Investment Behavior and Stock Preference of an Individual Investor: Evidence from Karachi Stock Exchange

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Abstract

The purpose of the research is to study the individual investor's behavior in Karachi Stock Exchange. In this study data was collected from individual clients at Karachi Stock Exchange. Type of the study is descriptive and deductive approach was used. The data was collected from 389 respondents at Karachi Stock Exchange with the help of designed questionnaire. The individual behavior is tested with the help of regression analysis. There are three regression models developed to study the relationship and impact of Independent variables (Accounting information & financial literacy, overconfidence, irrationality and biasness in decision making) on three different dependent variables (Preference of capital gain, preference of dividend and gambling). Results explain no relationship toward preference of capital gain but the significant relationships found toward preference of dividend and gambling. So it can be easily concluded that the investors at Karachi Stock Exchange do not prefer capital gain but they want better payout and speculation in the market. There were also studied that the accounting information & financial literacy increase the behavior toward preference of dividend and decrease toward gambling. There have been the evidences found that the investors at Karachi Stock Exchange have irrational behavior and this behavior influences the preference of dividend and gambling.

Keywords:Investment behavior, Capital gain, Dividend, Gambling, Financial Literacy, Overconfidence, Irrationality and Biasness in Decision Making.

1. Introduction

This research is a contribution in the field of behavioral finance. Before starting further chapters first of all we must know what the behavioral finance is. According to Baker and Nofsinger (2010), "Behavioral finance is a relatively new but quickly expanding field that seeks to provide explanations for people's economic decisions by combining behavioral and cognitive psychological theory with conventional economics and finance."

There are thousands of individual investors at Karachi Stock Exchange. This study is on these house hold investors and their investment behavior. In this work the behavior of individual investors is studied on different preferences of investment methods. This study is based on regression analysis, with the help of regression models the impact of behavior has been checked on stock preference. This concept is gathered from past studies on same topic in which different behavior factors were explored. In this study four factors are included those may impact on stock preference of individuals at Karachi Stock Exchange. These factors include accounting information & financial literacy, overconfidence while making transactions, irrationality in investment behavior and biasness in decision making. There are also three different investment criteria are included in study those are preference of capital gain, preference of dividend and gambling.

In this study the accounting information refers to the investor's behavior which indicates that do investors use annual or quarter reports in their investment decisions and financial literacy refers to the problem that do investors have skills and knowledge to understand financial activities and companies disclosers. In this study the overconfidence factor is also included which refers to the concept that do investors use market announcements in decision making or analyze the market condition before making investment. There may be possible that the investors purchase stock according to someone's recommendation or may be prefer a sector according to his willingness, to check this factor irrationality and biasness factors are included in study. There are also three other factors included in the study which explain the preference of stock. These factors include preference of capital gain which refers to the long-term investment with increase in price point of view. Second the preference of dividend is included, that is an important reason for investment at stock markets. That describes the investors invest in shares for seeking better payout. The house hold investorsgenerally want a quick profit from stock markets to test this variable the gambling factor is included.

1.1. Problem Statement and Research Question

This work is done to study the investment behavior and stock preference according that behavior of individual investors. Following research questions have been answered in this paper:

- What is the investment behavior of individual house-hold investor in Karachi Stock Exchange?
- What are the factors influencing investment decisions of individuals in Karachi Stock Exchange?
- Which type of stock they prefer to buy according to their behavior and for what purpose?

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1.2. Hypotheses of the Study

1.2.1. Preference of Capital Gain

- H_{A1}: Accounting information & financial literacy has significant impact on preference of capital gain.
- H_{A2} : Overconfidence has significant impact on preference of capital gain.
- H_{A3}: Irrationality has significant impact on preference of capital gain.
- H_{A4}: Biasness in decision making has significant impact on preference of capital gain.

