ELSEVIER

Journal of Business Research 54 (2001) 63–70

JOURNAL OF BUSINESS RESEARCH

Insider trading behavior prior to Chapter 11 bankruptcy announcements

Yulong Ma*

Department of Finance, Real Estate and Law, College of Business Administration, California State University, Long Beach, 1250 Bellflower Boulevard, Long Beach, CA 90840, USA

Accepted 18 December 1999

Abstract

This study uses non-parametric methods to examine the difference in trading behavior between Chapter 11 bankruptcy firms and non-bankruptcy firms traded on New York Stock Exchange (NYSE)/American Stock Exchange (AMEX) exchanges. It documents new evidence about the anomaly of insider purchases rather than sales prior to Chapter 11 bankruptcy announcements. Insiders of Chapter 11 bankruptcy firms purchase significantly fewer shares than insiders of the control firms before the bankruptcy announcement. Although insider trading volume declines long before the announcement, the decline is statistically significant only during the 3-month period before the announcement. The study, however, finds no significant difference in trading behavior between insiders of firms that ceased to trade on and those that continue to trade on the NYSE/AMEX within 5 years after the bankruptcy announcements.

Keywords: Insider trading; NYSE/AMEX; Chapter 11 bankruptcy

Empirical research on insider trading has shown that the significance of abnormal insider trading activities around corporate announcements may depend on the specific corporate event being investigated. Numerous studies such as Penman (1985), Hirschey and Zaima (1989), Karpoff and Lee (1991), and Pettit et al. (1996) have documented significant abnormal insider trading activities around corporate announcements. Other studies, however, find no strong associations between insider trading and corporate announcements. For example, Givoly and Palmon (1985) report no significant abnormal insider trading activity before the announcements of 11 types of corporate events. Further, Reinganum (1987) argues that insiders tend not to trade their own firms' stocks prior to large stock price increases. Since Chapter 11 bankruptcy announcements cause large stock price declines, it is important to examine how insiders of these bankruptcy firms trade.

There exists only limited empirical research on insider trading activities and corporate bankruptcies. Loderer and Sheehan (1989) study this issue by investigating whether insiders of bankrupt firms reduce their stockholdings in comparison with those of firms that do not file for bankruptcy. Their results show little evidence of abnormal insider trading behavior by insiders of bankrupt firms prior to the bankruptcies. Another study by Gosnell et al. (1992) uses actual insider trading transaction data to examine insider trading activities before the announcement of bankruptcy filings. They find that insiders of OTC firms increase their sales significantly over a period of 5 months before the bankruptcy announcement while the exchange-listed firms did not. A more recent study by Seyhun and Bradley (1997) examines the trading activities by insiders of New York Stock Exchange (NYSE) and American Stock Exchange (AMEX) bankrupt firms over the time period of 1975 to 1992. Their results show significant insider selling before the bankruptcy announcement with more intense selling by top executives.

Should we expect abnormal insider trading activities before firms announce bankruptcy filings? By the Securities and Exchange Commission's (SEC) definition, insiders are chairmen, directors, officers, etc., and principal shareholders with 10% or more of any equity class of securities. Corporate insiders refer to those insiders who hold managerial positions in the firm. The prevalent belief is that insiders possess superior information about their firms' future prospects and may trade either to make profits or to convey private information to the market. Financial

* Tel.: +1-562-985-4563; fax: +1-562-985-1754.
E-mail address: yulma@csulb.edu (Y. Ma).

0148-2963/00/$ – see front matter
PII: S0148-2963(00)00115-6

agency theory suggests that insiders will be more likely to engage in self-serving activities when a firm is in financial distress. Although equity values decline significantly long before firms filing for bankruptcy, firms announcing Chapter 11 bankruptcy still experience significantly negative abnormal returns over the announcement period (e.g., Altman and Brenner, 1981; Clark and Weinstein, 1983; Morse and Shaw, 1988). Therefore, corporate insiders may be motivated to sell more stocks prior to the bankruptcy announcement. As such, insiders, theoretically, can certainly minimize their losses by reducing purchases or increasing sales of their own firms' stock prior to the bankruptcy filings. However, trading by insiders based on material private information is against government regulations and corporate policies. Illegal insider trading may incur both high civil and criminal costs, which may deter insiders from trading before corporate announcements, especially with large price effects. This may explain the argument made by Reinganum (1987) that insiders tend not to trade their own firms' stocks prior to large stock price increases. Meulbroek (1992) presents a detailed discussion and analysis on government regulations against illegal insider trading.

