An analysis of insiders’ information-based trade within the SEC
Rule 10b5-1 safe harbor

Alan D. Jagolinzer
Stanford University
Graduate School of Business
518 Memorial Way
Stanford, CA 94305
(650) 725-2741
jagolinzer@stanford.edu

January 6, 2005

Abstract: The SEC enacted Rule 10b5-1 to deter insiders from trading with private information, yet also protect insiders’ preplanned, non-information-based trades from litigation. Despite its requirement that insiders plan trade when not privately informed, the Rule appears to enable information-based trade. Participating insiders earn abnormal profits larger than profits in periods before the Rule, and larger than profits to insiders trading outside of the Rule. Participating insiders also appear to trade more when it is profitable. Specifically, participating insiders’ sales volume is positively associated with abnormal returns and is greater before “bad news” earnings announcements than before “good news” earnings announcements.

JEL classification: K22; M52

Keywords: Insider trading; Securities Exchange Act of 1934; diversification trade; planned trade; blackout windows

Previously titled: “An empirical analysis of insider trade behavior within Rule 10b5-1.” I am grateful to Jesse Fried (Berkeley Law School) and Donna Nagy (Cincinnati Law School) for informative discussions about securities law; Daniel T. McCurdy and Scott Unger (The Cincinnati Insurance Company) for discussions about directors and officers’ litigation insurance; and several Nasdaq firm corporate officers and attorneys for discussions about corporate trading policies. I acknowledge helpful comments from my dissertation committee: Anne Beatty, Steven Huddart (chair), Karl Muller, and Mark Roberts, as well as from Ross Watts, an anonymous referee, Dan Givoly, Jim McKeown, Eddie Riedl, Mark Soliman, Hal White, and Yong Yu. I also acknowledge helpful comments from workshop participants at Carnegie-Mellon, Georgia, Minnesota, New Hampshire, Oregon, Pittsburgh, Rice, Southern Methodist, Stanford, Toronto, UC-Berkeley, and the Washington D. C. Area Finance Association Spring 2004 Conference. I am grateful for financial support from the American Institute of Certified Public Accountants, the Pennsylvania Institute of Certified Public Accountants, and the Deloitte and Touche Foundation.
1. Introduction

This study examines whether insiders earn information-based profits from trades protected from legal liability within the SEC Rule 10b5-1 safe harbor. The Rule protects insiders’ trades from civil or criminal penalties if they are planned in advance when insiders do not possess material nonpublic information. Certain Rule provisions, however, may allow insiders to profit from information-based trade while still obtaining legal protection within the safe harbor. The potential for insiders to protect profitable trade makes the Rule interesting since it seems to conflict with regulatory intent and since there appears to be broad use of the Rule in the market.

An analysis of Rule 10b5-1 trade profits provides an understanding of how insiders respond to a regulation that both increases insiders’ trade risk by implementing a stricter enforcement standard, and decreases insiders’ trade risk by implementing a safe harbor to protect certain trades. The ambiguous effect of the regulation on insiders’ trade risk makes this analysis different from prior research that shows that regulation limits insiders’ profitable trade opportunities. Prior research shows that insiders appear reluctant to trade profitably before forthcoming news events (Givoly and Palmon, 1985); earnings announcements (Park, Jang, and Loeb, 1995), and management earnings forecasts (Penman, 1982; Noe, 1999). Insiders also appear to reduce profitable trade before takeover announcements (Seyhun, 1992) and before negative earnings surprises (Garfinkel, 1997) in response to regulation or case law that increases penalties for illegal insider trading.

This study should interest regulators and market participants who would like to evaluate the effect of the Rule, since the Rule is intended to deter insiders from trading with material nonpublic information, yet protect trades by uninformed insiders from legal liability.
Regulators, for example, might be interested in whether insiders mimic Kenneth Lay, who relied on the Rule to protect up to $100 million in personal stock sales prior to Enron’s demise.\textsuperscript{1} This study should also help firms and insiders assess costs and benefits of establishing trade plans within the Rule’s safe harbor.

Ex ante, it is not clear whether the Rule provides insiders the opportunity to profit from information-based trade. The safe harbor requires insiders to plan trade when they do not possess material nonpublic information, so insiders should not be able to systematically earn abnormal profits in an efficient market. Trades planned in advance are also subject to greater market risk, thereby reducing their profit potential. Yet, certain Rule provisions may protect insiders’ information-based trade, allowing insiders to earn abnormal trade profits and perhaps encouraging them to trade when they might not have otherwise.\textsuperscript{2}

Evidence suggests insiders who participate within Rule 10b5-1 trade plans profit from information-based trade. Participants’ sales, on average, follow price increases and precede price declines generating economically large abnormal profits. Participants’ trade profits are larger than trade profits in periods before the Rule was available and are larger than trade profits to other insiders, from the same firm, who choose not to participate within the Rule.

Participating insiders also appear to increase trade volume when it is most profitable. There is a positive association between abnormal trade returns and participants’ sales trade volume. Net sales are also concentrated around earnings announcements when they would


\textsuperscript{2} Glen Meakem, chairman and CEO of FreeMarkets Inc., sold $3,000,000 of stock in 2001 within a Rule 10b5-1 trading plan where the final trade occurred five days before the company lowered earnings guidance for the year. “It [is] fair to assume that if the rule had not been adopted, he might have thought twice before selling so much stock in advance of an earnings report” (Lane, Marc J. December 3, 2001. \textit{SEC Insider Trading Rule Doesn't Instill Confidence}. Crain’s Chicago Business [cited October 2, 2003]). <http://www.marcjlane.com/article/SECinsider120301.html>}.
be most profitable; e.g., greater sales volume before “bad news” announcements and lower sales volume after “bad news” announcements. This is consistent with the Rule relaxing insiders’ trade risk since it appears insiders trade more in periods when they might not have otherwise.

Collectively, the results of this study suggest the Rule relaxes insiders’ trade risk thereby allowing insiders to increase profitable trade activity. Results are consistent with a notion, presented in the business press, that insiders use the Rule for “immunity baths,” where they sell shares before price declines yet maintain legal impunity.³ Results are also consistent with the possibility that insiders modify information disclosure timing or quality to profit from trades planned within the Rule. In either case, there are clearly policy implications if the intent of the regulation is to make it difficult for insiders to profit from information-based trade.

This paper proceeds as follows: Section 2 provides background information about SEC Rule 10b5-1. Section 3 presents the hypotheses. Section 4 presents the sample. Section 5 presents results. And Section 6 concludes the paper and discusses future research ideas.

2. Rule 10b5-1

The SEC released Rule 10b5-1 in October 2000, in part to deter insiders from trading while in possession of material nonpublic information. The Rule specifically makes trade while in possession of material nonpublic information illegal across all jurisdictions. Prior to the Rule, the SEC enforced this possession standard but some courts instead enforced a use standard.⁴ For trade to be deemed illegal, these courts required proof that an insider

⁴ For example, United States v. Adler, 137 F.3d 1325 (11th Cir. 1998) and United States v. Smith, 155 F.3d 1325 (9th Cir. 1998) supported the use standard.
actually used material nonpublic information in his possession as a basis for his decision to trade. The use standard thereby allowed an insider in these jurisdictions to avoid legal jeopardy by credibly demonstrating that possession of nonpublic information did not influence his decision to trade. The SEC enacted the Rule to effectively eliminate the use standard because it is “highly doubtful that a person who knows inside information relevant to the value of a security can completely disregard that knowledge when making the decision to purchase or sell that security. …Indeed, even if the trader could put forth purported reasons for trading other than awareness of the inside information, other traders in the marketplace would clearly perceive him or her to possess an unfair advantage.”

