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Behavior of small equity investors in Pakistan's stock exchanges

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ABSTRACT

This paper analyzes and investigates decision making process of equity investors for trading in stock exchanges of Pakistan. Survey research technique has been used to analyze the investors' attitude about the market's efficiency and to test different theories of traditional finance like efficient market hypotheses (EMH), rational investors and random walk hypothesis (RWH). The survey questionnaire forms were sent to 510 individuals identified as equity investors in stock exchanges of Pakistan, out of which 248 survey questionnaire forms have been received back. The results of descriptive statistics have indicated that investors are not completely rational individuals as supposed by theories of traditional finance.

Introduction

The holistic theory which aimed at explaining the functioning of financial markets cannot be expected to neglect how the investors, which are the basic participants of the markets, make their stock purchasing and selling decisions. Explanations which are based on Efficient Markets Hypothesis, which we may call the traditional finance as a holistic theory, concentrate on idea of rational investors for explaining how the investors should make their decisions. However, this is not the answer to how the investors make their investment decisions. According to Peters (1996) the question that how people in general and investors in particular make their investment decisions is a subject matter of behavioral psychology. However, this approach does not justify the thought of the traditional finance that psychology does not contribute to financial explanations (Oslen, 1998). The aversion of the traditional approach to understand and explain the decision processes of investors (because such an effort would mean questioning the rationality assumption) was the main reason to trigger the emergence of behavioral finance as an approach which tries to identify and understand the meaning of psychological decision processes for financial markets (Ricciardi and Simon, 2000). The main approach of behavioral finance is that investors are not rational and they are under influence, as opposed to traditional finance (Matthew, 1998). Therefore, it highlights the need for a new approach which does not neglect the decision processes of investors. The main concepts of behavioral finance can be classified into four groups; Expectations Theory, Regret Aversion, Over-Confidence, Cognitive Dissonance.

This paper explains the investor, traditional and behavioral finance theories to explain the decision making process of investors. It is imperative to acquire some insights about Pakistan stock exchanges in order to understand the equity markets of Pakistan. Stock exchanges of Pakistan comprises of three stock exchanges namely: Karachi Stock Exchange (KSE), Lahore Stock Exchange (LSE), and Islamabad Stock Exchange (ISE). KSE is the biggest, most liquid and best performing stock exchange of Pakistan. It started its working with an index of 50 shares. As the business and economic conditions grown up, more enhanced and revised index was required. Realizing this need, KSE-100 index was introduced on November 1, 1991. Since then, it was acknowledged as the most recognized index of stock exchange in Pakistan. KSE-100 index working as a benchmark to compare the prices of shares for different companies overtime. In this index, those companies which have highest capitalization in the market are selected. An organization having maximum capitalization from every sector is also included in this index in order to have representation of the whole market. Since 1991, the foreign investors were also able to operate and trade in Karachi Stock Exchange along with domestic investors. Since its inception, KSE performs in a very efficient and effective way for investors. It has an average turnover of 525.15 million shares on daily basis and its market capitalization is about US $ 54.28 billion. During 2002, KSE was recognized as the best performing stock exchange in the world by an international magazine named 'Business Week'. Since then KSE maintained its reputation as one of the best performing stock exchange in world as also confirmed by a USA newspaper 'USA Today'. The closing KSE 100 index was 9,386 on December 31, 2009 which depicts an increase of 60.03 % as compared to KSE 100 index on December 31, 2008.

The Islamabad Stock Exchange Market (ISE) was initiated on October 25, 1989. The foremost rationale behind the establishment of ISE is to set up an infrastructure where trading and settlement transactions can be conducted, trading information systems, skilled persons, and a market place which will be ranked among the best financial markets of the world.

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On October 1970, Lahore Stock Exchange (LSE) was established. It is the 2nd largest stock exchange of Pakistan having 12-16 % market share in daily trade volume. It has 519 listed companies, covering 37 different sectors of Pakistan's economy. LSE has total capital of Rs. 555.67 billion which was listed on the stock exchange and its market capitalization was about Rs. 3.64 trillion.

Based on these understandings and concepts, the objective of this paper is to present the results of a survey conducted to understand, analyze and interpret the behaviors and decision making process of equity investors trading in stock exchanges of Pakistan. The rest of the study has been organized as follows: the materials and methods part of the study has been presented in Section 2, results and discussions have been described in section 3, whereas, the last section describes the conclusions part.

