Role of Herding Behavior in Influencing Investor Decision Making in India

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Abstract

Herding behavior is the tendency of individual investors in India to follow investment decisions of others. Behavioral finance assumes that characteristics of individual market participants and the structure of information systematically have an influence on investment decisions of individuals. Financial markets have been facing unforeseen and sudden economic turbulences that have been directly or indirectly responsible for returns on stocks. This study aimed to identify the causes of herding behavior by an individual investor and identify the possible effects of herding behavior of investors on the stock market. To do this, we interacted with stock market investors to identify the reasons of their herding behavior. The response collected was analyzed using system dynamics models. The study revealed that investors in India have the tendency to follow the behavior of others while making investments in stock markets in order to avoid losses and regrets. This is because they are not much financially literate and are not well aware about stock market functioning. So, they generally go with the decisions made by market leaders to earn safe returns out of their investments.

Keywords : **herding behavior, investment decisions, stock market, stock returns, system dynamics modeling**

JEL Classification : D14, E44, G02, P34

Paper Submission Date : September 28, 2016 ; Paper sent back for Revision : December 5, 2016 ; Paper Acceptance Date : December 20, 2016

There is a term in investor behaviour i.e. herding; which means the behaviour shown by investors by following the investment decisions of other investors investing in stock market can cause huge, unfamiliar troops or cashing based on evidently small fundamental evidence to rationalize either. Herding is the key ground of illusion in finance. Herding effect in financial market is recognized as the propensity of investors to imitate the actions of others (Al-Tamimi, 2006). Herding behaviour shown by an investor makes his decision depend on others, which results in dissatisfaction about returns on investment. If investors do not show herding behaviour, they are able to make independent investment decisions and everything they get out of their investments boosts their confidence as well (Torrecillas, Yalamova, & McKelvey , 2016).

Practitioners generally carefully contemplate the presence of herding, due to the fact that investors depends on group information rather than on the information collected by them which causes price deviation of securities from fundamental value; hence, multiple good opportunities for investment at the current time can be impacted (Chen & Volpe, 1998).

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Herd behaviour is the proclivity of a person to follow the moves (rational or irrational) of an immense group. The herd mind is the outcome of two causes; firstly, there may be a social pressure of conformity. Mostly people do not want to move out from the group they belong to. Secondly, there is a common logic that a large group can't make mistakes. Purchasing stocks based on price momentum while ignoring basic economic principles of supply and demand is known in behavioural finance area as herd behaviour and it leads to faculty decision (Byrne, 2007).

It is a retort to not having ample information and assuming that others around us can actually give us an alternative to the way decisions are made. Studies have concluded that humans find the going against large number of people to be very hard, and they generally conceal their own perspective.

Review of Literature

Scharfstein and Stein (1990) described the factors influencing the attitude of retail investors. The psychological factors influencing investor behavior were identified using principal component analysis. The results of principal component analysis revealed six behavioral axes that drive investor behavior in the Indian stock market and the six factors are conservatism, diligence and discreetness, remorse abhorrence, cognition, prudence, and precaution under confidence. Bikhchandani (2000) gave an overview of the empirical research on herd behavior in financial markets, the meaning of herding, the causes of herd behavior, the success of previous work in identifying the phenomenon, and the outcome that herding had on financial markets.

Kutan and Riza (2006) used new methodology based on the approach of Hwang and Salmon (2004) and based it on a cross sectional dispersion of trading volume to analyze the herding behavior on Toronto stock exchange. It was found that herd phenomenon consists of three essential components: stationary herding which signals the existence of the phenomenon whatever the market conditions, intentional herding relative to the anticipations of the investors concerning the totality of assets, and the third component highlighted that the current herding depends on the previous one which is feedback herding. Maditinos (2007) used a power-law distribution of stock-price variations within a segment denoting herding behavior and the rise of the dot.com bubble. The results exhibited that DFA can be used to determine the origin of stock-market bubbles but not the start of crashes. Chiang and Zheng (2010) revealed that well informed investors had an inclination to exhibit herding behavior especially, for consumer and technology sectors during up and down markets, respectively as the negative coefficient is not limited to the downward market and to risky and uncertain shares.

