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Chinese Stock Market Research Report

Herding Behaviour in the Chinese Stock Market

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Introduction

In the last three decades, China's economy has undergone exponential growth and has gradually opened to the world, with its stock market reaching $7 trillion in market capitalization as of May 2017. China has become a center of attention for funds and the world's largest country for Initial Public Offerings (IPOs) in the first half of 2022. The goal of this paper is to discuss how investments' patterns in the Chinese stock market may be influenced by a bias known as "herding behavior", and studies how the various policies liberalizing the stocks to foreign investors might affect the amplitude of this behavioral bias.

Chinese Stock Market Background

The Chinese stock market is composed of two official exchanges: the Shanghai Stock Exchange (SSE) founded in December 1990, and the Shenzhen Stock Exchange (SZSE) established in July 1991. While they both operate large scale companies (the "Main Board") which are usually state-owned, the SZSE additionally handles since 2004 and 2009 respectively the Small & Medium Size Enterprise Board, and companies that are more export-oriented, entrepreneurial and independent. Moreover, the Stock Exchange is governed by the China Securities Regulatory Commission ("CSRC"), which regulates each operation within the market, in accordance with its laws and regulations.

In this market, firms can issue two classes of tradable shares with the same voting rights: A-shares, which are only quoted in RMB (China's local currency) and B-shares, quoted in foreign currencies such as the US Dollar. Until 2002, A-shares could not be purchased by foreign investors, whilst B-shares were hardly accessible to Chinese investors for currency-exchange reasons. However, with the introduction of the Qualified Foreign Institutional Investor (QFII) system, qualified foreign institutional investors were allowed to hold A-shares, although with various restrictions (a monthly 20% limit on repatriation of funds to foreign countries.)

Due to the original restrictions and separation from other financial markets, the Chinese Stock Market suffered many scandals and gained, in its early years, a reputation as a "casino manipulated by speculators" (Carpenter & Whitelaw, 2017). Nevertheless, it still grew at a remarkable speed with over 3700 firms listed and over $8 trillion in market capitalization 20 years after its establishment, in December 2019 (Carpenter et al., 2021). Which gradually led to making it the world's second largest stock market.

Herding Behavior

Herding behavior is defined as the phenomenon of individuals mimicking other agents' behavior, while disregarding their own information, beliefs, and predictions. This intentional herding must be differentiated from "spurious herding" where investors make comparable decisions because they are based on the same information set. The crucial difference between these two types of herding is that the spurious one leads to an efficient outcome, while the intentional one isn't necessarily efficient (Bikhchandani & Sharma, 2000).

This behavior arises from reasons that can be viewed as rational, such as the attempt to preserve reputation by conforming with other institutional investors, or the desire to maintain a high remuneration when an investment manager's compensation depends on their performance compared to others (Scharfstein and Stein, 1990; Rajan, 1994; Maug and Naik, 1996).

In addition to reputation and compensation-based herding, we can also cite information-based herding: if investors have short trading horizons, or just arrived in the market, for example, they may derive information from the actions of previous participants, trying to learn what they know. When they do imitate those decisions, this leads to the so-called information cascades (Bikhchandani et al., 1992), known for generating price volatility and instability in financial markets.

Finally, it has been argued that investors may simply prefer conformity with the market consensus as the consequence of psychological and/or social conventions (Keynes, 1930). Investors disregard their own perceptions and are influenced by a psychological bias.

Many economists suggest that herding leads to market fragility, excessive movements in prices, and may also provoke bubble-like episodes. Herding activities among investors have been a popular behavioral explanation for the excess volatility and short-term trends observed in financial markets. It causes prices to fluctuate rapidly from fundamental values and influences trading strategies, portfolio diversification, and asset pricing models (Yao et al, 2014).

Herding behavior in China

Many studies[1] have shown that herding behavior is particularly prevalent in China compared to other stock markets. Investor herding is seen both at the overall level across the Shenzhen (SZSE) and Shanghai (SSE) exchanges and in the performance of A and B shares within those exchanges.

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[1] *L Tan et al Herding behavior in Chinese stock markets : an examination of A and B shares; Herding and China's marketwide circuit breaker Wang and Kim 2017; Li et al Differences in*

Historically that has meant that A shares were sold predominantly by domestic investors[2] who lack investment expertise and the foreign currency to invest in B shares - and B by foreign and more sophisticated institutions.
Over the last 20 years these differences have narrowed but not disappeared, however, individual investors are still more important in China than in the US market.

