

BEHAVIOURAL OBSTACLES TO SOUND INVESTING – WITH SPECIAL REFERENCE TO HERDING BEHAVIOUR

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Abstract

Recent studies in the field of investment theory have indicated that individual investors are not always rational in their economic choices related to investments. In some part of investment decision-making process, they may even be emotional or irrational. The study of such investor behaviour and its causes is the basic premise of a newly developing body of knowledge in the field of finance known as Behavioural Finance. It combines the understanding of cognitive psychology and financial theory in order to explain the not so rational choice of investors. Behavioural finance asserts that behavioural biases and heuristics play an important part in influencing the investment decision making processes. A bias is a departure from normative, optimal or rational behaviour and heuristics are rules of thumbs that help individuals to take the most optimum decisions in situations which are cognitively complex. In either case, heuristics and biases, if consistently practiced, lead to various abnormalities and anomalies. One such action of investors is herding behaviour. We can say that it is a behavioural obstacle to sound investing because when people are following a herd mentality, they stop taking rational decisions and are in a rush to follow a crowd rather than pursue their investment objectives. This paper aims to elucidate how herding poses a challenge to proper economic functioning of the financial markets. This is a conceptual paper wherein we not only explore the existence of herding behaviour among equity investors but also deliberate upon the determinants of herding behaviour so as to lay a learning ground for studying it objectively and using this understanding in developing better investment strategies.

Introduction

In the real world of investments, investors make use of heuristics and biases in their investment decisions. These heuristics are useful as they make cognitively difficult tasks easier. However, they can lead to systematic biases. When a behavioural bias is consistently practiced, it gives a foundation for prediction of behaviour. The study of this field will be particularly useful where it can influence returns from investment. Such behavioural biases and heuristics form the subject matter of Behavioural Finance. Behavioural Finance focuses on how investors interpret and act on information to make investment decisions. One such bias which causes faulty decisions in investment-decision process is herd behaviour. Investors show a tendency to mimic the actions of a larger group though, individually, they would have not made the same choice. The

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cause behind this may be the social pressure of conformity and another may be a common rationale that a large group is unlikely to be wrong.

Herding is generally considered to be of two types: Sentiment-driven, intentional herding and unintentional herding driven by widespread identical reaction to public information and signals (Bikhchandani and Sharma, 2001). According to available literature by Scharfstein and Stein (1990), Hirshleifer and Teoh (2003) and Hwang and Salmon (2004), whatever may be the type of herding, it impairs and destabilizes stock prices and disrupts proper functioning of financial markets. Also, following the pervasive financial crises in the last two decades, the issue of herding has become a topic of great interest. Thus with an intention to delve deeper into the causes, evidence and measures of herding behaviour, this paper will be making an attempt to bring to light the need and importance of considering herding behaviour as one of the major obstacles in sound investment decision making.

Review of Literature

Although in its nascent stage, herding behaviour has been a topic of research and interest for behavioural theorists, psychologists, biologists, economists and investment advisors. An attempt has been made here to delve deep into the present body of knowledge on this topic to understand the meaning of herding behaviour and examine the evidence of its existence. Prechter (2001) explains herding behaviour from a biological perspective. He explains that when individuals are faced with situations cognitively difficult to comprehend, unconscious impulses from the brain's limbic system impel a desire in the individual to seek consolation from a group. According to Valence (2001), when such investors group together, they inadvertently create a consensus and create an impact to cause markets/stocks/sectors to fall in or out of favour. According to behavioural theorists, herding is a product of emotions like greed and fear (Landberg, 2003); or in other words, remorse and pride (Chen et al.). It has been empirically found that human beings perceive pain more strongly than pleasure. This intrinsic overpowering of fear over greed results in the human tendency of "following a herd". Thus even if the move is wrong, the feeling of remorse is less if it is felt by the entire herd. And when fear is in abundance, investors use herding as a shortcut to a decision and give no time to reflection. This explains why there is en masse panic selling in case of downturn.

