

How Herding Behavior Affects Our lives

—A Double-Edged Sword

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Abstract: Herding behavior is an important part of behavioral finance study. In this paper, I focus on the literature reviews of herding behavior along the timeline and explore how it affects our lives. Herding is a double-edged sword with various impacts. I conclude three possible explanations for herding actions based on regret aversion bias, group mind theory and Emergent Norms Theory. The historical evidence on social and economic impact including asset price bubbles, subprime crisis is presented. Although these negative impacts are serious, herding can improve decision-making for people who are less likely to be biased by regret. Herding may also accelerate society's development if we choose the right leader. Finally I would discuss several measures to ease the negative effect of herding behavior.

Keywords: Behavioral finance; Herding; Economic impact

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1. Introduction

Herding behavior plays a significant role in behavioral economies and may have various impacts on our life. It usually results from a tendency to imitate the actions of others. I would introduce a vivid story to help people gain better understanding.

A herd of sheep were drinking by the river, an elderly sheep fell into the water accidently and was washed away by the river. While the rest of the sheep didn't run away and believe the old sheep was leading them, so they all jumped into the water and died. The herd could have run away but they blindly followed others without judgment and lost their life.

Existing literatures on definition of herding behavior are multifaced following historical trend. The definition proposed by Christie and Huang (1995) suggested "individuals who suppress their own beliefs and base their investment decisions solely on the collective actions of the market, even when they disagree with its predictions"^[1]. As for Hirshleifer and Teoh (2003) mentioned in their paper, herding behavior is a behavioral convergence, where

people ignore private signals and make their decisions solely on the decision of others^[2]. So, we can formulize a general definition-- if people have the tendency to follow others' actions without rational thinking, then it can be regarded as the herding behavior.

Next I will focus on herding behavior's social and economic impact on our lives based on different theories.

2. Herding Behavior's Social and Economic Impact

2.1 Possible Explanations of Herding Behavior

2.1.1 Regret Aversion Bias

Herding behavior arise mainly because investors have bounded rationality, which is one of the most important fact in behavioral finance study. People may commit cognitive and emotional bias when faced with different situations. Koenig (1999) argues that regret aversion can initiate herding behavior^[3]. Investors who suffer from regret aversion bias tend to avoid making decisions that will result in action out of fear that the decision will turn out poorly. This may encourage investors to invest in a similar

fashion to avoid the burden of responsibility and engage in herding actions. People normally think following others is safer and it can limit their future, causing regret for poor performance.

I remembered an interesting phenomenon in primary school. Our teacher asked us to do multiple-choice problem and raise our hand when she said different options that we support. However, many students like me were afraid to make mistakes based on our limited knowledge and would rather follow the majorities. Thus, most of my classmates chose the option by following best students without detailed thinking. However, the correct answer belongs to the minorities. This phenomenon really attracts me to dig more about people's psychology.

2.1.2 Group-Mind Theory

Gustavo Le Bon's (1895) put forward a Group-mind theory, emphasizing the fact that individuals would lose all sense of self and responsibility when they are being a part of the crowd. They would gain a sentiment of invincible power due to their numbers^[4].

This is understandable because we all feel reliable with a sense of belonging when we follow others. Take Chinese stock market as an example, a growing number of college students, elders has started investing in stock markets because people around them gained a lot and it promoted them to invest in a similar pattern. They believe that their investment decisions are appropriate because a great number of people have enjoyed the benefits. The more people has invested, the more reliable decision they believe they have made.

2.1.3 Emergent Norms Theory

This is another famous crowd psychology theory explaining how herding behavior grows. Turner and Killian (1987) analyzed how norms are formed through social interactions^[5]. Before crowd action takes place, society is filled with uncertainty and confusion. Many individuals offer their own views of reality. Then certain people become leaders in this process who offer definite opinions and act clearly. The population will gradually follow the leaders and exclude other opinions. Eventually the crowd psychology grows.

Leaders are extremely important in herding trend since the rest of people would follow them. The key point is to find the right leaders. For instance, Jobs has led an Apple trend with smart phones and other useful electronic devices, which stimulated other global companies to capture the business opportunities for electronic device in highly competitive markets. Then imitation of smartphones be-

came popular and herding actually accelerate technical and society developments.