The SEC implemented relief within the Rule because it recognized that the possession standard limits insiders’ ability to trade for diversification since insiders routinely possess material nonpublic information. The Rule provides an affirmative defense against litigation to insiders who preplan trades when they do not possess material nonpublic information. This safe harbor does not prevent a party from initiating a lawsuit against insiders, but it does provide insiders a defense “which, if found to be credible, will negate criminal or civil liability, even if it is proven that the defendant committed the alleged acts.”

To qualify for the affirmative defense, insiders must: (1) enter into an irrevocable and explicit contract to purchase or sell firm securities; (2) transfer trade execution authority to

---

5 Usually, this argument requires the insider to demonstrate some tangible need for the proceeds from the equity transaction (e.g., a house purchase).
an uninformed third party (e.g., a broker); or (3) provide an uninformed broker an explicit written algorithm for trade execution. Many insiders choose option (3) since it provides a written record of the agreement that can be produced, if needed, for defense. Option (3) plans often outline specific dates for trades to execute or outline trade execution windows in which trades should execute subject to limit orders. Appendix A provides one example.

Insiders may find trading within the Rule costly because the Rule limits their ability to influence trades after plans have been initiated. The Rule expressly prohibits insiders’ subsequent influence over whether planned trades may execute. Insiders may selectively terminate their plans before they are scheduled to expire or selectively execute additional trades outside of their plans, however these acts may compromise the Rule’s legal protection or trigger a negative market response. The SEC suggests that “termination of a plan…could affect the availability of the Rule 10b5-1(c) defense for prior plan transactions if it calls into question whether the plan was ‘entered into in good faith.’” A roundtable of corporate attorneys suggests that trading outside of an existing plan, particularly to hedge or negate positions within the plan, will likely jeopardize the plan’s legal protection. And there is evidence that the market reacts negatively to a failure to comply with a preannounced trade commitment.

Some 10b5-1 use is not observable since the SEC allows firms to choose who participates within the Rule and whether participation is disclosed. In most firms, the board chooses whether to amend insider trade policy to allow 10b5-1 trade. Then firms generally

---

delegate the decision of whether to trade within 10b5-1 to the insider.\textsuperscript{12} In April 2002, the SEC proposed to mandate 8-K disclosure of insiders’ enrollment in 10b5-1 trading plans and also considered mandating disclosure of 10b5-1 participation within Form 4 for trades that are executed pursuant to these plans.\textsuperscript{13} This proposal, however, has been tabled indefinitely.\textsuperscript{14} Some firms, however, choose to voluntarily disclose participation in 10b5-1 trading programs, which provides the opportunity to identify the sample used in this study.

3. \textbf{Hypotheses}

Do insiders trade with information within Rule 10b5-1? Do these insiders trade more when it is more profitable? These questions directly address the effect of the Rule, whether the Rule relaxes insiders’ trade risk, and whether the Rule provides insiders more profitable trade opportunities.

3a. \textit{Information-based trade}

One should not expect to observe information-based trade within the Rule if insiders comply with the Rule’s proscription that trades be planned when insiders do not possess material nonpublic information. To obtain the affirmative defense, the burden of proof rests with insiders to show they have complied with the Rule.\textsuperscript{15} Therefore, insiders who rely on the safe harbor to reduce legal liability may be likely to comply with the Rule and avoid trade based on private information.

\begin{enumerate}
\item A few firms mandate trade through 10b5-1 to reduce litigation risk and reduce stock price sensitivity to insider trade signals. Most firms, however, allow insiders the choice to trade within 10b5-1 because they value insider trade flexibility. This is consistent with Roulstone (2003), who finds that firms that limit insider trade flexibility incur additional compensation expense.
\item Phone conversation with Anne M. Krauskopf, Special Counsel, Office of the Chief Counsel, SEC Division of Corporate Finance, March 24, 2003. Status confirmed with the SEC on December 29, 2003.
\end{enumerate}
On the other hand, one might expect to observe information-based trade within the Rule if (1) insiders believe other provisions of the Rule inadvertently reduce litigation risk for informed trade; (2) the Rule opens otherwise restricted trade opportunities; or (3) the Rule allows insiders to manipulate the timing or content of information disclosures subsequent to plan initiation.

Insiders might believe the Rule reduces informed trade litigation risk because the Rule applies the possession standard at the initiation date of the plan, not at the execution dates for trades within the plan. This shift forward makes it more difficult for shareholders or the SEC to link possession of information to execution of abnormally profitable trades.\(^\text{16}\)

The Rule opens otherwise restricted trade opportunities because some firms allow plan trades to execute within “blackout windows,” such as prior to earnings announcements, where trading by insiders is normally forbidden.\(^\text{17,18}\) Further, the SEC allows 10b5-1 trades to execute during pension fund blackout windows.\(^\text{19}\) This may provide an incentive and enhance the opportunity for insiders to trade during periods when they have a distinct information advantage.

Finally, the Rule allows insiders to manipulate the timing and content of disclosures related to material information obtained subsequent to faithful plan initiation. This is because the Rule does not require an insider to abstain from trade if he obtains material

\(^{16}\) An example can illustrate this point. An insider sells shares the day before his firm releases news that triggers a large stock price decline. Without 10b5-1, courts evaluate whether he possessed material nonpublic information regarding the news release on the transaction date. There is high probability that courts will link the transaction with possession. However, if the transaction was planned six months earlier within the Rule, courts must now assess whether he possessed material nonpublic information regarding the news release at the plan initiation date. Because of the distance between events, it will be more difficult for courts to link the transaction with possession.

\(^{17}\) Firms’ use of the Rule as a substitute for blackout windows was confirmed through discussion with several firms’ corporate attorneys.

\(^{18}\) See Jeng (1999); Bettis, Coles, and Lemmon (2000); and Roulstone (2003) for discussion about firm-imposed blackout windows.

\(^{19}\) Rule 101(c) of Regulation BTR, 17 CFR 245.101(c).
nonpublic information after he has initiated his trading plan. Therefore, insiders with existing plans can disclose subsequently obtained material nonpublic information when it maximizes planned trade profits.

This leads to the following hypothesis (in alternative form).

H1: Rule 10b5-1 trades are based on private information.

3b. Trade volume and profitability

It is unclear whether one should observe higher trade volume by participating insiders when it is more profitable. If participating insiders are true liquidity traders, as the Rule likely intends, then their trades should be randomly distributed across time, absent any blackout restrictions. This is feasible within Rule 10b5-1 since many firms relax blackout windows for these trades. However, relaxation of blackout windows combined with the potential for lower informed trade litigation risk provides participants better opportunity to trade when it is more profitable, such as prior to news events like earnings announcements.

If participants trade more when it is more profitable, then one should observe higher net sales volume prior to disclosure of “bad” news than prior to disclosure of “good” news. Similarly, one should observe higher net sales volume after disclosure of “good” news than after disclosure of “bad” news. Prior research that examines insider trade patterns before the existence of Rule 10b5-1 finds little evidence of strategic net sales patterns prior to news events because of both litigation concerns (e.g., Seyhun, 1992; Garfinkel, 1997; Noe, 1999) and firm-imposed blackout windows (e.g., Bettis, Coles, and Lemmon, 2000; Roulstone, 2003; Roulstone and Jagolinzer, 2004). These restrictions and litigation concerns appear to limit insiders’ trades to windows after news events. It is natural then, to expect more trade volume during otherwise risky yet more profitable periods if the Rule...
relaxes informed trade litigation risk. This leads to the following hypothesis (in alternative form):

H2: There is more Rule 10b5-1 trade volume during more profitable periods than during less profitable periods.

4. Sample

Rule 10b5-1 participants are identified using a keyword search for the term “10b5-1” within the Lexis-Nexis SEC Filings and Business Newswire databases. This search produces 310 firms that disclosed information regarding Rule 10b5-1 participation between October 23, 2000 and December 31, 2003. Observations are retained from 180 disclosure firms that identify individual participants; have trade data available from the Thomson Financial Wealth Analytics database; and have CRSP data available through 2003.