Jansirani and Shanmugasundaram (2012) examined investor behavior - whether they behave rationally or irrationally towards respective capital market information using descriptive study. The questionnaires were distributed to 500 investors and the data was analyzed using SPSS. The result exposed that investors behave rationally towards the information of the particular capital market. Prosad, Kapoor, and Sengupta (2012) studied the herding behavior in the Indian equity market. To test the existence of herding linear regression model and linear regression using quadratic functional form was applied. The results revealed that the Indian market was so efficient that no herding was notified. Cakan and Balagyozyan (2013) studied the existence of investors herding in the Turkish banking sector. The methodology of Chang et al. (2000) used for daily stock returns between 2007 and 2012 was applied and herding was found to exist. Test was done for asymmetric with respect to the direction of market returns and it was found that herding was only present when the market was rising.

Jayaraj (2013) offered a new method de-trended fluctuation analysis' (DFA); an econo-physics method of finance and herding research for identifying the change from efficient-market behavior to herding behavior. It was examined whether DFA recognizes the transition from efficient market trading to herding behavior and the growing of the NASDAQ dot.com stock market bubble. Dehghani and Sapian (2014) examined herding behaviors of not well-informed (non-private placement) and informed (private placement) investors in the IPO aftermarket from 2011 to 2011 using Christie and Huang's method. It was found that not well-informed investors exhibit rational behavior during market downswing for consumer, industrial, trading, and services sectors.

Objectives of the Study

(i) To identify the causes of herding behavior by an individual investor.

(ii) To identify the possible effects of herding behavior of an investor in stock market.

Research Methodology

The study is descriptive research in nature. This study was conducted during March - August 2016. Primary data for the study was collected using structured questionnaire containing open-ended questions. Secondary data was collected through literature review, reports, articles, and websites. Respondents of the study were from Agra and Mathura. The sample size of the study was 70 respondents. The data collected was analyzed using content analysis and system dynamics modeling; causal loop diagram (CLD), and stock flow diagram for achieving the objectives of the study.

Data Analysis and Interpretation

(1) Reasons of Herding Behavior : By interacting with respondents the researcher identified some reasons for showing herding behavior by the investors in India.

✧ **Lack of Financial Literacy :** Most of the investors in India face the problem of financial literacy. They don't know where to invest their money to get optimum returns. They even don't know the investment options available to them. This is the major cause because people generally follow the decisions made by a group of persons or by financial experts.

✧ **Fear of Losing Money :** Investors in India are afraid of losing their money by making independent decisions regarding investments in stock market. They feel that if they make the investment decision on the basis of their own experience, then there may be a higher chance of losing their money in stock market due to higher volatility.

