Journal of Financial Economics 115 (2015) 84–101

Contents lists available at ScienceDirect

Journal of Financial Economics

journal homepage: www.elsevier.com/locate/jfec

Attentive insider trading[☆]

Dallin M. Alldredge[a,1], David C. Cicero[b,*]

[a] University of Tennessee, USA
[b] University of Alabama, USA

ARTICLE INFO

Article history:
Received 17 July 2013
Received in revised form
8 January 2014
Accepted 20 January 2014
Available online 16 September 2014

Keywords:
Insider trading
Investor attention
Supply chain

JEL classification:
K22
G14
G30

ABSTRACT

We provide evidence that some profitable insider stock selling is motivated by public information. At firms that disclose having concentrated sales relationships, insiders appear to sell their own stock profitably based on public information about their principal customers. Supplier insiders also sell more stock when public information about their customers' recent returns and earnings surprises suggests they will earn larger profits. These results are stronger when outside investor attention could be lower. Outside of this setting, insiders engage in a higher proportion of routine sales and their sales are less profitable. We do not find similar patterns for insider purchases.

1. Introduction

Corporate insiders' trades predict future abnormal returns.[2] If stock prices reflect all publicly available information, this suggests that insiders generally do not respect the legal prohibitions on using inside information to make trading decisions.[3] We evaluate whether an alternative explanation can account for the abnormal returns earned by insiders. We pose a hypothesis of attentive insider trading informed by public information. That is, we hypothesize that corporate insiders pay close attention to public information that is relevant to their firms and earn profits by trading when outside investors are relatively inattentive.

We explore insider trading in a setting where attentive trading could be distinguished from illegal trading. It is where firms have disclosed that other individual public companies account for a large fraction of their sales (i.e., where suppliers are economically linked to their principal customers). Supplier insiders' opportunities to trade on

[☆] We thank a very helpful anonymous referee, Anup Agrawal, Lee Biggerstaff, Douglas Cook, Phillip Daves, Jesse Ellis, Joan Heminway, Ashrafee Hossain (Financial Management Association 2013 discussant), Andy Puckett, Bill Schwert (the editor) and seminar participants at Georgia State University and the University of Tennessee for helpful comments.

[*] Corresponding author.
E-mail addresses: dalldred@utk.edu (D.M. Alldredge), dccicero@cba.ua.edu (D.C. Cicero).
[1] Tel.: +1 865 974 8253.

[2] Examples of work in this area include Lorie and Niederhoffer (1968), Jaffe (1974), Finnerty (1976), Seyhun (1986, 1992, 1998), Bettis, Vickrey, and Vickery (1997), Lakonishok and Lee (2001), Jeng, Metrick, and Zeckhauser (2003), Agrawal and Cooper (2014), and Agrawal and Nasser (2012). Historically, most of the robust evidence of returns following insider transactions was based on stock purchases. More recently, Cohen, Malloy, and Pomorski (2012) and Cicero and Wintoki (2014) show that applying simple and intuitive screens on the trading data results in strong evidence of informed stock sales, too.

[3] In the United States, as in many other countries, it is illegal to trade securities based on private information. Securities and Exchange Act of 1934, Sections 16(b) and 10(b), and the related Security and Exchange Commission rules and case law.

http://dx.doi.org/10.1016/j.jfineco.2014.09.005
0304-405X/

public information should be enhanced in this setting. Cohen and Frazzini (2008) and Menzly and Ozbas (2010) argue that outside investors are limited in their ability to understand the full impact of public information across firms and industries, and they show that this leads to return predictability across economically linked firms.[4] Cohen and Frazzini (2008), in particular, show that investor inattention allows lagged abnormal returns to principal customers to predict their suppliers' returns. In this paper, we test whether customers' lagged returns and their information disclosures to the market (which are public information at the time of trading) explain supplier insiders' trading decisions and the abnormal returns that they earn. Although this is not the only setting in which insiders could trade profitably on public information, it is one in which opportunities should be particularly acute. Therefore, the evidence of attentive trading could contrast more starkly compared with trading outside of this context.

