to be deterred from violating Rule 10b-5.<sup>91</sup>

An insider can also profit trading on inside information that, when it becomes public, leads to a sharp increase in price -- as long as the trading is not contemporaneous with the release of the information. Suppose that Insider A receives reliable information from the CEO of another company that in six months that company will, barring unforeseen circumstances, offer to acquire Insider A's firm at a price substantially above the current market price. Insider A believes that the information is reliable and substantially increases his holdings. The acquiror in fact comes forward six months later and offers to purchase the company at a substantial premium. As a result, the stock price

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material" information. See *infra* Subsection II.B.3.c.

<sup>91</sup> Interestingly, the above-market returns earned by corporate insiders are sometimes made up to 12 months following their trades, suggesting that the information that they trade on is not released all at once, but rather gradually over time. See Baesel and Stein, *supra* note x, at 566.

rises sharply and Insider A earns a significant profit.<sup>92</sup>

The announcement of a takeover and the sharp rise in the price of the stock it generates may draw the attention of regulators. Yet it is unlikely that the regulators will ever connect the announcement to his purchase six months earlier. Thus a person in Insider A's position - who can trade on "material" inside information long before it is released -- may well not be deterred from doing so. (In fact, there is evidence that corporate insiders often start trading heavily three to six months before significant corporate announcements.<sup>93</sup>)

Finally, an insider may be able to get away with trading on "material" inside information around the time that its release leads to a sharp change in price -- as long as the size of the trade is modest and generally consistent with the insider's trading history so that it does not attract attention.<sup>94</sup>

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<sup>92</sup> Of course, Section 16(b) would require that the insider wait a few days before realizing the profit.

<sup>93</sup> See, e.g., Guo, Sen, and Shome, *Analysts' Forecasts: Low-Balling, Market Efficiency, and Insider Trading*, 30 FIN. REV. 529 (1995) (insiders trade heavily in the quarter before a firm releases surprise earnings data); Gosnell, Keown, and Pinkerton, *Bankruptcy and Insider Trading: Differences Between Exchange-Listed and OTC Firms*, 47 J. FIN. 349 (1992) (reporting that insiders in OTC firms sell stock heavily in the five months before a bankruptcy announcements the price); Lee, Mikkelsen, and Partch, *Managers' Trading Around Stock Repurchases*, 47 J. FIN. 1947 (1992) (insiders buy heavily six months before firms make price-increasing repurchase announcements). Of course, the insiders observed trading in these studies could have been trading on either "material" or "nonmaterial" information.

<sup>94</sup> See Elliott, Morse, and Richardson, *supra* note x, at 523.

## **C. Evidence that Corporate Insiders Trade on Inside Information**

In Section B we saw that there are a number of ways that the corporate insiders can trade legally on inside information under current law (and in many cases can trade illegally on such information without much fear of apprehension). This Section provides evidence that corporate insiders do in fact trade on inside information, including (1) studies indicating that corporate insiders appear to strategically time their trades to take advantage of anticipated price movements; (2) studies indicating that corporate insiders earn "excess" returns on their returns; and (3) the observed behavior of public investors, who act as if corporate insiders are trading on inside information.

### **1. The Timing of Insiders' Trades**

#### **a. Trading After Announcements and Abnormal Price Movements**

Two types of empirical studies yield results that are consistent with insiders taking advantage of their access to inside information to (1) postpone their trades until the release of information that moves the price in a favorable direction and/or (2) to make profits from market overreaction to both good and bad news (using undisclosed inside information).

The first type of study looks for unusual patterns of trading around important corporate announcements. These "announcement" studies find that sales by insiders increase after the release of good news and purchases by insiders increase after the release of bad news. For example, a study of NYSE and ASE-traded firms making annual earnings forecasts between 1967-1974 found that insiders substantially increased their

selling after good news forecasts (and, to a lesser extent, increased their buying after bad news forecasts).<sup>95</sup> Another study of exchange-traded firms between 1976-1979 found that insiders sold much more than usual after positive earnings announcements and merger announcements.<sup>96</sup>

The second type of study looks for "abnormal" returns<sup>97</sup> before months when there is heavy insider selling or buying. These studies find that stock prices experience negative abnormal returns prior to heavy buying by insiders and positive abnormal returns prior to heavy selling. In a study of OTC firms from 1975-1983, for example, Lin and Howe found that during the six months prior to "intensive" insider sales months, stock prices experienced positive abnormal returns averaging 13.66%-17.22% (depending on the methodology employed).<sup>98</sup> For "intensive" insider purchase months, there were abnormal negative returns averaging 2.29%-3.59% in the previous six months.<sup>99</sup> In a more recent study of trading by individual bank insiders between 1987-1991, it was found that the average negative abnormal return over the 40 days prior to insider purchase transactions

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<sup>95</sup> See Stephen H. Penman, *Insider Trading and the Dissemination of Firms' Forecast Information*, 55 J. BUS. 479, 492 (1982).

<sup>96</sup> Elliott, Morse, and Richardson, *supra* note x, at 525.

<sup>97</sup> A stock is said to yield "abnormal returns" when the price increases or decreases by an amount greater than what would be considered expected given its performance over time and the stock's performance relative to that of the larger market.

<sup>98</sup> See Lin and Howe, *Insider Trading and the OTC Market*, 45 J. FIN. 1273, 1279 (1990). A month was considered to be an "intensive" insider selling (buying) month if there were three or more sales (purchases) and no purchases (sales). *Id.*, at 1274.

<sup>99</sup> *Id.*, at 1279.

was 7.65% (abnormal positive returns were not observed prior to sales).<sup>100</sup> The finding that insiders buy after negative abnormal returns and sell after positive abnormal returns is also consistent with anecdotal evidence to that effect.<sup>101</sup>

Abnormal returns are usually caused by the release of good or bad news (by the corporation or other sources). Thus both the "announcement" and the "abnormal-return" studies are consistent with corporate insiders delaying their trading until after the release of important information that moves the price in a favorable direction. That is, they use inside information about the forthcoming announcement to time their trading.

However, the market often overreacts to the release of good or bad news by a corporation. Thus the trading patterns detected in both types of studies are also consistent with insiders taking advantage of their access to inside information (of whatever kind) to profit from market mispricing (after a corporate announcement or other news) that results in a period of abnormal returns. So, for example, when a good news announcement is responsible for positive abnormal returns, insiders may be increasing their selling after the release of the good news not because they have delayed planned sales until after that date, but because the market has overreacted to the release of the good news, giving insiders an opportunity to sell at a price that is temporarily high. Similarly, when a negative

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<sup>100</sup> Madura and Wiant, *supra* note x, at 222.

<sup>101</sup> See, e.g., Bridget O'Brian, *Insiders Buy Firms' Shares as Tide Turns*, The Wall Street Journal (Aug. 14, 1996 p. C1) (reporting that 6 insiders of Office Depot, Inc. had started buying 122,900 shares the day after the stock fell 24% and that the chairman of Ivax Corp purchased 290,000 shares after the stock price fell 50%); Bridget O'Brian, *McDonald's Executives Feast on Options, Sell Shares Amid Recent 52-Week High*, The Wall Street Journal (Apr. 17, 1996. p. C1) (reporting that McDonald's executives sold \$20 million of shares after two announcements "helped propel McDonald's stock higher" -- but before the price subsequently began falling).

announcement is responsible for negative abnormal returns, insiders may buy heavily after the release of the bad news simply because the market overreacts to the bad news, and not because they had delayed buying until that time.<sup>102</sup> Thus the announcement and abnormal return studies are consistent with insiders' trading and postponing trades based on inside information.

### **b. Trading Before Announcements**

The "announcement" and "abnormal-returns" studies just discussed are both consistent with insiders postponing their trades until information is released that moves the price in their favor and insiders using inside information to profit from market mispricing. A third type of study examines insiders' trading *before* announcements.

Although following the adoption of ITSA there has been less trading by corporate

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<sup>102</sup> There is other evidence consistent with the hypothesis that insiders trade on inside information when news (from whatever source) causes the market to become mispriced: namely, following a month in which there is "intensive" insider selling, stock prices experience, on average, abnormal negative returns; similarly, following a month in which there is "intensive" insider buying, stock prices experience, on average, abnormal positive returns. In the Lin and Howe study of OTC firms between 1975-1983, for example, it was found that following "intensive" insider sales months, the stock price experienced negative abnormal returns averaging 3.55%-8.63% in the following 12 months; following intensive insider purchase months, the abnormal price change in stock prices over the next 12 months was found to be -1.5%-8.28%, depending on the methodology used. Lin and Howe, *supra* note x, at 1280. A study during a similar period of all publicly traded firms found that "net" insider buying months were followed by 100-day positive abnormal returns of 3%. Net insider selling was followed by 100-day negative abnormal returns of 1.7%. Seyhun, *supra* note x, at 196. A month was considered to be a "net" insider selling (buying) month if there were more sales (purchases) than purchases (sales). *Id.*, at 194-195. However, the finding that abnormal returns occur after insiders trade is also consistent with insiders trading in anticipation of upcoming announcements which, as we will see next, appears to occur quite regularly.

insiders shortly prior to the release of takeover and earnings announcements, there is statistical and other evidence that corporate insiders continue to trade heavily in advance of these and other types of announcements, in ways which are consistent with their using inside information. That is, corporate insiders continue to increase their purchases before the release of good news and increase their sales before the release of bad news, suggesting that they are either trading legally on undisclosed "nonmaterial" information or trading illegally on undisclosed "material" information.

One study of publicly traded firms that announced stock repurchases (which tend to increase stock price) between 1982 and 1990 found that purchases by insiders increased sharply in the month before the announcement (and sales decreased sharply).<sup>103</sup> Another study, which examined OTC firms between 1985-1987, found that there was heavy selling by insiders in the five months before price-depressing announcements of bankruptcy.<sup>104</sup> A third study showed that employee-insiders tend to be heavy buyers of stock before the release of earnings results that were substantially better than analysts' estimates -- announcements that usually lead to large price increases.<sup>105</sup> The study examined Standard and Poor 400 industrial firms during the period 1984-1992, and found that in the quarters before surprise positive earnings results were released, the buying/selling ratio (ratio of buying transactions to selling transactions) was 50% greater than in the quarters

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<sup>103</sup> See Raad and Wu, *Insider Trading Effects on Stock Returns Around Open-Market Stock Repurchase Announcements: An Empirical Study*, 18 J. FIN. RES. 45, 55-57 (1995).

<sup>104</sup> See Gosnell, *et. al.*, *supra* note x, at \_\_\_\_.

<sup>105</sup> See Guo, *et. al.*, *supra* note x, at \_\_\_\_.

where analysts' estimates were on target.<sup>106</sup>

A study of REIT insiders<sup>107</sup> suggests that insiders are trading on specific news that will be announced shortly as well as other information. Managers of REITs generally seek a reappraisal of the underlying assets when they believe that the new appraisal will show that the value of the properties has increased. The release of such appraisal results, which occurs the next time the REIT announces its quarterly earnings, generally leads to an increase in price if the appraisal is favorable and a decrease in price if the appraisal turns out to be unfavorable. Since the date of the appraisal becomes public information once it is released, researchers can pinpoint the time the appraisal information becomes available to the insiders and study insiders' reactions to it during the period before it is publicly announced.

The REIT study found evidence that insiders increased their purchases *before* the appraisal date (presumably because they expected the appraisal to come back favorable).<sup>108</sup> Once the specific information contained in the appraisal arrived, trading intensified substantially. If, as was usually the case, the appraisal came back positive, there was an even greater increase in purchases. In firms with favorable appraisals, the

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<sup>106</sup> Similar results were obtained looking at the shares-bought/shares-sold ratio. As the authors of the study observe, analysts' estimates are usually based on conversations with management. Managers are believed to have an incentive to "low-ball" earnings estimates in order to look good when earnings are announced. This study suggests that they might have another incentive to engage in "low-balling". *Id.*, at 529.

<sup>107</sup> See Damodaran and Liu, *Insider Trading as a Signal of Private Information*, 6 REV. FIN. STUD. 79 (1993).

<sup>108</sup> *Id.*, at 116.

ratio of net insider purchases to total insider transactions rose to 77% (vs. 14% during normal periods); the ratio of net insider shares purchased over total insider shares traded rose to 93% (vs. 1% in normal periods); and the ratio of net insider purchasing (in dollars) over the total dollar value of insider transactions rose to 87% (vs. 3% in normal periods).<sup>109</sup> If, however, the insiders had misjudged and the report came back negative, there was a "dramatic shift" toward selling before the public announcement. In firms with unfavorable appraisals, the ratio of net insider sales to total insider transactions was 59% (vs. -12% in normal periods), the ratio of net insider shares sold over total insider shares traded rose to 99% (vs. .5% in normal periods), and the ratio of net insider selling (in dollars) over the total dollar value of insider shares traded rose to 99% (vs. .5% in normal periods).<sup>110</sup>

The studies cited here, which show that insiders do trade on inside information that has not yet been released, are consistent with the findings of studies examining other time periods;<sup>111</sup> with findings that insiders buy before abnormally large price increases and

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<sup>109</sup> *Id.*

<sup>110</sup> *Id.* For firms with positive appraisals, insiders who made timely purchases earned average abnormal returns of over 8% during the period from the month the REIT was appraised until the full appraisal was released (which was some time after earnings numbers were released), while insiders who sold after they learned the appraisal was negative avoided average abnormal losses of 4%. *Id.*, at 113.

<sup>111</sup> Studies examining other periods have found: (1) that insiders in NYSE and ASE firms between 1967-1974 tended to buy stock before they released earnings forecasts that caused a significant increase in the stock price and to sell stock before they released earnings forecasts that caused a significant decrease in share price, *see* Penman, *supra* note x; (2) that in NYSE firms in 1971 insiders traded in advance of significant corporate announcements, *see* Finnerty, *Insiders' Activity and Inside Information: A Multivariate Analysis*, J. FIN. QUANTITATIVE ANALYSIS 205,

sell before abnormally large price decreases;<sup>112</sup> with anecdotal accounts suggesting that corporate insiders time their transactions around the release of both favorable and unfavorable information;<sup>113</sup> and with studies that find heavy trading volume prior to significant corporate events.<sup>114</sup>

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213 (1976); (3) that in NYSE and ASE firms between 1976 and 1979, there was reduced insider selling/increased insider buying before price-increasing announcements of mergers, large earnings, and dividend increases, *see Elliott, et. al., supra* note x, at 529; (4) that in publicly traded firms between 1975-1982, net insider purchasing rose in the six-month period before the announcements of corporate sell-offs that were received the most favorably by the market, *see Hirschey and Zaima, Insider Trading, Ownership Structure, and the Market Assessment of Corporate Sell Offs*, 44 J. FIN. 971 (1989); (5) that in 265 publicly-traded firms that announced the initiation of dividends between 1975 and 1985, insider buying was found to be particularly heavy before those announcements that caused the largest increases in price, *see Kose John and Larry H.P. Lang, Insider Trading around Dividend Announcements: Theory and Evidence*, 46 J. FIN. 1361, 1382-84 (1991); (6) that in 179 primary security issues between 1975-1982, insiders were found to increase their sales prior to price-decreasing announcements of equity and convertible debt issues, *see Karpoff and Lee, Insider Trading Before New Issue Announcements*, \_\_\_ J. FIN. MGMT. 18, 25 (1991); (7) that in NYSE and ASE firms between 1977-1988 that announced fixed price repurchase offers (such announcements are usually accompanied by a favorable market reaction), there was an increase in purchasing in the six months prior to the announcement, *see Lee, Mikkelson, and Partch, supra* note x, at \_\_\_; (8) that insiders buy heavily before announcing value-increasing liquidations, *see, e.g., Eysell, Corporate Insiders and the Death of the Firm: Evidence on the Incidence of Insider Trading in Corporate Dissolutions*, 26 FIN. REV. 517 (1991); and (9) that insiders sell heavily in the five months before an announcement of bankruptcy, *see Eysell, supra*, at 531.