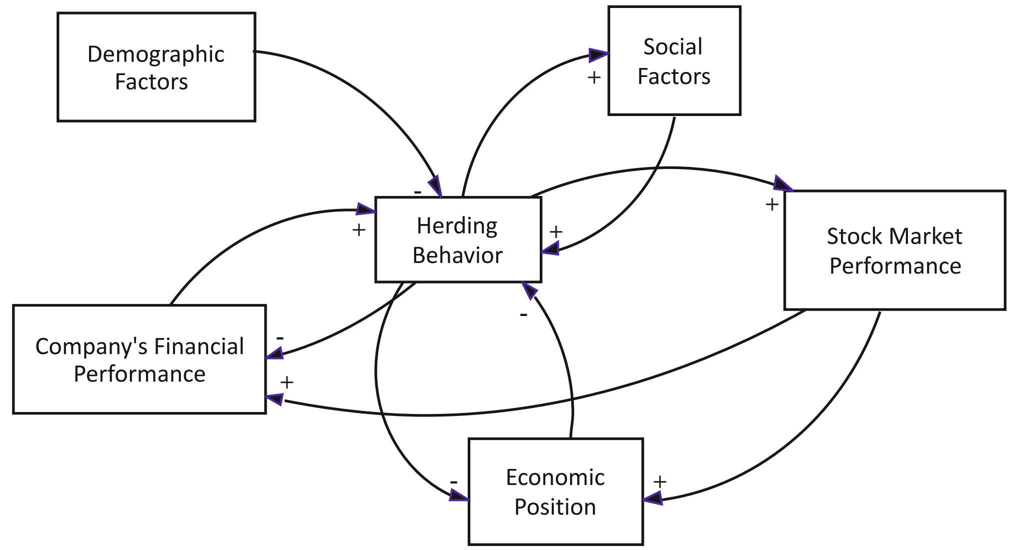
✧ **Diversification of Risk :** Indian investors think that when a group of people are investing their money in a particular security then there is a chance that the risk associated with that security will diversify. Sometimes when majority of investors invest in a particular stock, the stock price starts rising but many a times this behavior overvalues the price of that security in the market.

✧ **Market Image :** Many a times investors in India show herding behavior because the market image of the person or group of persons they follow is good in the market. So, the investors think that they are highly expert in taking financial decisions, and therefore, their investments will also be safe.

✧ **Past Performance :** Herding behavior shown by Indian investors is influenced by the past performance of the stock and the decision makers. Indian investors connect the decision of market leaders with their past decisions and on this basis they also start showing the same behavior to safeguard their investment and to reduce the risk associated with the stock market.

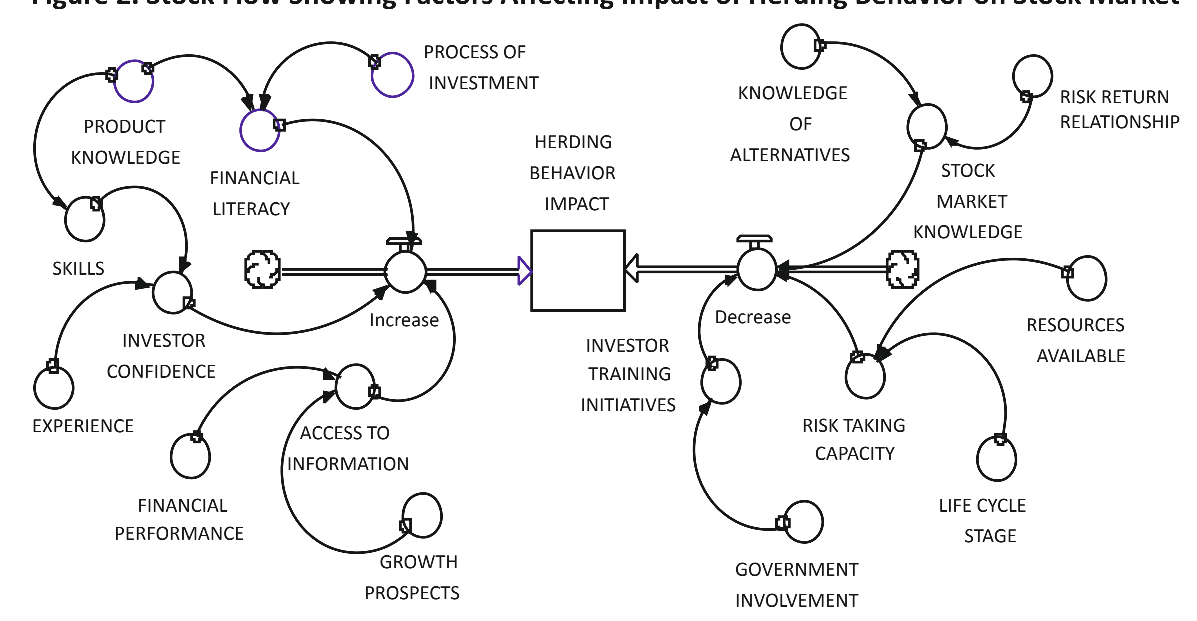
(2) Effects of Herding Behavior : By reviewing literature and articles the researcher found the following relationship among different variables associated with herding behavior of an individual investor. The relationship among variables has been shown using causal loop diagram (CLD). The diagram shows whether the variables are positively or negatively related with one another.

