Investor Empowerment or Market Manipulation in Financial Virtual Communities

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FINANCIAL MARKETS AND INTERNET DISCUSSION SITES

As the Internet has become more accessible, there has been a substantial increase in the amount of investment advice and information that can be accessed online. The Internet now plays an important role in keeping financial markets better informed by allowing private share investors better access to information about exchange traded securities anywhere in the world. The impact of ubiquitous access to online information is epitomized by the rapid growth in the number of online trading accounts (Tumarkin & Whitelaw, 2001).

Recognized sources of Internet-based information include the Web sites of official securities exchanges, listed companies, and third-party operators providing access to a variety of investment information including real-time market data, research, and trading recommendations. However, in their search for legitimate information sources, many investors also seek out the investment rumors and tips that are frequently posted on Internet-based finance forums. Consequently, Internet finance forums have become popular virtual gathering places for individuals seeking information on stocks and stock market trading (Barnatt, 1998; Wysocki, 2000). Some participants in these forums form strong community bonds through the sharing of ideas and information across a diverse range of topics concerned with the trading of shares in publicly listed companies. These forums offer participants the experience of a community and provide objects in text that support the impression of an “imagined” community through commonality, connectedness, and deep play (Anderson, 1983; Pollner, 2002). These virtual communities have become important knowledge sharing environments with real and significant economic consequences (Armstrong & Hagel, 1996; Balasubramanian & Mahajan, 2001; Hagel & Armstrong, 1997; Kollock, 1999; Rothaermel & Sugiyama, 2001).

Despite being a relatively new phenomenon, Internet discussion sites (IDS) play a significant role in the day-to-day dissemination of information about listed companies. The growth in online trading and the emergence of private day-traders have also contributed significantly to the general rapid increase in the popularity of Internet finance forums and message boards. Finance forums remain an important source of collective insights (stories, myths, behavior norms, etc.) on a broad range of topics relating to securities and securities trading. It can be argued that these forums empower private investors by supporting synchronous and asynchronous digital conversations on key securities related topics including trading strategies, tax implications, comparative assessments of stockbrokers and services, private research, and community-focused investor white papers. For many, these forums instill a strong sense of community and camaraderie both at the group and subgroup levels. From an international perspective, forums also allow individuals located in different parts of the world to exchange information about projects partnered by companies listed in other countries.

However, not all forum participants have trading objectives that are collectively beneficial. The organization and structure of many financial forums enable some individuals to systematically cultivate and exploit the uncertainty or enthusiasm of others (Baker, 1999; Drake, Yuthas, & Dillard, 2000; Goldwasser, 1999). The manipulation can be intentional or unintentional and is usually motivated by a desire to effect an increase or decrease in the price of some security over a comparatively short period of time. Although there are a number of ways by which investors can be manipulated, the most common technique is known as “ramping.” Stock ramping usually involves an organized campaign aimed at increasing the price of a particular stock by the rapid dissemination of false or excessively optimistic information through a variety of media including finance forums and e-mail (Wysocki, 2000). The ramping of a stock can initially have a very seductive effect. Both the company and its investors can be lulled into a false sense of security by a rising stock price. However, this type of promotion inevitably leads to a lower price as the promoters offload their holdings to trusting newcomers who, in turn, force the price lower when earlier expectations are not met. Small, thinly traded companies are frequently targeted because it is easier to manipulate a stock when the company has a low capitalization and/or comparatively few shares on issue.
A CONVERSATION ABOUT STOCK PRICE MANIPULATION

The analysis presented in this article is based on text-based dialogue from a virtual community situated at a popular Australian IDS. The IDS has been in existence since 1995 and at the time the data was collected claimed more than 20,000 registered members and generated between 4 million and 6 million page impressions per month. Forum participants included amateur investors, day traders, and professional brokers all of whom, despite their diversity of expertise, shared a common interest in stock market investment. Members were able to post messages on a range of financial topics in a bulletin-board style. Guidelines were provided to help participants conform to government regulations regarding investment advice and also to form the basis for moderating forum behavior. A standard disclaimer notice was attached to every message posted to the forum. The disclaimer reminded the reader that some claims might not be accurate and to seek professional advice before taking any action.

The conversation data was identified through the emergence of highly evocative posts about a particular company. These posts were accompanied by considerable abnormal market activity (see Campbell, 2001; Campbell & Cecez-Kecmanovic, 2003). The company at the center of the conversation had not attracted any notable mention prior to this event. In fact, the investigator had monitored this site for several years and during that time had not observed any mention of the company. In all, the captured conversation involved 126 posters contributing more than 600 messages over a period of 48 days. The data collected and analyzed in this study is considered to be of high quality and a particularly useful data set for the following reasons:

- The absence of any comment about the company in other forums or mass media prior to and during the initial stages of the forum conversation and anomalous market activity.
- The duration of the study period in which the posts were tracked and compared with market activity.
- The number of forum identities who participated in the conversation and the relatively large number of posts made during the study period.
- The absence of official company announcements that might explain the market and/or forum activity.

Figure 1 displays the volume and price range data (high, low, and close prices) for the company of interest over an extended period of time. Share price volatility and traded volume increased markedly during the three days from trading day zero to two—the period labeled escalation in Figure 1. If investors differ in the way they interpret IDS rumor, time will elapse before consensus is reached and trading volume and price volatility will be higher than normal (Bamber, Barron, & Stober, 1999). This phenomenon is consistent with findings from earlier IDS studies (see, e.g., Wysocki, 2000; Tumarkin & Whitelaw, 2001; Joyce et al., 2003). Share price variability and volume remained relatively high but in decline for several more days until returning to pre-event levels around trading day eight—the period labeled consolidation. This was followed by a period of steady price depreciation lasting approximately five trading day—the period labeled contraction.

Figure 2 shows the number of company specific posts per day against the share price intraday high. There had been no recent discussion on the IDS about the company prior to the anticipatory message which was posted on day zero. The most active period of posting occurred from posting day one to posting day seven. This pattern roughly coincides with the very large volumes and share price volatility identified earlier in Figure 1. However, there was a significant drop-off in the number of messages posted after posting day seven (see position of marker “A” in Figure 2). As forum activity takes precedence, it was decided to focus primarily on the period from posting day zero to posting day two compared against the period from posting day three to posting day seven.

A MODEL OF FINANCIAL MARKET AND IDS INTERACTION

This section provides a descriptive framework highlighting the link between stock market behavior and the information posted to IDS. The analysis is based on studies of a stock ramping-style promotion discussed earlier which led to the preliminary specification of a model representation that identifies the major stakeholders and important variables that describe how IDS are linked to stock market behavior. This model is illustrated in Figure 3.

In terms of market influence, forum activity will have the greatest impact on small thinly traded stocks, and hardly any impact on large liquid blue chip stocks. In turn, market activity introduces a certain amount of information “noise” back into the forum conversations. For example, many traders use rule-based software systems to monitor stocks for sudden changes in price and volume. Access to Internet-based real-time stock watch-list services means that forum members are often alerted to unusual market activity relatively early. At any point in time, forum conversation will generally center on the “hot” stocks or sectors in the market. Hence, the popularity or notoriety of a particular stock will naturally wax and wane over time, largely determined by the weight of market interest.
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