Hence, whether insiders trade abnormally prior to the announcement of Chapter 11 bankruptcy may be an empirical issue. In contrast to events with large price increases, two aspects associated with insiders of bankrupt firms deserve emphasis. First, the public is usually aware of the financial difficulty of the firm before it declares bankruptcy, and its stock price usually began to decline long before the announcement. This means that insiders of these firms could use their firm's publicly known financial distress as an excuse for selling before the bankruptcy announcement to avoid possible allegations of illegal trading. Second, since insiders in the financially distressed firms are more willing to take risks, insiders of Chapter 11 bankruptcy firms should have more incentive to engage in abnormal trading activities before the announcement. Therefore, even facing stringent government regulations, insiders of bankruptcy firms may still try to change their trading patterns in such a way so as to reduce their equity losses.

The purpose of this study is to examine whether insiders of Chapter 11 bankruptcy firms change their trading patterns/behavior prior to the bankruptcy announcements to reduce their financial losses. Unlike Loderer and Sheehan (1989), who use changes in shareholdings in the proxy statements, this study uses the actual insider trading transaction data from the SEC. It differs from the study by Gosnell et al. (1992) in the following two ways. First, this paper investigates a final sample of 89 NYSE and AMEX firms over a period of 10 years. Their final sample includes only 18 NYSE and AMEX firms over a 3-year period. Second, this study focuses exclusively on firms filing Chapter 11 bankruptcy. Our study also differs from Seyhun and Bradley (1997) in sample selection and testing method. In their study, sample firms consist of those that filed a voluntary bankruptcy petition over the period of 1975–1992. This research includes only Chapter 11 bankruptcy firms. Further, we employ non-parametric methods to test the significance of abnormal insider trading rather than parametric methods. Seyhun (1990) argues that insider trading does not follow a normal distribution.

The focus on Chapter 11 bankruptcy firms is motivated by the following reasons. First, Chapter 11 bankruptcy process, as a result of the 1978 Bankruptcy Act, gives the stockholders substantial protection against creditors. Morse and Shaw (1988) argue that the new changes may favor more reorganizations. The increasing number of firms seeking protection under Chapter 11 process is in supportive of this point of view. Franks and Torous (1989) also indicate that Chapter 11 bankruptcy process has been described as favoring corporate management and can be strategically used by managers as a new measure in its armory when the going gets tough rather than when the firm is insolvent. Therefore, the new attitude towards using Chapter 11 protection by the management may have a significant impact on insider trading behavior. Second, from an empirical point of view, the existence and distinction of Chapter 11 bankruptcy from other bankruptcy forms warrant an empirical investigation of the trading behavior by insiders of Chapter 11 bankruptcy firms.

The empirical results provide new evidence of abnormal trading behavior by insiders of Chapter 11 bankruptcy firms. The finding shows that most of the significant abnormal insider trading occurred within 6 months before the bankruptcy announcement for insider purchases rather than sales. It also shows that total insider trading volume reduced significantly during the 3-month period prior to announcement. Efforts are also made to examine whether separating corporate insiders (holding managerial positions) from all insiders sample provides additional information. The results show very similar trading patterns but stronger significance levels for the corporate insiders sample in comparison with all insiders sample.

1. Data source and sample description

The stock returns and the returns on the equally weighted portfolio of all NYSE and AMEX stocks are obtained from the Center for Research on Security Prices (CRSP) daily stock tapes. The insider trading data are retrieved from the Ownership Reporting System (ORS) master tape and the ORS accumulative tape. The master tape covers the period of January 1980 to August 1987, and the accumulative tape covers the period of July 1986 to March 1991. Although differing in data structure, these two tapes provide all trading transactions by insiders of the NYSE/AMEX firms over the respective time periods. Insider trading information is also available from the *Official Summary of Securities Transactions and Holdings* published by the SEC.