Materials and methods

Survey research technique has been used in this study which depended on sampling framework. The population which was covered by the survey was 510 individuals living in different cities of Pakistan and trading in stock exchanges of Pakistan, out of which 248 questionnaire forms have been received back. The sample population had covered investors from different spheres of life like professional investors, brokers, large investors, small investors, businessmen, salaried persons, young investors, experienced investors, active investors, passive investors etc. in order to have thorough representation of investors' behaviors from all walks of life. The survey forms had been handed over and collected back from respondents personally. In some cases, referrals were also used to get the survey forms filled from the investors. Moreover, in some cases survey forms had been mailed / posted to the respondents. The survey form contained 12 questions which were related to investor behaviors. Different possible options have been provided for these questions in order to determine the attitude of respondents. Every effort had been made to get the fair and unbiased responses from the sample population. Descriptive Statistics has been used for evaluation of the survey forms. It was voluntary for the population to respond to this survey. Data was directly collected from survey respondents in 2011.

Results and discussions

Based on results of the questionnaire forms, following empirical findings have been discovered:

Investors' Attitude Regarding Market Efficiency: The responses of investors to questions intended to identify their opinions regarding market efficiency have been presented in table 1 & table 2:

Table 1: Do you think that you can make profit by purchasing the shares before the stock market index goes up and sell out the shares before stock market index goes down?

	Frequency	Percentage
I think it is possible to earn profit by doing this.	180	72.58%
I don't think it is possible to earn profit by doing this.	32	12.90%
I have no idea about it.	36	14.52%
Total	248	100%

Table 2: If you attempt to evaluate and select individual stock, like you are forecasting whether the market price of HBL or Bank Alfalah shares will go up and at which time it will increase?

	Frequency	Percentage
I think it is possible to earn profit by doing this.	156	62.90%
I don't think it is possible to earn profit by doing this.	48	19.35%
I have no idea about it.	44	17.74%
Total	248	100%

It is evident from answers of the above two questions that investors don't believe on efficiency of market as majority of them answered "I think it is possible". Because if they really believe market efficiency, their responses would be "I don't think it is possible" as it should not matter to prefer timing of market entry or particular shares if stock prices pursue random walk as described by efficient market hypothesis (EMH).

The Investor's Behavior within Prospect Theory Framework:

Empirical analysis within this framework have depicted that process of decision making is not an entirely rational procedure and investors take more risk for avoiding losses instead of attaining greater returns (Laver, 1997). The responses of question intended to measure investors' attitude concerning rational behavior have been presented in Table 3:

Table 3: Does your intuitions will influence you when you are making decision to purchase shares of a specific company?

	Frequency	Percentage
Intuitions will have little influence.	48	19.35%
Intuitions will have influence.	74	29.84%
Intuitions will have large influence.	50	20.16%
Intuitions will not have influence.	24	9.68%
It based on the circumstances.	52	20.97%
Total	248	100%

The results of table 3 have shown that only 9.68 % investors have described that "intuitions will not have influence", which depicted that investors' decision procedure has been far away from being rational one. The responses of investors for the question intended to expose their risk attitude have been presented in table 4:

Table 4: In uncertain stock exchange market conditions, if you have to sell out some of the shares, which shares will you prefer to sell?

	Frequency	Percentage
The shares which earned a profit.	132	53.23%
The shares which earned a loss.	116	46.77%
Total	248	100%

The results of table 4 have depicted that 53.23 % of the investors described that they prefer to sell shares which earned profits instead of the shares which earned losses. It means that instead of selling shares having losses and realizing those losses, they take risk of having more losses. These results have provided support for investors' risk taking tendency within prospect theory structure.

Regret Aversion Conception:

Regret is frustration occurring as a result of bad selection (Kahneman and Tversky, 1979). The gratification joy and regret pain are significant. Ambition of gratification and regret aversion leads to profits realization and losses retardation respectively. It has been evident that this scenario is valid for small equity investors in Pakistan as depicted through table 5:

Table 5: By comparing the gratification of 50% appreciation in the price of the shares that you have purchased and the regret of 50% decrease in the price of the shares that you have purchased:

	Frequency	Percentage
The amount of gratification is higher than the amount of regret.	96	38.71%
The amount of regret is higher than the amount of gratification.	152	61.29%
Total	248	100%

The results of table 5 have described that 152 (61.29 %) out of 248 respondents have pointed that amount of regret is higher as compared to amount of gratification when comparing 50 % appreciation and 50 % decrease in share prices. Investors circumventing grief of regret might incline to lessen their portion of personal liability regarding their decisions of investment. To find out this notion, investors' responses who specified that regret pain is larger as compared to gratification pleasure have been presented in table 6:

It has been evident from the results of table 6 that only 32 (22.22%) out of 144 respondents have mentioned that they have made decisions based on their own analysis whereas others have used different references for making their decisions.