2.2 Economic Impact on Herding Behavior in Our Life

2.2.1 Herding Behavior on Asset Price Bubbles

Asset price bubble is one of the most significant phenomenon which can be explained by herding behavior. It happens when the price goes up till extremely higher deviated from expectation. Herding behavior may emerge in a poorly informed asset market.

Christian Hott has established a model that can explain the emergence of herding behavior in asset markets. He classified clearly in assets, information types, investors and assume investors maximizing the utilities of assets. After a detailed derivation, he found the correlation among market moods, informational signal and asset price. Hott concluded that (March 2008) investors may follow a group of mood investors—who are not fully rational because they overestimate the level of information in the market. By following the mood investors, they improve the market mood and create a positive feedback. This leads to a price bubble^[6].

This herding impact is evident in our life, especially in Chinese house market. We may hear the story of someone who earned a fortune on the house investment, which might therefore makes a household think current housing market is promising and the market mood is optimistic. Then others would receive this positive signal and make the same investment. House price would rise dramatically beyond its real sustainable value.

2.2.2 Herding Behavior on the Financial Crisis

The subprime crisis is an important historical event to analyze the herding behavior, which affects thousands of similar securities at the same time. From early 2000 to 2007, the US real estate prices have driven up on account of people's herding behavior of borrowing loans and buying house for short-term profits. Under the great temptation, not only ordinary home mortgage lenders but also low-income households couldn't wait to apply for home mortgages. Because institutional investors are exposed to the same information: historically low interest rate and their aversion to stock market after bubbles, they made similar investment decisions to change their preference in housing investment. That was how herding behavior arise.

However, the loose lending standards resulted in banks lending mortgage loans to low credit-worthy borrowers, default phenomenon increased and led to financial market panic. The consequences were serious due to the institu-

tional irrational behavior.

2.2.3 Herding Behavior Strategy for Better Outcomes

It is interesting to find that individuals can improve their expected outcomes by using herding psychology. In paper written by Jennifer Arlen and Stephan Tontrup (2015), they present evidence that people can use herding as a behavioral rational strategy to overcome the negative impact of regret aversion^[7]. Individuals are able to change their reference point by focusing on the choices of others and shift their bias to favor the majority choice. This increases the relative weight they give to the benefits of trading over the benefits of keeping, causing subjects to anticipate less regret over trading than keeping their ticket.

This fact can be useful for investors in social environment, especially active investors. A large number of evidences show that active investors are frequently overconfidence, who underestimate risks and overestimate expected returns, leading to hold poorly diversified portfolios. Herding in this way give them another change to reconsider their investment after observing the crowd trend and ease their regret for poor performance.

As we mentioned above, herding can contribute to the development of some competitive markets if they choose the right leader, giving them courage to catch up with the latest trend rather than staying with the same.

2.3 How to Ease the Effect of Herding Behavior

To see in a general way, herding behavior is irrational. The emergence of herding may have various negative impact on our society including asset bubbles and price volatilities, increasing market risk and financial market panic. Therefore, taking actions to eliminate the consequences and trying to control it appropriately are necessary.

First, enhancing information transparency is important. As I mentioned, herding behavior may emerge in a poorly informed market based on the information asymmetry. So, the presence of adequate information can help investors gain a better understanding of the market situation. Second, investors should receive higher level of education to get more financial knowledge to eliminate cognitive errors. In this way, they won't ignore the objective market signals and make wiser decisions. Third, government should open some legal institutions to guide investors

appropriately using financial instruments and contribute to steady economic environment. If there is any irrational tendency like house flipping, they can be used to suppress the heat.

3. Conclusion

In the light of those literatures analysis, herding behavior initially arises from human psyche and social exposure. Due to market's asymmetric information, investors may overestimate information levels and suffer from regret aversion bias, then crowd psychology grows to reduce their sense of responsibility and limits their future regret. The more support they are given, the safer feeling they can obtain. On the positive side, people may improve their expected outcomes by herding because of the shifting in reference point and active investors would think more comprehensively. On the negative side, the crazy herding trend would not only bid up the asset price and lead to bubbles, but also increase financial panic in credit markets. Therefore, it's essential for investors to take corresponding measures to use herding appropriately and ease the negative impact by enhancing information transparency and improving education level.

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