Table 1 provides descriptive statistics for the disclosure firms, their participating insiders, and insiders’ trade activity within the six months following disclosure. Disclosure firms are listed mostly on the Nasdaq exchange, and are generally not large. Only 4.4% of these firms are Fortune 500 ranked.

It appears that most participants are top-level managers. Panel C of Table 1 shows a large concentration of managers from top positions within the participation group. There is, however, some lower-level management (i.e., managers who rank below the top-four executives) representation within this group, so the Rule does not appear to be exclusively available to top management.

Panel D of Table 1 shows that Rule 10b5-1 trades are predominantly sales. This is consistent with insiders using the Rule to protect sales since insiders’ sales are subject to greater legal scrutiny than insiders’ purchases.
Rule 10b5-1 trade volume represents a majority of total insider trade volume at disclosure firms. Panel D of Table 1 shows that, for both sales and purchases, participants’ transactions are most of all insider share transactions within these firms. Specifically, 76% of all insider purchase and 74% of insider sales transactions, on average, are executed through 10b5-1 plans.20

There appears to be reasonably broad use of the Rule at firms that provide no disclosure. Table 2 presents results of a survey of 2,690 Nasdaq-listed firms that did not disclose insider participation within the Rule between October 20, 2000 and December 31, 2002. Almost 18% of the 378 survey respondents report that their firms had at least one insider participating within a 10b5-1 trading plan during the period. Several respondents reporting no participation also indicated that insiders at their firms might participate in the near future. This evidence, combined with evidence that most insider trade volume is within 10b5-1 at disclosure firms (Panel D of Table 1) suggests that many insiders trade within the Rule. The results of this study, therefore, should be relevant to regulators and market participants interested in better understanding the effects of the regulation.21

5. Empirical Results

Consistent with prior research, this study infers whether Rule 10b5-1 trades are information-based from insiders’ abnormal trade returns (e.g., Finnerty, 1976) and insiders’ trade patterns surrounding news events (e.g., Karpoff and Lee, 1991; Seyhun, 1992; Seyhun and Bradley, 1997; Noe, 1999). Finnerty (1976) suggests that insiders’ trades should not systematically generate abnormal returns in an efficient market if insiders are not privately

---

20 It is assumed that all transactions made by participants during the six-month window following disclosure are subject to 10b5-1 plans. It is possible that some transactions are executed outside of these plans. This is unlikely, however, since it is costly for participants to trade outside of their plans (see section 2).
21 The ability to generalize results beyond this study’s sample is discussed in Section 6.
informed. Therefore evidence of abnormal returns is consistent with informed trade. Patterns of profitable trade preceding events (e.g., sales before bankruptcy) are also consistent with informed trade and comprise the bulk of evidence supporting illegal trade activity in case law (Seyhun, 1992).

5a. Abnormal Returns and Profits

To examine whether trades within the Rule are information-based, Panel A of Table 3 presents abnormal return and profit data for sales by insiders who trade within the Rule. Data regarding insiders’ purchases are not tabulated because the sample of insiders’ purchases is too small for statistical inference.\(^{22}\) Within the 180 sample firms, 290 insiders initiate sales during the six-month window following the firms’ disclosure of 10b5-1 participation. For each trade by each insider, the abnormal return is computed as the six-month buy-and-hold return from the date of trade minus the six-month buy-and-hold return to the CRSP value weighted portfolio.\(^{23}\) Because these are sales transactions, the buy-and-hold abnormal return is multiplied by \(-1\) since sales represent foregone profits or avoidance of loss. MeanRet is then computed as the insider’s average abnormal return per trade during the six-month window following the firm’s 10b5-1 disclosure. TotalProf, a measure of the economic value of trades made within the Rule, is computed as each insider’s cumulative abnormal dollar profit for the period. In other words, TotalProf is computed by multiplying each trade’s abnormal return by its dollar volume and then cumulating periodic trade profit to each insider.

\(^{22}\) There is little evidence of profitable trade within the sample of 17 insiders who had 10b5-1 purchase transactions.

\(^{23}\) Prior research generally computes abnormal returns over a six-month horizon, since insiders are penalized for profits earned on trades made fewer than 180 days subsequent to prior trades (i.e., “short-swing” rule).
Panel A of Table 3 shows that participating insiders earn statistically positive abnormal returns and economically significant abnormal profits from sales planned within Rule 10b5-1. On average, participants’ sales anticipate firm price declines, providing a 6% market-adjusted average abnormal return. This translates, on average, to a periodic trade profit of almost $409,000 per insider for the six-month window. This evidence suggests insiders’ trades within the Rule are information-based.

To examine whether participating insiders’ trades follow price increases or declines, Panel A of Table 3 presents firm returns prior to trade activity. PriorRet is computed as the firm’s buy-and-hold return for the twenty days preceding each participant’s first trade execution during the period. On average, firms observe a 10% run-up in stock price preceding participants’ sales activity. This suggests that participating insiders employ contrarian trade strategies, consistent with Seyhun (1998) and Lakonishok and Lee (2001).

Collectively, evidence in Panel A of Table 3 is consistent with participants utilizing information to profit from trades planned within the Rule. Participants appear to systematically execute sales between price increases and subsequent price declines, generating statistically positive and economically significant abnormal profits.

Participants’ trade profits appear larger than those to nonparticipant traders from within the same firms. Panel B of Table 3 compares participants’ trade returns to nonparticipants’ trade returns to control for other factors that might influence the magnitude of returns, such as changes in firm risk or performance. This analysis focuses on the subset of 210 participants at 133 firms where at least one nonparticipant actively trades within the six-month window following 10b5-1 disclosure. For sales trades, there is no detectable difference in MeanRet across the partition, despite the fact that participants have relatively
less control over whether trades execute. Participants earn, on average, almost $507,000 more abnormal sales profits than nonparticipants, likely due to relatively larger periodic trade volume.

Finally, participants’ trade profits appear higher than profits earned before the Rule was available, despite the Rule’s requirement to plan trade without possession of material information. Panel C of Table 3 shows an average 9% increase in MeanRet for the 79 participants from 54 firms who actively sell shares in both the six-month window following disclosure of their participation and a six-month window that begins one year before the disclosure date. Average improvement in TotalProf of nearly $300,000 is not statistically different from zero, however median improvement of nearly $76,000 is significant at the 1% level (one-tailed), providing some evidence that the Rule improves insiders’ trade profits.

5a1. Sensitivity Analyses

Inferences from the analyses in Panel A of Table 3 are unaffected when abnormal returns are computed using the six-month buy-and-hold returns to the CRSP equally weighted portfolio, the S&P 500 index portfolio, and the CRSP value weighted Nasdaq portfolio. Specifically, the mean abnormal returns from sales plans are 22%, 4%, and 7%, respectively, generating mean total abnormal profits of $914,000, $346,000, and $276,000. Results are also consistent when abnormal returns are computed over 1-, 3-, and 9-month buy-and-hold horizons. Similarly, results regarding returns before trade are consistent when PriorRet is computed using 30-, 60-, and 90-day windows.

Results in Panel B of Table 3 are consistent when the return and profit variables are regressed on a dichotomous participation variable and a self-selection correction variable
computed from a probit regression of factors associated with an insiders’ decision to participate within Rule 10b5-1 (Appendix B).\textsuperscript{24} The coefficient on the dichotomous participation variable is $-0.06$ ($t$-statistic $= -1.36$) in the $MeanRet$ regression and $271.68$ ($t$-statistic $= 1.85$) in the $TotalProf$ regression after controlling for self-selection. These results are robust when using a fixed effects specification to control for omitted firm-level variables, such as risk and performance.