<sup>112</sup> Seyhun, *Insiders' Profits, Costs of Trading, and Market Efficiency*, 16 J. FIN. ECON. 189, 196 (1986).

<sup>113</sup> *See, e.g., Vanessa O'Connell, Circuit City Officials Sold Stock Before Poor Sales Report*, The Wall Street Journal (May 8, 1996 p.C1) (reporting that nine Circuit City insiders sold \$6 million of shares "just as the stock price peaked and shortly before reports of lower-than-expected sales in April").

<sup>114</sup> *See, e.g., Keown & Pinkerton, Merger Announcements and Insider Trading Activity: An Empirical Investigation*, 36 J. FIN. 855 (1981); Meulbroek, *An Empirical Analysis of Illegal Insider Trading*, 47 J. FIN. 1661 (1992). However, these studies do not differentiate between trading by corporate insiders and market insiders.

## 2. Corporate Insiders' "Excess" Returns

Subsection C.1 presented evidence that corporate insiders trade heavily after important corporate announcements and periods of "abnormal" stock returns as well as before potentially price-moving announcements, suggesting that insiders are (1) deferring their trades to take advantage of anticipated price movements in connection with a forthcoming announcement; (2) trading on market overreactions to announcements or other news; and (3) trading (either legally or illegally) on important information that is expected to be made public. The timing of corporate insiders' trades thus suggests the use of inside information.

However, much of the trading by corporate insiders does not appear to be connected to the release of particular news.<sup>115</sup> Thus studies that measure the profits corporate insiders make from all of their trades can provide independent evidence that corporate insiders trade on inside information. These studies find that corporate insiders as a group consistently earn "excess" or "abnormal" returns trading in their own shares -- that is, after adjusting for the specific characteristics of their own companies (*e.g.*, volatility, price/earnings ratio, size), corporate insiders (as a group) consistently beat the market.<sup>116</sup> In light of the considerable evidence that there is no group of public investors that is able

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<sup>115</sup> See Elliott, Morse, and Richardson, *The Association Between Insider Trading and Information Announcements*, 15 RAND J. ECON. 521, 535 (1984) (in a study of exchange-traded firms between 1975 and 1979, only a small proportion of insider trading appears to result from the private use of information that is subsequently disclosed); Givoly and Palmon, *supra* note x, at 85; Seyhun, *supra* note x, at \_\_\_\_.

<sup>116</sup> See Seyhun, *supra* note x, and sources cited *infra* note x.

to systematically outperform the market, the most plausible explanation for this result is that insiders are trading on information that is not available to the rest of the market.<sup>117</sup> Economists and legal commentators on both sides of the insider trading debate therefore interpret these "excess" returns to mean that insiders are using inside information when trading (and that these "excess" returns measure the profits attributable to inside information).<sup>118</sup>

The most recent study of the "excess" returns earned by insiders indicates that, although the increased penalties for insider trading introduced in the 1980s have apparently reduced the amount of trading by corporate insiders prior to takeovers and earnings announcements,<sup>119</sup> there has not been a reduction in the volume of trading by corporate insiders nor a reduction in the "excess" returns from such trading.<sup>120</sup> The study, which was performed by H. Nejat Seyhun, examined trading by corporate insiders in 9000 NYSE and ASE firms between 1975 and 1989. Seyhun found that corporate insiders earned

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<sup>117</sup> Two other explanations are considered *infra* Subsection II.C.4.

<sup>118</sup> See, e.g., Seyhun, *supra* note x, at 176-177. Carlton and Fischel, *supra* note x, at 859; Kraakman, *supra* note x, at \_\_\_\_.

<sup>119</sup> See Seyhun, *supra* note x at 150-151. See also Arshadi and Eysell, \_\_\_\_\_ (1991) Eysell and Reburn, *The Effects of the Insider Trading Sanctions Act of 1984: The Case of Seasoned Equity Offerings*, 16 J. FIN. RES. 161 (1993) (finding that the tendency of insiders to sell shares prior to price-depressing announcements of equity issues disappeared after passage of the Insider Trading Sanctions Act of 1984).

<sup>120</sup> See Seyhun, *supra* note x, at \_\_\_\_\_. For earlier empirical studies showing that the adoption of restrictions on insider trading has historically had little effect on the level of insider trading, see Finnerty, *supra* note x, at 1148; Jaffe, *The Effect of Regulation on Insider Trading*, 5 BELL J. ECON. & MGMT. SCI 93 (1974). Cf. CLARK, *supra* note x, at 282 (observing that pre-1984 restrictions on insider trading were unlikely to have much effect because insiders caught insider trading were required to do no more than disgorge their profits).

abnormal returns of 3.5% during the 12 months following the month of their trades for the period 1975-1980, rising to 5.1% for the period 1980-1984, and then to 7% for the period 1984-1989.<sup>121</sup> (Seyhun's methodology thus underestimates total abnormal returns by not taking into account the abnormal returns that arise between the trading date and the end of the month.) In addition to finding that the profitability of insider trading had doubled during the period of the study, Seyhun also found that there had been a fourfold increase in the number of shares traded by insiders.<sup>122</sup>

The data from Seyhun's study make it possible to form a rough estimate of the total

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<sup>121</sup> See Seyhun, *supra* note x, at 159. Seyhun found that the difference between "excess" returns for purchases and for sales has increased over time. In the first period, purchases were associated with abnormal returns of 4.4% and sales with abnormal returns of 3.3%. By the last period, 1984-1989, purchases were not associated with abnormal returns and sales were associated with abnormal returns of 13.8%, suggesting that insiders were not buying on good news but selling on bad news. *Id.*, at 162.

The results reported are consistent with those of previous studies by Seyhun and other researchers looking at similar time periods. See, e.g., Finnerty, *Insiders and Market Efficiency*, 31 J. FIN. 1141 (1976) (study of NYSE insiders from 1969-1972 found that insiders earned abnormal returns of approximately 4.8% over the year following their trades.); Jaffe, *Special Information and Insider Trading*, 47 J. BUS. 410, 426 (1974) (study of insiders in 200 largest NYSE stocks between 1962-1968 that experienced net insider buying found that, after transaction costs, insiders were able to make excess returns of 5% over 8 months); Givoly and Palmon, *supra* note x (study of insider transactions in 68 ASE-listed companies between 1973-1976 found that insiders earned abnormal returns of 8.6% during the year following their trades, with abnormal returns of 11.53% per year following sales transactions); Lin and Howe, *supra* note x (finding that insiders in OTC firms between 1975-1983 earned 12-month excess returns of 2.46-4.05% on their trades (depending on the methodology used); Rozeff and Zaman, *Market Efficiency and Insider Trading: New Evidence*, 6 J. BUS. 25 (1988) (study of NYSE firms during the period 1973-1982 found that insiders earned 6.6% over 12 months after 2% transaction costs using the same methodology as Jaffe, but using a model that takes into account size effect, insiders made 3.2% per year, after transactions costs); Seyhun, *supra* note x, (study of over 700 publicly-held firms between 1975-1981 found that insiders earned 4.3% excess returns for purchases and 2.2% excess returns for stock over the 300 days following the trades).

<sup>122</sup> See Seyhun, *The Effectiveness of Insider Trading Sanctions*, 35 J. L. & Econ. 149, 157 (1992).

profits that corporate insiders make trading on inside information. Reports from insider tracking services suggest that insiders are currently trading approximately \$3 billion of shares per month, or \$36 billion per year. If insiders are still earning an average of 7% 12-month "excess" returns per trade, this implies that corporate insiders are earning at least \$2 billion each year trading on inside information.<sup>123</sup>

### 3. The Behavior of Public Investors

The timing of insiders' trades and the "excess" returns earned by insiders on their trades both suggest that insiders are trading on inside information. Additional (albeit anecdotal) evidence that insiders are trading on inside information is found in the behavior of public investors: namely, that public investors act as if insiders trade on such information.

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<sup>123</sup> There are two reasons why this figure may understate the total profits earned by corporate insiders through the use of inside information.

First, insiders might be trading more than \$36 billion of shares per year. Seyhun reports that net insider trading -- that is the net number of shares purchased or sold for each firm (so that purchases and sales that offset each other are not counted) constituted .074% of outstanding shares per month during 1985-1989 (or approximately .9% over the year), *not including sales off the exchange*. Seyhun, *supra* note x, at 169. The total value of publicly traded shares in the U.S. currently is approximately \$7.2 trillion. If the annual volume of net trading by insiders is still .9% of total outstanding shares, and trading is uncorrelated with firm size, then the amount of trading by insiders each year may exceed \$70 billion (which would suggest that total profits attributable to inside information are on the order of \$5 billion).

Second, Seyhun's methodology underestimates abnormal returns by not taking into account those abnormal returns that arise between the trading date and the end of that month. *Id.*, at 180.

However, there is a reason why this 7% figure might overstate the total profits: namely, that the figure does not take into account the insiders' "marginal" transaction costs. *See infra* note x and accompanying text.

Recall that Section 16(a) of the 1934 Act requires insiders to report the previous month's trades by the 10th of each month. This information is published over a month later in the SEC's *Official Summary of Security Transactions and Holdings* ("*Official Summary*"), approximately two months after the average trade.<sup>124</sup> The information contained in the *Official Summary* is widely reported by the financial press when the *Summary* is released.<sup>125</sup>

However, services such as the Consensus of Insiders (COI) Advisory Service,<sup>126</sup> Insider Indicator,<sup>127</sup> The Insiders,<sup>128</sup> Insiders' Chronicle, Invest/Net: Insider Trading Monitor,<sup>129</sup> Vickers On-Line<sup>130</sup>, Transactions & Intentions Report,<sup>131</sup> and Vickers Weekly Insider Report<sup>132</sup> retrieve this information as soon as it arrives at the SEC, analyze it, and distribute the information through on-line services and newsletters to public

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<sup>124</sup> See Penman, *A Comparison of the Information Content of Insider Trading and Management Earnings Forecasts*, 20 J. FIN. AND QUANTITATIVE ANALYSIS 1, 9 (1985).

<sup>125</sup> See Givoly and Palmon, *supra* note x, at 70.

<sup>126</sup> P.F. Wyson, Consensus of Insiders Advisory System.

<sup>127</sup> Willamette Associates, Insider Indicator.

<sup>128</sup> Fosback, The Insiders (Fort Lauderdale, Florida: Institute for Econometric Research).

<sup>129</sup> Invest/Net Group, Inc., Fort Lauderdale, Florida.

<sup>130</sup> Vickers On-Line, Huntington, N.Y.

<sup>131</sup> Vickers Stock Research Corporation, Brookside, NJ.

<sup>132</sup> *Id.*

investors who are eager to have the information as soon as possible.<sup>133</sup> These services also gather, analyze, and distribute insider trading information from stock exchanges<sup>134</sup> and other sources.

That investors would pay for reports and analyses of insiders' trading suggests that the information increases their investment profits. But for the insider trading reports to be valuable to the individual investor, the trades must communicate information that is not already available to the market (that is, incorporated properly into the stock price). The trades can communicate such information only if the trades themselves reflect nonpublic information available to the insiders. The fact that public investors are willing to invest in reports and analysis of insiders' trading thus provides independent evidence that corporate insiders are trading on inside information.<sup>135</sup>

#### **4. Alternative Explanations for Insiders' "Excess" Returns and the Behavior of Public Investors**

The studies indicating that insiders time their trades to precede or follow significant announcements about their firms suggest that insiders use inside information in their trading. There is thus little doubt that at least part of insiders' "excess" returns is due to

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<sup>133</sup> See Lee and Stolt, *Insider Trading: A Poor Guide to Market Timing*, \_\_\_\_ J. PORTFOLIO MGMT. 66 ( ).

<sup>134</sup> Stock exchanges sometimes require that insiders report trades within a certain time after trading, and frequently such reports are made within a few days of trading. See Lee and Stolt, *supra* note x, at 66.

<sup>135</sup> For estimates of the excess returns public investors can make following insiders' trades, see *infra* note x and accompanying text.

trading on inside information. But there could be other factors contributing to these "excess" returns. Corporate insiders might simply be superior investors. Or perhaps insiders earn superior returns because investors *believe* that insiders have access to inside information (even when they do not) and engage in "copycat" behavior that moves in the direction "predicted" by the insider trading. But, as is explained below, neither the "superior investor" nor the "copycat effect" explanation is likely to account for a substantial portion of corporate insiders' "excess" returns.

#### a. The "Superior Investors" Theory

In principle, insiders could earn much of their "excess" returns simply because they are superior investors. The theory that corporate insiders consistently beat the market because they are better investors is, on its face, an entirely plausible one: it would not be surprising if corporate officers, directors, and 10% shareholders are smarter (or have more investment skill) than the average stock market investor.

However, even professional money managers, who are likely to be as savvy investors as corporate insiders, who devote full-time to investing, and who have staff to collect and analyze corporate and market information, cannot (as a group) outperform the market over time.<sup>136</sup> Indeed, only a handful of these money managers are able to outperform the market over time, and they can do so by an average of only a few points per year. Thus while it is plausible that corporate insiders are better investors than

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<sup>136</sup> See Dooley, *supra* note x, at p. 6.

individual public investors, it is much less likely that insiders are better investors than money managers, and therefore that a significant portion of these "excess" returns are attributable to investment skill.<sup>137</sup> If the "superior investor" explanation were true, we would expect a steady migration of lower-paid corporate insiders to the money management sector, where managers who can beat the market over time receive very high salaries. That such a pattern is not observed is further evidence that the corporate insiders' high returns are due more to their positional advantage than inherent investment abilities.

In addition, a number of studies have shown that those insiders who have access to the most information in the firm tend to make the highest profits trading. For example, in a study of corporate insiders' trading between 1975-1981, officer-directors were found to trade on more valuable information than chairmen of the board and ordinary directors, who in turn were found to trade on more valuable information than ordinary officers.<sup>138</sup> Large unaffiliated shareholders -- the insiders farthest from both the day-to-day operations of the firm and board decision-making -- are generally found to perform the worst of all insiders.<sup>139</sup> Similar results were reported when trading around particular announcements was studied. "High information" insiders -- board chairmen and inside directors -- were

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<sup>137</sup> *Id.*

<sup>138</sup> See Seyhun, *supra* note x, at 204-205.

<sup>139</sup> See Lin and Howe, *supra* note x, at 1283 (in study of 1800 OTC firms between 1975 and 1983, board chairman, directors, officer-directors, and officers earned greater returns trading returns on inside information than did large unaffiliated shareholders). See also Nunn, Madden, and Gombola, *Are Some Insiders More "Inside" Than Others?*, 9 J. PORTFOLIO MGMT. 18 (1983) (study examining firms between 1974-1978 found that CEOs and directors outperformed shareholders-insiders and vice presidents on purchases, but not on sales).

more likely to trade before price-moving dissolution announcements than "low information" insiders -- outside directors, large shareholders, and officers who are not directors.<sup>140</sup> These studies suggest that insiders earn "excess" profits from their access to information rather than their inherent investment acumen. Market watchers also generally give more weight to the trading activities of those insiders that are likely to be the most informed.<sup>141</sup>

The finding that insiders of small firms consistently outperform insiders of large firms in their trading<sup>142</sup> also suggests that "excess" returns are due more to informational advantages than to ability. There is no reason to believe that insiders of small firms are more savvy investors than insiders of large firms. However, insiders of small firms do have two informational advantages over those in big firms that could account for their better performance: first, insiders of small firms are likely to have a better understanding of their firm's affairs than insiders of larger companies; second, smaller companies are covered by fewer analysts -- thus, the market price is likely to deviate more from its

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<sup>140</sup> See Eysell, *Corporate Insiders and the Death of the Firm: Evidence on the Incidence of Insider Trading in Corporate Dissolutions*, 26 FIN. REV. 517 (1991).

<sup>141</sup> See A. FEIGEN, *INVESTING WITH THE INSIDERS LEGALLY* (Simon and Schuster, New York 1988).