While overall "herding" is identifiable, not surprisingly given the different investor bases, there is different behavior between A and B shares. A shares herd on small and growth stock portfolios when there is higher market volatility, but only herd on large stock portfolios when the market is going down.
On B shares this pattern is not seen with herding on all shares and all volatility and while fundamental herding exists the herding response is stronger in B shares to non-fundamental (e.g. not company specific data) especially during financial crises. Asymmetrical information may be one of the causes between the differences in herding behavior. Investors in A and B shares react differently to the same information, for example international investors tend to react to international events more than domestic investors.

Overall herding is seen to exacerbate volatility of the stock prices and an example of this extreme volatility is the collapse of the Chinese stock market in 2015 (Balcilar et al., 2013). Share prices had been rising quickly in 2014 and then the Shanghai and the Shenzhen Indexes dropped sharply by 53.3% and 54.8% respectively within the space of two months despite there being no material change in the underlying "fundamentals".
Moreover, in the B share markets where persistent herding behavior is documented, portfolio diversification strategies may not be as effective as they would in a herd-free market. That is, a greater number of securities are required to achieve the same level of diversification than an otherwise normal market.

Surprisingly there is low correlation or spillover effects between the herding on A and B. Overall herding behavior in the Chinese stock market has a destabilizing impact on financial markets leading to mispricing of assets. On an individual level herding behavior can lead investors to deviate from their original diversification strategy.

Herding: individual vs institutional investors 2017 and Xin 2019 Herding behavior in Chinese A and B markets.

[2] *Since 2003 select and licensed foreign investors can also buy A shares but the market is still dominated by individual domestic investors.*

Shanghai and Shenzhen Hong Kong Stock Connect Policies

Since the 1990s, China has been gradually opening its stock markets to overseas investors. Among many policies, the Chinese government implemented the Shanghai-Hong Kong Stock Connect policy in 2014, and in 2016 to the Shenzhen market. The connect policy allows investors in mainland China and Hong-Kong to trade designated stocks listed on other markets through local exchanges. The staggered implementation of the two connect programs are exogenous shocks to the liberalization of China's A-share markets (Zhao et al., 2021).

Theoretically speaking, the liberalization of stock markets to foreign investors can amplify or reduce investor herding. Information asymmetry in the market is a necessary feature for the formation of institutional herding. On one hand domestic investors may imitate foreign ones, due to information advantages; a so-called information cascade generated by information asymmetry between foreign and domestic investors. However, foreign investors may in turn lower information asymmetry by acting as active monitors for local firms. This correlated signal theory indicates increases in value relevant info readily available (Zhao et al., 2021).

Foreign institutional ownership changes the information environment by discovering firm-specific information, improving corporate governance quality, promoting financial reporting comparability, and facilitating information transmission. An analysis of Chinese A-share stocks during 2011–2019 found that institutional herding is 7.5% lower for connected A-share stocks than non-connected ones (Lakonishok et al, n.d.). The connect policies have a more pronounced negative on firms with higher information asymmetry, such as smaller firms with less analyst coverage. Moreover, the probability of herding in smaller firms is higher, as the price volatility is more significant.

Nevertheless, even after the implementation of the SHKSC policy, we find there still has obvious herding behavior. This indicates that Chinese investors did not take advantage of the relevant information after the introduction of the relevant policies (Yu et al, 2022). Despite the introduction of market liberalization policies, institutional herding is still prevalent on the Chinese stock market, causing more volatile fluctuations in the stock prices.

Conclusion

Over the last 30 years China has been an ideal stock market to analyze “herding behavior” because it contains both A and B shares which while representing the same firms have significantly different investors bases. This has allowed for comparison between domestic and foreign investors and enabled a greater understanding of the impact of herding behavior on Chinese stock markets.

Our conclusions in this essay are three-fold. Firstly, that herding behavior is evident in the Chinese stock market. Secondly, the impact of herding behavior is different between A shares and B shares, with predominantly domestically traded A shares showing greater signs of herding behavior than B shares which are predominantly traded by foreign institutions. However, B shares showed greater herding tendencies relating to international events.
Lastly that the Shanghai-Hong Kong Stock Connect policy implemented in 2014 to the Shenzhen market has resulted in lower institutional herding behaviors for connected A-share stocks than non-connected ones. The impact of the Connect policy alongside the maturing of the domestic investor base suggests that “spurious” as opposed to “intentional” herding is likely to diminish over time.

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