5b. Trade volume and profitability

The next analysis examines the association between trade volume and abnormal returns to provide evidence of whether participants trade more volume when trades are more profitable. A regression of the square root of dollar volume traded on abnormal return per trade is estimated for 210 participants matched with 407 nonparticipants from 133 firms who trade within the six-month period following firm disclosure:

$$SqrtDollVol_{jl} = \beta_0 + \beta_1 AbnRet_{jl} + \beta_2 AbnRet_{jl} \times Part_j + \omega_{jl}. \quad (1)$$

$SqrtDollVol$ is the square root of dollar sales volume; $AbnRet$ is the six-month buy-and-hold return per trade executed by an insider during the window minus the six-month CRSP value weighted buy-and-hold return; $Part$ is a dichotomous variable that equals one if the insider is a participant and zero otherwise; and $j$ and $l$ are indices for insider and trade, respectively.

Consistent with Noe (1999), the square root of dollar volume is used to control for the effects of outliers in the sample. The distribution for dollar volume of sales is, not surprisingly, heavily right-skewed.

\textsuperscript{24} Consistent with expectations, participation is positively associated with a proxy for an insider’s personal litigation risk, his prior trading frequency, his stock compensation, and his firm equity position. The proxy for an insider’s personal litigation risk is computed in Appendix C. This proxy reflects the likelihood an insider will be named as a defendant in a 10b5 lawsuit as a function of his prior trade activity and position within the company.
In Table 4, there is no detectable association between SqrtDollVol and AbnRet for nonparticipants ($\beta_1 = -0.32; t$-statistic = −0.63). In contrast, Table 4 documents a greater relative positive association for participants than nonparticipants between abnormal returns and dollar sales volume ($\beta_2 = 1.35; t$-statistic = 2.72) resulting in a net positive association for participants ($\beta_1 + \beta_2 = 1.03; t$-statistic = 4.30). This suggests that participants sell more volume when abnormal returns are higher.\footnote{This association may, instead, capture the market’s response to insiders’ sales. Under this interpretation, however, one would also expect a positive association between abnormal returns and nonparticipants’ sales volume. The lack of evidence regarding an association for nonparticipants casts doubt on this alternative explanation.}

Evidence that participants’ trades are larger when it is more profitable (i.e., when subsequent abnormal returns are greater) is supported by the next analysis, which examines insiders’ trade volume in proximity to earnings releases. Specifically, Panel A of Table 5 presents results of the following estimation:

$$SqrtDollVol_{ijk} = \delta_0 + \delta_1 BefEarns_{ik} + \delta_2 NegAnn_i + \delta_3 BefEarns_{ik} \ast NegAnn_i + \zeta_{ijk}. \quad (2)$$

$SqrtDollVol$ is the square root of net dollar sales volume by an insider during the specified twenty-day trade window. $BefEarns$ is a dichotomous variable that equals one during the twenty trading day window immediately preceding the earnings announcement date (reported by CRSP), and zero during the twenty trading day window immediately following the earnings announcement date. $NegAnn$ is a dichotomous variable that equals one if the firm’s cumulative three-day return, centered on the announcement date, is less than the CRSP value-weighted portfolio cumulative return for the same three days; zero otherwise. And $i$, $j$, and $k$ are subscripts denoting announcement, insider, and window, respectively.
Panel A of Table 5 reports results for 168 participants from 106 firms who trade in proximity to 88 “good news” and 102 “bad news” quarterly announcements during the six-month period following 10b5-1 disclosure. This sample represents all observations from Panel A of Table 3 for which earnings announcement data are available. Each insider has two volume observations for every one of his firm’s quarterly announcements: one for the before window and one for the after window. This yields a total of 598 insider-announcement-window observations.

Evidence in Panel A of Table 5 is consistent with participants concentrating trade volume when it is more profitable. Specifically, the positive coefficient on $BefEarns \times NegAnn$ ($\delta_3 = 9.85; t$-statistic = 3.13) suggests participants trade more volume immediately before “bad news” announcements than immediately before “good news” announcements. Similarly, the negative coefficient on $NegAnn$ ($\delta_2 = -9.36; t$-statistic = -3.50) suggests participants avoid sales immediately following “bad news” announcements.

For comparison and to help control for firm-level factors that might influence volume around earnings announcements, Panel B of Table 5 presents results of $\sqrt{DollVol}$ for 113 participants matched with 298 nonparticipant counterparts who traded during the same six-month window following firm 10b5-1 disclosure. The sample in Panel B represents the 80 firms from Panel B of Table 3 for which earnings announcement data were available. Each insider has two volume observations for every one of his firm’s quarterly announcements: one for the before window and one for the after window. This yields a total of 1472 insider-announcement-window observations for the following estimation:

$$\sqrt{DollVol}_{ijk} = \gamma_0 + \gamma_1 Part_j + \gamma_2 BefEarns_{ik} + \gamma_3 NegAnn_i + \gamma_4 BefEarns_{ik} \times Part_j + \gamma_5 BefEarns_{ik} \times NegAnn_i + \gamma_6 BefEarns_{ik} \times NegAnn_i \times Part_j + \varepsilon_{ijk}. \quad (3)$$
\( SqrtDollVol, BefEarnings, NegAnn, i, j, \text{ and } k \) are as defined for equation (2). \( Part \) is a
dichotomous variable that equals one if the insider is a participant and zero otherwise.

Evidence in Panel B of Table 5 supports that in Panel A. Specifically, the coefficient on
\( \gamma_6 \) is 9.44 (\( t \)-statistic = 3.54), suggesting that participants increase net sales volume before
“bad news” earnings releases relative to nonparticipants.

Collectively, evidence suggests participating insiders concentrate sales when trades are
more profitable. This pattern is evident even immediately before “bad news” earnings
announcements, which is a period when insiders are likely to have a distinct information
advantage and trade is commonly restricted outside of the Rule.

5b1. Sensitivity Analyses

Inferences from results in Table 4 are unaffected when \( AbnRet \) is computed using the
six-month CRSP equally weighted buy-and-hold return, the six-month CRSP value
weighted Nasdaq buy-and-hold return or the six-month return to the S&P500 index as the
relevant benchmark. Similarly, inferences from results in Panels A and B of Table 5 are
unaffected when: (1) the 20-trading-day window immediately before and after earnings
announcements is replaced with 10-, 15-, and 30-day windows; (2) the benchmark for
\( NegAnn \) is replaced with equally-weighted CRSP or size decile returns; and (3) \( SqrtDollVol \)
is replaced with the total net dollar sales volume or the rank of total net dollar sales volume.

6. Conclusions and Future Research

Rule 10b5-1 is an interesting insider trading regulation because it combines a stricter
enforcement standard with a safe harbor for preplanned trade. Thus, the Rule represents
rare regulation with an ex-ante ambiguous impact on insiders’ trade risk. Evidence
suggests that, through some combination of (1) the safe harbor, (2) enforcement of the
possession standard at the plan initiation date, (3) relaxation of trading “blackout” windows, and/or (4) the absolution of participants’ duty to disclose subsequently obtained information before trades execute, the Rule lowers trade risk thereby providing profitable trade opportunities. This outcome clearly has policy implications if the SEC’s intent for the Rule is to make it more difficult for insiders to profit from information-based trade.

Exactly how insiders generate trade profits within their 10b5-1 plans is an interesting question for future research. Abnormal profits documented in this study could result from insiders illicitly planning trade when they possess nonpublic information or from insiders altering the timing or content of disclosures once trades have already been planned. It would be interesting to document to what degree either of these activities is present.

It is not clear how well this study’s evidence describes Rule 10b5-1 trade activity within nondisclosure firms. One should use caution when generalizing these results beyond the documented sample. Results in this paper, however, may understate the extent of 10b5-1 information-based trade by insiders at nondisclosure firms. There may be more information-based trade within the Rule at nondisclosure firms because there is less ability to monitor insiders’ compliance. Participating insiders at nondisclosure firms, for example, may find it easier to terminate plans before poorly-timed trades execute since the market is not aware these plans exist.