<sup>142</sup> See Gosnell, *et. al.*, *supra* note x, at \_\_\_\_; Madura and Wiant, *Information Content of Bank Insider Trading*, 5 APPLIED FIN. ECON. 219, 225 (1995) (insiders of small banks able to outperform insiders of large banks, perhaps because small banks less well monitored by analysts); Seyhun, *supra* note x, at 203 (study of insiders' trading in publicly held firms between 1975-1981 suggests that insiders in large firms trade on less valuable information than insider of small firms). Cf. Lin and Howe, *supra* note x, at 1283 (concluding that, among OTC firms examined between 1975-1983, there was no evidence that insiders of smaller firms trade on more valuable information).

fundamental value than the stock price of a large company that is more carefully scrutinized, allowing insiders of small firms greater profit opportunities.<sup>143</sup> Thus the evidence points to "excess" returns being attributable to access to information rather than investment skill.

### b. The "Copycat Effect" Theory

Much of the abnormal price changes that occur after insiders trade is not due to the release of specific news. Instead, it appears that the market price moves in reaction to the trading itself.<sup>144</sup> That is, as investors learn about the insiders' trades, they mimic them, because they know that, on average, insiders have better information about the future direction of their companies' stock prices than does the market.

Although it is generally believed that the market response to the disclosure of trading by insiders is "rational" (in other words, outsiders mimic insiders' trades because

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<sup>143</sup> Another study suggesting that insiders' returns are a function of information is one of trading by Canadian insiders during 1968-1972. It found that bank directors who were placed on corporate boards -- and were therefore presumed to have access to more confidential market information than "ordinary" insiders on those boards -- earned average 12-month excess returns on purchases of 7.8%, twice that of the ordinary insiders (3.8%). See Baesel and Stein, *The Value of Information: Inferences from the Profitability of Insider Trading*, 14 J. FIN. & QUANTITATIVE ANALYSIS 553, 564 (1979). On both purchases and sales, the bank directors earned average 12 month excess returns of 6.3%, compared to 4.3% for ordinary insiders. *Id.*, at 566. However, the bankers' superior performance may simply reflect that those working in the financial services industry tend to be more savvy investors than those who do not.

<sup>144</sup> See Givoly and Palmon, *supra* note x, at 86.

insiders' trading does convey information about the stock's underlying value),<sup>145</sup> at least one commentator has argued that insiders may make "excess" profits by deliberately or inadvertently inducing "copycat" trading when they report trades that are not motivated by inside information.<sup>146</sup> According to this theory, the "excess" profits earned by insiders do not result from access to superior information, but arise only because outsiders *think* insiders have superior information.<sup>147</sup> That is, when the market learns of an insider trade it believes (incorrectly) that the insider has information indicating that the value of the share is significantly different from the market price, leading to copycat behavior that moves the price of the stock in the direction favorable to the insider. This price movement is then taken as further evidence that insiders' inside information gives them the ability to "forecast" future price changes.

To be sure, there will be times when the market "copies" insiders' trades that do not reflect inside information (just as there will be times when the market fails to "copy" trades that do reflect inside information). But the unstated premise of the "copycat effect" explanation is that insiders' trades can consistently fool the market into moving a stock price away from its fundamental value in a direction favorable to the insiders. If this were the case, insiders would eventually learn that they could make a steady stream of profits manipulating shares prices by buying, reporting their buying, waiting for the price to rise,

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<sup>145</sup> See, e.g., Givoly and Palmon, *supra* note x, at \_\_\_\_.

<sup>146</sup> See Samuelson, *The Prevention of Insider Trading: A Proposal for Revising Section 16 of the Securities Exchange Act of 1934*, 25 HARV. J. LEG. 511 (1988).

<sup>147</sup> The market would react the same if it believed that insiders' "excess" returns arose from their superior investment skills.

and then selling (at least six months later), before starting the cycle over again. We would expect insiders to trade frequently and be continually reversing the direction of their trading. However, this is not observed. Long periods often go by in which insiders do not trade.<sup>148</sup> On average, most firms see only one insider trade per month.<sup>149</sup> In addition, purchases (sales) by one insider are usually followed by purchases (sales) by another insider over long periods.<sup>150</sup> Thus, the observed pattern of trading by insiders is certainly not consistent with any attempt to deliberately fool the market. In any event, it is believed that the market would eventually learn to ignore trading that did not communicate any real information.<sup>151</sup> So while there may be instances in which the "copycat effect" occurs, it is unlikely that this effect can explain a meaningful portion of insiders' "excess" returns.

We have seen that current insider trading law prevents corporate insiders from engaging in only a limited range of trading on inside information. Thus it is not surprising that insiders' "excess" returns, the timing of their trades, and the behavior of public

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<sup>148</sup> See Penman, *A Comparison of the Information Content of Insider Trading and Management Earnings Forecasts*, 20 J. FIN. AND QUANTITATIVE ANALYSIS 1, 3 (1985) (finding that in publicly traded firms that released earnings forecasts from 1968-1973, the average insider that traded in company stock during a given year did so a little over twice during that year).

<sup>149</sup> See M.S. Rozeff, *Reflections on Insider Trading*, \_\_\_ FIN. ANALYSIS J. 12 (1989).

<sup>150</sup> Lorie and Niederhoffer, *supra* note x, at 45.

<sup>151</sup> See O'Connor, *supra* note x, at 354 (observing that market watchers would stop following the trades of an insider who tried to mislead them); Carlton and Fischel, *supra* note x, at 892 (same). Cf. Gabele, *supra* note x, at \_\_\_ (reporting a case in which an insider's purchase of \$60,000 worth of shares was considered an attempt to deliberately signal the market -- rather than a reflection of the person's actual beliefs about the stock -- because 7 years before the insider had sold \$16 million worth of shares).

investors all point to the conclusion that insiders are trading on inside information. In the next Section, the paper considers whether it would be feasible to reduce corporate insiders' profits from trading on inside information by extending either Section 16(b) or Rule 10b-5.

#### **D. Building on the Current Approach**

In Section C we saw that Section 16(b) and Rule 10b-5 cannot prevent corporate insiders from making profits on inside information, and that these profits appear to be at least \$2 billion per year. This Section considers whether it would be worth increasing the scope of either of these provisions to further the goal of reducing those profits. As we will see, the limitations inherent to both the "no-profit" and the "disclose-or-abstain" approach means that Section 16(b) and Rule 10b-5 could be made more effective only at considerable cost.

##### **1. Extending Section 16(b): A "No-Profit" Rule**

We saw earlier that Section 16(b)'s ability to prevent insiders from profiting from their access to information is limited, in large part because an insider can avoid the reach of the provision simply by waiting six months before entering into an opposite transaction. Thus it might be natural to first consider extending the six-month period of Section 16(b). This period could be extended to any length of time. However, for example's sake let us consider a "no-profit" rule that prohibits insiders from profiting from a purchase and a sale during the period that they are insiders. Any purchase and any sale an insider makes from the time he or she becomes an insider to the day that status ends could be matched to

determine if the insider has made Section 16(b) "profits."<sup>152</sup>

A no-profit rule would have some attractive features. It would be as easy to enforce as current Section 16(b). The rule would prevent corporate insiders from using inside information to make trading profits buying and then selling shares (or vice versa) during the insider period. In addition, an insider that has information suggesting that the shares are undervalued might be discouraged from buying on that information if he had previously sold shares at a higher price. Likewise, an insider who believes that shares are overvalued might be discouraged from selling if he had previously purchased shares at a lower price. Consequently, the no-profit rule would almost certainly reduce insiders' profits from trading on inside information.

However, there are two significant problems with a no-profit rule. First, it would be completely ineffective in many cases. Insiders who mostly purchase shares -- such as insiders of small companies<sup>153</sup> -- could buy on inside information as an insider and not sell until after their insider period ends. On the other hand, insiders who mostly sell shares -- such as insiders of larger companies<sup>154</sup> -- could sell on inside information during the insider period stock that was acquired before the period (or, in the case of employee-insiders, stock that they receive as executive compensation).

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<sup>152</sup> That is, profits would be computed by matching "high price" sales with "low price" purchases currently used under Section 16(b). See *supra* Subsection II.A.1. The rule would apply to shareholder-insiders the day after they become insiders and not apply on the day they reduce their shareholdings to 10% or less. Otherwise, shareholder-insiders would be required to disgorge all of the appreciation in their shares during the period that they were insiders.

<sup>153</sup> See Rozeff and Zaman, *supra* note x, at 42; Seyhun, *supra* note x, at 194.

<sup>154</sup> See Rozeff and Zaman, *supra* note x, at 42; Seyhun, *supra* note x, at 194.

Second, in those cases where the rule was not completely ineffective, it would impose a cost on insiders (beyond that of reducing their profits from inside information).<sup>155</sup> The effect of a no-profit rule would be to impose a tax on purchases (sales) when an opposite trade had previously taken place at a higher (lower) price. This tax would often exceed the profits from inside information arising from the insider's trading (since some, and perhaps most, of the profits arising from the trading would not be due to inside information). So while insiders would in principle have complete liquidity and the ability to increase and decrease their shareholdings on other than inside information, they could face steep "transaction costs" when they trade.

To be sure, the no-profit rule could be modified to ease the burden on those insiders who desired to both buy and sell. Profits could be measured cumulatively, rather than on the basis of the most favorable pair of trades. Alternatively, one might permit insiders to earn "reasonable" profits trading. A "reasonable-profits" rule might, for example, require an insider to disgorge any profits in excess of that which he would have earned by similar trading in a stock market index (whether those profits are measured on a most-favorable-trade or cumulative basis).<sup>156</sup> Although both approaches would lessen the cost imposed on insiders (beyond the cost of reduced profits from inside information), to

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<sup>155</sup> A no-profit rule would impose no costs on (but would also be completely ineffective with respect to) insiders which consistently bought or consistently sold shares (such as an insider who receives more stock through his or her executive compensation plan than desired and periodically sells to rebalance his or her portfolio).

<sup>156</sup> To illustrate, if an insider is determined to have made profits in company stock by buying 400 shares for \$10 on January 1st and selling 200 shares on August 1 for \$15 (realizing a gain of \$1000), one could calculate how much the insider would have realized buying \$4000 of stock market index units on January 1st and selling half of those indexes on August 1).

the extent the insider is allowed to earn profits from trading, he is able to earn more profits trading on inside information. Thus easing the burden on insiders who desire to buy and sell would further reduce the effectiveness of the rule.

The problem with the no-profit rule is that it focuses on realized trading profits, which do not necessarily bear any relation to the amount an insider makes buying and selling on inside information. In certain cases realized trading profits would understate an insider's profits from trading on inside information and in other cases exaggerate them. As a result, the rule would not prevent certain insiders from earning insider trading profits while imposing significant burdens on others.<sup>157</sup>

## 2. Expanding Rule 10b-5

We have seen that extending the Section 16(b) would not be very effective at reducing corporate insider trading profits while imposing a significant burden on certain insiders. Let us now consider whether Rule 10b-5's disclose-or-abstain rule could be extended to further reduce corporate insiders' ability to profit from their access to inside information.

We saw that Rule 10b-5's effectiveness is more limited than it might appear at first glance. First, Rule 10b-5's duty to disclose "material" inside information or abstain from trading permits three forms of trading on inside information: (1) postponing trading until

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<sup>157</sup> This problem could not be mitigated by shortening the no-profit period (so that insiders could sell or buy freely after (say) two years had passed). Shortening the no-profit period would reduce the burden on some insiders, but also increase the opportunities for earning profits on inside information. In Part V, I present three rules that would avoid this problem by limiting the total return (both realized *and unrealized*) that insiders can earn from their trading.

the release of inside information ("material" or not) that moves the price in a favorable direction; (2) using "soft" information to trade on the market's inability to properly assess important announcements and on market mispricing generally; and (3) trading on undisclosed "nonmaterial" "hard" information. Second, Rule 10b-5's prohibition against trading on undisclosed "material" information will often not deter such trading because potential violators often know that the probability of being caught and successfully prosecuted is very low. To increase Rule 10b-5's effectiveness, one could thus (1) reduce the domain of "legal" trading on inside information; and/or (2) enhance the rule's ability to deter "illegal" trading on inside information.

It would of course be impossible to enforce a rule requiring that insiders abstain from *not* trading (or abstain from postponing their trades) based on undisclosed "material" information. Nor would it be possible to enforce a rule requiring insiders to abstain from trading on "soft" information (defined as information whose existence is basically undiscoverable). Under Rule 10b-5's disclose-or-abstain approach, the only feasible way to shrink the domain of legal trading on inside information thus would be to lower the "materiality" standard. Increasing deterrence could be achieved by (1) increasing the penalties for violating Rule 10b-5; and/or (2) lowering the government's burden of proof.

Consider an "expanded" Rule 10b-5 under which (1) there is a lower standard for "materiality;" (2) the government must meet a lower burden of proof; and (3) the penalties are even higher than they are currently. Such a rule would reduce the profits corporate insiders make trading on inside information. First, there would be increased deterrence of such trading that is currently illegal. Second, there would be less trading on inside

information that is not currently "material" but would be under the lower standard. Third, the higher penalties, the lower burden of proof, and the lower "materiality" standard would tend to "chill" trading on inside information even when it would be legal (because corporate insiders would face an increased risk of being improperly convicted of violating Rule 10b-5).

However, to the extent insiders were not chilled from trading, they could still trade legally on "soft" information about their firm as well as hard information that did not meet the new "materiality" standard. And, unless the SEC's enforcement budget was increased substantially, in many cases insiders would still not be deterred from trading illegally on inside information. Thus an "expanded" Rule 10b-5 would still permit insiders to make profits trading on inside information.

Of course, the cost of extending Rule 10b-5 in this manner would be quite high. Enforcement costs would be higher as a result of increased litigation over the "materiality" of the information at issue. The cost to insiders would also rise substantially. Lowering the "materiality" standard and the government's burden of proof would increase the risk that a corporate insider trading legally would be subject to a severe penalty (or at least forced to litigate the legality of the trade). This in turn would (1) increase the average transaction costs associated with each trade and (2) "chill" trading not based on inside information (leading to higher liquidity and flexibility costs).

In short, expanding the reach of Rule 10b-5 or Section 16(b) is likely to be very costly and not that effective at reducing the profits corporate insiders earn from inside information. It is thus necessary to consider entirely different approaches to reducing such

profits. In the next Part, I consider the first such approach: directly or indirectly requiring insiders to reveal their identities and intentions to their trading partners so that their trading partners can incorporate this information into the terms of the trade.

### III. THE INFORMATION-BASED APPROACH

This Part presents two "information-based" rules that are designed to reduce corporate insiders' profits from trading on inside information (including the "pre-trading disclosure" rule, which the paper finds most attractive). Both rules are aimed at ensuring that insiders' trading partners are aware of the insiders' identities and intentions so that it is more difficult for insiders to make "excess" profits at their trading partners' expense.

The "pre-trading disclosure" rule would allow insiders to trade whenever and wherever they wished (subject to Section 16(b) and Rule 10b-5), but only if they had publicly disclosed their order (or trade) to the market shortly before. This notice would allow market makers, stock exchange specialists, and professional and amateur investors to adjust the price at which they are willing to transact to reflect the information, if any, that is transmitted by the disclosure. As will be explained, the adjustments that result from the disclosure would substantially reduce, and could in principle eliminate, the ability of insiders as a group to systematically outperform other shareholders.

Under the second rule, the "face-to-face" rule, insiders would not be permitted to trade on the open market, but could enter into unlimited negotiated ("face-to-face") trades. The purpose of such a rule would be to ensure that insiders transact only with parties that are aware of their identity and can use that information to structure the transaction so that the insiders do not earn "excess" profits at these parties' expense.

### A. A "Pre-Trading Disclosure" Rule

Consider a rule that would require a corporate insider to inform the market shortly before his or her intended trade.<sup>158</sup> Market participants could then adjust the price at which they are willing to trade to reflect the heightened possibility of abnormal price change that would be signalled by the insider's order.

