Chapter 10

PUBLIC DISCLOSURE OF TRADES BY CORPORATE INSIDERS IN FINANCIAL MARKETS AND TACIT COORDINATION

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Abstract: We consider the consequences of public disclosure of insider trades on trading costs and price discovery in financial markets. Similar to Cournot competition in product markets, corporate insiders with common private information have incentive to trade more aggressively than a monopolist with the same information. Since, given periodic financial corporate reporting, insiders routinely have access to information in advance of the market, it is reasonable to expect them to seek ways to limit trades and, thereby, increase profits. Public reporting of insider trades may have the unintended effect of furthering tacit coordination by allowing insiders to monitor each others' trades. Moreover, even without such reporting, we show how insiders may be able to sustain coordinated behavior depending on the distribution characterizing liquidity trading. Thus, competition among corporate insiders may be less influential in price discovery than previously thought.

Keywords: Public Disclosure, Insider Trading, Tacit Coordination

Introduction

A common perception of regulation which requires public disclosure of trades by corporate insiders, well expressed by Carlton and Fischel (1983), is that "The greater the ability of market participants to identify insider trading, the more information such trading will convey." In this paper, we suggest that public disclosure of insider trades per se may actually inhibit the price discovery

process by dampening competition among insiders as they seek to exploit their information advantage.

The notion that competition among insiders with common private information serves to advance price discovery is based on an analogy to Cournot behavior in product markets. As in that setting, Cournot insiders trade more aggressively on their private information than a monopolist would trade, thereby causing more of their private information to become impounded in price. However, this effect of competition presumes a static trading environment in which insiders lack the means to coordinate their demands.

It seems clear that officers, directors, and other corporate insiders routinely have information about earnings, dividend changes, contract awards, order backlogs, product approvals, appraisal values, research discoveries, litigation outcomes, and other recurring events in advance of public announcements.[1] Accordingly, a more suitable environment in which to analyze their behavior is a dynamic setting involving repeated episodes of private information arrival, opportunities to trade, and public release of that information. From a modeling standpoint this recommends characterization as a repeated game.

Our approach is based on one-period models of monopoly and Cournot competition by Kyle (1985) and Admati and Pfleiderer (1988), respectively. The extension to multiperiod play involves simple trigger strategies analogous to those of Green and Porter (1984). To capture the impact of public disclosure of insider trades, we consider scenarios in which insiders are able through such reports to perfectly monitor each others' trades or are able to only imperfectly monitor trades by observing the aggregate order flow. The former scenario involves a straightforward application of the Folk Theorem. The latter scenario is broken down into special cases wherein noise from liquidity demands has either bounded (moving) or unbounded support. Distributional assumptions range over the error class, which encompasses symmetric distributions distinguished by a shape parameter that determines kurtosis. This class includes the normal along with its limiting families, the uniform and Laplace. Dutta and Madhavan (1997) independently consider repeated insider trading assuming the normal and apply optimal strategies described by Abreu (1988). Their results are qualitatively similar to ours in that case. By departing from optimal trigger strategies and imposing some further structure, we obtain simple and intuitive characterizations of equilibria for a variety of cases. This, in turn, allows us to portray the significant role played by the kurtosis of liquidity demands.

Holden and Subrahmanyan (1992) and Foster and Viswanathan (1993) consider the effects of competition among identically informed insiders in a context of long-lived information. They find that price discovery is accelerated in comparison to Kyle's monopolist case. Foster and Viswanathan (1996) extend the analysis to the case of heterogeneously informed insiders and show that the degree of competition depends upon the correlation structure of insiders'