1.2.2. Preference of Dividend

- H_{B1}: Accounting information & financial literacy has significant impact on preference of dividend.
- H_{B2}: Overconfidence has significant impact on preference of dividend.
- H_{B3}: Irrationality has significant impact on preference of dividend.
- H_{B4} : Biasness in decision making has significant impact on preference of dividend.

1.2.3. Gambling

- H_{C1}: Accounting information & financial literacy has significant impact on gambling.
- H_{C2}: Overconfidence has significant impact on gambling.
- H_{C3}: Irrationality has significant impact on gambling.
- H_{C4}: Biasness in decision making has significant impact on gambling.

1.3. Objective and Justifications of the Study

This study is done to explain the investment behavior of individual investors in Karachi Stock Exchange and their stock preferences. In this study the impact of behavior on reason of investment is explored. This study is done to explain the type of transactions which are made by investors at Karachi Stock Exchange. This study may help the brokers in the manner that they can make new policies according to the investor's behavior. Analyst can analyze the nature of transactions those may be made by individual investors at Karachi Stock Exchange.

2. Review of Literature

There has been lot of research done in the field of behavioral finance in Pakistan. In findings of all research it has been stated that the behavior of individual investors in Karachi Stock Exchange is same as indicated in different theories of behavioral finance. According to Ngoc (2014) there are five behavior factors of individuals; Herding, Market, Prospect, Overconfidence-gamble's fallacy and Anchoring-ability bias. Another study by Anwar et al (2014) explained that the behavior of individual investors in different stock markets of Pakistan is irrational. He took the data from primary sources with help of questionnaire, his study was descriptive and he used deductive approach. Further, he collect data from KSE, LSE and ISE the three main stock markets in Pakistan.

According to Ali & Tariq (2013), "The behavior of individual investor in the terms of self-image/firmimage coincidence and there was not any influence is found in classic wealth maximization, accounting information and personal financial needs of an individual investor". Another study in which identification of impact of financial literacy and accounting information of individual investor on his investment decision and impact of experience in decision making was explained by collecting data from individuals in Karachi city. The study stated that the accounting information and financial literacy helps the investors to invest in more risky investments but increase in age will decrease this behavior. It was also stated that the elder age investor's motive of investment is dividend rather than capital gain (Lodhi, 2014). There was also studied by Iqbal&Usmani (2009) that the investors use accounting information and firm's ethical and environmental records were not considered, 86% of the investors were performing trading activities its self without depending on brokers and investors ignored the exchange listings. They collect data from individuals at Karachi Stock Exchange with the help of questionnaires.

In Asian stock markets the individual investors traded more than the institutional investors (Chaung, Lee & Wang, 2014). According to Kaniel, Saar & Titman (2008), it is common in investment behavior of individual investors that they buy the stock at lower price and sell it at the higher price for capital gain. Furthermore review stated that the individual investors remained trading actively in financial crises (Hoffmann, Post &Pennings, 2013). It was also analyzed the individual investor's behavior and stock price variation in Karachi Stock Exchange byAzam& Kumar (2011), they expained the positive relationship between EPS, FDI and GDP growth rate with stock price by using primary data which were collected with help of questionnaires and also secondary data related to EPS, FDI and GDP. Moreover, relationship between investor's overconfidence and stock returns was explained by Tariq &Ullah (2013); they usedsecondary data collected from KSE and SBP on 27 different stocks and studied that the investors in Pakistan were overconfident and had a significant relationship between overconfidence and stock return.

Another study by Joshi, Khushboo& Desai (2011), they took the samples from the cities Investors in city Ahmedabad and Khambhat (Gujarat) and addressed the questionnaire to them and They studied the factors effecting investors behavior are financial performance, Share's long-term performance, expected payout and

firms goodwill in market.Moreover, Zhu (2002) investigated the personal biasness in investment decisions and he confirmed the hypothesis and concludes that the investors invest in those companies whose advertisement is strong and they do not change their investment portfolio. According to Barber &Odean (2004), individual investors had a problem in stock searching because there were thousand possibilities were given. They compare individual investors and institutional investors and conclude that generally the investors invest in those stocks which they already own.A study done in Bangladesh in which questionnaire addressed to individual investors at brokerage houses and they studied that the majority of investors are young and educated. Investors in Bangladesh are very efficient and before investment analyze the market condition and prices (Rashid &Nishat, 2009).

