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Bid-ask spreads, informed investors, and the firm's financial condition

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Abstract

As the firm's financial condition worsens, informed trading increases in the firm's stock and uninformed traders exit the market. Market-makers widen spreads in response to the increased probability of a trade against an informed investor. Using alternative proxies for the firm's financial condition, we find that financially ailing firms do indeed have higher bid-ask spreads. The results obtain after controlling for key factors known to influence spreads. Our analysis suggests that a deteriorating financial condition can lower shareholder wealth through its effect on bid-ask spreads.

JEL classification: G330, G190, G000

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As a firm's financial condition deteriorates, it imposes several hardships on its shareholders. Several papers have examined the costs of financial distress. These costs include direct costs such as legal and administrative expenses of bankruptcy proceedings (Warner, 1977; Weiss, 1990), and indirect costs such as management resources devoted to resolving financial distress, loss of suppliers and customers, and constraints on the firm's financing and investment opportunities (Altman, 1984; Titman, 1984; Wruck, 1990).

In this paper, we demonstrate that, in addition to the previously noted costs associated with financial distress, firms in poor financial condition also suffer from reduced stock liquidity

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(increased bid-ask spreads). We find strong evidence that the bid-ask spread on a stock is influenced by the firm's financial condition. For a sample of over 2,000 NYSE and AMEX-listed stocks, we show that the percentage spread is higher for firms in weaker financial health, after we control for other variables that are known to affect spreads.

We suggest that the higher spreads for poorly performing firms can be attributed to an increase in informed trading in the market for these firms' stocks. In competitive markets, market makers set the spread on a stock to cover three major costs that they bear: inventory costs, order-processing costs, and the costs of adverse selection, i.e., the cost of trading against informed traders.[1] Several papers including Copeland and Galai (1983), Glosten and Milgrom (1985), and Kyle (1985) model equilibrium spreads in the presence of informed traders. The essence of their argument is that market makers trade against two sets of investors, informed traders and uninformed or noise traders, and they are most often unable to distinguish between the two. On average, market makers lose in trades to informed traders, whose private information is not reflected in the prices at the time of the trade. Market makers expect to profit on average in their transactions with noise traders, who trade for reasons such as liquidity needs, risk aversion, and possibly random speculation. Thus, market makers set the spreads wide enough to ensure that their profits from trades with uninformed/noise traders will cover their expected losses to informed traders. Therefore, the greater the proportion of informed traders in a given stock, the higher will be the bid-ask spread.

As a firm's performance deteriorates and the likelihood of financial distress increases, trading in the firm's stock may be increasingly dominated by informed investors. Section 1 advances arguments to support this conjecture. Informed investors include vulture capitalists, mutual funds (especially hedge funds), takeover specialists, arbitrageurs, and other institutional and individual investors who are likely to be better informed than the average investor. These large investors acquire blocks of securities, both debt and equity, either because according to their private valuations these are undervalued claims, or because they intend to exert control over the firm. Hotchkiss and Mooradian (1997) find evidence of vulture investing prior to bankruptcy filings in 52 out of 105 firms, thus supporting our conjecture. They also report several 13D filings prior to Chapter 11 bankruptcy proceedings.[2] Section 1 also contains a detailed analysis of the market for the securities of poorly performing firms.

We argue that as the firm's financial condition worsens, there is an increase in the proportion of informed traders in the firm's securities. To protect themselves from trades against informed investors, market makers increase the bid-ask spread. Amihud and Mendelson (1986) show that investors require a higher rate of return for stocks with higher bid-ask spreads (lower liquidity), thus implying a higher cost of capital and a lower firm value. Amihud and Mendelson (1989) argue that this increase in bid-ask spreads is not a "second order effect" because repeated trading in the stock can substantially lower stockholders' wealth.[3] Therefore, the potential decrease in trading by uninformed investors is a burden that the firm's shareholders may suffer in addition to the other effects of a deteriorating financial condition.

While a deteriorating financial condition affects spreads because of the likely increase in informed investing, it is also likely to affect spreads through its effect on other trading variables. Consistent with market microstructure theory, the empirical research has shown spreads to be correlated with price, volume, share turnover, and volatility.[4] As a firm's performance deteriorates, some of these empirical determinants will also be affected, in turn, affecting spreads.