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Investment Behaviour of Nepalese Investors

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Abstract : *This article deals with the field that has been recently getting lots of attention from finance academics – investor behaviour. This article aims to explore why Nepalese investors' invest in share markets and whether their decisions to invest in share market are in a way influenced by behavioural factors. The existence or otherwise of three selected behavioural biases, namely heuristics relating to information, herding behaviour and overconfidence were empirically tested through data collected from self-administered questionnaires from Nepalese investors and supplemented by interviews with brokers. Based on the analysis of findings, it is observed that Nepalese investors invested in shares for both financial and non-financial reasons. Behavioural factors have an important influence in Nepalese investors' investment decision making process. Investors are found to exhibit some facets, all three selected behavioural biases, which are influencing their investment decisions.*

I. INTRODUCTION

When studying modern finance, individual's behaviour is always taken as given. Using various models, finance practitioners solve complex decision making problems and come to conclusions like Mr. A would invest in Project B as it gives him more return than Project C for the same level of risk. In reality, would Mr. A act exactly as the financial model predict? Would his decision be affected by factors other than risk and returns? As far as modern finance is concerned, the answer to this question would be a definite 'NO'.

In the last two decades, however, a new school of finance, the behavioural finance, has emerged which accepts limitations of being a human in financial decision making process. If we repeat the above question again, the answer could be anything from 'Yes', 'Maybe', 'Sometimes' or perhaps 'No'. As per behavioural finance, various factors, including feelings and emotions of the decision maker, come into play when a financial decision is made that it is not possible to come to a conclusion that Mr. A will act this

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particular way (unless we know all the factors that would affect his decision!).

If we extend this debate of rationality or otherwise of financial decision makers to investors, the next question to explore would be 'do investors act rationally when making their investment decisions? Rationality here would mean the process of making optimal investment decision taking into account risk and return factors from the investment portfolio. Or, perhaps investors do let factors other than risk and return affect their investment decision making process?

The remainder of this article would explore this question empirically based on analysis of information obtained through a short survey of investors in Nepal Stock Exchange (NEPSE). The objectives are to identify the factors that make Nepalese investors invest in share markets. Are risks and returns the only factors for their investment decision making or are there any other behavioural influences in their investment decision making process? The following sections will address this question.

II. LITERATURE REVIEW

How do investors make their investment decisions? What are the factors that influence investors' decision making processes? Are the investors rational or do they let behavioural factors influence their decisions? What sort of, if any, tools they make use of for aiding their investment decisions? The answers to these questions differ according to the school of financial thoughts the person answering these question belongs to.

2.1 Traditional finance and investment decisions:

Traditional paradigm posits that most of the investors view maximizing shareholder wealth as the most obvious, and perhaps only defensible, corporate objective function (Raynor,2009).This means, as per traditional paradigm, investors invest in share markets to maximize their wealth through capital gain from their investments and current earnings through dividends.

2.2. Behavioural finance and investing decisions

Behavioural finance scholars opine that investing decision of individual investors are not solely based on maximising returns from investments but involves psychological decision processes. As per Malkeil (1973), people generally follow their emotions rather than reasons and their hearts rather than their minds when it comes to investment decisions. Thus, behavioural finance adds 'behavioural/ psychological' variable to 'rational' investor behaviour and it involves identifying behavioural decision-making attributes that are likely to effect financial market behaviour.

2.3 Biases and attributes

This article focuses on three specific behavioural biases and attributes, namely heuristics dealing with information, herding behaviour and overconfidence and the remainder of this section reviews articles related to these behavioural biases.

2.3.1 Heuristics dealing with information

Shefrin (2002) defines heuristics as rules of thumbs, usually generated through a trial and error process, which can lead to other errors. Shefrin (2002) describes 'availability heuristics' as the degree to which information is readily available and varying availability of information may impact the investment decisions as each and every participant in the financial market does not have all necessary information

Similarly, interpretation and application of information may impact investment decision making as not everyone is equally capable of making sense out of information they have in an appropriate way.

Similarly, attention could play a role in investment decision making. When choosing between thousands of available stocks to purchase from, investors limit their search to stocks that have recently caught their attention (Odean,1999). Barber and Odean (2008) have shown in their study that individual investors display attention-driven buying behaviour.