3. Methodology

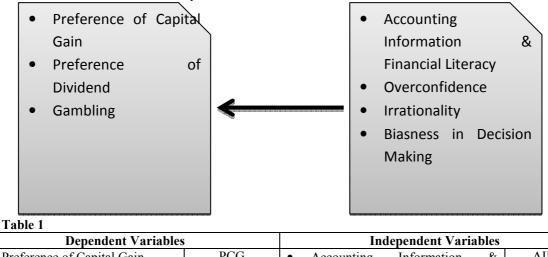
This study is based on primary data and deductive approach was used. Data was collected with help of questionnaire from individual investors in Karachi Stock Exchange. The basic purpose of this study is to explain the relationship between investment behavior and stock preference.

3.1. Research Design

The purpose of this study is explanatory and using deductive approach. The type of study is correlational and study has been done in non-contrived settings. The primary data was collected by questionnaire by using survey strategy from individuals. Time horizon for this study is cross-sectional.

3.2. Theoretical Framework and Regression Model

Theoretical model for this study is as under:



Dependent Variables		Independent Variables			
Preference of Capital Gain	PCG	Accounting Information & AIFL			
Preference of Dividend	PD	Financial Literacy			
Gambling	G	• Overconfidence OC			
6		Irrationality IRR			
		Biasness in Decision Making BDM			

Models for the study are as under:

Regression model for Preference of Capital Gain: $PGC = \alpha_1 + \alpha_2 AIFL + \alpha_3 OC + \alpha_4 IRR + \alpha_5 BDM + \varepsilon....1$ Regression model for Preference of Dividend: $PD = \beta_1 + \beta_2 AIFL + \beta_3 OC + \beta_4 IRR + \beta_5 BDM + \varepsilon....2$ Regression model for Gambling: $G = \gamma_1 + \gamma_2 AIFL + \gamma_3 OC + \gamma_4 IRR + \gamma_5 BDM + \varepsilon....3$

3.3. Study Procedure

This study has been done in non-contrived settings and data was collected from individuals. First of all select the broker's offices in Karachi Stock Exchange than select individual clients. Questionnaire was made to be filled by these clients. With help of questionnaire got the observations from these individual responded and coded the data in MS-Excel. Arrange all data category wise and analyze it for final decision and made final conclusion on such data.

3.4. Plan of Analysis

Collected was coded to MS-Excel than Analyze the data in MS-Excel 2010 and SPSS 16.0. First studying the impacts regression analysis was used. Also correlation analysis was used to test the linear relationship between variables.

4. Results and Findings

4.1. Reliability Analysis

There were two different questions for collecting data for one variable. After collection of data the reliability test was run to check the reliability of data. The reliability is tested by Cronbach's Alpha with the help of SPSS 16.0 and the summary is given below:

Table	2

S. No.	Variables	Cronbach's Alpha
1.	Preference of Capital Gain	0.780
2.	Preference of Dividend	0.731
3.	Gambling	0.725
4.	Accounting Information & Financial Literacy	0.737
5.	Overconfidence	0.748
6.	Irrationality	0.712
7.	Biasness in Decision Making	0.745

4.2. Results of the Preference of Capital Gain

Table 3

Regression (Preference of Capital	l Gain)
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regression (Freierenee of Suprim Sum)							
	Unstandardized Coefficients		Standardized Coe <u>ff</u> icients				
Predictors	В	Std. Error	Beta	t	Sig.		
(Constant)	3.665	.405		9.059	.000		
Accounting Information & financial literacy	096	.081	062	- 1.183	.237		
Over Confidence	.083	.051	.083	1.614	.107		
Irrationality	.116	.059	.105	1.947	.052		
Biasness in Decision Making	021	.053	022	396	.692		