For example, suppose that on Monday, when ABC Co. stock is trading for \$26, an ABC insider announces that, on Wednesday, she will submit an order to her broker to sell 20,000 shares at a price of \$25 or better. Knowing that there is a possibility that the insider is selling now because she believes, based on inside information, that the stock is overvalued, investors that were considering trading ABC stock on Tuesday and Wednesday might choose to modify or abandon their planned trades. Investors who were considering purchasing shares of ABC stock might not go forward with these purchases, or reduce the price at which they are willing to purchase the stock. Potential sellers who were considering selling ABC stock might reduce the price at which they are willing to sell it. Investors who, prior to the insider's announcement, were not considering selling the stock, might decide to sell some of their shares. The combined effect of these adjustments would be, everything else equal,<sup>159</sup> to reduce the price at which those making a market in the stock are willing to buy (and perhaps sell) the stock. When the insider's trade is executed

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<sup>158</sup> One could require notification one, two, or perhaps three days before the trade. The optimal notice period would depend on the speed with which the market can react to announced trades and the cost delay imposes on insiders. *See infra* Subsection III.A.3.

<sup>159</sup> There will of course be other news that affects the price at which investors are willing to buy and sell the stock.

on Wednesday, it is likely to be executed at a lower price than if she had not disclosed the order in advance.

The idea of pre-trading notification is not new. Rule 144 currently requires that a Form 144 be filed with the SEC in advance of a sale by certain "affiliates" and holders of "restricted securities."<sup>160</sup> In the mid-1980s, a number of proposals were made to amend Section 16(a) to require same-day disclosure or disclosure a few days in advance of trading.<sup>161</sup> The motivation of these proposals appeared to be to improve price efficiency and serve the information needs of traders.<sup>162</sup> However, none of these rules or proposed rules was aimed explicitly at reducing corporate insiders' profits from inside information.<sup>163</sup>

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<sup>160</sup> Rule 144 provides limits on the amount of restricted securities that can be sold at any given time. The purpose of Form 144 is to help the SEC monitor the amount of restricted securities that holders propose to sell. See STEINBERG, *UNDERSTANDING SECURITIES LAW*, 132 (2nd ed. 1995).

<sup>161</sup> See Klein, *Outsider Proposes Change in Insider Trading Bill*, *LEGAL TIMES* (Dec. 12, 1983, p.8) (proposing that Section 16(a) insiders be required to give three-to-five day notice of their specific intentions to trade in the company's stock). A same-day disclosure rule was suggested by Senator Chafee in 1985. Without much elaboration, a 1987 American Bar Association report dismissed these same-day and prior disclosure proposals as impractical and unnecessarily burdensome and suggested disclosure within two business days of the transaction. *Report of the Task Force on Regulation of Insider Trading, Part II: Reform of Section*, 42 *BUS. LAW.* 1087, 1102 (1987).

<sup>162</sup> See Klein, *supra* note x. The possibility of using pre-trading disclosure to enhance price efficiency is also discussed in Gilson and Kraakman, *The Mechanisms of Market Efficiency*, 70 *VA. L. REV.* 549, 632 n. 221 (1984). For an explanation why pre-trading disclosure rule may not promote price efficiency, see *infra* note x and accompanying text.

<sup>163</sup> The only proposal I have seen that links pre-trading disclosure with reducing corporate insiders' profits from trading on inside information is one that would require insiders to announce their trades 90 days in advance. The purpose of this proposal is to ensure that any inside information that is available to the insider at the time of announcement will have emerged and be incorporated into the share price by the time the trade is executed (thus depriving the insider of

Suppose that any time corporate insiders submit an order to buy or sell shares in their company they would be required to disclose the order shortly before (say, after the close of the market one, two, or three days before).<sup>164</sup> (If the insider intended to consummate a face-to-face transaction on the off-market, it would be required to announce that transaction shortly before as well). The disclosure would be made by filing details of the order on the SEC's proprietary electronic filing system (Edgar), which can make the information available to the market the instant it arrives at the SEC.<sup>165</sup> The insider would then disclose (in the same manner) when and at what price the order is filled (or that the order has expired unfilled).<sup>166</sup> In those cases where the insider submits a limit

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the ability to profit from that information). See Samuelson, *The Prevention of Insider Trading: A Proposal for Revising Section 16 of the Securities Exchange Act of 1934*, 25 HARV. J. LEG. 511, 522-28 (1988). The mechanism for reducing profits from inside information at the core of this proposal is different from the two mechanisms that would operate under a rule requiring disclosure shortly before trading. For reasons discussed *infra*, a 90-day rule would be no more effective at reducing profits from inside information than the rule I analyze yet impose much greater costs.

<sup>164</sup> A standard order specifies three things: the number of shares that are to be bought or sold, a limit price, if any (the price above or below which the customer does not want the transaction to go forward), and whether the order is "good for the day" or "good-until-canceled." Thus, for example, if the insider intends to tell his broker to buy 100 shares at a price of \$10 or better, the insider would announce the order the day before. A broker may be willing to accept a more complicated order. In any event, the insider would be required to announce the exact order he was submitting to his broker.

<sup>165</sup> Currently, Edgar filings are made available immediately to a contractor, which feeds them to subcontractors that sell the information to subscribers. See Vickers, *Rich, if Not Famous, in 15 Minutes*, The New York Times (July 14, 1996, p. D7). Investors could obtain the information directly through subscribing or via news services such as Reuters, the Associated Press, and Bloomberg, which would disseminate the information in the electronic and print media before the market opens the next morning.

<sup>166</sup> On a good-until-canceled order the insider would be required to announce his intent to cancel the order shortly before canceling.

order, and the order expires unfilled or is canceled, the insider would be required to send a copy of the order receipt to the SEC.

There would be various ways of ensuring compliance with a rule requiring pre-trading disclosure. For example, an insider who trades without previously announcing could be forced to disgorge any profits (avoided losses) and fined a fraction (or multiple) of the dollar value of the transaction. An insider who announces that he or she intended to submit an order to a broker but then fails to do so might be fined a small fraction of the dollar value of the transaction.<sup>167</sup>

### 1. Effectiveness of the Pre-Trading Disclosure Rule

Market makers, stock exchange specialists, and professional and amateur investors know that corporate insiders have access to inside information and that this information is reflected in their trading.<sup>168</sup> As Subsection II.C.3. explained, significant number of market participants use the trading reports insiders file with the SEC to guide their trading decisions.

Currently, the SEC reports are analyzed to determine whether there has been a pattern of trading activity in the previous month that suggests that a company's insiders

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<sup>167</sup> If no punishment resulted from the failure of insiders to follow through on their announcements, insiders could frequently announce intended trades and then not follow through in order to soften the market's adjustment to future announcements. Then from time-to-time they could trade on inside information without facing a market adjustment. If this were believed to be a problem, then a penalty might be imposed for each "false alarm." For other possible solutions to the "false alarm" problem, see *infra* note x and accompanying text.

<sup>168</sup> See Gilson and Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549, \_\_\_\_ (1984).

believe (based on their inside information) that the stock is over- or undervalued. Heavy net buying activity is often taken to indicate that the stock is undervalued; similarly, heavy net selling activity is taken to mean the opposite. Some of the simple strategies that are actually used by investors -- such as buying a stock when three or more insiders have made purchases within the previous month and none has made a sale -- have been shown to yield investors "excess" returns of 2-5% per year.<sup>169</sup> More refined strategies might take into account other factors, including: (1) the absolute size of the trades; (2) the size of

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<sup>169</sup> A 1987 study showed that by buying the stocks listed in the Consensus of Insiders (COI) newsletters published between 1976 and 1983 (each of which listed the 20 stocks that appear most attractive based on insiders' trading over the trailing four months) and holding them 12 months, readers could earn an "excess" return estimated to be 3-5% (depending on the methodology used). See Benesh and Pari, *Performance of Stocks Recommended on the Basis of Insider Trading Activity*, 22 FIN. REV. 145 (1987). A 1988 study using different methodology found that, in the period 1973-1982, by buying the stock of NYSE firms in which three or more insiders buy and no insiders sell during the previous month, public investors could earn "excess" returns of 3.7% per year. See Rozeff and Zaman, *Market Efficiency and Insider Trading: New Evidence*, 61 J. BUS. 25, 38 (1988). Other studies have come to similar conclusions. See, e.g., Givoly and Palmon, *supra* note x, at 85; Lorie & Niederhoffer, *Predictive and Statistical Properties of Insider Trading*, 11 J.L. & ECON. 35 (1968). See also Jaffe, *Special Information and Insider Trading*, 47 J. BUS. 410, 427 (1974) (outsiders using publicly available information about insider trades could make excess returns of 4.5%; Finnerty, *Insiders Activity and Insider Information: a Multivariate Analysis*, 11 J. FIN. QUANTITATIVE ANALYSIS 205 (1976); Madden, *The Performance of Common Stocks After Intensive Trading by Insiders*, 14 FIN. REV. 27, 34 (1979) (in a study of NYSE firms between 1974-1976, outsiders who relied on intensive selling by insiders to sell stock "significantly" outperformed the market).

However, transaction costs make it difficult for outsiders to earn "excess" returns following an active trading strategy based on insiders' trades. Public investors could not earn these "excess" returns unless the outsiders had already decided to trade and were using the insider trading data to decide which stocks to buy or sell. See Lin and Howe, *supra* note x, at 1283 (concluding based on a study of OTC insider trading during 1975-1983 that outsiders could not earn excess returns following insider trades after taking into account transaction costs); Rozeff and Zaman, *supra* note x, at 38 (after taking into account 2% transaction costs, outsiders following NYSE insider trades between 1973-1982 would have earned virtually no excess returns); Seyhun, *supra* note x, at 208 (in a study of insider trading between 1975-1981, outsiders following insiders' trades when they became available from the SEC could earn 300-day excess returns of only 2% before transaction costs).

the trades relative to each insider's existing holdings and previous trades;<sup>170</sup> (3) whether previous trades by these insiders and other company insiders correlate with later price movements; (4) purchases and sales by insiders of the same corporation in recent months;<sup>171</sup> (5) recent share price history;<sup>172</sup> and (6) any other information about the corporation or the market generally that traders think is relevant.<sup>173</sup>

Under pre-trading disclosure, market participants would have an incentive to perform the same type of analysis whenever an insider announces an intention to place an order through his or her broker (or consummate a trade off the exchange).<sup>174</sup> As they do currently, market participants would tend to increase their purchases (and reduce their sales) whenever an inside's announcement about a purchase signalled the possibility that

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<sup>170</sup> An insider's previous trading is often scrutinized in assessing more recent trading, *see* Gabele, *supra* note x, at 15 (reporting case in which \$62,000 purchase of stock by insider was considered to be an attempt to show confidence in the company's stock rather than reflect the insider's true convictions about the firm because six years earlier he had sold \$16 million worth of shares); Bridget O'Brian, *Insiders Buy Firms' Shares as Tide Turns*, *The Wall Street Journal*, (May 14, 1996 p. C13) (observing that a transaction was the insider's first open market purchase).

<sup>171</sup> *See* Gabele, *supra* note x, at 15.

<sup>172</sup> Buying is considered noteworthy when the share price has already moved up or after there has been a sharp drop in the price of the stock. *See* Gabele, *supra* note x, at 15.

<sup>173</sup> Such information would include whether the company is buying its own stock, and whether the buying or selling is options-related. *See* Gabele, *supra* note x, at 15. Selling following the exercise of options (which increase an insider's shareholdings) is not considered as much of a bearish signal as the selling of existing shares. *See* O'Brian, *Insiders' Sales Bear Careful Watching*, *The Wall Street Journal*, (May 29, 1996 p. C1).

<sup>174</sup> Of course, the adoption of a pre-trading disclosure rule would affect the trading patterns of corporate insiders. Thus strategies that worked when insiders' trades were made public weeks after they were made might no longer be suitable. However, investors would eventually develop new strategies for profiting from the information signalled by pre-trading disclosures.

the stock is undervalued and would tend to increase their sales (and reduce their purchases) when an insider's sale announcement signalled the opposite. However, much (perhaps most or all) of the resulting adjustment in the price would occur before the insider trades, not after. Thus the effect of the investors' trading activity would be to move the price against the insider, reducing the insider's profits from the trade.<sup>175</sup>

Of course, the market participants could not know the motives for the insider's trade. Thus the adjustment in price caused by investors trading on the disclosure would never, in any given case, precisely reflect the inside information, if any behind the trade. Instead, the adjustment would at best reflect the "expected value" of the inside information communicated by the announcement, as the following simple example illustrates.

Suppose that in the example above, the ABC insider's announcement that she

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<sup>175</sup> There might be concern that insiders would attempt to "deceive" the market by breaking up large trades into less conspicuous small trades. For example, suppose an insider thinks that a sale of 20,000 shares would lead to a market adjustment of 2% and sale of 10,000 shares would lead to a market adjustment of 1%. Then it would appear to be in its interest to sell 10,000 one day and 10,000 the next. Before the first sale the market price will go down 1%. Thus on the first 10,000 shares the insider will lose 1%. When the next 10,000 shares are sold the market will realize that in fact 20,000 shares are being sold and reduce the price another 1%. Thus there would be a total of a 2% adjustment on the second \$10,000. As a result, it would appear that the insider could make \$100 in excess profits (1% of the first \$10,000) profits by splitting up trades in this manner.

However, if the insider decides to sell \$10,000 on Day 1 and another \$10,000 on Day 2, the insider will signal to the market that it is trying to deceive public investors. This raises the possibility that the insider plans to sell another 10,000 shares on Day 3, and so on. As a result, the market will "overadjust" to the insider on Day 2. Thus it may end up costing an insider more to split up the order. The insider may also be deterred from splitting up its order by reputational considerations: an insider that splits up its trades may find that the next time it trades the market will believe that the insider plans to trade even more shares on the following days, and overadjust against the insider. In any event, when disclosing their orders to the SEC insiders should be allowed to indicate that they will not make any additional trades for a period they specify. This would ensure that traders that did not plan to break up their orders would not face overadjustment.

intended to sell 20,000 shares at \$25 or better could mean either that she had inside information suggesting that the stock, currently trading at \$26, was overvalued by \$2, or that she had no particular inside information suggesting that the stock was overvalued but needed to raise cash. Suppose that, based on the insider's previous trading history and other information, market participants believe that there is a 75% chance that she is selling to raise cash, and a 25% chance that she knows the stock is worth only \$24. In that case, buyers may be willing to pay only \$25.50 for the stock ( $\$26 - .25 \times \$2$ ) and sellers who otherwise would not have sold for less than \$26 may now be willing to sell for \$25.50. The insider will thus be able to sell her shares for \$25.50 (rather than for \$26, the price that would have prevailed in the absence of her disclosure). Thus if the ABC insider is selling on inside information indicating that the stock is worth only \$24, she will make a profit of \$1.50 per share from inside information. But if the ABC insider is simply selling to raise cash, she will get \$.50 less for her shares than what they are worth.<sup>176</sup> Thus although in neither case will the adjustment will reflect precisely the inside information, if any, behind the trade, these adjustments would in principle eliminate the insider's profit from trading on inside information over time.

In the real world, of course, one would not expect the total adjustments faced by each insider to precisely offset profits from trading on inside information. There would

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<sup>176</sup> It might be argued that the ABC insider could inform the market that she was liquidating the shares in order to pay for personal expenses. However, such information could not be credibly communicated. The market would know that regardless of the insider's reason for selling the stock she will have an incentive to give the impression that the order does not convey any information about the firm in order to minimize the counter-adjustment. Thus she will not have an incentive to communicate this information to the market in the first instance.

never be enough information available to the market to make that possible. However, the ability of investors to trade with or ahead of insiders on information about insiders' trades should (in principle) tend to eliminate insiders' ability *as a group* to earn profits from trading on inside information.