Cognitive Dissonance Theory:

The other methodology interrelated to theory of regret aversion is cognitive dissonance. This theory describes that any information, opinion or approach of an individual needs reverse of other information, opinion or approach of that individual, there is existence of cognitive dissonance among them (Festinger et al., 1956). It means that it can be considered being regret pain arising as of inappropriate beliefs. Because investors don't desire to alter their decisions, therefore, they assure themselves that decisions taken by them have been reasonable.

Results of this research have described that 84 (67.74 %) out of 124 responses which pointed that they have a loss, replied to another question that they will sell the shares which earned a profit in period of uncertainty (Table 7). So, they have retained their opinion that their initial decision was accurate.

Again for similar respondents group which pointed that they have a loss, only 10 (8.06 %) out of 124 investors responded that "I may not be able to have positive return" (Table 8). Others still believe that they might have a profit. It can be considered as a further supporting evidence for rationalizing earlier decisions which might be inaccurate.

Heuristics: It explains that people have inclination for making decisions promptly, and making simpler policies for approaching complicated difficulties and limiting explanatory data. Availability based heuristics describes that individuals tend to assign greater probability to known actions. This phenomenon has been verified in table 9 and table 10.

The results of table 9 have indicated that 74.19 % respondents have stated that they "agree" or "strongly agree" with statement that well recognized organizations have lesser risk. Whereas, the results of table 10 have depicted that 70.97 % of the respondents have stated that "they think it is possible" that familiar stocks will provide more return.

Another type of heuristics which is called representative heuristics stated that individuals are expected to get lessons from historical changes in prices, their anticipations about future will have resemblance with their historical experiences, and it will shift them away from analyzing present information independently. This notion has been verified through table 11.

As it can be seen from the results of table 11, that individuals historical experiences could not be disregarded.

Investors Trade Too Aggressively: Behavioral finance also describes that the investors trade too aggressively because of having overconfidence on their trading skills and consequently, they have to bear greater transaction costs which offset major portion of whatever profits they have gained. It has been verified through table 12:

Results of table 12 have indicated that 132 (53.23 %) out of 248 respondents have mentioned that they will immediately sell the stocks which have provided them positive return instead of holding it for better return in the future.

Table 6: Which was the most influencing factor of your decision making to purchase shares which provided greatest profit to you recently?

		Advice of a friend	Advice of professional	Analysis of your own	Recomm-endations provided by media	Your intuitions	Total
By comparing the gratification of 50 % appreciation in the price of the shares that you have purchased and the regret of 50 % decrease in the price of the shares that you have purchased	The amount of gratification is higher than the amount of regret	12	24	40	2	16	94
	The amount of regret is higher than the amount of gratification	36	34	32	24	18	144
	Total	48	58	72	26	34	238

Table 7: How much return on average you obtained from your investments in stock exchange market during the last year:

		The Shares which earned a profit	The shares which earned a loss	Total
How much return on average you obtained from your investments in stock exchange market during the last year?	At loss	84	40	124
	0 - 20	30	38	68
	20 - 40	20	12	32
	40 - 60	12	2	14
	Above 60	10	0	10
	Total	156	92	248

Table 8: How much average return you are expecting from stock investments for coming year?

		At loss	0-20%	20%-40%	40%-60%	Above 60%	Total
How much average return you are expecting form your investments for the coming year?	I am expecting a return of atleast 10 %	34	16	4	2	2	58
	I am expecting a return of 10 % - 20 %	32	18	8	2	2	62
	I am expecting a return of 20 % - 30 %	8	18	4	4	2	36
	I am expecting a return of 30 % - 40 %	40	12	14	6	2	74
	I may not be able to have positive return	10	4	2	0	2	18
	Total	124	68	32	14	10	248

Table 9: The shares of well recognized organizations have lesser risk as compared to risk of the shares of the smaller firms:

	Frequency	Percentage
Agree strongly	90	36.29%
Agree	94	37.90%
Disagree	26	10.48%
Disagree strongly	18	7.26%
Have no judgment	20	8.06%
Total	248	100%

Table 10: Do you think that familiar stock will provide you more return as compared to stock which is unfamiliar to you?