There are still some interesting questions to address regarding the market effects of disclosing participation within Rule 10b5-1. The Rule presents one of the few instances where firms provide ex-ante information regarding pending insider trades. It might be useful to examine how the market responds to 10b5-1 announcements and to what degree these announcements impact insiders’ trade profits. If these announcements reduce
insiders’ profits, it would be interesting to then examine why firms voluntarily disclose this information when there is no mandate from the SEC.
REFERENCES


Table 1. Descriptive Statistics

Basic statistics for the sample of 180 disclosure firms and 307 insiders from these firms who participate within Rule 10b5-1 plans. Firm data is collected for the fiscal year ending before each firm’s disclosure regarding 10b5-1 participation. Trade statistics are for the six-month period immediately following the firm’s 10b5-1 participation disclosure date.

**Panel A. Firm statistics**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Min</th>
<th>Median</th>
<th>Max</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td>4,066.31</td>
<td>2.97</td>
<td>305.50</td>
<td>426,794.00</td>
<td>32,812.00</td>
</tr>
<tr>
<td>Sales</td>
<td>1,225.40</td>
<td>0.00</td>
<td>217.29</td>
<td>45,413.00</td>
<td>4,909.00</td>
</tr>
<tr>
<td>MVE</td>
<td>1,785.87</td>
<td>6.21</td>
<td>434.06</td>
<td>87,751.15</td>
<td>7,480.00</td>
</tr>
<tr>
<td>Basic EPS</td>
<td>0.19</td>
<td>−21.77</td>
<td>0.54</td>
<td>18.04</td>
<td>2.99</td>
</tr>
<tr>
<td>ROA</td>
<td>−0.08</td>
<td>−1.94</td>
<td>0.02</td>
<td>0.43</td>
<td>0.34</td>
</tr>
<tr>
<td>ROE</td>
<td>0.02</td>
<td>−4.76</td>
<td>0.08</td>
<td>10.07</td>
<td>1.15</td>
</tr>
</tbody>
</table>

**Panel B. Exchange and index representation**

<table>
<thead>
<tr>
<th></th>
<th>NYSE</th>
<th>AMEX</th>
<th>NASDAQ</th>
<th>Other Exchange</th>
<th>Fortune 500</th>
<th>S&amp;P 500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample percentage</td>
<td>30.0%</td>
<td>1.6%</td>
<td>65.0%</td>
<td>3.4%</td>
<td>4.4%</td>
<td>8.9%</td>
</tr>
</tbody>
</table>

**Panel C. Insider demographics**

<table>
<thead>
<tr>
<th></th>
<th>Chairman</th>
<th>CEO</th>
<th>President</th>
<th>CFO</th>
<th>Officer and Director</th>
<th>Outside Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample percentage</td>
<td>21.2%</td>
<td>30.6%</td>
<td>24.4%</td>
<td>8.8%</td>
<td>22.1%</td>
<td>10.4%</td>
</tr>
</tbody>
</table>
Table 1. Descriptive Statistics (continued)

*Panel D. Trade statistics*

Trade statistics for 17 participants with purchase plans and 290 participants with sales plans from 180 disclosure firms. Statistics are for the six-month period immediately following the firm’s 10b5-1 participation disclosure date. Size is the dollar value traded, in thousands. Relative volume is the participants’ volume scaled by total insider volume during the period. Trades per insider is the number of trades each insider executed during the period including multiple trades executed within a single day.

<table>
<thead>
<tr>
<th>Traded executed</th>
<th>Attribute</th>
<th>Mean</th>
<th>Min</th>
<th>Median</th>
<th>Max</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases</td>
<td>Size</td>
<td>30.29</td>
<td>0.21</td>
<td>7.49</td>
<td>571.20</td>
<td>70.81</td>
</tr>
<tr>
<td></td>
<td>Relative Volume</td>
<td>0.76</td>
<td>0.29</td>
<td>1.00</td>
<td>1.00</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>Trades per insider</td>
<td>10.18</td>
<td>1.00</td>
<td>11.00</td>
<td>19.00</td>
<td>7.52</td>
</tr>
<tr>
<td>Sales</td>
<td>Size</td>
<td>110.34</td>
<td>0.07</td>
<td>12.26</td>
<td>14,762.00</td>
<td>543.30</td>
</tr>
<tr>
<td></td>
<td>Relative Volume</td>
<td>0.74</td>
<td>0.03</td>
<td>0.88</td>
<td>1.00</td>
<td>0.31</td>
</tr>
<tr>
<td></td>
<td>Trades per insider</td>
<td>32.23</td>
<td>1.00</td>
<td>7.00</td>
<td>1147.00</td>
<td>108.39</td>
</tr>
</tbody>
</table>
Table 2. Survey Results

Results from a survey of 2,690 Nasdaq-listed firms that: (1) did not disclose insider participation within Rule 10b5-1 between October 20, 2000 and December 31, 2002, and (2) provided a working investor or media relations electronic mail address on the corporate website as of March 30, 2003. The survey asks whether the firm had at least one Section 16 insider participate within a Rule 10b5-1 plan during the period.

<table>
<thead>
<tr>
<th>Surveys Sent</th>
<th>Responses</th>
<th>Non Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,690</td>
<td>378 (14%)</td>
<td>2,312 (86%)</td>
</tr>
<tr>
<td>Participation</td>
<td>No Participation</td>
<td>Cannot Answer Question</td>
</tr>
<tr>
<td>66 (18%)</td>
<td>276 (73%)</td>
<td>36 (9%)</td>
</tr>
</tbody>
</table>
Table 3. Abnormal Returns and Profits

Summary of abnormal returns and profits for traders who execute sales transactions within the six-month window immediately following firm disclosure of 10b5-1 participation.

**Panel A. Participants within Rule 10b5-1**

Statistics for 290 participating insiders identified from 10b5-1 disclosures provided by 180 firms.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>MeanRet</td>
<td>0.06</td>
<td>0.12</td>
</tr>
<tr>
<td>TotalProf</td>
<td>408.72</td>
<td>31.04</td>
</tr>
<tr>
<td>PriorRet</td>
<td>0.10</td>
<td>0.08</td>
</tr>
</tbody>
</table>

**Panel B. Participants vs. nonparticipants within the same firm**

Statistics for traders from 133 firms that had at least one participant and one nonparticipant trade.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Trader</th>
<th>n</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>MeanRet</td>
<td>Participant</td>
<td>210</td>
<td>0.06</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>Nonparticipant</td>
<td>407</td>
<td>0.03</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>Difference</td>
<td></td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td>TotalProf</td>
<td>Participant</td>
<td>210</td>
<td>535.41</td>
<td>23.00</td>
</tr>
<tr>
<td></td>
<td>Nonparticipant</td>
<td>407</td>
<td>28.46</td>
<td>14.10</td>
</tr>
<tr>
<td></td>
<td>Difference</td>
<td></td>
<td>506.81</td>
<td>8.90</td>
</tr>
</tbody>
</table>
Table 3. Abnormal Returns and Profits (continued)

Panel C. Participants within Rule 10b5-1 Before and After

Statistics for 79 participants from 54 firms that traded within the six month window immediately following 10b5-1 disclosure (Post window) and also within a six month window one calendar year prior (Pre window).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MeanRet</strong> Post</td>
<td>0.09</td>
<td>0.11</td>
</tr>
<tr>
<td>Pre</td>
<td>0.00</td>
<td>-0.01</td>
</tr>
<tr>
<td>Difference</td>
<td>0.09</td>
<td>0.12</td>
</tr>
<tr>
<td><strong>TotalProf</strong> Post</td>
<td>470.68</td>
<td>47.20</td>
</tr>
<tr>
<td>Pre</td>
<td>171.73</td>
<td>-28.73</td>
</tr>
<tr>
<td>Difference</td>
<td>298.95</td>
<td>75.93</td>
</tr>
</tbody>
</table>

*** Significant at 1% level (one-tailed)
** Significant at 5% level (one-tailed)
* Significant at 10% level (one-tailed)

Median results are from Kruskal-Wallis Test (Conover, 1999)

*MeanRet* is the mean abnormal return per trade executed by an insider during the window. For each trade executed, the abnormal return is computed as the six-month buy-and-hold return minus the six-month CRSP value weighted buy-and-hold return.