Due to high multicollinearity the R-Square of the model is very low which is 0.02 and Adjusted R-Square is 0.01. This study used the evidences to test hypotheses and the results show that the accounting information & financial literacy has no significant impacts on preference of capital gain. So, thestudy did not found any evidence to accept H_{A1} . There was also not any significant impact of overconfidence, irrationality and biasness in decision making on preference of capital gain found in this study. Evidences conclude that the study cannot accept the H_{A2} , H_{A3} and H_{A4} because there were no significant impacts found in this model. The regressed model for the study is as follows:

 $PCG = 3.665 - 0.096AIFL + 0.083OC + 0.116IRR - 0.021BDM + \varepsilon$

4.3. Results of the Preference of Dividend Table 4

Regression (Preference of Dividend)							
	Unstandardized Coefficients		Standardized Coe <u>ff</u> icients				
Predictors	В	Std. Error	Beta	t	Sig.		
(Constant)	2.558	.301		8.492	.000		
Accounting Information & financial literacy	.262	.060	.220	4.329	.000		
Over Confidence	.072	.038	.094	1.878	.061		
Irrationality	.091	.044	.109	2.063	.040		
Biasness in Decision Making	020	.039	027	503	.616		

In the table 4 the results of multiple regressions are given. The model for preference of dividend is strongly significant with F-Statistic 7.584. The problem of the autocorrelation is also controlled. R-Square of the model is 0.271 and Adjusted R-Square is 0.064. Furthermore the results of regression explain the significant positiveimpact of accounting information & financial literacy on preference of dividend at level of significance 0.05, so that there was no evidence found to reject H_{B1} . There is also a significant positive impact of irrationality on preference of dividend was studied in his research, so according to the evidences H_{B3} is true. But there were no impact of overconfidence and biasness in decision making is found on preference of dividend. So there were no evidences found to accept H_{B2} and H_{B4} . The regressed model is as under:

 $PD = 2.558 + 0.262AIFL + 0.072OC + 0.091IRR - 0.02BDM + \varepsilon$

4.4. Results of Gambling

Table 5

Regression (Gambling)						
		standardized Coe <u>ff</u> icients	Standardized Coe <u>ff</u> icients		\Box	
Predictors	В	Std. Error	Beta	t	Sig.	
(Constant)	3.943	.468		8.422	.000	
Accounting Information & financial literacy	208	.094	113	- 2.210	.028	
Over Confidence	113	.059	095	- 1.903	.058	
Irrationality	.271	.069	.208	3.949	.000	
Biasness in Decision Making	.046	.061	.040	.758	.449	

According to the results of regression the model is significant and F-Statistic is 7.571. The R-Square of the model is 0.073 and adjusted R-Square is 0.063. There is also negative autocorrelation exists between disturbances. Results given in table 8 explains there was a negative significant impact of accounting information & financial literacy on gambling found, so that there was no evidence found to reject H_{C1} . There was also a positive significant impact of irrationality found on gambling, so that there was no evidence found to reject H_{C3} . Moreover there were no impact of overconfidence and biasness in decision making was studied. The regressed model is as under:

G = 3.943 - 0.208AIFL - 0.113OC + 0.271IRR + 0.046BDM + ε

5. Discussion and Conclusion

5.1. Discussion

According to the above results the impact has been studied in all three models. The dependent variables of the study are preference of capital gain, preference of dividend and gambling. This work is done to study the impacts of accounting information & financial literacy, overconfidence, irrationality and biasness in decision making were tested on dependent variables. According to the problem statement it can be concluded that the behavior of