To see why this is the case, suppose that the market systematically underadjusts in response to announcements of insiders' trades. That is, when insiders announce their intention to buy, the trading of market participants reacting to the announcement does not, on average, increase the price sufficiently to reflect the positive abnormal returns that are expected to follow. And when insiders announce their intention to sell, the trading of market participants reacting to these announcements does not, on average, reduce the price sufficiently to reflect expected abnormal negative returns. As a result, insiders as a group continue to earn "excess" returns. Eventually, market participants would learn that insiders are continuing to earn "excess" returns.<sup>177</sup> This in turn would have two effects, both of which would tend to reduce insiders' returns.

First, those investors who find themselves about to trade against insiders (*e.g.*, a person buying shares on the day an insider is selling) may abandon their trades or seek a better price in their limit orders. Those investors who find themselves trading with the insider may increase the size of their trades or accept a worse price on their limit orders. This effect, to the extent it occurs, would force insiders to trade at a worse price. In principle (although probably not in practice), this effect should eliminate insiders' "excess"

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<sup>177</sup> The industry that sells information and analysis relating to insiders' trading would have an incentive to bring it to investors' attention.

returns from *undisclosed information*.<sup>178</sup> In practice, however, many of the investors trading against the insider will be either uninformed or forced, for one reason or another, to transact at the market price. Thus this effect alone may not eliminate the "excess" returns from undisclosed information.

Second, to the extent insiders continue to earn "excess" returns (whether by postponing their trades or by trading on undisclosed information, or both) that are greater than the *marginal* transaction costs<sup>179</sup> of professional traders, these traders would have an incentive to devise better strategies for using the information communicated by insiders' trades. Indeed, traders could earn "excess returns" simply by imitating insiders' trades. Over time, the effect of these investors' trading would be to drive down the "excess" returns insiders earn as a group to the marginal transaction costs faced by outsiders (plus whatever return is necessary to induce this type of arbitrage trading).<sup>180</sup> Another way of explaining this point is as follows: corporate insiders should not, in principle, be able to consistently outperform other shareholders (whether by postponing their trades until information is released or trading on undisclosed information, or both) if these other

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<sup>178</sup> Under certain conditions, this adjustment could also in principle eliminate insiders' "excess" returns that are attributable to postponing trades until the release of information.

<sup>179</sup> Marginal transaction costs are the costs a trader must incur to buy or sell shares relative to the costs he or she would have otherwise incurred. If the trader would not otherwise trade, marginal transaction costs would be the full transaction costs. However, if a market participant were planning to trade anyway and incur transaction costs of the same magnitude, then marginal transaction costs are zero.

<sup>180</sup> Of course, insiders must also incur marginal transaction costs when trading (which, when the insider would trade in any event, would be zero). Thus, an insider's "excess" returns should be reduced by this amount.

shareholders have the option of performing the exact same trades as the insiders.<sup>181</sup>

By reducing the returns insiders could make trading on inside information, these two effects would reduce the number of instances in which insiders find it worthwhile to trade to take advantage of inside information.<sup>182</sup> Thus, the total profits that insiders make from inside information would fall even further because pre-trading disclosure would reduce the volume of insiders' trading.<sup>183</sup>

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<sup>181</sup> It might seem surprising that pre-trading disclosure could in principle (that is, assuming no marginal transaction costs) prevent corporate insiders from outperforming other shareholders when one of the forms of trading on inside information is postponing a trade until news is released that moves the price in a direction that is favorable to the insider. After all, the pre-trading disclosure need not be made until after the news has been released. By that time, it would appear, the insider has made his or her "excess" returns.

To see why pre-trading disclosure could, in principle, prevent corporate insiders from profiting from postponing their trading until favorable news is released, consider a world in which the only possible form of trading on inside information is delaying sales until good news is released, and that insiders engaging in this form of trading on inside information earn "excess" returns. In that case (assuming no marginal transaction costs), other investors would simply buy when insiders buy (pushing the price up, and reducing the insiders' "excess" returns) and then sell when insiders sell (pushing the price down, reducing the insiders' "excess" returns further). Over time, the average "adjustment" faced by insiders on all of their transactions would be such that it reduces insiders "excess" returns to zero.

<sup>182</sup> Currently, an insider will have an incentive to trade to take advantage of inside information if the expected "excess" return is greater than marginal transaction costs. Under pre-trading disclosure, expected "excess" returns will be lower (and in some cases negative) because the market is expected to adjust against the insider. As a result, there will be more instances when the expected "excess" returns are less than marginal transaction costs.

<sup>183</sup> A number of commentators have considered the possibility of requiring insiders to disclose in advance as a means to improve market efficiency. See, e.g., CLARK, *supra* note x, at \_\_\_\_; Gilson and Kraakman, *supra* note x, at 632. The analysis I have offered suggests that pre-trading disclosure, while transmitting information more quickly to the market than post-trading disclosure in those instances when insiders trade, may well reduce the amount of trading on inside information, and thus the overall amount of information that is conveyed to the market. (However, to the extent insiders are unable to profit from inside information, they may be more willing to disclose it directly to the market, which would lead to an increase in the information received by the market). In any event, there is growing consensus among commentators that stock price accuracy is not that important for allocational efficiency. See Kahan, *supra* note x;

## 2. Costs of the Pre-Trading Disclosure Rule

The cost of enforcing the pre-trading disclosure rule would be relatively low because Section 16(a) already requires that insiders report their trades. These reports would be matched by the disclosures (received by the SEC, and then distributed to the public) to determine if there had been a trade without prior disclosure (or, if insiders are required to follow through with their orders, or an announced order that was not followed by a submission of the order to a broker).

There would be no meaningful liquidity or flexibility cost to preventing insiders from selling for several days. There would be a modest transaction cost involved in transmitting information to the SEC (but presumably this could be handled efficiently by the broker).

Requiring insiders to follow through with their orders (or face a penalty) in order to deter them from attempting to deceive the market might appear to put insiders at some risk. That is, an insider would be bound to submit the order that he or she had announced several days before, even if the person's circumstances or views had changed. But the likelihood that an insider's desires would change so dramatically over several days that he or she would wish to cancel the order is very unlikely, especially since a limit order would offer considerable (although not complete) protection from paying too much for shares or selling them for too little. In any event, the risk to the insider would be limited to the

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Lynn Stout, *The Unimportance of Being Efficient: An Economic Analysis of Stock Market Pricing and Securities Regulation*, 87 MICH. L. REV. 613 (1988).

penalty that would be imposed for not following through on the transaction, which need not be prohibitive (and which might be fairly modest, say, 1 or 2% of the transaction amount).<sup>184</sup> The pre-trading disclosure rule would thus not appear to impose much cost on insiders (beyond reducing their profits from inside information).<sup>185</sup>

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<sup>184</sup> There are other approaches to preventing "false alarms" that might be considered. The first would be to permit insiders to back out of any particular trade, but not allow the insider to back out of more than a fixed fraction (say, 80% or 90%) of its trades (by dollar value) per year. This would severely reduce the ability of insiders to manipulate the market while reducing the risk they would face from market fluctuations.

The second would be to allow unlimited backing-out and rely on the Rule 10b-5 antifraud provisions to deter insiders from attempting to manipulate the market. The advantages of this approach over the first is that the SEC (or the exchange) need not keep track of an insider's trades. However, it might be difficult to prove fraud -- in which case such a rule might not deter manipulation. Or it might be too easy to prove fraud -- in which case insiders will feel pressure to go through with trades to avoid Rule 10b-5 liability. In either case, a safe harbor rule permitting insiders to back out of a certain fraction of their announced orders would be preferable.

<sup>185</sup> The effect of pre-trading disclosure on insiders' voluntary shareholdings could be either positive or negative. By slightly increasing the transaction cost of (buying and) selling shares, the rule would reduce insiders' incentive to hold additional shares, everything else equal. For the same reason, there would be less trading. The reduction in trading could, everything else equal, either tend to increase or decrease employees' voluntary shareholdings. The reduction in trading will reduce both the purchasing and selling of shares. Since sales are twice as common as purchases, this reduction will, everything else equal, tend to increase voluntary employee-insider shareholdings (although in small firms, where buying is more common than selling, the opposite would be true). However, insiders would anticipate trading less under such a rule and adjust their initial holdings (as well as the amount of compensation they seek in the form of stock) accordingly. Thus, the overall effect of the reduction in trading on employee-insider voluntary shareholdings will be ambiguous in every case.

Large shareholders do much of their trading off-market. To the extent these trades are "face-to-face," the pre-trading disclosure rule, while imposing a small transaction cost on the shareholder-insider, is unlikely to affect the price at which it trades (since their counterparties would know the information contained in the announcement anyway). Thus, pre-trading disclosure may not have much effect on the large (affiliated) shareholders that would be affected by the rule.

### 3. Requiring Much Earlier Disclosure

A pre-trading disclosure rule would give public investors several days (or as little as 12 hours, if the disclosure is made the day before) to interpret the information communicated by the disclosure. It might be argued that the rule would not give the market enough time to digest this information. One might propose instead requiring disclosure much farther in advance. Indeed, one commentator has suggested requiring corporate insiders to announce their trades 90 day in advance.<sup>186</sup>

Requiring much earlier disclosure would probably increase the accuracy of adjustment with respect to each individual transaction. However, it would not necessarily increase the rule's effectiveness at reducing the total profits corporate insiders earn trading on inside information. The intuition is that the effect of increased accuracy would be to reduce the adjustment with respect to some trades but increase the adjustment with respect to others. On average, however, there is no reason to believe that the total adjustment faced by insiders as a group would change.

To take a highly simplified example, suppose that when insider A announces that he will sell shares market participants believe, after several days of analysis, that there is a 50% probability that there will be abnormal returns of 0% (A is selling for liquidity reasons) and a 50% probability that there will be 12-month abnormal negative returns averaging 10% (A is selling because he has information suggesting that the stock is overpriced). And suppose that if the market has several more weeks to consider the

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<sup>186</sup> See Samuelson, *supra* note x.

announcement it can determine with 90% accuracy whether A is selling for liquidity reasons or whether A is selling because the stock is overvalued.

Under the pre-trading disclosure rule, the price would be driven down 5% by the market, reflecting an expected negative abnormal return of 5%. In half the cases, insider A will earn insider trading profits of 5%, and in the other half he will give those profits back to the market. Under a rule that requires disclosure several more weeks in advance, the market would adjust 9% in those cases where the insider was selling because the stock was overpriced by 10%, and 1% otherwise. The insider would earn 1% abnormal returns 50% of the times and give them back the other 50%. On average, the insider would make the same "excess" returns under both rules -- zero.

However, although requiring early disclosure would not necessarily increase the rule's effectiveness, it would certainly increase the cost to insiders (beyond reducing their profits from trading on inside information). First, to the extent an insider is required to give more notice prior to submitting an order to a broker or trading on the off-market, the insider would face higher liquidity costs -- that is, he or she would need to keep more money in cash.<sup>187</sup> The insider would also face the risk that its cash needs might change between the time he or she submits a purchase order and the trade date.

Second, insiders would face increased investment-risk. The insider would have some protection from risk by specifying the price range in which he or she will trade. As explained, such a range can prevent the insider from buying at a price he or she considers

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<sup>187</sup> For example, the 90-day rule described *supra* note x would not permit an insider to raise cash by selling shares until three months after the insider realizes that he has a need for cash.

too high or selling at a price he or she considers too low -- assuming that the *value* the insider attaches to the shares stays within a certain range. However, specifying the price range does not protect the insider from the risk that his or her subjective *valuation* of the stock will change dramatically during the period between disclosure and execution. The insider's valuation of the stock may change because of macroeconomic changes (interest rates), larger market changes, changes in the value of all of the companies in the industry, or changes in the company itself. The insider will thus face two types of risk: (1) the risk that a trade that the insider considers desirable on the trade date does not go through (*e.g.*, the insider's valuation of the stock increases so that the insider would prefer to buy at the market price, but the trade is not executed because the trading price exceeds the limit-price that was specified by the insider at a time he placed the order), and (2) the risk that a trade that is not desirable on the trade date goes through (*e.g.*, the insider's valuation of the stock decreases so that the insider would prefer not to buy at the market price, but the trade is executed because the market price is below the limit-price that had been specified).<sup>188</sup>

Having seen that requiring much earlier disclosure is unlikely to increase the

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<sup>188</sup> For example, suppose that on January 1st the stock is trading at \$100 and the insider believes that the stock is undervalued because it has a value \$110. Under a rule that required 90-day advance disclosure, the insider would put in an order to buy the stock at a price of \$110 or better for April 1st. Now suppose that during the intervening three months the price increases to \$110 but because of changes in industry conditions the insider now believes that the stock is worth only \$100. Under a 90-day prior-disclosure rule, the insider would be forced to go through with the sale even though it will make him \$10 worse off. Or, suppose that industry conditions change in such a way that, on April 1, the insider values the stock at \$120, and that the stock is trading for \$115. In that case the purchase will not go through because the price exceeds the limit-order price of \$110 even though it would make the insider better off.

effectiveness of the pre-trading disclosure rule while potentially increasing the burden on corporate insiders, let us compare pre-trading disclosure to the "face-to-face" rule, to which we now turn.

## **B. A "Face-to-Face" Rule**

Let us now consider the second information-based rule, a "face-to-face" rule that permits insiders to enter into unlimited privately-negotiated face-to-face trades, but forbids them from trading anonymously (on the open market or through automated proprietary trading systems).<sup>189</sup> The rule would require also that the other party to the transaction not make offsetting trades for a certain "holding" period after trading with the insider.<sup>190</sup> That is, if a private trader purchases (or sells) shares from (to) the insider, it could not sell (purchase) shares during the holding period. An insider or private trader which trades in violation of the rule would be forced to disgorge its profits (if any), and pay a fine equal to a specified fraction of the dollar amount of the transaction.

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<sup>189</sup> I use the term "face-to-face" to describe a trade in which each side knows their counterparty's identity and can take that information into account in negotiating the terms of a transaction. Many institutional investors currently trade "face-to-face" (as well as anonymously through automated proprietary trading systems) off the major exchanges in what is known as the "Fourth Market." See KLEIN AND COFFEE, *BUSINESS ORGANIZATION AND FINANCE: LEGAL AND ECONOMIC PRINCIPLES* 387-388 (5th ed. 1993).

<sup>190</sup> As will be explained shortly, a face-to-face rule would be effective at reducing corporate insiders' profits from trading on inside information only if the insiders' trading partners are forced to bear the risk of price movements following the transactions.

## 1. Effectiveness of the Face-to-Face Rule

As under the pre-trading disclosure rule, the traders with whom the insiders are dealing would not have access to the insiders' inside information about the firm. The terms of the face-to-face transaction thus would not perfectly reflect that information. In any given transaction, an insider might therefore be able to earn "excess" profits at the expense of the other party. However, just as under the pre-trading disclosure rule the market would form an estimate of the value of the stock in light of the insider's announced trade, the insider's trading partner would charge a premium for the transaction that reflects the risk of abnormal price change following the transaction. While in certain cases the counterparties would not be fully compensated for the price changes that follows, in other cases they would be overcompensated.<sup>191</sup> One would expect those trading face-to-face with insiders to charge premiums that, on average, adequately compensate them for this risk (just as under the pre-trading disclosure rule the market price adjustment should tend to compensate market traders for the risk that an insider's trade would be followed by abnormal returns).

However, there are three important differences between pre-trading disclosure and the face-to-face rule that, everything else equal, would tend to make the latter more effective in practice.

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<sup>191</sup> One might argue that an insider would simply choose not to trade when it is being charged a premium that overcompensates the other party for the risk of abnormal price movements. However, insiders often must buy shares (to increase control, to satisfy shareholder demands that they own a certain amount of stock) and sell shares (to meet consumption needs, pay taxes, raise cash for other investments). Thus, insiders do not always have the option of declining to trade in the face of an unfavorable price.

