

Comparison of Herding Effect Between Developed Countries and Developing Countries

Tianhe Chen*

Research Institute of Economics and Management, Southwestern University of Finance and Economics, Chengdu, China

*Corresponding author: cth_cdx@smail.swufe.edu.cn

Abstract. How to properly invest in the stock market is a hot issue of social concern, and some studies have shown that the herding effect will have a certain impact on the market stability and market efficiency of the stock market, and the herding effect between countries with different levels of development can be studied in more depth. The research topic of this paper is the study of herding effects in countries with different levels of development. The research methodology of this paper is as follows: developed and developing countries are divided into two categories, and four countries, the United States, the United Kingdom, China, and Indonesia, are selected to explore the causes and effects of the herding effect in developed and developing countries, respectively. The study found that the herding effect was more pronounced in developing countries compared to developed countries. The herding effect is more pronounced in developing countries because of the relatively imperfect construction of financial markets, the lack of financial literacy of the people, and so on, so these internal factors lead to the herding effect. In contrast, developed countries need to pay more attention to the herding effect caused by external influences such as epidemics and financial crises.

Keywords: Herding effect; stock market; developed country; developing country.

1. Introduction

The herding effect is a phenomenon in which individuals influence each other and interact with each other to produce consistent behavior. And the herding effect in the stock market is a phenomenon in which investors ignore their information and follow the investment decisions of other investors, making them buy or sell the same stock with other investors at the same period, affecting the market [1]. Individual investors are often influenced by trending news and other information when making decisions in the stock market. Studies have shown that herding effects can lead the public to deviate from value investors, which can affect the volatility of financial markets and even lead to global financial crises.

Wang [2] found that by analyzing the herding effect in two countries, China and the United States, he can explain the reasons for their different herding effects and also provide a new way of thinking about the herding effect. And his study can also explain the different development histories of the two markets, market globalization, and other factors. It also provides relevant suggestions for the Chinese stock market [2]. At the same time, Ge [1] also made a comparison between the US and China: one is a representative of a developed country and the other is a representative of a developing country. Ge [1] also said that such a study would help to better investigate the causes of the herding effect and provide reasonable opinions. In this article, by analyzing the differences in herding effects between developed and developing countries, we can obtain conclusions with broader applicability. It will be possible to explain the reasons for the herding effect in countries with different levels of development by digging into other different factors that lead to different herding effects in the stock market.

The remainder of this paper is organized as follows: Section 2 analyzes the herding effect in both developed and developing countries; Section 3 makes a summary of the literature used in this article; Section 4 concludes.

2. Herding Effect in both Developed and Developing Countries

2.1 Developed Countries

2.1.1 America

Causes and effects: As the largest and most powerful developed country in the world, the United States also has a relatively sound legal system and investment environment. This paper selects the U.S. as one of the developed countries to study because of the combination of national influence, national investment environment, and other factors. As the world's most vocal country with a very active investment environment, it can provide a sample and guidance for other developed countries. The United States, as an old capitalist country, has a very low herding effect compared to China. Ukpong et al. [3] found that the herding effect in the U.S. was not significant, especially within the financial sector. This means that the herding effect in the U.S. stock market is not as severe as in other countries. Meanwhile, Nikolaos and Verousis [4] examined herding behavior in the U.S. equity market, and they found no evidence of herding as a general tendency of investors in America. Wang [2] mentioned that there are three factors why the effect is small. First, Americans are more independent and autonomous, many decisions they can adhere to; second, Americans have simple interpersonal relationships and do not like to rely on others; third, more attention to privacy, "insider information" is not easy to spread [2]. In addition to the above factors, the United States' original capitalism has been developed for a long time, the financial market laws and regulations are very complete, and the overall market is also very mature also makes the U.S. stock market herding effect relatively low. Meanwhile, Chang et al. [5] also found that although the overall herding effect in the US is low, there are episodic herding effects in the US market and this is related to factors such as the subprime mortgage crisis, the European debt crisis, and the collapse of the Chinese stock market, etc. As can be seen, major financial events in the world can also have an exacerbating effect on the herding effect in the United States.