2.3.2 Herding

An investor can be said to herd if an he/she would have made a decision to follow a course of action in absence of knowledge of other investors' decisions, but does not make it after the decision of other investors' to not take a particular action is revealed.

Herding may involve intent (intentional herding) or it may not involve intent (spurious herding). Gavriilidis et al. (2007) further explain that in the case of intentional herding, conformity, namely the condition under which people feel more convenient when doing what others do, seems to be playing a major role. If investors have conformity needs, investors might not make their investment decisions in isolation Hirschleifer and Teoh (2003) agree on existence of conformity bias and point out that all of us are influence by others in almost every activity and this includes investment and financial transactions.

Existence of herding in financial markets

Various studies (Agarwal *et al.*, 2007), (Chang *et al.,* 2000)have indicated presence of herding behaviour in various stock exchanges. Ivkovich and Weisbenner (2007) provide evidence that investors are influenced in their stock trading behaviour by the behaviour of neighbours.

Evidence contrary to existence of herding:

The result of a laboratory experiment conducted by Azofra *et al.* (2006) indicated that agents are not clearly inclined to herd in any of the three markets they considered for their study

2.3.3 Overconfidence

As per Skala (2008), overconfidence is either investors overestimating the precision of their information and/or underestimating risk, which in turn makes them hold riskier portfolios.

Implication of overconfidence for financial market

As per Karlsson and Norden (2007), individual investors' perceived competence in the understanding financial information and recognizing investment opportunities would affect their choice between making active investment decisions, settling for inactive options or making no investments at all.

Components of overconfidence

Economics generally involves study of overconfidence in the context of positive illusions, i.e., the better-than-average effect, illusion of control and unrealistic optimism (Skala, 2008).

As per Barber and Odean (1999), another manifestation of overconfidence is miscalibration and studies of the calibration of subjective probabilities have repeatedly found that people tend to overestimate the precision of their knowledge.

Glaser and Weber (2003) describe better-than-the-average effect as people's thinking that they are above average.

Evidence of overconfidence in the financial markets

Various researchers (De Bondt, 1998), (Kim and Nofsinger, 2002), (Chen *et al*., 2007) confirm existence of overconfidence in the players in the financial market. The study of De Bondt (1998) indicates that investors are overly optimistic about the performance of shares they themselves own but not about the level of the stock index in general.

Barber and Odean (2000) have come to a conclusion through their research that in tasks like investment decision making, men are more overconfident than women.

III. SAMPLE AND DATA

Data collection for the research was done in two phases. The first phase involved collection of data from individual investors, whereas the second phased involved collection of data from security brokers.

The sample for the first phase of data collection comprises individual investors who held a portfolio of equities in companies listed in NEPSE. A total of 60 questionnaires were distributed to and collected from individual investors through 4 securities brokerage firms. A total of 49 completed questionnaires were returned back to the researcher. This equates to a response rate of 82 per cent.

Self-administered questionnaires, which were to be completed by the respondents' themselves without the presence of the researcher for explaining questions or recording answers, were distributed to and collected from the investors through security brokers. The choice of this delivery method was largely determined by lack of direct access of the researcher to the investors and for obtaining standardized answers to simplify analysis of data.

After some instructions on item completion, the questionnaire sought answers to given questions. The first section sought answers on descriptive characteristics covering investors' socio-demographics and educational status. The second section sought answers regarding trading behaviour of the investors.

For the second phase of data collection, 4 out of 23 security brokers listed in NEPSE were interviewed The main reason for including the brokers interview in this research, in addition to collecting qualitative data regarding investors' decision making processes, was getting access to brokers' clients for questionnaire distribution and collection. Also, since brokers are only allowed to place buy and sell orders for their clients they do not provide any investment advice to their clients (Securities Exchange Board Nepal, 2009), small sample size of 4 brokers out of 23 listed security brokers was deemed adequate.

IV. RESULTS

The data obtained from the survey is analyzed in this section. In section 4.1, the respondents' general profile is presented. In section 4.2, individual respondents' responses regarding their investment behaviour is presented.