First, when negotiating face-to-face off the exchange, insiders are likely to be faced with prices that better reflect the expected "excess" returns that they will earn from the trade. As explained, the presence of uninformed traders and transaction costs faced by informed traders may prevent the price faced by the insider under pre-trading disclosure from fully reflecting these expected "excess" returns. Off the exchange, a party negotiating with an insider can easily adjust the price at which it is willing to transact with the insider.

Second, the insiders' counterparties could arrange contractually to be compensated if there are abnormal price changes following the transaction, or to be given an option to reverse the transaction if the price moves significantly against them.

Third, an insider who becomes known for selling shares shortly before unfavorable information is released may find it difficult to buy or sell shares in the future. Insiders may therefore have a reputational incentive not to buy or sell when they anticipate significant price movements in their favor. (In fact, there is evidence that when insiders currently trade off-market, the abnormal returns exhibited by the stock following the transaction are much lower than when insiders trade anonymously on the open market.<sup>192</sup> This suggests that there may be costs to insiders of attempting to exploit their access to inside information when trading face-to-face with private parties, and, as a result, in advance of large anticipated price movements they choose to do their trading

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<sup>192</sup> See Seyhun, *supra* note x, at 156 n.20.

anonymously.<sup>193</sup>)

Of course, the face-to-face rule would be effective only to the extent that the insiders' trading partners have an incentive to protect themselves from (or seek compensation for) the risk of abnormal price movement following their transactions with the insiders. And the insiders' trading partners would have an incentive to protect themselves in this way only if they could not eliminate their exposure to such risk following the transaction. For example, a person that purchases shares from an insider would not need to charge a risk premium if it could simultaneously hedge by selling the stock short or selling the stock the next day. In essence, the face-to-face purchaser would simply be acting as a "middleman" between the insider and the public market. Thus to accomplish the desired result of reducing corporate insiders' profits from trading on inside information it would be necessary to prohibit insiders' trading partners from making offsetting trades during the "holding period."<sup>194</sup>

In principle, the holding period should be long enough so that the insider's counterparty is forced to bear the risk of abnormal price movement following the transaction. One approach would be to make the holding period last the entire period in

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<sup>193</sup> Another possible explanation is that the insiders which transact on the off-market tend to be large shareholders, which in general trade on less valuable information than employee-insiders. See *supra* notes xx and accompanying text.

<sup>194</sup> Private traders could still use information from insiders to increase their trading profits. For example, a private trader who is approached to buy shares from an insider could take it as a sell-signal and dump his existing holdings before buying the insider's at a discount to reflect the expected risk of negative abnormal price change. However, this problem also arises under the current regime, whether the insider trades on the off-market *or* the insider trades on the open-market (which requires informing the broker of the desired trade).

which abnormal price movements are likely to occur (say, 12 months). Alternatively, one could make the holding period last until public investors learn of the insider's trade and incorporate that information into the stock price (so that the price at which the counterparty would trade at the end of the holding period reflects the risk of abnormal return signalled by the insider's trade).<sup>195</sup> However, to the extent the market price does not accurately reflect the information communicated by the insider's trade, this approach would not be effective as the first.<sup>196</sup>

## **2. Costs of the Face-to-Face Rule**

While a face-to-face rule might be more effective than a pre-trading disclosure rule, it would certainly be more costly.

First, enforcing the face-to-face rule would require monitoring the activities of those trading with insiders in the off-market to ensure that they respected the "holding period" requirement. These traders would be required to file statements with the SEC indicating that they had entered into a transaction with an insider and then reporting all of their transactions for the duration of the holding period. The SEC or private parties would then be required to determine if an impermissible offsetting transaction had taken place during

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<sup>195</sup> If the market learns of the trade before the insider's trading partner undoes or offsets the trade, then (in principle) the insider and its trading partner could not make "excess" profits at public investors' expense.

<sup>196</sup> One could eliminate insiders' ability to earn excess profits altogether by allowing insiders to trade only among themselves. But such an approach would substantially reduce insiders' liquidity and unlikely to be that much more effective than the face-to-face rule.

the holding period.

Second, the face-to-face rule would impose a greater burden on insiders (particularly employee-insiders). Although the rule would not prohibit insiders from selling their shares whenever they wished for liquidity reasons (subject to Section 16(b) and Rule 10b-5), nor prevent them from increasing or decreasing their shareholdings for any reason, it would impose transaction costs to the extent that it would be costly to find trading partners and negotiate each transaction.<sup>197</sup> These costs would be higher than the transaction costs under pre-trading disclosure.

In sum, the face-to-face rule is likely to be more effective at reducing corporate insiders' profits from trading on inside information than the pre-trading disclosure rule because the insiders' trading partners are more likely to transact under terms that compensate for the risk of abnormal price changes following the trade. However, monitoring the activities of insiders' counterparties would make the rule more expensive to enforce than the pre-trading disclosure rule and the transaction costs (especially for employee-insiders) could be significantly higher.

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<sup>197</sup> The size of the transaction costs would depend on the number of off-market traders willing to transact with insiders face-to-face on terms that properly reflect the risk of trading with insiders. This would of course depend on the length of the holding period. The longer the holding period, the fewer traders there would be willing to trade with insiders. But since there is already considerable off-market trading, much of which involves insiders selling large blocks of shares, it is possible that the transaction costs would not be particularly high if the holding period were short (say, 2 months). With respect to large shareholders -- which appear to do much of their buying and selling outside of the open market currently -- the face-to-face rule may make them nearly as well off as under existing law (to the extent counterparties would be willing to freeze their positions in the stock for the length of the holding period). However, the size of these transaction costs would vary, and in some cases insiders may face high transaction costs under the rule (*e.g.*, employee-insiders selling small blocks of shares).

#### IV. THE TRADE-RESTRICTING APPROACH

Part III presented the two information-based approaches to reducing corporate insiders' ability to profit from trading on inside information: (1) the pre-trading disclosure rule and (2) the face-to-face rule, which is likely to be more effective but also much more costly.

This Part considers an entirely different approach to reducing the ability of corporate insiders to take advantage of their access to inside information: restricting the direction or timing of trading by corporate insiders. The principle behind the trade-restricting rules considered in this Part is straightforward: to the extent a corporate insider cannot trade, he or she cannot earn profits trading on inside information.

This Part first considers a "no-trade" rule, which would be the most simple and effective method for eliminating profits from trading on inside information (Section A). As will be explained, however, such a rule would impose much larger costs on insiders than pre-trading disclosure or the face-to-face rule. The other rules considered in this Part relax the no-trade rule in different ways in an attempt to achieve a better tradeoff between cost and effectiveness. Section B examines "one-way" rules -- a "buy-only" rule and a "sell-only" rule. Section C then considers "trading window" rules, which permit insiders to buy or sell only during certain fixed trading periods throughout the year. As we will see, the problem with the trade-restricting approach is that it is only effective at reducing insiders' profits from trading on inside information to the extent it prevents insiders from trading, but to the extent a rule prevents insiders from trading it imposes a

burden on them. As a result, the trade-restricting approach cannot be effective without causing potentially large costs.<sup>198</sup>

#### A. A "No-Trade" Rule

As is well understood, a no-trade rule would be the most effective approach to eliminating insiders' profits from inside information. In fact, some commentators have advised that in certain situations the voluntary adoption of such a rule is the best way for a firm to comply with the "controlling person" provisions of ITSFEA that impose penalties on employers for failing to take steps to prevent illegal trading on inside information.<sup>199</sup>

Although there might be a number of ways to implement a no-trade rule,<sup>200</sup> for concreteness consider a rule that freezes an insider's shareholdings when the person becomes an insider. An employee-insider would be forbidden from acquiring or disposing shares from the day before the person becomes an insider until the day after he or she

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<sup>198</sup> However, some of the trade-restricting rules (in particular, the trading-windows rules) could be combined with the prior-day disclosure rule to increase the latter's effectiveness. See *infra* note x and accompanying text.

<sup>199</sup> See S. WINER AND P. BUTLER, THE INSIDER TRADING AND SECURITIES FRAUD ENFORCEMENT ACT OF 1988 AND EXPANSION OF CONTROL PERSON LIABILITY, 42-43 (1989).

<sup>200</sup> For example, one could implement a no-trade rule by forbidding officers and directors from owning shares altogether and forbidding shareholders from acquiring sufficient shares to obtain control and access to inside information. However, such a rule would be no more effective than the no-trade rule presented here, but much more costly.

loses that status.<sup>201</sup> For a shareholder-insider, however, the trading freeze would begin the day *after* it accumulates at least 10% of the corporation's shares and end the day its shareholdings are reduced to 10% or below.<sup>202</sup> For a person who is an insider by virtue of both share-ownership and employment, the strictest of the two rules would apply.<sup>203</sup> The rule could be enforced in a number of ways. For example, an insider trading in violation of the rule could be required to disgorge profits from the trade (if any) to the government and pay a penalty equal to a specified fraction (multiple) of the dollar amount of the transaction.

### 1. Effectiveness of the No-Trade Rule

The no-trade rule described above would be more effective than the pre-trading disclosure rule at reducing insiders' profits from trading on inside information. Recall that

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<sup>201</sup> Exceptions to the no-trade rule could be made for "involuntary" acquisitions or dispositions, such as the sale of stock pursuant to a merger, or the acquisition of shares as part of an employee incentive program that has been approved by the companies' independent directors and/or public shareholders.

<sup>202</sup> One could not freeze the shareholder-insider's shareholdings at those of the day before he or she becomes an insider, because prohibiting a shareholder-insider from buying shares on the day it becomes an insider would prevent outside investors from ever accumulating more than 10% of a company's stock. Nor could one prohibit a shareholder-insider from selling its shares until its insider status terminates because such a rule would prevent it from ever selling its shares (and thus discourage it from accumulating those shares in the first instance). Thus to the extent that it is considered desirable for outside shareholders to accumulate large blocks of shares (and for the original shareholders to be able to sell their shares), a no-trade rule must allow shareholder-insiders to trade while they are still insiders. The approach described here would put shareholder-insiders on a roughly equal footing with persons who are insiders solely by virtue of their position within the company.

<sup>203</sup> This would mean that an employee-insider could not become a shareholder-insider while in office and a shareholder-insider could not sell shares as long as he or she was still an officer or director.

under pre-trading disclosure corporate insiders would still be able to profit from inside information at least to the extent the market is not efficient. Under the no-trade rule, insiders would make no profits whatsoever.<sup>204</sup>

To be sure, the no-trade rule would not *completely* eliminate an insider's ability to earn profits trading on inside information because an employee-insider could terminate its insider status and then purchase or sell based on information to which he or she had recent access, and a 10% shareholder could sell its holdings based on inside information. However, the profit from inside information an insider could make on a one-time transaction is limited.<sup>205</sup> In any event, all of the rules considered in this paper (including the pre-trading disclosure rule) have this "loophole."<sup>206</sup>

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<sup>204</sup> In addition, the no-trade rule would eliminate 100% of *each* corporate insider's profits from trading on inside information, while the prior-day disclosure rule would at best eliminate 100% of the total profits insiders as a group make trading on inside information, forcing some insiders to disgorge more than 100% of the profits they make trading on inside information and forcing others to disgorge less.

<sup>205</sup> There might be a need to ensure that employee-insiders do not circumvent the no-trade rule by terminating their insider status temporarily, buying or selling shares, and then shortly thereafter reacquiring insider status (and, similarly, that shareholder-insiders do not change their level of share-ownership by reducing their shareholdings below 10%, thereby terminating insider status, and then buying back more or fewer shares). Thus, one might want to require that a person whose insider status is terminated not become an insider at the same company until some time has elapsed.

<sup>206</sup> In principle, one could prevent an officer or director from terminating his insider status and then trading on information he obtained while he was an insider by "freezing" his or her holdings for a period of 1 or 2 months after the person ceases being an insider. But it would be difficult to design a similar mechanism for a 10% shareholder.

## 2. Costs of the No-Trade Rule

Under current Section 16(a), insiders are required to report their trades.<sup>207</sup> All of the mechanisms for monitoring insiders' compliance with a no-trade rule are thus already in place. In contrast, the pre-trading disclosure rule might, among other things, require establishing computer connections between brokers and the SEC. There might also be less litigation under the no-trade rule than under the pre-trading disclosure rule.<sup>208</sup> Thus a no-trade rule would be both more effective and easier to enforce than pre-trading disclosure.

However, the no-trade rule would impose a much larger burden on insiders than pre-trading disclosure. First and most significantly, a no-trade rule would deprive insiders of the ability to raise cash by selling their shares. This in turn could reduce their investment return by requiring them to keep more cash on hand to meet unexpected consumption needs.<sup>209</sup> Second, a no-trade rule would deprive insiders of the ability to increase or decrease their shareholdings for reasons unrelated to inside information -- such as a change in their wealth or risk preferences, or the availability of a particularly attractive opportunity elsewhere -- an ability enjoyed by other shareholders. However, a

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<sup>207</sup> See *supra* Subsection II.A.1.

<sup>208</sup> Under both rules there might be litigation over whether a person is an "insider" when he or she trades and the amount of damages. However, under the prior-day disclosure rule there also might be litigation over the adequacy of the disclosure.

<sup>209</sup> An insider whose stock is "frozen" could probably obtain a broker's loan for up to 50% of the stock's value. However, he or she would be subject to the risk that the stock would be sold pursuant to a margin call, triggering a penalty under the no-trade rule.

no-trade rule would not prevent insiders from earning the same return on their stock as public shareholders (in fact, it would ensure that they do so).

In sum, a no-trade rule would be simple to enforce and would eliminate profits from trading on inside information. However, the costs the rule imposes on insiders (beyond those associated with reducing their profits from trading on inside information) could be very high.<sup>210</sup> I therefore next examine two types of restricted-trade rules that are designed to impose substantially lower costs on insiders than a no-trade rule while seeking to preserve as much of its effectiveness as possible.

#### **B. Buy-Only or Sell-Only Trading Rules**

One approach to relaxing the no-trade rule would be to permit the insider to trade in one direction only, that is, permit an insider only to buy or only to sell. The possible appeal of such a "one-way" rule is that it would be as easy to enforce as a no-trade rule (and less costly to insiders) while preventing insiders from using inside information to buy (sell) stock when they know it is undervalued (overvalued) and then to sell (buy) the stock, at least six months later. A "buy-only" rule might be of particular interest because recently the high-ranking insiders of a major company voluntarily imposed such a rule on

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<sup>210</sup> In Section V.C, I examine a "virtual no-trade" rule that attempts to maintain the effectiveness of the no-trade while reducing the burden associated with it by (1) giving corporate insiders unlimited freedom to buy or sell shares, but (2) limiting the total return from their trading to that which they would earn under the no-trade rule described here.

themselves.<sup>211</sup>

For concreteness, consider a "buy-only" rule and a "sell-only" rule that relax the no-trade rule described in Section A above by permitting insiders to buy (to sell) shares whenever they desire (subject to Rule 10b-5).<sup>212</sup> As under the no-trade rule, an insider that traded in violation of the rule in place might be required to disgorge profits from the trade (if any) to the government and pay a penalty equal to a specified fraction (multiple) of the dollar amount of the transaction. As we will see, both one-way rules are likely to be less effective and more costly than pre-trading disclosure.

### 1. Effectiveness of One-Way Rules

The buy-only rule described would reduce profits from trading on inside information by (1) preventing corporate insiders from selling shares on inside information; and (2) discouraging insiders from buying shares on inside information (by not permitting them to sell the shares until their insider status terminates). However, insiders could still buy shares when inside information suggests that the shares are undervalued (*e.g.*, before good news announcements or after the market overreacts to bad news announcements), and hold them until their insider status terminates.

A sell-only rule would reduce insiders' profits from trading on inside information by (1) preventing insiders from buying shares when inside information indicates they are

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<sup>211</sup> The commitment was apparently made to signal confidence in the company's stock. See O'Brian, *Travelers Rule Prohibits Sales by Executives*, The Wall Street Journal, (Aug. 7, 1996 p. C1).

