TRADING BEHAVIOR OF THE TAIWAN STOCK MARKET INSTITUTIONAL INVESTORS

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ABSTRACT

This paper investigates the existence of short-term profit opportunities based on institutional investor's net buy-sell information. Net-buy and net-sell portfolios are constructed using net trading volume and net dollar volume. Further, zero-investment portfolios are constructed buying net-buy portfolios. The results of our investigation indicate that all institutional investors prefer large cap and growth stocks, however, security investment trust companies hold a higher percentage of small cap and low book-to-market stocks in their portfolios than the percentage held in the foreign investor's portfolio. Finally, a zero-investment portfolio structured using security investment trust company outperforms market, foreign investor's and security dealer's portfolios.

INTRODUCTION

In October 1981, the Ministry of Finance of Taiwan initiated a sweeping three-stage liberalization policy. The first stage began in September of 1983 and allowed several Taiwan trust companies to raise abroad funds for investment in the domestic stocks. In the second phase, instituted in July 1987, the Taiwan government relaxed its foreign exchange controls and allowed domestic investors to invest directly in foreign markets, albeit subject to a ceiling on capital outflows. In the final phase of the liberalization policy, enacted in September 1990, regulations were passed providing foreign institutional investors who met certain restrictive requirements to invest directly in the Taiwan stocks. Despite these efforts, however, the Taiwan stock market has not achieved the intended globalization and remains dominated by individual domestic investors (Harrison, 1994).

Institutional investors in Taiwan were classified by the Taiwan Stock Exchange Corporation (TSEC) into three major groups: foreign investors, security investment trust companies (henceforth referred as trust companies), and security dealers. Up to January 2003, the Taiwanese government had licensed 686 qualified foreign institutions, 44 security investment trust companies, and 97 security dealers to invest in the domestic stocks. Since then, overall capital inflows to the Taiwan stock market have amounted to 43 billion U.S. dollars while the value of mutual funds managed by security investment trust companies has totaled about 6.3 billion U.S. dollars.

While institutional investor's trading account for the 70% of dollar volume on the NYSE in 1989 (Schwartz and Shapiro, 1992), in Taiwan, it accounted for a mere 3% in the same year, according to the statistics published by the Taiwan Securities and Futures Commission. This number, nevertheless, has been increasing rapidly. Figure 1 shows the proportions of institutional investors' daily dollar trading volumes to the market dollar trading volumes from December 12, 2000 to November 8, 2002. The share of institutional investors during the 1990s, compared to that in the 1980s, rose dramatically and institutional investors became active traders. Of particular note, the number of shares held by foreign investors dominated those held by the trust companies and security dealers. Given the increasing proportions of institutional investors' dollar trading volumes, the purpose of this paper is to study the informative content of the net-buy information, including short-term profitability, stock selections, and lead-lag relations, of institutional investors in the Taiwan stock market.

Institutional investors are often regarded as informed traders on account of their ability to collect and process information more efficiently than individual investors. Traders from well-known international investment companies, e.g., Morgan Stanley, Chase, and Merrill Lynch, are believed to have superior access to new information regarding securities and to be more adept at interpreting new information. Moreover, the trading activities of foreign investors are considered targets for other investors to mimic in their own subsequent trading. Individual investors typically tend to follow the footsteps of foreign investors even without solid evidence of the wisdom to do so.

Many researches, e.g., Grinblatt, Titman, and Wermers (1995), Choe, Kho, and Stulz (1999), Grinblatt and Keloharju (2000), and Chui, Titman and Wei (2000), have examined the investment behaviors of institutional investors in different markets; and have concluded that institutional investors are usually momentum traders. That is, they tend to buy prior winning stocks and short prior losing stocks, the behavior that Delong et al. (1990) and Lakonishok, Shleifer, and Vishny (1992) refer to as a "positive-feedback" trading. Grinblatt, Titman, and Wermers (1995) find that institutional investors have a tendency to exhibit "herding" behavior, implying that they buy or sell the same stocks about the same time. Edelen and Warner (2001) suggest that institutional trading affects stock returns. Chan and Lakonishok (1995) observe that money managers with high demands for immediacy tend to be associated with larger market impacts. If such patterns also exist in Taiwan, then it follows that individual investors should be able to gather information such as the net-buy information on the trading activities of institutional investors, and thereby make profits by following their moves.

Economists have studied the investment behaviors of institutional traders such as the lead-lag relations between them using the aggregate net-buy information. For example, Huang and Yang (2000) observe that foreign investors have created positive demonstration effects on companies and security dealers in buying stocks. Usually, the aggregate net-buy dollar volumes of institutional investors provide individual investors with an overall impression of how active and optimistic they are. Nonetheless, it is uncertain how individual investors can benefit from the aggregate net-buy information. Even if knowing that institutional investors can affect stock prices, individual investors are likely unsure about which stocks institutional investors exactly pursue. According to Warther (1995), in the U.S. market, mutual fund flows are correlated with the returns on those securities held by the funds, but not with the returns on other groups of securities. Thus, without explicit details that stocks institutional investors have mostly bought and sold, individual investors can hardly make definitive moves with confidence and profit from the aggregate net-buy information.

CONCLUSIONS

Since the liberalization of the Taiwan stock market, the shares of the dollar trading volumes of institutional investors have risen remarkably. Operating on an international scale, foreign investors are groups of specialists engaging in a variety of worldwide investment activities. Compared to domestic institutional investors, such as Security investment trust companies and security dealers, foreign investors are considered to have superior expertise in collecting and processing information and, as a consequence, their net-buy information in trading days attracts much attention from other investors, However, due to the shortage of disaggregate data, very limited evidence is presented to justify the values embedded in the net-buy information of foreign investors.

This paper formally applies newly released disaggregate data to test for the short-term values embedded in the prior net-buy information of institutional investors, including foreign investors, trust companies, and security dealers. Based on the prior net-buy volume and dollar volume, the top 20 net-buy and net-sell stocks are selected to form the net-buy and net-sell portfolios, respectively. The NB-NS portfolio is referred to as the zero investment buying the net-buy portfolio and shorting the net-sell portfolio.

The evidence shows that, first, the average NB-NS portfolio returns based on the net-buy trading volume and dollar volume of trust companies are positive and outperform the average market returns and those based on foreign investors and security dealers, even after accounting for the transaction cost and price-limit effect. This finding is contrary to the common impression that foreign investors are capable of accessing new information more efficiently than the domestic institutional investors, trust companies and security dealers. Second, on average, the net-buy and net-sell stocks of all institutional investors are categorized as large and growth stocks. The net-buy and net-sell stocks of trust companies, relative to those of foreign investors, are small in size and have low book-to-market ratios.

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