*TotalProf* is the cumulative abnormal profit (in thousand dollars) by an insider from trades executed during the window. For each trade, the abnormal profit is computed as the six-month buy-and-hold return minus the six-month CRSP value weighted buy-and-hold return times the dollar amount traded.

*PriorRet* is the firm’s raw return over the twenty trading days immediately preceding an insider’s first trade during the window.
Table 4. Association Between Trade Volume and Abnormal Returns

Analysis of the association between trade volume and abnormal return for a sample of 5,034 trades by 210 participants and 2,415 trades by 407 nonparticipants within 133 firms that had at least one participant and one nonparticipant sell shares within the six-month window following 10b5-1 disclosure. The intercept represents the fixed effect coefficient for the first firm in the sample. Other firm fixed effects coefficients are not reported.

\[
\text{SqrtDollVol}_{jl} = \beta_0 + \beta_1 \text{AbnRet}_{jl} + \beta_2 \text{AbnRet}_{jl} * \text{Part}_j + \omega_{jl}
\]

<table>
<thead>
<tr>
<th>Variable</th>
<th>Predicted Sign</th>
<th>Coefficient</th>
<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>?</td>
<td>20.10</td>
<td>27.89</td>
</tr>
<tr>
<td>AbnRet</td>
<td>–</td>
<td>-0.32</td>
<td>-0.63</td>
</tr>
<tr>
<td>AbnRet * Part</td>
<td>+</td>
<td>1.35</td>
<td>2.72</td>
</tr>
<tr>
<td>$\beta_1 + \beta_2$</td>
<td>+</td>
<td>1.03</td>
<td>4.30</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td></td>
<td></td>
<td>0.46</td>
</tr>
</tbody>
</table>

$\text{AbnRet}$ is the abnormal return per trade executed by an insider during the window. The abnormal return is computed as the six-month buy-and-hold return minus the six-month CRSP value weighted buy-and-hold return. $\text{SqrtDollVol}$ is the square root of dollar volume of trade. $\text{Part}$ is a dichotomous variable that equals one if the insider is a participant and zero otherwise. $j$ and $l$ are indices for insider and trade, respectively.
Table 5. Net Sales in Proximity to Earnings Releases

Summary of insiders’ net sales activity in close proximity to quarterly earnings announcements.

Panel A. Participants within Rule 10b5-1

Sample represents 598 insider-announcement-window observations. The sample is constructed from 106 firms within the sample in Panel A of Table 3 for which quarterly earnings announcement dates and corresponding price data are available. For 168 participants representing these firms, trade volume is cumulated during the 20-trading day window immediately before and immediately after each of the 88 “good news” and 102 “bad news” observed quarterly announcements. The intercept represents the fixed effect coefficient for the first firm in the sample. Other firm fixed effects coefficients are not reported.

\[
SqrtDollVol_{ijk} = \delta_0 + \delta_1 BefEarns_{ik} + \delta_2 NegAnn_i + \delta_3 BefEarns_{ik} * NegAnn_i + \zeta_{ijk}
\]

<table>
<thead>
<tr>
<th>Variable</th>
<th>Predicted Sign</th>
<th>Coefficient</th>
<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>?</td>
<td>48.62</td>
<td>5.03</td>
</tr>
<tr>
<td>BefEarns</td>
<td>–</td>
<td>-9.74</td>
<td>-4.22</td>
</tr>
<tr>
<td>NegAnn</td>
<td>–</td>
<td>-9.36</td>
<td>-3.50</td>
</tr>
<tr>
<td>BefEarns * NegAnn</td>
<td>+</td>
<td>9.85</td>
<td>3.13</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td></td>
<td></td>
<td>0.28</td>
</tr>
</tbody>
</table>
Table 5. Net Sales in Proximity to Earnings Releases (continued)

Panel B. Participants vs. nonparticipants within the same firm

Sample represents 1472 insider-announcement-window observations. The sample is constructed from 80 firms within the sample in Panel B of Table 3 for which quarterly earnings announcement dates and corresponding price data are available. For 113 participants and 298 non-participants representing these firms, trade volume is cumulated during the 20-trading day window immediately before and immediately after each of the 67 “good news” and 74 “bad news” observed quarterly announcements. With the exception of the intercept, which represents the first firm in the sample, firm fixed effects coefficients are not reported.

\[
SqrtDollVol_{ijk} = \gamma_0 + \gamma_1 Part_j + \gamma_2 BefEars_{ik} + \gamma_3 NegAnn_i + \gamma_4 BefEars_{ik} \times Part_j + \\
\gamma_5 BefEars_{ik} \times NegAnn_i + \gamma_6 BefEars_{ik} \times NegAnn_i \times Part_j + \epsilon_{ijk}
\]

<table>
<thead>
<tr>
<th>Variable</th>
<th>Predicted Sign</th>
<th>Coefficient</th>
<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>?</td>
<td>13.29</td>
<td>4.74</td>
</tr>
<tr>
<td>Part</td>
<td>+</td>
<td>9.66</td>
<td>6.93</td>
</tr>
<tr>
<td>BefEars</td>
<td>–</td>
<td>–8.12</td>
<td>–6.15</td>
</tr>
<tr>
<td>NegAnn</td>
<td>?</td>
<td>–3.93</td>
<td>–2.65</td>
</tr>
<tr>
<td>BefEars * Part</td>
<td>?</td>
<td>–4.95</td>
<td>–2.17</td>
</tr>
<tr>
<td>BefEars * NegAnn</td>
<td>–</td>
<td>3.12</td>
<td>1.70</td>
</tr>
<tr>
<td>BefEars * NegAnn * Part</td>
<td>+</td>
<td>9.44</td>
<td>3.54</td>
</tr>
</tbody>
</table>

Adj. $R^2$  

$SqrtDollVol$ is the square root of net dollar sales volume (i.e., sales minus purchases) by an insider during the specified twenty-day trade window.

$Part$ is a dichotomous variable that equals one if the insider is a participant and zero otherwise.

$BefEars$ is a dichotomous variable that equals one during the twenty trading day window immediately preceding the earnings announcement date (reported by CRSP), and zero during the twenty trading day window immediately following the earnings announcement date.

$NegAnn$ is a dichotomous variable that equals one if the firm’s cumulative three-day return, centered on the announcement date, is less than the CRSP value-weighted portfolio cumulative return for the same three days; zero otherwise.

$i, j, and k$ are subscripts denoting announcement, insider, and window, respectively.
Appendix A. Stock Sales Plan

Stock Selling Plan
AmeriCredit Corp. Common Stock

January 15, 2001 through July 13, 2001

THIS STOCK SELLING PLAN (the "Plan") is executed by Clifton H. Morris, Jr. ("Executive"), an executive officer and stockholder of AmeriCredit Corp. ("AmeriCredit").

Recitals
A. Executive has decided to enter into this written plan of disposition to sell 700,000 shares of AmeriCredit common stock, which shares are comprised of (i) 282,666 shares to be acquired by Executive upon the exercise of certain stock options granted to Executive by AmeriCredit on April 28, 1994 that expire on April 28, 2001 (the "April Options"), (ii) 400,000 shares to be acquired by Executive upon the exercise of certain stock options granted to Executive by AmeriCredit on July 16, 1991 that expire on July 16, 2001 (the "July Options" and, together with the April Options, the "Options"), and (iii) 17,334 shares owned by Executive (the "Owned Shares" and, together with the shares to be acquired by Executive upon exercise of the Options, the "Plan Shares").