Figure 1. Causal Loop Diagram (CLD) for Herding Behavior Effects



Relationship among different factors which affect the performance of the Indian Stock Market is shown in the Figure 1. It shows that herding behavior is positively related with stock market performance. It shows that when investors follow herding behavior the performance of stock market also increases, when stock market performance increases, the condition of the economy also improves. The Figure 1 shows that demographic factors like age, experience etc. of the respondents negatively affect herding behavior. For example, when age and experience of people increases, they start taking independent decisions rather than following others. Social factors are positively related with herding behavior as when people take advice of others, they start becoming social and adapt their beliefs and values.

Figure 2. Stock Flow Showing Factors Affecting Impact of Herding Behavior on Stock Market



(3) Impact of Herding Behavior on Stock Market Performance : By reviewing existing literature on this subject and interacting with respondents, certain factors have been identified which can increase the effect of herding behavior on stock market and some factors which can decrease the impact of herding behavior on the stock market. Different factors have been indicated using Stock Flow Diagram.

Figure 2 shows effect of different factors of herding behavior on stock market performance. On the left side there are factors which affect it positively and on the right side there are factors which are affect it negatively. Financial literacy of the investor, investor confidence and access to information are the factors which directly increase the impact of herding behavior on stock market performance. If investors are not financially literate, then they start following the decision of others, when they are not confident regarding investment decision and when they don't have access to different information, herding behavior increases.

On the other hand, when investors are aware about different aspects of stock market like different investment alternatives, relationship between risk and return etc., they can make their decisions independently. When risk taking capacity of investors is high, the impact of herding behavior is less but the risk taking capacity depends on various aspects like stage of life cycle of the investor and the resources available with the investor etc.

Conclusion

To conduct this study, we used an entirely unique methodology which has not been used by any researcher so far in the available literature related to the study. The result of the study is relatively same as the previous related studies and there are no contradictory findings of the study as compared with similar studies. As an investor in India, where mostly people don't have knowledge about financial markets, it is very difficult to make an investment decision where one can get optimum returns. So while making investment decisions, people in India generally follow the decisions made by the majority of people or market leaders. It is observed that when investors show herding behavior, they generally don't make rational decisions and cause a sudden fluctuation in stock price of a security. These types of sudden changes in stock prices mostly do not match the financial performance of a company. So, after some time, it may lead to losses as well. Therefore, it is suggested that while making investment decisions, investors should search for information on the basis of sufficient information. They should take a decision by taking into consideration the movement of market leaders as a whole.

Managerial Implications

With this study, it was possible to understand different factors due to which investors tend to show herding behavior. With the help of this study decisions can be taken regarding what the reasons are for this behavior and how to incorporate them. When decision makers are able to understand the reasons, they can act accordingly to improve the performance of stock market and an individual becomes able to make independent investment decisions rather than depending on others. To reduce the impact of herding behavior certain investor education programmes can be launched to educate investors. Independent decision making by investors leads towards financial independence and it boosts the confidence of the investor.

Limitations of the Study & Scope for Further Research

The limitations of the study lie in the selection of the sample for the study as the respondents were selected only from Mathura and Agra. Respondents can also be selected from other parts of the country or beyond the country. The major part of this study was based on secondary data due to scarcity of time and resources; another study can be done using primary data to measure the level of impact of herding behavior on stock market.

The study can be further developed in terms of explaining the level of different factors on herding behavior using numeric data and some advanced software such as E-views.

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