Further, a large number of definitions distinguish between irrational and rational herding. From an irrational perspective, herding is a type of behaviour caused by collective actions taken by individuals under uncertain conditions. (Devenowand Welch, 1996). From a rational perspective, herding is said to be a result of such action of investors wherein they ignore their own analyses and depend on so-called experts who possess more reliable information (Bikhchandani and Sharma, 2001). These theorists classify rational herding into three types: herding based on information, herding based on reputation and herding based on compensation. Herding based on information results when investors deduce useful information by observing the trades of previous investors to the extent that they ignore their own private information (Banerjee, 1992). Herding by reputation hits those investors who have a reputation of acting differently from the crowd and hence they ignore their information. Herding based on compensation arises due to blind conformity behaviour. When investors include specific clauses regarding performances of their portfolio managers, they give them an additional incentive to fall prey to herding behaviour (Visser and Swank, 2008).

Measures/Determinants of Herding Behaviour

Since herding is a non-quantifiable behaviour, it cannot be measured directly. Instead we can infer it from related measurable parameters.

One such measure is the LSV measure introduced by Lakanishok et al. (1992). According to LSV measure, herding is defined as the tendency of traders to accumulate on the same side of the market in a specific stock and at the same time compared to what would be expected if they traded independently. The LSV herding statistic is given by

$$HMit = (brit - brt) - Et [(brit - brt)]$$

Here the first term, $(brit - brt)$ calculates the deviation of the buyer ratio in stock I at t from the overall buy probability at time t. The second term, $Et [(brit - brt)]$, is the expected value of the difference between the buyer ratio and period average buyer ratio. Subtracting this term accounts for the possibility of observing more variation in the buyer ratio in stocks and only a few trades. This is like an adjustment factor which helps in inferring that the herding measure $HMit$ will be zero if trades are independent; a positive and significant value of $HMit$ indicates that the average tendency of the group to herd their investing decisions.

Another such measure is a measure used by Wermers (1999) which distinguishes between "buy herding", $BHMit$ and "sell herding", $SHMit$ to discover whether investors buy or sell a stock I in herds, where

$$\begin{aligned} BHMit &= HMit \text{ if } brit > brt \\ SHMit &= HMit \text{ if } brit < brt \end{aligned}$$

These equations do not consist of $brit = brt$ because that is a situation where no herding occurs. Moreover, with this measure, one can also calculate $BHMit - SHMit$ to find out asymmetries in investors' behaviour when buying or selling stocks.

Other measures contributed by Christie and Huang (1995), Chang et al. (2000) and Hwang and Salmon (2001) are also of great significance. These studies view herding behaviour as collective buying and selling actions of investors in order to try to follow the performance of the market or any other economic factor or phenomenon. Christie and Huang (1995) rationalise that when stock prices are very volatile, herding of stocks towards the market is likely to be present. They are of the opinion that when market conditions are extreme, investors may not have the conviction in their own belief and may choose to follow market consensus. Christie and Huang use cross-sectional standard deviation (CSSD) of returns to imply whether herding behaviour is prevalent or not.

In another study, Chang et al. (2000) used cross-sectional absolute deviation of returns instead of cross-sectional standard deviation. They ran two separate regression models and examined the non-linearity in up and down markets to accommodate the possibility that the degree of herding may be asymmetric.

Hwang and Salmon (2001, 2004 and 2009) on the other hand instead of returns, examined cross-sectional movements of factor sensitivities. Their measures capture market-wide herding as well as herding towards fundamental factors. They conclude that changes in investor sentiment can be inferred from time-variation in betas.

