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The Existence of Herding Biases among Investors: A special reference to Odisha

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Abstract: There are many studies has conducted in behavioural finance which identified that the behaviour of investors in share market are not rational. Herd behaviour is one of the biases behind the irrational behaviour of the investors. A lot of factors are there which leads to create the herding behaviour among the investors in the share market. To analyse the existence of this herd behaviour a structured questionnaire has prepared and circulate among the investors of Bhubaneswar and Cuttack region. According to their responses the present study has carried out to identify the factors which lead to the existence of herd behaviour. While analysing all the factors the impact of age on herd behaviour has also taken into the consideration.

Key Words: Herding, Behavioural Finance, Share market

Introduction

Classical theory of finance gives more emphasis on logical justification while taking the investment decision. Among them Efficient Market Hypothesis has played an important role in stock market. This theory is based on the assumption that market reflects all information and investors take their decisions based on that information rationally. But the current market situation reflects reversal of this theory. It shows that investors are not rational; they are irrational because as market reflects all information, it depend upon the behaviour or attitude of an investor while analysing and interpreting the data. As every human is different from each other and keeps different level of knowledge regarding market, their attitude towards the investment also play an important role while taking the investment decision. So now- a- days it is important for the researcher to study the behavioural aspect of the investor.

When investors follow each other's decision, it leads to herd behaviour. But they forgot that it will not be a healthy idea for all of them. Each and every investor knows themselves and their assessment is restricted to them only. It may work for others or may not. If everyone shares their knowledge with each other and do the assessment, then it may work for them but the problem with investor is that they don't want to share their investment assessment with others. So in this study, an attempt has been made to identify those factors which lead to "Herding Behaviour" in share market

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LITRETUER REVIEW

There are several studies available on behavioural aspect of investment and in every study there are deviations to classical theory of finance.

Coval and Shumway(2005) and Kumar and Lee (2006) in their studies reveals behaviour of investor has an impact upon stock market and they says that that behaviour is not rational that is irrational in nature.

As financial market is uncertain in nature it cannot say that irrational behaviour is only responsible for herding behaviour, rational behaviour of an investor has also create impact on stock market (Cipriani and Guarino, 2008).

Bhaduri & Mahapatra(2012) concluded in their study that herding among the participants during major crashes in the share market was very significant. The emotion or bias arise by the investor are not good for the market, which may be the reason of bubbles and crashes at times unnecessarily.

Khan(2013) study reveals that there is no existence of herding behaviour in Lahore stock market. He applied two different models to see the results and in both the cases it shows the non existence of herding behaviour. He also suggests that there are other tests of herd behaviour which can be used for the herd test.

Kavita Shah (2014) study exhibited, due to some psychological factors, investors became irrational with their investment and to overcome these irrational decisions, behavioural finance provides detailed information about financial markets.

Amlan Jyoti Sharma (2016) study unveiled the limitations of traditional finance theories and the progress of behavior finance discipline for investors in the financial market. It also shown the principles of behavioral finance and the paper were based on secondary data and it was descriptive& conceptual in nature

Reshma Sheikh (2017) study states that the role of behavioral finance on investment decision of investors and its significance The researcher conducted the survey through a review of 65 studies on behavioral finance.

Scope of the study

The present study tries to find out the existence of herd behaviour among the investors of share market. Sample sizes of 100 respondents have been taken into account for the current study. The study is confined only to Cuttack and Bhubaneswar town of Odisha.

Objective of the study

- To find out any effect of age on the existence of herding behaviour in the share market.
- To find out the factors which influence the investment decisions this leads to herd behaviour in the share market.

Data & Methodology of the study

In the present study, both primary and secondary methods are used. Secondary data includes different research papers from different journals, web resources and different books related to herding behaviour. For primary data, a structured questionnaire has been prepared and circulated among the investors of different age group. Five point scale from strongly

agree to strongly disagree has been used to analyse the latent variable i.e. herd behaviour. A list of 22 items [Table-1] has been developed to measure the herd behaviour. Simple random sampling technique method is used to collect the data from 100 equity investors.