4.1 Respondents' Profile

Out of 60 questionnaires distributed, 49 responses were received. 35 respondents were male and 14 were female. 36.8 per cent of the respondents were in the age group 21-30 and 40.8 in the age group 31-40. There were no respondents above age 60 and only 2 were of age below 20. 75.5 per cent of the respondents began their investment activity in their 20s and 40.8 per cent of the total respondents only perform 10-20 trading per year. 26.5 per cent of respondents traded at least 50 times in a year.

4.2 Investment behaviour of respondents

4.2.1 Why invest in shares?

Respondents were asked to indicate major motive behind their investment in shares. The results are indicated in Table I in the order of preference as indicated by respondents.

The table (Table I) shows that the respondents gave the first preference to "Invest for capital gain", the second preference to "Invest for bonus shares', This indicates that financial consideration is a major factor that drives investment decision making process. This is the expected result under the traditional financial paradigm.

"Invest to engage in investment related conversations with others" was the least preferred option by the participants; however, this option had a mean score of 2.59, indicating that the respondents did place importance to this social need as well. 10.2 per cent of the respondents 'strongly agreed' and 32.7 per cent agreed on this statement as their reason for investing in shares. This shows that these respondents are also influenced by factors other than financial factors in their investment decision making. This is an unexpected result applying the traditional financial paradigm which does not have any scope for motives other than financial motives. The result can be said to be consistent with behavioural paradigm which accepts social factors as one of the element in financial lesion making process.

Table 1 : Respondents' Motives For Investment In Shares

This table presents the mean weightage of the responses on the given statements. The mean values are calculated by assigning scores 1 through 5 for rankings from 'strongly agree' to 'strongly disagree' respectively.

		Percentage of responses (out of 49 responses)					Mean	Median	Std. Dev.	Rank
		1	2	3	4	5				
(a)	Invest for capital gain	57.1	34.7	8.2	0	0	1.51	1.00	0.649	**1**
(b)	Invest for bonus shares	32.7	55.1	10.2	2.0	0	1.82	2.00	0.697	**2**
(c)	Invest for right shares	18.4	67.3	14.3	0	0	1.96	2.00	0.576	**3**
(d)	Invest for dividend income	46.9	28.6	8.2	12.2	4.1	1.98	2.00	1.199	**4**
(e)	Invest to engage in investment related conversations with others	10.2	32.7	46.9	8.2	2.0	2.59	3.00	0.864	**5**

Source : Survey, 2009

4.2.2 Use of different tools in investment decisions

Investors were asked to indicate their preference in the use of different tools to assist in their investment decision making process. The result is shown in Table II in the order of preference.

The mean value of the tools used by respondents to aid their investment decision making in Table V varies from 3.92 to 2.23. In their overall ranks, the respondents indicated that they mostly used financial position of the company they were investing in to guide their investment decision making followed by advice of family and friends. This result indicates that the respondents' have a general tendency towards conformity (Gavriilidis *et al*., 2007) as the respondents are basing their decision on their communication with their family or friends.

Respondents placed 'Gut feeling' as the third mostly used investment aid. This result indicates that respondents are influenced by behavioural bias like gut feeling and family and friends suggestions.

The surprising finding in this table (Table II) is that 'professional financial advice' was the least preferred tool used by respondents to aid in their investment decision making.

Table 2 : Use of Various Desion Tools to Aid investment Decisions by the Respondents

This table presents the mean weightage of the responses on the use of the given decision tools by respondents to aid their investment decision making. The mean values are calculated by assigning scores 1 through 5 for rankings from 'Never' , 'Rarely, 'Sometimes', 'Frequently' and 'Always'.

		n	Percentage of responses					Mean	Std. dev	Rank
			1	2	3	4	5			
(a)	Financial position of the company they are investing in	49	6.1	2	14.3	49	28.6	3.92	1.038	**1**
(b)	Advice of family and friends	47	6.4	8.5	42.6	31.9	10.6	3.32	1.002	**2**
(c)	Gut Feeling	47	10.6	14.9	29.8	27.7	17	3.26	1.224	**3**
(d)	Media coverage	49	2	18.4	46.9	28.6	4.1	3.14	0.842	**4**
(e)	Professional advice	47	29.8	31.9	27.7	6.4	4.3	2.23	1.088	**5**

Source : Survey, 2009

4.2.3 Measure of confidence

To understand the respondents' level of confidence in their investment decision making process, two questions were asked. The first question asked the respondents' to indicate the level of investment related knowledge they have ranging from very little to very much. 46 per cent of the respondents' perceived themselves as having average knowledge in investment related matters. 29 per cent perceived themselves to have much knowledge and 6 per cent very much. These results show that at more investors (at least 35%) think that they have above average level of knowledge and points towards existence of better-than-average effect, a type of overconfidence, in investors.