Recommendations: Continuously monitor other countries' relations with the U.S. and maintain a high level of vigilance to prevent impacts from other countries. At the same time, lessons should be learned about unexpected events, while contingency plans should be made to prevent sudden herding effects in times of future crises.

2.1.2 UK

Causes and effects: As the most powerful capitalist country once, the UK laid the foundation for the later capitalist system, and today London is still one of the world's major financial centers. As a strong developed country, the UK itself has a relatively low herding effect. However, Economou et al. [6] used the data from January 2004 to July 2014 in the US, the UK, and German, and found that cross-market herding eliminates international diversification benefits. And the documented impact of investors' cross-market sentiment facilitates crisis transmission and market contagion [6]. This requires UK investors to be aware of the impact of cross-country herding effects, as European countries are closely linked financially and economically, and need to strengthen their investment philosophy and firm up their investment objectives. What's more, Aslam et al. [7] studied the herding effect during the novel coronavirus epidemic and found that the new coronavirus exacerbated the herding effect to varying degrees in many countries, including the United Kingdom. Aslam et al. [7] also found that European countries are generally more sensitive to risk loss than Asian countries, which means that the UK would have a higher herding effect in the face of an event such as a novel coronavirus outbreak.

Recommendations: According to herding behavior, Aslam et al. [7] proposed that information is well-regulated and strives for greater transparency of information while establishing and maintaining a favorable economic environment to enhance the investment environment for investors. Since the UK is a developed country with a relatively well-developed system, the herding effect will generally be relatively low, and dealing with external risk factors, with the current experience in the future will be able to cope better.

2.2 Developing Countries

2.2.1 China

Causes and effects: As the largest developing country, the herding effect of Chinese investors can serve as a good example. At the same time, studying the herding effect in China's investments can also provide a good example for other developing countries. China, as a developing country, has many reasons of its own that make its herding effect relatively significant. Dong [8] mentioned that China surpassed institutional investors in terms of the ratio of individual investor holdings in the stock market in 2017, which directly illustrates the need for our research on the herding effect in the Chinese stock market. And Dong [8] argued that the causes of the herding effect in China are divided into internal and external factors: personal reasons are blind self-confidence and low education; external reasons are the influence of media orientation, institutional influence, and the imperfect mechanism of the Chinese stock market. At the same time, Dong [8] introduced a model consisting of a value function and a weighting function that will be introduced to specifically explain investor behavior bias and concludes that overconfidence and blind following with risk aversion cause stock market volatility. However, Jin and Wang [9] put the herding effect into a new informational perspective. Such a perspective gives complements the traditional herding effect of investment from our informational life. Jin and Wang [9] thought that the reasons for this effect are that information asymmetry between investors and the selection and following of different information on social platforms. What's more, Wang [2] suggested that the relatively high herding effect in China is due to people's preference for short-term operations, so the high turnover rate makes the stock market more volatile; and that China's market legal system is not sound and regulatory techniques need to be improved; the Chinese "Confucianism, Buddhism and Taoism" values and Chinese people's interpersonal relationships and poor independence. All these Wang [2] put forward can be possible reasons as a supplement. Furthermore, Ge [1] thought that individual investors do imitate institutional investors, leading to an increase in herding effects.

Recommendations: Next are some suggestions that can reduce herding effects and increase market efficiency. Ge [1] suggested that the Chinese securities regulator can improve the way of information disclosure and enhance the transparency of the market; at the same time, improve the professional knowledge and investment philosophy of individual investors and enhance the national education and publicity for national investors; finally, guide the orderly and effective development of institutional investors to reduce the influence of institutions on individual investors. Wang [2] also recommended that China vigorously develop regulatory technology and improve the regulation of the stock market to reduce the occurrence of stock price manipulation and insider information, thereby improving the efficiency of the stock market and reducing the herding effect. In addition, Jin and Wang [9] suggested that China should regulate media orientation and strictly prohibit the dissemination of false news; it can also reduce the herding effect by diversifying investors.