Evidence of Existence of Herding

In this section we try to bring out with the help of studies conducted in various countries whether researchers have found some evidence of herding. Christie and Huang by using their empirical measure tried to test herding behaviour in US equity market and concluded that there was no significant evidence of herding in the period of study. Even Changet al. (2000) in their studies found no evidence of herding in the US and in

the Hong Kong markets. However, in times of extreme price movements, they could come across partial herding in Japanese markets. Also, they could document dramatic decrease of return dispersion in case of Taiwanese and South Korean markets. There is significant evidence of herding in these emerging markets. The study of Hwang and Salmon (2001, 2004, and 2009) in the U.S., U.K. and South Korean market revealed that regardless of whether markets are bullish or bearish, when the direction of market is obvious, there is existence of herding. In a study conducted by Zhao (2012) on Herding evidence in Chinese stock market, on studying the contribution of price in the prediction of volume, he concluded that change in price causes or influences the change in the trading volume. Zhao points out that investors are not rational and their investment decisions are influenced by psychological and emotional factors and they tend to depict herding behaviour. In another study conducted in Malaysia, Chen, Hin and Lian found patterns of herding existing more prominently in both rising and falling markets that are preceded by sharp reversals. When markets are clearly bullish or bearish, herding could not be identified clearly. Again Chen, Hin and Lian conclude that herding exists when atmosphere of uncertainty is prevalent.

How Herding Affects Rational Investment Decision Making

The stock markets of any country face a lot of information overload. In their inability to handle this extreme volume of information, investors want to follow an easy way out by following a herd and not utilising the entire information rationally. Investors opt to be a part of a herd rather than be left alone. This herd mentality does not let them see reason even when they know that such companies popular among the investors in the herd have stretched valuations. They have a tendency to blindly follow the crowd and even start doubting their own rationality thinking how so many people can go wrong. As a result, in the past in many sectors like real estate, information technology, infrastructure and power, herd mentality has been evident and they have witnessed crazy and irrational valuations. For example, a turnaround is perceived as good news by investors. Once a sector's or company's turnaround is identified and trends start showing upward movements, investors start chasing that company's share. This further leads to a surge in the share prices and more investors join in. When such crowd behaviour is at work, there is no rationality. And this in turn will have a direct influence on the profitability and efficiency of financial markets (Parikh, 2009). It will not be an exaggeration to point out that herding is a challenge for proper economic functioning of financial markets and the root cause of financial bubbles and crashes.

How to Overcome the Herding Behaviour Heuristic

First and foremost, to reduce herding activities, investor awareness and investor education is a must. Secondly, as in case of all psychological biases, following certain guidelines and disciplining one's investment regimen may prevent the investor from falling prey to herd mentality. As suggested by Baker and Nofsinger (2002), one must first understand that we do get influenced by psychological habits. Then we must develop a plan wherein we write down the objectives and constraints of investments in quantitative as well as qualitative terms. Last but not the least; investors must always diversify among asset classes as proper asset allocation is even more important than market timing and security selection. If investors will follow these guidelines they will not feel the need to follow a herd.

Conclusion and Areas of Further Research

To conclude, we can say that although latent, if researched in depth, herding is an observable process. Although it may be imperative given the psychological, behavioural and emotional aspects of investor behaviour, it would be beneficial to judge in what degree it is present at any given point in time compared to another. There is indeed evidence that herding behaviour is prevalent whether in a different degree in developed

and emerging markets or whether in intentional or unintentional form or whether by individuals or institutions or whether in small capitalization stocks or large capitalization stocks. We can say that if we delve deeper into causes and effects of herding behaviour, our regulators will be able to form much better policies which will increase the efficiency of our financial markets. We may even be able to contain financial bubbles. Empirical literature on institutional as well as individual herding especially in India seems to be conspicuous by absence and thus can be taken up by researchers for further research. Future studies could also be conducted with large sample size to cover the entire country; or it may cover different regions separately as each region with its own diverse ethnicity and culture may influence the perception of investors on financial and investment decision making. Such studies could be useful for investors, individual as well as institutional, and the regulators to monitor the stock market behaviour in India.

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