<sup>212</sup> Section 16(b) would be made redundant by rules permitting only buying or only selling.

undervalued, and then selling them at least six months later; and (2) discouraging insiders from selling their shares when inside information indicates that they are overvalued, by not permitting them to buy the shares back later in order to take advantage of the long-run appreciation of the stock. However, insiders could still profit from their access to information whenever they sold shares.<sup>213</sup> Thus, it would appear that neither the buy-only rule nor the sell-only rule would be as effective at reducing profits from trading on inside information as the pre-trading disclosure rule.

## 2. Costs of One-Way Rules

A buy-only rule would impose the same liquidity costs as a no-trade rule. It would also deprive insiders of the ability to reduce their shareholdings for reasons other than inside information. In addition, the ability of insiders to increase their shareholdings would not be as valuable to insiders since there would be a greater cost to holding shares. That is, an insider's inability to sell the shares for an indefinite period also reduces the benefit of having the flexibility to buy shares in the first instance. Thus a buy-only rule might not impose much less cost on insiders than a no-trade rule.<sup>214</sup> For these same reasons, the buy-only rule would appear to impose much greater costs on corporate

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<sup>213</sup> Overall, sales by corporate insiders are twice as common as purchases. See Penman, *supra* note x, at 492 n.15. Most of the sales are by insiders of large firms and most of the purchases are made by insiders of small firms. See Rozeff and Zaman, *supra* note x, at 42. Thus, a sell-only rule might permit insiders to make more profits on inside information than a buy-only rule.

<sup>214</sup> However, insiders of small companies, who on average buy twice as many shares as they sell, might be better off than insiders of larger firms, who, on average, sell twice as much as they buy.

insiders than the pre-trading disclosure rule (and would be less effective).<sup>215</sup>

Unlike the buy-only rule (and no-trade rule), the sell-only rule would not impose any liquidity costs. The only cost it would impose on insiders (beyond reducing their profits from inside information) is that it would reduce insiders' investment flexibility (by the same extent as the buy-only rule).<sup>216</sup> As a result, the sell-only rule would impose very modest costs on insiders beyond reducing their profits from trading on inside information, perhaps even lower than those imposed by pre-trading disclosure.

In short, while either a buy-only or sell-only rule would be easy to enforce and would substantially reduce profits from trading on inside information, neither would appear to be as effective as the pre-trading disclosure rule. In addition, the buy-only rule would most likely impose a greater cost on corporate insiders than the pre-trading disclosure rule.

I now turn to a different method for relaxing the no-trade rule -- restricting the

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<sup>215</sup> Assuming that it would be desirable for insiders to own additional shares, *see supra* note x, a buy-only rule might not accomplish that result.

A buy-only rule would affect employee-insider shareholdings by (1) increasing the cost of holding shares (which would tend to reduce shareholdings) and (2) changing insider trading patterns (which could tend to either increase or decrease shareholdings). By permitting buying and forbidding selling, everything else equal, a buy-only rule would tend to increase each insiders' shareholdings. But each insider, anticipating the ability to buy but not to sell, would sharply reduce his or her initial holdings and accept much less compensation in the form of stock and stock options. A buy-only rule would increase insider shareholdings only when the "trading" effect (the elimination of selling) dominates the "cost" effect (the decrease in shareholdings as a result of the increased cost of holding shares) and the tendency of insiders to try to offset the "trading" effect by holding fewer shares initially and accepting less of their compensation in the form of shares. In all other cases, insider shareholdings will be decreased. A priori, there is no way of knowing which outcome would be more common. However, it is clear that a buy-only rule would not always increase voluntary insider shareholdings and may often reduce them.

<sup>216</sup> Insiders of small firms, who are generally net buyers, might be worse off than insiders of large firms, who are generally net sellers. Since insiders sell twice as many shares as they buy, a "sell-only" rule would -- overall -- be less burdensome to insiders as a group than a "buy-only" rule.

times in which insiders can trade.

### C. Trading-Windows

A second approach to restricting trading would be to restrict the timing of insiders' trading. For example, one could permit insiders to trade only during certain fixed periods throughout the year ("trading-windows").<sup>217</sup> A trading-window rule would reduce corporate insiders' profits from trading on inside information by hampering their ability to time their trades in order to take advantage of expected price movements. It would be easy to enforce and would appear not to impose significant costs on insiders. It thus might be seen as an attractive alternative to the pre-trading disclosure rule.

This Section first considers the "standard" trading-windows rule, under which corporate insiders are permitted to trade during a 7-30 day period after quarterly earnings reports and other important corporate announcements are released. The New York Stock Exchange has for the past two decades suggested that listed companies adopt such a rule (with respect to employee-insiders)<sup>218</sup> and many publicly traded companies have done so

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<sup>217</sup> Another example would be a "black-out" rule that permits insiders to trade except during certain limited periods throughout the year. Gillette, for example, has adopted a rule that allows employee-insiders to trade except during the two weeks before and the one week after the release of earnings results. The Wall Street Journal (October 9, 1996 p. C1). Cf. Grundfest, *Disclose and Refrain--A Deep and Clear Safe Harbor for Forward-Looking Statements: Proposed Rule 175A 2* (mimeo, STANFORD LAW SCHOOL, 1995) (in order to qualify for a proposed safe harbor for forward-looking statements with projection periods of three months or shorter, Section 16(a) insiders would be required to forego trading *after* the projection is made until the end of the projection period).

<sup>218</sup> The New York Stock Exchange has urged listed companies to allow insiders to trade only after the firm issues the annual report, quarterly results, proxy statement, or prospectus, and the insider has learned from the CEO that there are no important undisclosed developments. New

(perhaps in order to avoid "controlling person" liability under ITSFEA).<sup>219</sup> As we will see, the standard trading-windows rule -- while not imposing much costs on insiders -- would also not be very effective. The Section then considers whether the "standard trading-windows" rule could be modified to make it more effective (without substantially increasing its costs).

### 1. "Standard" Trading-Windows

For concreteness, consider a "standard" trading-windows rule that relaxes the no-trade rule featured in Section A to give insiders fixed trading windows during which they could trade (subject to Section 16(b) and Rule 10b-5). In particular, suppose that insiders are permitted to trade only during each of the four weeks following the release of quarterly earnings reports. As under the no-trade rule, an insider who traded in violation of the rule might be required to disgorge profits from the trade (if any) to the government and pay a penalty equal to a specified fraction of the dollar amount of the transaction.

Insiders would be required to wait no more than three months before they could buy or sell shares. There would be some liquidity and investment flexibility costs imposed on

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York Stock Exchange Listed Company Manual (NYSE Listed Company Manual) Section 309.00, 4 Fed. Sec. L. Rep. (CCH) Par. 26,100 at 19,103-104 (1983).

<sup>219</sup> See, e.g., O'Brian, *Insider Selling of a Stock Headed South May Mean Others Should Also Bail Out*, The Wall Street Journal, (July 17, 1996 p. C14). (reporting that Micro Warehouse Inc. permits executives to trade only during a nine-day period that begins five days after each quarterly earnings announcement); Joseph B. White and Alexandra Peers, *GM Executives Sold Price Prior to Sharp Drop*, The Wall Street Journal, (October 2, 1991 p. C1) (reporting that top GM insiders are allowed to sell shares only during four annual 10-day window periods following the release of earnings results).

insiders, but probably not much.<sup>220</sup>

The problem with the standard trading-windows is that it would be much less effective than the pre-trading disclosure rule. To be sure, the standard trading-windows rule would reduce insiders' ability to trade on certain inside information. First, insiders could not trade on information that they learn after a window period closes, and becomes public and incorporated into the stock price before the next window period begins. Second, when an announcement is expected to occur some time before the next window period, (1) it would be more difficult for insiders to defer trading until after the announcement has been made (because the price may move in an unfavorable direction between the time of the announcement and the next window-period) and (2) it would be impossible to take advantage of market overreaction immediately following the announcement.

However, there is reason to believe that the standard trading-windows rule would not be very effective at reducing profits from trading on inside information. First, under a trading-windows rule insiders could still trade on inside information that has not yet become public. As we saw in Part II, insiders often trade heavily up to six months in advance of significant corporate announcements.<sup>221</sup> This suggests that insiders often have access to important information months before it is announced (and therefore would not be prevented from trading on it under a standard trading-windows rule).

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<sup>220</sup> In general, the burden on insiders of a trading-windows rule would depend on the size of the window and the number of window-periods during the year.

<sup>221</sup> See *supra* note x.

Second, under a standard trading-windows rule, insiders are permitted to trade shortly after earnings and other announcements. This allows insiders to delay their trading until good or bad news is announced, as well as trade on the market overreactions to good or bad news that often follow important announcements.<sup>222</sup> In fact, there is anecdotal evidence that insiders of corporations using such windows buy and sell on inside information during the trading periods.<sup>223</sup>

Third, a standard trading-windows rule is unlikely to be effective at further reducing profits from trading on inside information if most companies have already adopted such a rule. A standard trading-windows rule could only reduce such profits to the extent there are companies that had not already adopted something similar.<sup>224</sup> For

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<sup>222</sup> Of course, the ability of insiders to trade on market overreactions would be reduced to the extent some time is allowed to elapse between the announcement date and opening of the trading-window. Cf. O'Brian, *supra* note x, at C14 (reporting that Micro-Warehouse Inc.'s trading windows open five days after each quarterly earnings announcement).

<sup>223</sup> See, e.g., O'Brian, *Insider Selling of a Stock Headed South May Mean Others Should Also Bail Out*, The Wall Street Journal, (July 17, 1996 p. C14) (reporting that Micro Warehouse Inc. which permits executives to trade only during a nine-day period that begins five days after each quarterly earnings announcement, sold \$2.4 million of stocks in late-April/early-May, a month before an announcement about disappointing second quarter earnings drove the share price down by more than 60%). In addition, many companies are forced to close trading windows when unscheduled announcements are made, suggesting that by themselves the trading windows could not have prevented illegal insider trading. See White and Peers, *GM Executives Sold Price Prior to Sharp Drop*, The Wall Street Journal (Oct. 2, 1991 p. C1) (reporting that top GM insiders are allowed to sell shares only during four annual 10-day window periods following quarterly earnings announcements); Alexandra Peers, *These Top Executives Sent Hot Signals to Investors*, The Wall Street Journal (Jan. 22, 1992, p. C25) (quoting a GM spokesman as saying that GM insiders were asked not sell shares "early in the year" and in the fourth quarter because of potentially market-moving announcements by the company).

<sup>224</sup> It would be important to determine to what extent trading windows were used during 1984-1989, the last period in which the excess returns made by insiders were studied (or to measure these profits with more recent data). It is possible that during this period only a few scattered firms had adopted trading windows, and that insiders' excess returns have declined

these three reasons, mandatory adoption of a standard trading-windows rule is unlikely to be very effective at reducing insiders' profits from trading on inside information below their existing levels.

## 2. More Restrictive "Trading Windows" Rules

As we saw, the standard trading-windows rule is likely to be considerably less effective than the pre-trading disclosure rule. The problem with the standard trading-windows rule is that corporate insiders can trade on inside information during the window period. Corporate insiders can thus take advantage of overreactions to corporate announcements or trade on important information that has not yet become public. Thus it is worth considering whether it would be possible to design a more restrictive trading-windows rule that achieves greater effectiveness without much imposing greater costs.

One approach to making the standard trading-windows rule more restrictive would be to restrict the types of trading that corporate insiders can engage in while the window is open. For example, one could permit insiders only to sell shares (in effect, combining the sell-only rule with the standard trading-windows rule).<sup>225</sup> A selling-windows rule would be more effective than the standard trading-windows rule because (1) it would not permit corporate insiders to buy on inside information during the window periods and (2) insiders would have less of an incentive to sell shares on inside information if they think that in the

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since then as more companies adopted trading-windows rules.

<sup>225</sup> Since the buy-only rule is quite costly for insiders, *see supra* Section IV.B, a selling-windows rule is likely to be more desirable than a buying-windows rule.

long-run the stock is a good investment.<sup>226</sup> Such a rule would not impose much additional burden on corporate insiders.<sup>227</sup>

The main problem with a selling-windows rule is that it would still permit corporate insiders to sell on inside information during the trading-windows.<sup>228</sup> Thus restricting the types of trading that can take place during the standard trading-window is unlikely to be very effective and could be costly.

The second approach to modifying the standard trading-windows rule would be to change the window periods themselves, by reducing the number of trading windows during

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<sup>226</sup> The rule would be more effective than a sell-only rule because it would limit the insider's ability to (1) buy in advance of inside information that will shortly become public and (2) postpone trading until an announcement that moves the price in a direction favorable to the insider.

<sup>227</sup> Since the burden on insiders imposed by the sell-only rule and the standard trading-window rules are not significant, the total burden on insiders of the selling-windows rule would also not be great: an insider would have slightly less liquidity than under a selling-only rule and less investment flexibility than under a trading-windows rule that permits purchases.

<sup>228</sup> One could eliminate this insider trading opportunity by requiring mandatory selling during the selling-window rule. For example, an insider could be required to sell a fixed fraction of its shares each window period. By removing the insider's discretion over the timing and amount of his or her sales, such a rule would prevent the insider from trading on inside information. The most important problem with such an approach is that there may be times when the amount of shares to be sold would not be sufficient to meet the insider's needs.

Similar schemes have already been suggested. See Levmore, *supra* note x, at \_\_\_\_ (describing a "blind-trust" scheme that would randomly purchase or sell shares each period). See also NYSE Listed Company Manual, *supra* note x, Par. 26,100, at 19,103 (suggesting that a firm concerned about insider trading could employ independent brokers to administer investment programs for employees so that employees could not time their purchases and sales of the company's securities). These two arrangements would also eliminate insiders' opportunity to trade on inside information. However, they would be more expensive to administer and impose greater flexibility and liquidity costs on insiders. It is also interesting to note that Netscape Corporation, while not preventing its employee-insiders from buying during trading-windows periods, insists that they spread out their sales so as not to "cherry-pick" the best prices.

the year and/or shrinking the size of each window. Reducing the frequency of the window periods and reducing their size would provide corporate insiders with fewer opportunities to trade on inside information (and therefore reduce their profits from trading on inside information).<sup>229</sup> And one might be able to reduce significantly the number and the length of trading window periods without increasing the burden on insiders.

However, it would be difficult to determine the point at which restricting the trading windows begins to impose substantial costs on insiders. Furthermore, whenever insiders did trade, they could still profit fully from their access to inside information.<sup>230</sup> In contrast, the pre-trading disclosure rule would substantially limit corporate insiders' ability to make profits from their access to inside information while giving them much more freedom to trade.

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<sup>229</sup> One could also delay opening the windows for a few weeks after important news is released. Delaying the opening the windows would reduce corporate insiders' ability to trade on the market overreactions to corporate announcements (but increase the amount of undisclosed information on which they could trade).

<sup>230</sup> Presumably, the optimal trading windows for each company might be different (*e.g.*, some companies might release important corporate information five times a year; for others it might be awkward to have fewer than six announcement dates).

#### IV. THE RETURN-LIMITING APPROACH

In the last Part, we saw that trade-restricting rules can be effective at reducing profits from trading on inside information only to the extent the rules impose additional costs on insiders. The problem with the trade-restricting approach is that it attempts to reduce these profits *indirectly* -- by curtailing an insider's ability to *trade*. It is thus worth comparing pre-trading disclosure to a more direct approach to reducing profits from inside information -- limiting the *returns* insiders can make from trading rather than the trading itself. To that end, this Part considers three (hypothetical) rules that follow the return-limiting approach: (1) a rule that requires insiders to forego any "excess" or "abnormal" returns from each trade (Section A); (2) a rule that imposes a "tax" on insiders' trades equal to average "excess" returns (Section B); and (3) a rule that limits the return an insider can make trading to that which he or she would have earned under the no-trade rule considered in the previous Part (Section C).<sup>231</sup> As we will see, these rules would, in principle, be somewhat more effective than pre-trading disclosure. However, the high cost of implementing any of these hypothetical rules would, in my view, make them undesirable alternatives to pre-trading disclosure.