Table-1

Statement of items relating to Herd Behaviour

Item No	Statement
1	I usually consider public information (news) when trading stocks.
2	I usually follow the stock market through financial news papers every week.
3	I always use my own information and analysis when trading in stocks
4	I follow investment approaches of others for my own investment
5	When I see others gaining from a particular stock, I immediately buy that following them.
6	When I suffer loss, but my friends has made a gain, I feel much pain
7	My decision on share investment is often taken on the basis of interaction with my co-investor
8	It does not feel much painful when a loss is suffered by my co-investors too along with me.
9	When I face a loss in share market, I stick to my own analysis in future too.
10	I believe my own predictions about future share prices to be better than other predictions.
11	My investment in stocks is largely based on investment knowledge, and experiences.
12	I would invest in a stock even if my own valuation of the stock is different from that made by a well known expert.
13	I would invest in the stock market as my relatives are investing.
14	I would invest in the stock market as my friends are investing.
15	I usually follow the advices given by my broker regarding selection of stocks.
16	My decision to sell greatly relies on my personal feelings.
17	When market crashes, I follow the stock analysts' suggestions.
18	I quickly respond to changes in investment decision made by others in the stock market.
19	When stock volume of a particular stock goes up, I try to know others preference towards it.

20	My disappointment after losing money on an investment diminishes a little if

	others have also experienced the same loss.
21	Market stress compels me some times to follow group mentality for investment.
22	I closely follow reputed and renowned investor's portfolio

Source: Compiled from Questionnaire

Analysis and Interpretation

Mean and standard deviation are calculated to find out the degree of influence of the individual items in herd behaviour. The descriptive statistics for individual scale in respect to investment in shares are presented in the following table.

Table-2

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Item1	100	1	5	3.77	.874	.765	-.270	.241	-.147	.478
Item2	100	2	5	4.01	.772	.596	-.286	.241	-.570	.478
Item3	100	1	4	1.97	.771	.595	.186	.241	-.921	.478
Item4	100	3	5	4.11	.764	.584	-.190	.241	-1.254	.478
Item5	100	1	5	3.38	1.179	1.389	-.367	.241	-.629	.478
Item6	100	1	5	2.53	1.141	1.302	.466	.241	-.552	.478
Item7	100	3	5	4.02	.724	.525	-.030	.241	-1.069	.478
Item8	100	1	5	2.38	1.229	1.511	.433	.241	-1.016	.478
Item9	100	1	5	2.18	1.086	1.179	.743	.241	-.171	.478
Item10	100	1	4	1.85	.833	.694	.717	.241	-.115	.478
Item11	100	1	5	2.02	1.044	1.091	.991	.241	.508	.478
Item12	100	1	5	2.75	1.175	1.381	.083	.241	-.953	.478
Item13	100	1	5	3.38	1.144	1.309	-.545	.241	-.499	.478

Item14	100	1	5	2.78	1.203	1.446	-.062	.241	-1.117	.478
Item15	100	1	5	2.91	1.240	1.537	-.053	.241	-1.086	.478
Item16	100	1	5	2.49	1.168	1.364	.238	.241	-1.046	.478
Item17	100	1	5	3.22	1.194	1.426	-.328	.241	-.831	.478
Item18	100	1	5	3.75	1.029	1.058	-.614	.241	-.270	.478
Item19	100	1	5	3.70	1.210	1.465	-.795	.241	-.418	.478
Item20	100	1	5	3.67	1.055	1.112	-.671	.241	-.013	.478
Item21	100	1	5	3.55	1.132	1.280	-.404	.241	-.692	.478
Item22	100	1	5	3.75	1.266	1.604	-.916	.241	-.202	.478
Valid N (listwise)	100									

Source: compiled from survey data

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.703
Bartlett's Test of Sphericity	Approx. Chi-Square	354.136
	Df	231
	Sig.	.000

Source: compiled from survey data

This table shows two tests that indicate the suitability of data for structure detection. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a statistic that

indicates the proportion of variance in your variables that might be caused by underlying factors. High values (close to 1.0) generally indicate that a factor

analysis may be useful with data. If the value is less than 0.50, the results of the factor analysis probably won't be very useful. Here as the KMO sampling adequacy value is 0.703, thus it can be concluded that factor analysis can be applied.

