Available online at www.sciencedirect.com
ScienceDirect
ELSEVIER
Pacific-Basin Finance Journal 14 (2006) 453–466
PACIFIC-BASIN FINANCE JOURNAL
www.elsevier.com/locate/pacfin

Which trades move prices in emerging markets?: Evidence from China's stock market

Bill M. Cai, Charlie X. Cai, Kevin Keasey *

International Institute of Banking and Financial Services, Leeds University Business School, England

Received 28 April 2005; accepted 8 May 2006
Available online 17 August 2006

Abstract

This paper extends Barclay and Warner's [Barclay, M.J. and J.B. Warner (1993), 'Stealth trading and volatility: which trades move prices?', Journal of Financial Economics, vol. 34, pp. 281–306.] original work on stealth trading by analysing which trades move price for the emerging Chinese stock market. A large block trade/manipulation hypothesis is proposed in addition to the stealth and public information hypotheses examined by Barclay and Warner. Using high-frequency data the results show that while medium and large-size trades are associated with disproportionately large, overall, cumulative stock price changes, it is the large-size trades (in terms of the number of transactions) which have the largest effect on cumulative price increases. Thus, while there is some support for stealth trading in the Chinese market, there are other effects in operation such as large block trades/price manipulation.

JEL classification: G12; G14; D82
Keywords: Price discovery; Stealth trading; Emerging stock market

1. Introduction

This paper extends Barclay and Warner's (1993) work on stealth trading by both analysing which trades move price in the emerging Chinese stock market and by proposing/testing a large block trade/manipulation hypothesis in addition to the stealth and public information hypotheses considered by Barclay and Warner.

The central prediction of the stealth-trading hypothesis is that privately informed traders use medium sized trades so as not to reveal their information (as would be the case if they used large

* Corresponding author. Leeds University Business School, The University of Leeds, Leeds, England, LS2 9JT.
E-mail address: kk@lubs.leeds.ac.uk (K. Keasey).

0927-538X/$ - see front matter
doi:10.1016/j.pacfin.2006.05.001

trades) and for a sample of 105 NYSE firms that were tender-offer targets between 1981 and 1984, Barclay and Warner found most of the cumulative stock-price change is due to medium-size trades. Similarly, using audit trail data for a sample of NYSE firms, Chakravarty (2001) found that medium-size trades are associated with a disproportionately large cumulative stock price change relative to their proportion of all trades and volume. In addition, they found that the source of the disproportionately large cumulative price impact of medium-size trades is trades initiated by institutions. Finally, Anand and Chakravarty (2003) found that informed traders tend to operate in medium sized trades of high leverage and high volume options.

The extension of the analysis of stealth trading from a primarily US context to China is of interest for a number of reasons. First, China is an emerging market with a developing regulatory framework and this allows us to examine whether traders adopt stealth trading in a less developed regulatory regime. Second, it is unclear whether there would be the same need for privately informed investors to adopt stealth trading given the relative youth of the Chinese stock markets and the possible lack of sophistication of the general investing public. Third, given these first two factors there may be scope for traders to gain by other trading strategies such as price manipulation and this possibility is examined here. Finally, China is an emerging global power which has already and will continue to attract businesses and investors from the rest of the world. These organisations and individuals will want to understand the efficiency of the Chinese stock market especially given the concerns expressed by a number of eminent individuals in China. At the National People's Congress (NCP) in spring 2000, Premier Zhu Rongji remarked that China's stock markets had developed quickly, achieved much but were still not well regulated with concerns over rampant speculation, poor-quality listed firms, defective regulation and widespread corruption. In 2001, Professor Wu Jinglian commented that 'China's stock market is no better than a casino. At least in a casino there are rules.' (Wu, 2001).

The current results show that while stealth trading and large block trades/price manipulation hypotheses have explanatory power for overall price changes, it is large block trades/price manipulation which best explains price increases. Therefore, these results add to the existing literature on stealth trading by showing that while it still exists in the context of the emerging Chinese market with all of its associated characteristics, there are other forces at work in this emerging market. The results may have implications for the regulatory oversight of stock trading in China and for research on stealth trading. In terms of the latter, further work could look at other emerging markets and different regulatory regimes.

The structure of the paper is as follows. Section 2 presents the various hypotheses, Section 3 discusses the data and methodology, while Section 4 presents the results and Section 5 offers conclusions and suggestions for further research.

2. Trading hypotheses

The stealth trading hypothesis has a simple premise at its core; informed traders will try to hide their information by fragmenting their orders and this means they will, on average, use medium sized trades because small trades are too expensive and large trades run counter to their objectives. This literature has its roots in Kyle (1985) who argued that informed investors attempt to camouflage their trades by spreading them over time, while Admati and Pfleiderer (1988) found that informed traders like to trade when liquidity volume is high. Barclay and Warner (1993), however, were the first to focus on the informed traders' choice of trade size. Effectively, informed traders are unlikely to use small sized trades because the profit potential from these positions is small. Equally, large trades are unlikely to be used because of the issue of revealing