2.2.2 Indonesia

Causes and effects: Indonesia sits with a population of over 200 million people and is ranked fourth in the world in terms of population. As a country in Southeast Asia with a GDP surpassing the trillion-dollar threshold, its stock market can also be studied as an example for developing countries. Rizal and Damayanti [10] used the GARCH-type methods and found that herding behavior does exist in Indonesia using the data from 6 October 2000 to 5 October 2018. Rizal and Damayanti [10] found that, statistically, the herding effect exists because the coefficient of the squared market return is negative; and they then decompose the data into upward and downward markets and find that there is a herding effect in the downward market. Setiyono et al. [11] found that most of the institutions in Indonesia adopt a positive feedback strategy and they like to follow the trends in the market. Setiyono et al. [11] also found that the behaviors of institutional investors are similar to the habits of the informed agents, thus institutional investors also can have an excessive return compared to non-institutional investors. However, Pahlevi and Oktaviani [12] found that the herding effect has a positive effect on the investor's attitude toward investment. This means that a certain herding effect

in attitude can help investors in their decision-making. Chairunnisa et al. [13] found no relationship between the herding effect inside the Indonesian stock market and whether or not investors are financially literate, nor did they find any relationship with the population around the millennium. These two points seem to have some subversion of traditional perceptions, perhaps not quite the same in different countries. For example, in the previous passage, greater financial literacy in China could help people reduce the herding effect. However, Chairunnisa et al. [13] also found that there is a positive relationship between credibility and herding behavior.

Recommendations: Some recommendations can be given to the local government. Rizal and Damayanti [10] suggested that investors in Indonesia should know more about the basic knowledge in stock market. At the same time, Chairunnisa et al. [13] suggested that the government should strengthen the regulation of the market and improve the market system.

3. Summary

This article analyzes the causes and effects of the herding effect in the financial markets of countries with different degrees of development by comparing the herding effect in developed countries with that in developing countries.

First, this article focuses on the herding effect in developed countries. Studies have shown that the herding effect is not significant in developed countries [3, 4]. However, the herding effect is significantly increased in times of external crises such as the new crown epidemic [5, 7].

Second, the paper focuses on the herding effect in developing countries and finds that the herding effect can be caused by developing countries themselves. Studies from China and Indonesia found that the herding effect is due to imperfect financial markets, low national financial literacy, and individual investors being influenced by institutional investors [1, 8].

For the literature cited in this paper, a table is presented here (Table 1) with the countries, authors, and relevant findings of the corresponding study.

Table. 1 Summary of the literature on the herding effects in developed and developing countries

Countries	Author(s)	Main findings
America	Idibekea basi Ukpong et al.	The herding effect is not significant in the financial sector.
America	Voukelatos Nikolaos and Thanos Verousis	No evidence of herding as a general tendency of investors.
America	Chia-Lin Chang et al.	Overall herding effect in the US is low, but there are episodic herding effects in the US market.
UK	Fotini Economou et al.	Cross-market herding eliminates international diversification benefits.
UK	Faheem Aslam et al.	European countries are generally more sensitive to risk loss than Asian countries.
China	Jin Dong	Blind self-confidence, low education, the influence of media, institutional influence, and the imperfect mechanism of the Chinese stock market are the factors that cause the herding effect.
China	Hujiang Jin and Cai Wang	Information asymmetry between investors and the selection and following of different information on social platforms can also contribute to the herding effect.
China	Liuxin Wang	Information asymmetry between investors and the selection and following of different information on social platforms can lead to the herding effect.
China	Menghao Ge	Investors do imitate institutional investors, leading to an increase in herding effects.
Indonesia	Nora Amelda Rizal and Mirta Kartika Damayanti	The herding effect exists because the coefficient of the squared market return is negative.
Indonesia	Setiyono et al.	Most of the institutions in Indonesia adopt a positive feedback strategy and they like to follow the trends in the market.
Indonesia	Reza Widhar Pahlevi and Indri Irma Oktaviani	The herding effect has a positive effect on the investor's attitude toward investment.
Indonesia	Ananda Chairunnisa et al.	No relationship between the herding effect inside the Indonesian stock market and whether or not investors are financially literate, nor did they find any relationship with the population around the millennium.