Our hypothesis is grounded in an expectation that corporate insiders are among the most attentive traders of their own stocks. They have undiversified economic stakes in their firms, including both their current securities holdings and their future income, giving them high incentives to monitor developments that affect their firms' prospects. In addition, the nature of their jobs is to be informed about market developments that affect their firms as they work to maximize firm value. Corporate insiders at economically linked suppliers could, therefore, quickly recognize profitable trading opportunities when they observe public information about their large customers such as recent stock returns, earnings announcements, and corporate press releases.[5] As a result, insiders at these firms could have increased opportunities to trade profitably on public information beyond that which is available to insiders at other firms.

Taken as a whole, our results suggest that some profitable insider stock sales are motivated by public information. We first show that insiders' sales are more profitable at economically linked suppliers, suggesting that these insiders possess some informational advantage. Interestingly, though, their purchases, although profitable in this setting, are followed by similar return patterns when strong supply chain links are not reported. The asymmetry of this finding supports a conclusion that insiders' sales are at times motivated by public information. To see why, it is useful to consider the different incentives insiders face when they sell stock versus when they purchase it. As argued by prior researchers, there is significantly more litigation risk associated with selling stock. If an insider withholds negative information when he trades, other investors would clearly be harmed if they purchase at an inflated price. Selling by insiders when their stock is overvalued could also be used as evidence in a suit claiming fraudulent financial reporting. However, if an insider withholds positive information and purchases stock, the only harm is to other investors who could have sold and missed out on potential gains if the good news had already been released. But as others point out, it is less likely that shareholders will bring a successful derivative lawsuit against insiders when their only losses are best described as opportunity costs.[6]

Given the asymmetric litigation risk, a reasonable interpretation of our results is that the higher levels of profitable insider selling in this context is driven by the greater abundance of opportunities to trade profitably on public information. The comparably strong profitability of insider purchases across settings suggests that any increased opportunities to trade on public information in the supply chain context is not incrementally useful when insiders are less deterred from exploiting private information.[7]

To conduct our analysis, we collect a sample of 1,858 firms (6,939 firm-years) that report the existence of large principal customers during the period 1986–2010 (economically linked suppliers). We compare insider trading activity at these firms across years when they do and do not report these strong economic links. We also contrast the returns to insider trading at the economically linked firms to those at 5,118 other firms that never report these relations (never-linked firms). Our focus is on trades that are nonroutine, because Cohen, Malloy, and Pomorski (2012) show that these trades are most likely to be motivated by an informational advantage.

We start by evaluating the profitability of insiders' trades. Abnormal returns following nonroutine insider sale months are significantly larger at economically linked suppliers. For example, NYSE size decile-adjusted one-month cumulative abnormal returns (CARs) following insider sales at economically linked suppliers are -0.67% compared with -0.16% at linked suppliers during non-linked years and -0.32% at never-linked firms. The significance of this result is confirmed in multivariate tests controlling for market returns, firm size, book-to-market equity value, and stock return momentum. In addition, a larger proportion of trade months are profitable when strong economic links exist. In contrast, insiders' stock purchases are profitable, on average, regardless of the existence of a strong supplier–customer relationship. For example, insiders' purchases are followed by monthly abnormal returns of 0.92% when an economic link is present and 0.80% when it is not, and these two values are not significantly different.

We provide a variety of additional tests to help further identify whether insiders' trades in this setting are motivated by private or public information. For one, we show

[4] Numerous researchers argue for both the existence and rationality of limited investor attention to information relevant to asset prices (Hong, Torous, and Valkanov, 2007; Bacchetta and Van Wincoop, 2010; Peng and Xiong, 2006). Huang and Liu (2007), in particular, show that investor inattention can lead to cross-sectional return predictability. For the social psychology foundations of limited attention theories, see Kahneman (1973) and Fiske and Taylor (1991).

[5] Throughout the paper we refer to stock sales as profitable if they precede negative abnormal returns, as the insider avoids losses by selling.

[6] See, for instance, Skinner (1994), Brochet (2010), and Chen, Martin, and Wang (2012).

[7] Other research suggests that attentive institutional investors exploit information spillovers when investing in related firms (see, for example, Cohen and Frazzini, 2008; Menzly and Ozbas, 2010; and Huang and Kale, 2012). However, because the mutual fund holdings data are reported at quarterly frequency, they are generally neither able to evaluate the profitability of specific investments nor establish the direction of causation between trading and returns.