##### A. Disgorgement of "Excess" Returns: A "Normal-Return" Rule

As Part II explained, the profits made by corporate insiders trading on inside information are measured by the "excess" returns insiders make on their trades. Thus, it

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<sup>231</sup> To my knowledge, none of these rules has been proposed before.

would be natural to consider a rule that attempts to reduce corporate insiders' profits from trading on inside information by forcing insiders to disgorge the "excess" returns from their trading.

Consider a "normal-return" rule that would force an insider who has purchased shares to disgorge the excess, if any, of the stock's *actual* return over the next 12 months, over the *expected* return that is generated by a model using stock price and market-performance data over a multi-year period around the transaction.<sup>232</sup> An insider who has sold shares would be required to pay the excess, if any, of the stock's *expected* return over the next 12 months, over the stock's *actual* return.<sup>233</sup>

The following example illustrates how the normal-return rule would operate. Suppose that insider A sells 100 shares of X corporation for \$100, and over the next 12 months the share price of corporation X declines by 50%, to \$50. Insider A has thus avoided a loss of \$5000. During the same period of time, the market as a whole loses 20% of its value. Based on the behavior of X's share price over a number of years (both before and after A's trade) and its correlation with the market, X's shares would have been predicted to have lost 30% of their value. Thus 20% of the 50% decrease in share price is deemed "abnormal." The "abnormal" decrease might have been due to the release of specific bad news about X corporation or X's industry. It might also have no identifiable cause. In any event, the normal return rule would force A to disgorge \$2000 to the

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<sup>232</sup> For a discussion of "excess" and "abnormal" returns, see *supra* note x and accompanying text. For simplicity, I assume that when an insider trades all of the "abnormal" returns, if any, are made in the following 12 months.

<sup>233</sup> *Id.*

government.

### 1. Effectiveness of the Normal-Return Rule

As explained in Part II, the "excess" returns earned by insiders as a group are believed to represent the profits insiders as a group make from the use of inside information. Eliminating the ability of insiders as a group to earn those returns should therefore deprive them of their profits from trading on inside information. The total "excess" returns made by insiders is simply the sum of all insiders' *actual* returns from their trades (the actual gain or loss on a purchase, or the actual gain or loss that foregone by selling) less the *expected* returns of the transaction (the expected gain or loss following a purchase, or the expected gain or loss foregone following a sale). Thus, the normal-return rule applied to each individual insider transaction would eliminate the *aggregate* "excess" profits made by corporate insiders, and therefore total profits from trading on inside information. Consequently, the normal-return rule would be more effective at reducing total profits from trading on inside information than pre-trading disclosure (which, as explained, would permit insiders to earn "excess" returns to the extent the market is not efficient).<sup>234</sup>

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<sup>234</sup> It is also worth noting that there would be differences between the rules even in the absence of transaction costs. Without transaction costs, both rules would, in principle, eliminate insiders' ability as a group to profits from inside information. However, the rules would have different effects on each trade. Because the price adjustment that follows pre-trading disclosure is based only on people's estimates of future abnormal returns, the rule will be less accurate with respect to each trade than the normal-return rule, which can calculate these returns more accurately *ex post*.

Nevertheless, it should be emphasized that application of the normal-return rule could force an insider to disgorge more or less of the trading profit in any given transaction than that

## 2. Costs of the Normal-Return Rule

A normal-return is likely to be much more costly than a pre-trading disclosure rule. First, any trade by a corporate insider could lead to a demand that the insider disgorge its "abnormal" returns from the trade. There would be substantial litigation over how to measure properly those returns. Enforcement costs alone would therefore make the normal-return rule cost-prohibitive. And since each trade could lead to litigation over the possible disgorgement of "abnormal" returns, the normal-return rule would create a substantial transaction-cost burden for insiders.

Second, the normal-return rule would reduce corporate insiders' returns by more

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which is attributable to inside information. Although on average insiders are likely to be no better investors than the average public shareholder, there are individual insiders who would outperform the market even without inside information and those who would underperform it. However, a "normal return" rule assumes that every insider is an "average" investor (and thus any above-average return is due to inside information). It thus would not distinguish between abnormal returns earned from inside information and abnormal returns earned as a result of market savvy. As a result, it would force talented insiders to disgorge not only their profits from insider trading but also the abnormal profits attributable to their investment skills. On the other hand, a normal return rule would allow other insiders to benefit from inside information to the extent they would have earned abnormally low returns because of their inferior investment skills.

The following example illustrates this point. Suppose that insiders A and B both receive stock compensation and periodically sell shares to rebalance their portfolios. Suppose that insider A is an above average investor who always beats the "normal" return by an average of 2% when selling, and insider B is a below average investor and does an average 2% worse whenever he or she sells shares. For simplicity, suppose that both insiders earn 10% trading on inside information above what they would otherwise make. Thus insider A earns an abnormal return of 12% and insider B earns an abnormal return of 8%. When their trades are aggregated, it will appear that they are on, average, making 10% trading on inside information. But when each insider's trades are looked at separately, insider A will be appear to be making 12% based on inside information, and insider B will be appearing to make 8%. Insider A will be required to disgorge 2% too much and insider A will be required to disgorge 2% too little. Thus, under a normal-return rule insider A will be required to over-disgorge and insider B will be able to profit from his access to inside information, even if "excess" returns could always be determined correctly.

than that which arises from their access to inside information, thus making them systematically worse off than public shareholders (even in the absence of the transaction-cost burden). The intuition for this is as follows: when the *expected* return is found to be higher than the insider's *actual* return (either because the *actual* return is low as a result of the insiders' bad luck or misjudgment, or because error in the modeling procedure creates too high an estimate of the *expected* return), the insider receives no compensation. However, when the insider's *actual* return is found to be higher than the *expected* return (because the *actual* return is high due to good luck or good judgment, or because of an error in the model the *expected* return to the insider is too low), the insider is required to disgorge the entire difference. Thus over time the insider will be forced to disgorge more than the *average* abnormal return he makes trading.<sup>235</sup> As a result, most insiders, and insiders as a group, would made be systematically worse off than public shareholders under the normal-return rule.

To illustrate, suppose that on average insider A makes 10% in "excess" profits, but that half the time he or she underperforms the *expected* return by 5% and half the time he or she makes an abnormal *positive* return of 25%. Under a normal return rule, each time insider A earns a 25% "excess" return he or she would be required to disgorge it, while each time he or she earns an abnormal negative return there would no consequences. Thus, insider A would be required to disgorge an average of 12.5% per trade -- more than

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<sup>235</sup> This problem could be reduced by deferring a calculation of an insider's excess returns until his or her insider status is terminated, and then taking into account all of the insider's trades. However, for such a calculation to be meaningful the abnormal returns associated with each trade would need to be discounted for the time value of money.

the average amount earned trading on inside information.

The high enforcement costs and the burden the rule would place on insiders would thus make the normal-return rule a very costly approach to reducing profits from insider trading.

## **B. Imposing A Uniform "Excess>Returns" Tax on Insider Trades**

In Section A we saw that the normal-return rule's trade-by-trade approach to eliminating "excess" profits would be effective at reducing corporate insiders' profits from trading on inside information. However, that approach would be too costly to enforce, would create a transactions cost burden for insiders, and would make insiders' returns systematically lower than those of other shareholders.

Thus it is worth briefly examining an alternative approach to forcing insiders to disgorge their "excess" returns: imposing a uniform "excess-returns" tax on all insider transactions. For concreteness, let us consider a rule under which insiders purchasing shares are forced to pay the average "excess" returns earned by insiders as a group when they purchase shares and insiders selling shares are forced to pay the average "excess" returns earned by insiders as a group when they sell shares.

The uniform excess-returns tax would eliminate profits from trading on inside information *if* the average "excess" returns earned by insiders buying and selling shares remained unchanged following adoption of the rule. In such a case, the uniform excess-return tax would be as effective as the normal-return rule, and thus more effective at reducing corporate insider trading profits than pre-trading disclosure. Once the appropriate

tax was determined, the cost of enforcing the rule would be minimal. Insiders could be required to submit, along with their reported trades, the proper excess-returns tax for each trade.

However, imposition of the excess-returns tax would alter the pattern of corporate insiders' trading activity. In particular, the imposition of a uniform excess-returns tax would cause corporate insiders to trade only when either (1) they are forced, for one reason or another, to buy or sell shares; or (2) they anticipate making "excess" returns that would be greater than the tax. This in turn could increase or reduce average "excess" returns, which would make the uniform excess-returns tax either too low or too high (respectively). In addition, exogenous changes in the markets and in firms themselves -- such as changes in price volatility, the number of analysts covering stocks, and the policies adopted by firms towards insider trading -- could tend either to increase or decrease the average "excess" returns earned by insiders over time. The cost of continually adjusting the tax to ensure that it remained effective (and to avoid the cost that would result from overtaxing insiders) would thus make the rule much more difficult to enforce than pre-trading disclosure.

### **C. A "Virtual No-Trade" Rule**

In Section IV.A. we saw that, in principle, a no-trade rule would be completely effective at eliminating insider trading profits. We also saw that the main problem with the no-trade rule is that it would impose too large a cost on insiders by reducing their liquidity. In principle, however it should be possible to provide insiders with the same

*return* as the no-trade rule while giving them complete freedom to buy and sell shares.

Such a "virtual" no-trade rule would have the same effect as a rule that eliminates insiders' ability to profit from their access to inside information, but not the liquidity costs associated with the no-trade rule.<sup>236</sup>

Let us consider the following virtual no-trade rule. Suppose that whenever an insider buys company shares, he or she is presumed to have sold an equal amount in a market-index fund. And whenever the insider sells company shares, he or she is presumed to reinvest the proceeds in such a fund. At the end of an insider's tenure, the return that is imputed to his trading in the company's stock (including the returns that are foregone when the insider is presumed to liquidate shares in the index fund and the extra return the insider is presumed to make when the insider is deemed to purchase shares in the index fund) is compared with the return he or she would have made had the no-trade rule been in effect.<sup>237</sup> Any return in "excess" of what the insider would have earned under the no-trade rule would then be disgorged to the government.

To illustrate the operation of such a rule, suppose that when A becomes an insider on January 1st, 2000, he or she owns 1000 shares that are worth \$10 each. A could then sell those shares or buy additional shares. If A sells shares, the proceeds are considered to

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<sup>236</sup> However, as we will see, corporate insiders would still face investment flexibility costs (because they could not adjust their "investment" in their companies), as they do under the no-trade rule.

<sup>237</sup> If the period were to be any less than the insiders' entire tenure, the virtual no-trade rule would tend to make insiders worse off than under a no-trade rule because in periods where they outperformed the no-trade rule they would be forced to disgorge but in periods where they underperformed the no-trade rule they would not be compensated.

be placed in a market-index fund. If A buys shares, the money is considered to have come from liquidating shares in that fund. Suppose that on January 1st, 2001, A buys another 1000 shares at \$20 each. On January 1st, 2002, when the price of the shares is \$30, A terminates his or her insider status. Suppose further that during 2001, the return on the market-index fund is 25%.

Had A been subject to the no-trade rule, A would have held the 1000 shares he or she owned on January 1st, 2000 until January 1st, 2002, when they were worth \$30 each. Thus A would have ended up with \$30,000 worth of shares. But because A purchased 1000 shares on January 1st, 2001, he or she ended up with \$60,000 worth of shares. However, as a result of the hypothetical liquidation of the \$20,000 from the market-index fund, which returned 25% during the year A held the additional 1000 shares, the purchase of those 1000 shares is presumed to have cost A \$25,000, the \$20,000 that was "liquidated" and the \$5,000 in foregone appreciation on that amount. As a result, A is considered to have gross proceeds of only \$35,000 from holding and trading in company shares, \$5,000 more than if A had been subject to a no-trade rule. Thus, A would be required to disgorge \$5,000.

### **1. Effectiveness of the Virtual No-Trade Rule**

To the extent that a virtual no-trade rule provides an insider with a return that is no better than that of the no-trade rule, the virtual no-trade rule would in principle eliminate the ability of *each* insider (and therefore insiders as a group) to make profits trading on

inside information.<sup>238</sup> It would thus be more effective than the pre-trading disclosure rule.

However, to the extent that this index does not reflect insiders' other investment opportunities, the rule would fail to provide the same return as a no-trade rule. And to the extent insiders earn returns different from that under a no-trade rule, the less effective the rule would be. If in any given case the index provides a hypothetical return that is greater than the actual returns the insider could earn, the insider can use inside information to buy additional shares at a low price. And to the extent the index provides a return that is too low, the insider could use inside information to sell shares when they are overpriced. Thus, in practice, the virtual no-trade rule would not be 100% effective.

## **2. Costs of the Virtual No-Trade Rule**

The virtual no-trade rule could also be expected to impose more costs than the pre-trading disclosure rule. First, it would be costly to construct an index that reasonably reflects insiders' other investment opportunities.<sup>239</sup> The flexibility that would be needed to ensure that the rule was relatively effective could give rise to litigation.

Second, the virtual no-trade rule would tend to make corporate insiders

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<sup>238</sup> Insiders could still profit from insider information whenever they have prior trading "losses" that would shelter the excess profits. In other words, an insider would be able to make profits trading on inside information to the extent he incurs losses relative to the average shareholder. But he could never do better than the average shareholder by earning such profits.

<sup>239</sup> However, once the appropriate market-index was chosen, the cost of enforcing the rule would not be high. When a person's insider status terminates, a computer program could quickly analyze the insiders' trading and determine the "penalty," if any.

systematically worse off than public shareholders (even if the rule did not reduce corporate insiders' investment flexibility). The intuition is that the market-index would not reflect perfectly every insider's investment opportunities -- it would overstate some and understate others. When errors in determining hypothetical no-trade returns exaggerate an insider's return relative to the no-trade rule, that insider would be required to pay too high a penalty. But when the error understates an insider's return so that it appears below that which he or she would have made under the no-trade rule, that insider would not be compensated.<sup>240</sup>

In sum, the virtual no-trade rule could be effective at reducing corporate insiders' profits from trading on inside information if a market-index were found that reasonably reflected insider's alternative investment opportunities. However, even if such an index could be created, the development and updating of the index -- and the litigation the choice of the index would generate -- would make this rule costly to enforce. It would also burden insiders by restricting their investment flexibility and, to the extent the market index did not perfectly reflect their outside opportunities, the virtual no-trade rule would tend to reduce insiders' investment returns below those of other shareholders. The virtual no-trade rule thus does not appear to be a feasible approach to reducing profits from trading on inside information.

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<sup>240</sup> As explained earlier, such errors could also give rise to opportunities to profit from inside information.

## VII. CONCLUSION

Despite recent efforts by Congress and the SEC to crack down on trading on inside information, "corporate insiders" -- officers, directors, and large shareholders of corporations -- continue to make substantial profits trading on inside information acquired through their relationships with their corporations. In light of the failure of current trading regulations to prevent corporate insiders from profiting from their access to inside information, this paper puts forward an approach that would substantially reduce these profits: requiring insiders to disclose their trades to the market shortly before trading.

Pre-trading disclosure would reduce corporate insiders' profits from trading on inside information by forcing insiders to trade at a price that reflects the information, if any, that is communicated by the announcement. The paper showed that, over time, such a rule could be expected to reduce substantially (and, in principle, could eliminate) the profits made by corporate insiders trading on inside information. The analysis offered also suggested that such a rule would be simple to enforce and would not impose much cost on insiders (beyond reducing their profits from trading on inside information).

The paper also considered a variety of other steps that could be taken to reduce the profitability of such trading -- including a rule that would require corporate insiders to perform all of their trades "face-to-face," rules that would restrict the timing or direction of insiders' trading; and rules that would limit insiders' returns from trading. However, none of these rules appears to be as attractive an approach as pre-trading disclosure.