	Frequency	Percentage
Yes, I think it is possible	176	70.97%
No, I don't think it is possible	36	14.52%
I have no idea	36	14.52%
Total	248	100%

Table 11: You have earned profit previously on the purchase of shares which a friend has recommended to you. Now the same friend asks you that the price of shares of a certain company A will increase. What will be your decision regarding the purchase of that stock?

	Frequency	Percentage
I will purchase these shares immediately.	70	28.23%
I will do some research and then purchase it.	94	37.90%
I will consider some other similar alternatives.	20	8.06%
I will not consider purchasing these shares.	16	6.45%
I will make decision based on existing market trend regarding these shares.	48	19.35%
Total	248	100%

Table 12: If your current stock holding is able to provide you positive return, what will be your decision about your stock holding?

	Frequency	Percentage
I will immediately sell the stock	132	53.23%
I will hold the stock for better return in the future	100	40.32%
I am unable to decide	16	6.45%
Total	248	100%

Conclusions

The purpose of this study is to understand decision making processes of investors operating in stock exchanges of Pakistan. Findings of this study have indicated that investors have not been completely rational individuals as supposed by theories of traditional finance. Hence, traditional theories attempting to describe financial markets should not merely concentrate at “what should be done”, instead they should also concentrate on “what was previously done”. It is unavoidable that behavioral explanations and theories will not have significant role in these structural activities.

References

Peters EE. Chaos and Order in the Capital Market. Second Edition, John Wiley&Sons.1996.

Oslen RE. Behavioral Finance and Its Implications for Stock Price Volatility. Financial Analyst Journal. 1998; 54(2): 10-18.

Ricciardi V, Simon HK. What is Behavioral Finance? Business Education and Technology Journal. 2000; 2(2): 1-9.

Matthew R. Psychology and Economics. Journal of Economic Literature, American Economic Association. 1998; 36(1): 11-46.

Laver R. Who is Afraid of Risk. Maclean’s. 1997; (110): 38: 54.

Kahneman D, Amos T. Prospect Theory: An Analysis of Decision under Risk. Econometrics. 1979; 47: 263-291.

Festinger L, Henry WR, Stanley S. When Prophecy Fails: A Social and Psychological Study of a Modern Group that Predicted the Destruction of the World. University of Minnesota Press. 1956.

Amos T, Kahneman D. Judgment under uncertainty; Heuristics and biases. Journal of Science. 1974; 185: 1124-1131.

Guven S, Mehmet S, Abdullah Y. Small Investor Behavior in Istanbul Stock Exchange. Middle Eastern Finance and Economics. 2007; 1(2007): 74-79.

Ritter J. Behavioral finance. Pacific-Basin Finance Journal. 2003; 11: 429- 437.

Shiller RJ. Human behavior and the efficiency of the financial system. In Taylor, J., and Woodford, M., (Eds.). Handbook of Macroeconomics, Amsterdam: Elsevier. 1999.

DeBondt FMW, Thaler HR. Does the stock market overreact? The Journal of Finance. 1985; 11(3): 793-807.

Slovic P, Lichtenstein S. Preference Reversals: A Broad Perspective. American Economic Review. 1983; 73: 596-605.

Larrick R, Boles T. Avoiding Regret in Decisions with Feedback: A Negotiation example. Organizational Behavior and Human Decision Processes. 1995; 63: 87-97.

Maheran N, Muhammad N. Behavioral Finance Vs Traditional Finance. Advance Management Journal, 2009; 2(6): 1-10.

Kahneman D, Amos T. Advances in Prospect Theory: Cumulative Representation of Uncertainty. Journal of Risk and Uncertainty. 1992; 5: 297-323.

Statman M. Behavioral Finance vs. Standard Finance. Behavioral Finance and Decision Theory in Investment Management. Charlottesville. VA: AIMR. 1995; 14-22.

Shefrin H. Beyond Greed and Fear. Boston, Massachusetts: Harvard Business School Press. 2000.