Respondents' were asked to indicate their ability to pick stock ranging from very less to very high and the result indicate that 33 per cent of the respondents' perceived themselves as high level of ability in picking stocks and 4 per cent as having very high ability. This indicates excess confidence in respondents' regarding their ability to pick stock and reinforces Barber and Odean (1999) findings that people are more overconfident in task like stock selection.

4.2.4 Additional measures of investor confidence

The paragraphs below in this section present the respondents' agreeing, disagreeing or expressing unawareness to statements depicting their confidence in different aspects of investment decision making process. To facilitate comparison with the reviewed literature the responses are sub-divided on the base of respondents' gender.

i) Confidence in respondents' ability to differentiate good and bad stock

77 per cent of male respondents and 71 per cent of female respondents agreed that they had confidence in their ability to differentiate between good and bad stock. Result in figure 19 depicts that male respondents were more conservative with their abilities to differentiate good stocks and bad stocks.

ii) Confidence in respondents' ability to analyze financial statement

83 per cent of male respondents and 64 per cent of female respondents indicated that they had confidence in their ability to analyze financial statements.

Taking cumulative figures for male and female respondents, out of 49 respondents, 38 indicated their agreement, 1 disagreement and 10 their unawareness regarding their ability to analyze financial statements.

At least 3 respondents that analyze financial statements do not have confidence in their ability to analyze financial statements.

iii) Confidence in respondents' ability to correctly value shares

79 per cent of male and 43 per cent of female respondents indicated that they had confidence in their ability to correctly value shares for investment purposes. This result also points out towards existence of overconfidence in respondents (in a much higher degree in male respondents) in their ability to correctly value shares.

Majority of both female and male respondents (86% and 85% respectively) felt that shares they buy would appreciate in value. This result points out towards existence of unrealistic optimism (Skala, 2008), a component of overconfidence in which people believe that positive events are more likely to happen to them than to others.

iv) Respondents belief in the direction of securities index in general

62 per cent of male respondents and 14 per cent of female respondents believed that securities index in general would rise.

v) Respondents belief in the direction of prices of shares they hold

Regarding the optimism in investors, responses showed that male investors were more optimistic about the performance of the share market in general. Both male and female investors were optimistic about the specific shares they held. When compared to the findings of De Bondt (1998), this provided conflicting results where as results of (v) above were consistent with De Bondt (1998)'s findings that investors were overly optimistic about the performance of shares they themselves owned.

4.2.5 Influences on respondents' decision making process

Respondents were asked to indicate whether their investment decisions are in any way related to or are affected by other people's thoughts and actions. Table III summarizes the result:

Table 3 : Influences on Respondent's Investment Decision Making Process

This table presents what sort of influence are exerted by other people in the respondents' investment decision making process:

	Statement	N	%
a)	It is important to me that other people approve of the stocks that I buy.		
	Agree	20	40.8
	Disagree	18	36.8
	Neutral	11	22.4
	Total	49	100
b)	I get a feeling of belongingness by buying and/or selling the same stocks as others do.		
	Agree	22	44.9
	Disagree	18	36.7
	Neutral	9	18.4
	Total	49	100
c)	When I have little experience with a certain stock, I often ask friends and acquaintances about it.		
	Agree	38	77.6
	Disagree	4	8.2
	Neutral	7	14.2
	Total	49	100
d)	I consult with others ultimately choose my own investment.		
	Agree	26	53.1
	Disagree	8	16.3
	Neutral	15	30.6
	Total	49	100
e)	I just choose my own investments and do not solicit others suggestions.		
	Agree	16	32.7
	Disagree	27	55.1
	Neutral	6	12.2
	Total	49	100

Source : Survey, 2009

Of the total 49 respondents, 40.8 per cent of them indicated that it is important for them that other people approve their investments in shares. 36.8 per cent showed their disagreement. Similarly 44.9 per cent of respondents indicated that they got a feeling of belongingness by buying the shares others had bought. 36.7 per cent respondents disagreed to this. These results point out towards existence of behavioural biases in the respondents' investment decision making process. Respondents' desire for feeling of belongingness and getting approval from others indicates that they also want to address their social needs through their investment behaviour.

