Available online at www.sciencedirect.com
ScienceDirect
Pacific-Basin Finance Journal 16 (2008) 61 – 77
PACIFIC-BASIN FINANCE JOURNAL
www.elsevier.com/locate/pacfin

Herding behavior in Chinese stock markets: An examination of A and B shares

Lin Tan [a,1], Thomas C. Chiang [b,2], Joseph R. Mason [b,3], Edward Nelling [b,*]

[a] *California State Polytechnic University, Pomona, 3801 West Temple Avenue, Pomona, CA 91768, USA*
[b] *Drexel University, 101 North 33rd Street, Philadelphia, PA 19104, USA*

Available online 4 May 2007

Abstract

This study examines herding behavior in dual-listed Chinese A-share and B-share stocks. We find evidence of herding within both the Shanghai and Shenzhen A-share markets that are dominated by domestic individual investors, and also within both B-share markets, in which foreign institutional investors are the main participants. Herding occurs in both rising and falling market conditions. Herding behavior by A-share investors in the Shanghai market is more pronounced under conditions of rising markets, high trading volume, and high volatility, while no asymmetry is apparent in the B-share market.

JEL classification: G15; G14
Keywords: Herding behavior; Chinese stock market; Asymmetric behavior; A and B shares

1. Introduction

Herding in financial markets has been typically described as a behavioral tendency for an investor to follow the actions of others. Practitioners are interested in whether herding exists, because the reliance on collective information rather than private information may cause prices to deviate from fundamental value and present profitable trading opportunities. Herding has also attracted the

* Corresponding author. Tel.: +1 215 895 2117; fax: +1 215 895 2955.
E-mail addresses: Ltan@csupomona.edu (L. Tan), chiangtc@drexel.edu (T.C. Chiang), joseph.r.mason@drexel.edu (J.R. Mason), nelling@drexel.edu (E. Nelling).
[1] Tel.: +1 909 869 4587.
[2] Tel.: +1 215 895 1745; fax: +1 609 265 0141.
[3] Tel.: +1 215 895 2944; fax: +1 215 895 2955.

0927-538X/$ - see front matter
doi:10.1016/j.pacfin.2007.04.004

attention of academic researchers, because the associated behavioral effects on stock price movements may affect their risk and return characteristics and thus have implications for asset pricing models.

Theoretical models of herding behavior have been developed by Bikhchandani et al. (1992), Scharfstein and Stein (1990), and Devenow and Welch (1996). Empirical studies have mainly focused on detecting the existence of herding behavior among mutual fund managers (Lakonishok et al., 1992; Wermers, 1999) or financial analysts (Trueman, 1994; Graham, 1999; Welch, 2000; Hong et al., 2000; Gleason and Lee, 2003; Clement and Tse, 2005).

The Chinese stock market provides an interesting setting for the analysis of investor herding behavior. Since the establishment of the Shanghai Stock Exchange (SHSE) and the Shenzhen Stock Exchange (SZSE) in December 1990, two classes of shares have been issued. *A shares* can be purchased and traded only by domestic (Chinese) investors and are denominated in the local currency, the Renminbi (RMB). *B shares* were sold only to foreign investors before February 2001, and have been sold to both foreign and domestic investors since then. A shares and B shares are traded simultaneously on the Shanghai and Shenzhen stock markets. However, the characteristics of their investors are very different. The A-share market is dominated by domestic individual investors (China Securities and Futures Statistical Yearbook, 2004), who typically lack significant knowledge and experience in investments. In contrast, the B-share market is dominated by foreign institutional investors, who tend to be more knowledgeable and sophisticated than A-share investors. The different characteristics of A-share and B-share investors may result in differences in the level of herding in each market.

In this study, we examine whether herding behavior exists *within* each of the Chinese stock markets, whether it exists *across* A-share and B-share markets, and whether it exists *across* the Shanghai and Shenzhen markets. For markets characterized by herding behavior, we further examine whether herding exhibits asymmetric effects associated with market returns, trading volume, and return volatility. Our results indicate that dual-listed Chinese A and B shares exhibit significant herding behavior. Herding by A-share investors in the Shanghai market displays strong asymmetric characteristics: it is higher during periods of rising stock markets, high trading volume, and high market volatility. We find no evidence of asymmetric effects in the herding behavior of B-share investors. Although herding occurs *within* each of the markets examined, we find no evidence of information *across* markets affects the dispersion in returns.

The remainder of this paper is organized as follows. Section 2 presents the methodology used to detect herding behavior. Section 3 describes data. Section 4 reports evidence of herding behavior within each market. Section 5 studies the asymmetric effects of herding in response to market conditions, trading volume, and return volatility. Section 6 examines the effects of cross-market information on herding. Section 7 concludes the paper.

2. Detecting herding behavior by investors

Two studies that have proposed methods of detecting herding behavior using stock return data are Christie and Huang (1995) (hereafter referred to as CH) and Chang et al. (2000) (hereafter referred to as CCK). CH suggest that the investment decision-making process used by market participants depends on overall market conditions. They contend that during normal periods, rational asset pricing models predict that the dispersion in returns will increase with the absolute value of the market return, since individual investors are trading based on their own private information, which is diverse. However, during periods of extreme market movements, individuals tend to suppress their own beliefs, and their investment decisions are more likely based on the collective actions in the market. Individual stock returns under these conditions should tend to cluster around the overall