B. Executive has engaged Paine Webber ("Broker") to effect sales of the Plan Shares in accordance with this Plan, and to exercise the Options to the extent necessary to acquire the Plan Shares to be sold.

C. Executive acknowledges that he is not subject to any legal, regulatory or contractual restriction or undertaking that would prevent Broker from conducting sales in accordance with this Plan and is entering into this Plan in good faith. Furthermore, Executive acknowledges that he is subject to AmeriCredit's insider trading policy (XIV-316), as supplemented and amended from time to time (the "Policy").

Agreement
In consideration of the foregoing, the Executive agrees to enter into this Plan in accordance with the following terms and conditions:

1. Sales Plan; Exercise of Options.
   (a) The Executive agrees and agrees to instruct the Broker to sell the Plan Shares and to exercise the Options to acquire the Plan Shares, as provided below:

   (i) For the period commencing on January 15, 2001 and ending on and including January 31, 2001, Broker will sell as many as possible of the Plan Shares, and exercise the Options to acquire the Plan Shares to be sold, up to a maximum of 100,000 shares, at any per share price of $28.50, or higher; provided, however, that the Options shall only be exercised by Broker to the extent the shares acquired therefrom will be sold pursuant to this Plan;

   (ii) For the period commencing on February 1, 2001 and ending on and including February 28, 2001, Broker will sell as many as possible of the Plan Shares, and exercise the Options to acquire the Plan Shares to be sold, up to a maximum of 100,000 shares, at any per share price of $29.50, or higher; provided, however, that the Options shall only be exercised by Broker to the extent the shares acquired therefrom will be sold pursuant to this Plan;

   (iii) For the period commencing on March 1, 2001 and ending on and including March 31, 2001, Broker will sell as many as possible of the Plan Shares, and exercise the Options to acquire the Plan Shares to be sold, up to a maximum of 100,000 shares, at any per share price of $30.50, or higher; provided, however, that the Options shall only be exercised by Broker to the extent the shares acquired therefrom will be sold pursuant to this Plan;

   (iv) For the period commencing on April 1, 2001 and ending on and including April 30, 2001, Broker will sell as many as possible of the Plan Shares, and exercise the Options to acquire the Plan Shares to be sold, up to a maximum of 100,000 shares, at any per share price of $31.50, or higher; provided, however, that the Options shall only be exercised by Broker to the extent the shares acquired therefrom will be sold pursuant to this Plan; and, provided, further, to the extent that all or some portion of the April Options remain unexercised and the Plan Shares underlying such April Options remain unsold by Broker on April 1, 2001, then in such event the remaining, unexercised portion of the April Options shall be exercised in full and the Plan Shares underlying such April Options sold by Broker during the period from April 1, 2001 through April 27, 2001 at such times (within such period), in such amounts and at such per share price as will maximize the aggregate proceeds to Executive from such transactions;

   (v) For the period commencing on May 1, 2001 and ending on and including May 30, 2001, Broker will sell as many as possible of the Plan Shares, and exercise the Options to acquire the Plan Shares to be sold, up to a maximum of 100,000 shares, at any per share price of $32.50, or higher; provided, however, that the Options shall only be exercised by Broker to the extent the shares acquired therefrom will be sold pursuant to this Plan;

   (vi) For the period commencing on June 1, 2001 and ending on and including June 30, 2001, Broker will sell as many as possible of the Plan Shares, and exercise the Options to acquire the Plan Shares to be sold, up to a maximum of 100,000 shares, at any per share price of $33.50, or higher; provided, however, that the Options shall only be exercised by Broker to the extent the shares acquired therefrom will be sold pursuant to this Plan;

   (vii) For the period commencing on July 1, 2001 and ending on and including July 13, 2001, Broker will sell as many as possible of the Plan Shares, and exercise the Options to the extent necessary to acquire the Plan Shares to be sold, up to a
maximum of 100,000 shares, at any per share price of $34.50, or higher; provided, however, that the Options shall only be
exercised by Broker to the extent the shares acquired therefrom will be sold pursuant to this Plan; and, provided, further, to the
extent that all or some portion of the July Options remain unexercised and the Plan Shares underlying such July Options
remain unsold by Broker on July 1, 2001, then in such event the remaining, unexercised portion of the July Options shall be
exercised in full and the Plan Shares underlying such July Options sold by Broker during the period from July 1, 2001 through
July 13, 2001 at such times (within such period), in such amounts and at such per share price as will maximize the aggregate
proceeds to Executive from such transactions.

(b) Notwithstanding anything to the contrary contained herein, the Plan Shares to be sold by Broker pursuant to Section
1(a) above shall be sold in the following order of priority: first, the shares acquired upon exercise of the April Options;
second, the shares acquired upon exercise of the July Options; and third, the Owned Shares.

(c) All sales of Plan Shares and exercises of the Options to the extent necessary to acquire such Plan Shares will be placed
through or effected by Broker. The timing (within each sales period specified above) and execution of all sales will be made
at the sole discretion of Broker to maximize the value to the Executive, provided that in all cases the specified number of Plan
Shares must be sold during each sales period specified above in section 1(a). The Executive will provide no other instruction
or guidance to Broker with respect to any sales. Broker will be provided with a copy of this Plan. The Executive will obtain
from Broker an acknowledgement of the receipt of this Plan and an agreement that Broker will cease sales (but not exercises
of the Options, to the extent necessary to cause the Options to be exercised in full before the respective expirations thereof as
provided above in section 1(a)) under this Plan at such time as Broker may become in possession of material nonpublic
information regarding AmeriCredit (as that phrase is used in 17 C.F.R.(S)240.10b-5). The number of Plan Shares sold under
this Plan will be appropriately adjusted from time to time to reflect any stock split, stock dividend, reorganization,
reclassification, consolidation or similar event with respect to AmeriCredit common stock.

(d) Notwithstanding the sales provisions of this Plan, the Executive will cease all sales under this Plan (but not Option
exercises, to the extent necessary to cause the Option to be exercised in full before the respective expirations thereof, as
provided above in section 1(a)), and will instruct Broker to cease all sales, promptly upon notice from the Secretary of
AmeriCredit that the independent directors of the AmeriCredit Board of Directors have determined that sales under this Plan
must be suspended for the period determined by those directors. In this regard, the Executive acknowledges that it may be
necessary or appropriate for AmeriCredit to instruct Executive to suspend sales under this Plan in connection with certain
events, including without limitation public or private offerings of securities, mergers or acquisitions, tender offers or similar
events.

(e) Broker will conduct all sales in accordance with the requirements of Rule 144 under the Securities Act of 1933,
including, but not limited to, the completion and filing by Broker of appropriate Form 144s. Broker will be instructed by
Executive to provide AmeriCredit any information requested by AmeriCredit in connection with AmeriCredit's efforts to
determine compliance with the terms of this Plan by Executive and Broker. Executive will be responsible for all filings
required under Section 16 of the Securities and Exchange Act of 1934 (i.e., Form 4 filings). It is the intent of the Executive
that this Plan comply with the requirements of Rule 10b5-1(c) under the Exchange Act and this Plan shall be interpreted to
comply with the requirements of Rule 10b5-1(c).

(f) Notwithstanding this Plan, Executive may sell or purchase shares of AmeriCredit common stock (other than Plan
Shares) pursuant to the Policy and subject to the terms and conditions thereof, and such sales or purchases shall not be subject
to this Plan.