Similarly, 77.6 per cent of the total respondents indicated that they consulted with family or friends when they had less experience with the shares they were considering investing in and only 8.2 per cent disagreed. 53.1 per cent indicated that they consulted with others but chose their own investment. 32.7 per cent respondents indicated that they just chose their investments and did not solicit others advise and 55.1 per cent disagreed to it. The result indicates the respondents have conformity need to meet through their investing activity.

The result that 32.7 per cent of the respondents indicated that they do not solicit others advice and just choose their own investment also points to existence of a fraction of investors fit into Odean (1998)'s model of overconfident investors who concern themselves less about the beliefs of others.

1.3 Findings from interviews of brokers

Interviews were conducted with 4 security brokers regarding the skills and knowledge level of their clients, all 4 brokers indicated that majority of clients are not skilled in understanding the fundamentals of stock exchange. They do not analyze financial position of the company they are investing in and even when they do, they cannot interpret the results. This indicate presence of bias related to availability and use of information in investment decision making process.

V. CONCLUSION AND FUTURE RESEARCH

This research has drawn out following conclusions:

5.1 Major motives behind Nepalese investors' investments in shares

The results addressing the research objective of understanding the major motive of Nepalese investors for investing in shares can be summarized in the following way.

Investors participating in the survey primarily invested in shares to meet their financially oriented needs. They seek to maximize their wealth through capital gain. They also seemed to invest for bonus and right shares. Satisfaction of current consumption need through dividend income followed investing for bonus shares and right shares.

Apart from financially oriented needs, the investors that participated in the investment survey also tried to satisfy more socially oriented needs of participating in investment-related conversations with other investors.

This research has thus proved, in line with the current behavioural finance literature that investors are not solely guided by risk and returns of their investment but they invest to satisfy other needs like social needs.

5.2 Behavioural factors affecting investment decisions of respondents

This study has found that investors participating in the survey have behavioural influences in their investment decision making process which are summarized below:

5.2.1 Influences of availability of information and the skills in analysis and i nterpretation of the available information

This study has found that varying availability of information and the level of understanding of the respondents have an influence in their investment decision making process. Interviews with brokers have brought out a conclusion that most of the Nepalese investors do no have necessary skills to analyze financial information related to companies they are considering investing in and this affects the quality of their investment decision making.

5.2.2 Overconfidence

This study has found that the respondent investors are mostly overconfident regard to their self-reported level of investment-related knowledge, experience and their ability to pick stock. They exhibited wishful thinking that the shares they hold will appreciate in value. There was a notable difference in the level of confidence in various aspects of investing according to the age and gender of the respondents.

5.2.3 Herding behaviour

This study has found that the respondent investors exhibited herding behaviour. Their need to confirm with others was one of the influences on their investment decision making process.

5.3 Limitations of the research and scope for future research

The literature reviewed mainly consisted of prior studies of investor behaviours in developed stock exchanges. As the research is based on a relatively new and developing stock exchange, the results of reviewed literature and that of this research may not be directly comparable. The existence or otherwise of behavioural bias identified in the research are only studied and other bias that investors might possess are not considered as affecting investment decisions.

Many studies have been conducted aiming to understand the behaviour of investments in more developed stock markets. In context of NEPSE, there has hardly been any research in the field of investor behaviour. There is thus a future research scope for understanding of the behaviour of Nepalese investors and their motives for investments.

5.4 Final Remarks

All in all, this research has empirically proved that to many investors, investing means more than just satisfying their financial needs. It is more than just simply weighting the risks and expected returns of the various investment assets. Rather, the investors that participated in our investment survey indicated that for them investment is something that fulfils their social needs as well. Moreover, these investors were influenced by behavioural factors in their investment decision making process contrary to that expected by traditional finance paradigm.

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