4. Conclusion

By comparing the herding effect in the stock markets of developed and developing countries, this paper finds that the herding effect is generally more significant in developing countries. For the China and Indonesia studies, the herding effect due to internal factors in these two developing countries is more dominant. The common reasons are the poorly developed financial markets and the lack of financial literacy of the citizens. For these two developing countries, the construction and regulation of financial markets need to be strengthened as soon as possible, while vigorously cultivating the financial quality of the nationals. While the herding effect in the stock market caused by the developed countries' factors comes more from external factors, the herding effect in the developed countries studied in this paper mainly comes from external factors. External factors such as epidemics and financial crises will significantly enhance the herding effect in developed countries while developing countries will have a corresponding herding effect in the face of these crisis events. Although the causes of the herding effect vary among countries with different levels of development, we should all take maximum precautions to deal with possible herding effects. When dealing with emergencies, all countries should learn from past experiences and put together appropriate precautions to reduce the impact of these crises on the country to reduce the herding effect.

References

- [1] Ge Menghao. Analysis of difference between the stock market in China and the United States-from the perspective of institutional and individual investors' investment behavior, Soochow University, 2013.
- [2] Wang Liuxin. Comparative empirical study on herd behavior in stock markets of China and USA: based on HS State Space Model, Northeast University of Finance and Economics, 2015.
- [3] Idibekeabasi Ukpong, Handy Tan, Larisa Yarovaya. Determinants of industry herding in the US stock market. *Finance Research Letters*, 2021, 43: 101953.
- [4] Voukelatos Nikolaos, Thanos Verousis. Option-implied information and stock herding. *International Journal of Finance & Economics*, 2019, 24(4):1429-1442.
- [5] Chia-Lin Chang, Michael McAleer, Wang Yu-Ann. Herding behaviour in energy stock markets during the Global Financial Crisis, SARS, and ongoing COVID-19. *Renewable & Sustainable Energy Reviews*, 2020, 134.
- [6] Fotini Economou, Christis Hassapis, Nikolaos Philippas. Investors' fear and herding in the stock market. *Applied Economics*, 2018, 50(34-35):3654-3663.
- [7] Faheem Aslam, Paulo Ferreira, Haider Aliet al. Herding behavior during the Covid 19 pandemic: a comparison between Asian and European stock markets based on intraday multifractality, *Eurasian Economic Review*, 2022, 12(2): 333-359.
- [8] Dong Jin. The impact of individual irrational investment on the stock market - An example of irrational herding effect of individual investors. *TaxPaying*, 2018, (16) :164-165.
- [9] Jin Hujiang, Wang Cai. Anatomy of the new herding effect under the social interaction of investor networks. *China Market*, 2015, (50): 168-169.
- [10] Nora Amelda Rizal, Mirta Kartika Damayanti. Herding behavior in the Indonesian Islamic stock market. *Journal of Islamic Monetary Economics and Finance*, 2019, 5(3): 673-690.
- [11] Setiyono, Tandelilin Eduardus, Hartono Jogiyanto, et al. Detecting the existence of herding behavior in intraday data: Evidence from the Indonesia Stock Exchange. *Gadjah Mada International Journal of Business*, 2013, 15(1): 27-44.
- [12] Reza Widhar Pahlevi, Indri Irma Oktaviani. Determinants of individual investor behaviour in stock investment decisions. *Accounting and Financial Review*, 2018, 1(2): 53-61.
- [13] Ananda Chairunnisa, Zuliani Dalimunthe. Indonesian stock's influencer phenomenon: Did financial literacy on millennial age reduce herding behavior. *Journal Akuntansi dan Keuangan*, 2022, 23(2): 62-68.