3. Term. This Plan shall become effective on the date executed by the Executive and shall terminate on the earliest to occur
of: (i) July 15, 2001, (ii) the date on which a total of 700,000 shares of AmeriCredit common stock have been sold in
accordance with the terms of this Plan, and (iii) the death of the Executive; provided, however, that Executive may terminate
this Plan at any time upon written notice delivered to Broker with a copy to the Secretary of
AmeriCredit.

4. Covenants. The Executive acknowledges and agrees that he will not exert any influence over how, when or whether to
effect sales of Plan Shares subsequent to the effective date of this Plan and during the time period the Plan remains in effect.

5. Filing of Plan. The Executive agrees to file a copy of this Plan with the Secretary of AmeriCredit. Executive further
acknowledges and agrees that a copy of this Plan may be filed by AmeriCredit with the Securities and Exchange Commission
("SEC") and disclosed in reports filed by AmeriCredit with the SEC.

IN WITNESS WHEREOF, this Stock Selling Plan is executed and effective as of the date set forth below the Executive's
signature below.
Appendix B. Decision to Participate

Probit estimation of the decision to participate within a 10b5-1 plan on a sample of 289 participants and 1716 non-participants from 175 firms, for which estimation data is available. Each firm has at least one 10b5-1 participant and one nonparticipant. Firm fixed-effects coefficients are not reported.

\[ Part_j = \alpha_0 + \alpha_1 \text{LitRisk}_j + \alpha_2 \text{Freq}_j + \alpha_3 \text{StockComp}_j + \alpha_4 \text{Holds}_j + \lambda_j \]

<table>
<thead>
<tr>
<th>Variable</th>
<th>Predicted Sign</th>
<th>Coefficient</th>
<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>?</td>
<td>−1.94</td>
<td>−3.75</td>
</tr>
<tr>
<td>LitRisk</td>
<td>+</td>
<td>2.77</td>
<td>8.57</td>
</tr>
<tr>
<td>Freq</td>
<td>+</td>
<td>0.05</td>
<td>4.77</td>
</tr>
<tr>
<td>StockComp</td>
<td>+</td>
<td>1.18</td>
<td>3.81</td>
</tr>
<tr>
<td>Holds</td>
<td>+</td>
<td>6.15</td>
<td>5.87</td>
</tr>
</tbody>
</table>

Pseudo $R^2$ 0.400
% Concordant 88.4
% Discordant 11.3

*Part* is a dichotomous variable that equals one if an insider is disclosed as a 10b5-1 plan participant (zero otherwise).

*LitRisk* is the predicted probability an insider will be named as a defendant in a 10b5 lawsuit. It is computed from parameters from a two-stage estimation of the probability of being named as a 10b5 defendant in Appendix C.

*Freq* is the insider’s trading frequency during the year preceding the firm’s 10b5-1 plan announcement date.

*StockComp* is the insider’s ratio of stock compensation to total compensation in the fiscal year ending prior to the firm’s 10b5-1 announcement date. The numerator is computed as the value of restricted shares granted plus the value of options granted (5% growth assumption) as provided in the proxy statements. The denominator is the numerator plus salary, bonus, and all other compensation.

*Holds* is the number of shares held by the insider as a percentage of average shares outstanding in the fiscal year ending prior to the firm’s 10b5-1 announcement date.

$j$ is an index for insider.
Appendix C. Determinants of Insiders’ Litigation-risk

\[ \text{Defendant}_j = \sigma_1 + \sigma_2 \text{NetPurchs}_j + \sigma_3 \text{CEODum}_j + \sigma_4 \text{CBDum}_j + \sigma_5 \text{DirDum}_j + \sigma_6 \text{CFODum}_j \\
+ \sigma_7 \text{PresDum}_j + o_j \]

\[ \text{NetPurchs}_j = \phi_1 + \phi_2 \text{Defendant}_j + \phi_3 \text{Holdings}_j + \phi_4 \text{StockComp}_j + \eta_j \]

Simultaneous estimation on a sample of 353 corporate insiders at 35 firms defending 10b5 litigation with allegations of illegal insider during 1999. Sample is collected from the Stanford Law School Securities Class Action Clearinghouse. From these firms, 154 individual defendants are identified in formal complaints or dockets. Proxy statements provide names of 228 non-defendants. Twenty nine observations are deleted for lack of holdings and compensation data. Firm fixed-effects coefficients are not reported.

<p>| Dependent Variable = Defendant | |</p>
<table>
<thead>
<tr>
<th>Variable</th>
<th>Prediction</th>
<th>Probit Estimation (p-value)</th>
<th>2-stage Probit Estimation (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>?</td>
<td>−0.939 (0.037)</td>
<td>−0.980 (0.030)</td>
</tr>
<tr>
<td>NetPurchs</td>
<td>−</td>
<td>−0.122 (0.003)</td>
<td>−0.271 (0.000)</td>
</tr>
<tr>
<td>CEODum</td>
<td>+</td>
<td>1.279 (0.001)</td>
<td>1.302 (0.001)</td>
</tr>
<tr>
<td>CBDum</td>
<td>+/-</td>
<td>1.247 (0.002)</td>
<td>0.762 (0.070)</td>
</tr>
<tr>
<td>DirDum</td>
<td>+/-</td>
<td>−0.631 (0.003)</td>
<td>−0.674 (0.001)</td>
</tr>
<tr>
<td>CFODum</td>
<td>+</td>
<td>1.154 (0.000)</td>
<td>1.174 (0.000)</td>
</tr>
<tr>
<td>PresDum</td>
<td>+</td>
<td>1.140 (0.009)</td>
<td>0.550 (0.224)</td>
</tr>
<tr>
<td>% Concordant</td>
<td></td>
<td>88.8</td>
<td>89.6</td>
</tr>
<tr>
<td>% Discordant</td>
<td></td>
<td>10.8</td>
<td>10.3</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td></td>
<td>0.400</td>
<td>0.407</td>
</tr>
</tbody>
</table>

<p>| Dependent Variable = Netpurchase | |</p>
<table>
<thead>
<tr>
<th>Variable</th>
<th>Prediction</th>
<th>OLS Estimation (p-value)</th>
<th>2-stage OLS Estimation (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>?</td>
<td>−0.156 (0.908)</td>
<td>−0.139 (0.919)</td>
</tr>
<tr>
<td>Defendant</td>
<td>+/-</td>
<td>−1.393 (0.021)</td>
<td>−1.452 (0.252)</td>
</tr>
<tr>
<td>Holds</td>
<td>−</td>
<td>−18.853 (&lt;.0001)</td>
<td>−18.898 (&lt;.0001)</td>
</tr>
<tr>
<td>StockComp</td>
<td>−</td>
<td>0.564 (0.730)</td>
<td>0.577 (0.729)</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td>0.219</td>
<td>0.209</td>
</tr>
<tr>
<td>Adj R²</td>
<td></td>
<td>0.130</td>
<td>0.119</td>
</tr>
</tbody>
</table>
Defendant is a dichotomous variable that equals one if the insider is specifically named as a defendant in the 10b5 complaint (zero otherwise).

NetPurchs is the total purchases minus sales by the insider during the 12-month period preceding the end of the class action period outlined in the 10b5 complaint, scaled by average shares outstanding.

CEO Dum, CBDum, DirDum, CFO Dum and Pres Dum are dichotomous variables that equal one if the insider held the position of CEO, Chairman of the Board, Director, CFO, or President, respectively (zero otherwise).

Holds is the insider’s personal firm holdings scaled by total shares outstanding in the fiscal year ending prior to the beginning of the 12-month period for NetPurchs; and

StockComp is the ratio of the value of stock compensation to total compensation paid to the insider in the fiscal year ending prior to the beginning of the 12-month period for NetPurchs. The numerator is computed as the value of stock grants (5% growth assumption as provided in the proxy statements) plus restricted stock grant value. The denominator is the numerator plus salary, bonus, and all other pay.

j is an index for insider.