Bartlett's test of sphericity tests the hypothesis that your correlation matrix is an identity matrix, which would indicate that your variables are unrelated and therefore unsuitable for structure detection. Small values (less than 0.05) of the significance level indicate that a factor analysis may be useful with data. As significance level is 0.000, it can be concluded that factor analysis can be used.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.693	12.240	12.240	2.693	12.240	12.240	2.319	10.541	10.541
2	1.935	8.795	21.036	1.935	8.795	21.036	1.611	7.321	17.861
3	1.881	8.548	29.584	1.881	8.548	29.584	1.604	7.290	25.152
4	1.561	7.096	36.680	1.561	7.096	36.680	1.525	6.932	32.084
5	1.398	6.355	43.035	1.398	6.355	43.035	1.504	6.836	38.919
6	1.339	6.086	49.121	1.339	6.086	49.121	1.489	6.770	45.689
7	1.248	5.672	54.793	1.248	5.672	54.793	1.454	6.608	52.297
8	1.119	5.086	59.879	1.119	5.086	59.879	1.433	6.515	58.812
9	1.055	4.796	64.674	1.055	4.796	64.674	1.290	5.863	64.674
10	.958	4.354	69.028						
11	.884	4.017	73.045						
12	.784	3.563	76.608						
13	.766	3.481	80.088						
14	.717	3.259	83.347						
15	.628	2.857	86.204						
16	.601	2.734	88.938						
17	.560	2.547	91.485						

18	.519	2.359	93.844							

19	.436	1.981	95.825						
20	.371	1.686	97.511						
21	.301	1.368	98.879						
22	.247	1.121	100.000						

Extraction Method: Principal Component Analysis.

The cumulative percentage of variance accounted for by the current and all preceding factors. The ninth row shows a value of 64.674. This means that the first nine factors together account for 64.674% of the total variance. The numbers of rows in the extraction correspond to the number of factors to be retained. Thus, nine factors have to be retained.

Rotated Component Matrix[a]

	Component								
	1	2	3	4	5	6	7	8	9
Item1							.778		
Item2								-.672	
Item3							.647		
Item4									.804
Item5		-.563		.415					
Item6									.427
Item7								.718	
Item8		.729							
Item9	.639								
Item10	.584								
Item11				.834					
Item12					.562	.407			
Item13					.692				
Item14		.589							
Item15						.768			
Item16	.565				.449				

Item17				.678	.426					

Item18							-.417		
Item19	-.797								
Item20			.787						
Item21						.636			
Item22			.723						

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 20 iterations.

This table contains the rotated factor loadings, which are the correlations between the variable and the factor. Because these are correlations, possible values range from -1 to +1. On the /format subcommand, we used the option blank (.40), which tells SPSS not to print any of the correlations that are .4 or less. This makes the output easier to read by removing the clutter of low correlations that are probably not meaningful anyway.

There are nine factors. 1st factor comprises of item no 9,10,16,19. It can be named as "Investors' own analysis and believe". 2nd factor comprises of item no 5,8,14. It can be termed as "Imitating the investment strategy of friends". 3rd factor consists of item no 20 and 22. It can be named as "following the renowned investors". 4th factor consists of item no 5, 11, and 17. It can be named as "following the stock analysts". 5th factor contains item no 12 and 13.This factor can be termed as "following the relatives for investment strategy". 6th factor contains item no 15 and 21 which can be named as "acceptance of broker's advice and group mentality". 7th factor comprises of item no 1,3,18 which can be named as "accepting the views of experts on business news". 8th factor consists of item no 2 and 7 and this can be named as "following the business

newspaper and interaction with co-investors". 9th factor contains item no 4 and 6 which can be termed as "Pessimistic view on investing".

Conclusion

There is a need to change the strategy of investing or trading whenever there is any news or information comes to public domain. When the market scenario changes, the traders and investors use to panic and to safeguard themselves they follow the approach of "herd". Herding is not common even when there is trading of mass volume on particular scrip. But in case of uncertainty and panic situation in the stock market, traders and investors imitate the others.

From the study, it can be concluded that there are three forms of herding. The first form is "information based" when everyone tries to react in the similar manner to announced information. The second form is "reputation based", where the traders and investors use to follow the renowned investors, brokerage houses, trade analysts or business news anchors and experts of the business news channels. The third form is "Compensation-based", where the investors follow the big institutional managers. Whileinvestigating the presence of herd behaviour among the investor Bhubaneswar and Cuttack region, it was

found that investors following herding approach while investing.

Many investors have responded that they follow their own investment strategy and do not follow anyone. But a new concept has evolved called "hidden herding behaviour". It means unknowingly they herd believing that they are not herding.

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