individuals at Karachi Stock Exchange is irrational. The individual investors' preferences are dividend and gambling, they do not go for a capital gain. Therefore, the investors at Karachi Stock Exchange prefer to by those types of shares that give better dividend. It is also studied that the investors at Karachi Stock Exchange prefer highly liquid shares due to their gambling behavior. In this study there were no significant impacts found on preference of capital gain in Karachi Stock Exchange. The basic reason for it is that the investors at Karachi Stock exchange do not prefer to buy shares for a long term purpose. Due to the lack of financial literacy the investors do not prefer capital gain. According to the regression analysis the investors at Karachi Stock Exchange prefer dividend and the impact of irrationality and accounting information found toward preference of dividend. Investors want an increase in dividend instead of increase in the long term value of a share. There were also evidences found toward gambling behavior of individuals. Investors prefer to purchase shares with the fluctuation of index or price. The also prefer short-selling for making profit. So it can be concluded that the investors at Karachi Stock Exchange go to the speculation and gambling. Results also explain that the biasness in decision making do not impact the preference of capital gain, preference of dividend and gambling because there were no significant relationship found according to the evidences.

5.2. Conclusion

This study is the contribution in the field of behavioral finance. There was no impact studied on preference of capital gain so that the study can conclude that in Karachi Stock Market the individual investors do not prefer capital gain. The measure reason of this is that the investors do not purchase shares according to the long term investment perspective. By comparison with previous study it was concluded that the Pakistani investors prefer dividend and speculation. In this study according to evidences it can be concluded that the Pakistani investors prefer dividend and they may purchase shares with dividend point of view. Their buying behavior is toward those shares whose payout is high. There was also the attitude toward gambling is studied in this study. Pakistani investors at Karachi Stock Exchange prefer speculation and prefer to buy shares for a short term period. They prefer to buy shares before index goes up and sale before index goes down. There was a positive impact of financial literacy studied on preference of dividend, so we can conclude that the accounting information & financial literacy will help investors to buy high payout shares. There was also positive impact of irrationality studied on preference of dividend, so it can be concluded that due to the irrational behavior the investor prefer dividend. The gambling was also tested to study behavior of individuals. The results stated that there is a negative impact of financial literacy studied on gambling behavior, so it can be concluded that with help of financial literacy the gambling behavior can be reduced. In this study according to the evidences it can also be concluded that due to the irrationality the investors prefer gambling. Moreover there were no relationship found between overconfidence and biasness in decision making on preference of dividend and gambling. So we can conclude that the individual investors are not highly biased in Karachi Stock Exchange.

5.3. Future Research

This study can be extended by applying it on other stock markets in Pakistan and in any other country. It is also possible to test the impact of economic factors on investment behavior of small equity investors as well as on institutional investors. There is also a possible research work done by testing illiteracy rate on investment decision. In this study, only individual investors was included as a study population but this type of study can be done by collecting data from industrialist, professionals or office employees who are also the investors at stock market.

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Appendix

Welcome

We look forward to receiving your responses to this questionnaire. It has been designed to provide us with a full picture of your views about investment in Karachi Stock Exchange. Please complete the questions as fully and as candidly as possible - we guarantee that this survey is completely confidential and purely for academic purpose. **1.** Your age group?

1.	Your age group?			
	□ 18 to 29	□ 30 to 44	□ 45 to 59	\Box Over 60
2.	Your marital status?			
	□ Single		[□ Widower
3.	Your level of education?	•		
	M / '		1.1	41 14

 Intermediate
 Bachelors
 Masters

 Please state carefully whether you agree or disagree with the following statements:
 Above Masters

			Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
4.		I will prefer to purchase the shares for a long-term period.					
		I will purchase a share whose value will be increased in future.					
5.		I prefer the share which will give reasonable dividend on my investment.					
		Ialso want an increase in dividend in my investment.					
6.	a.	I think that I can make a profit by purchasing shares before index goes up and sell out before index goes down.					
		I think the short-selling (Bhata) will be profitable for me.					
7.	a.	In my point of view, the accounting information disclosed in annual reports is useful in my investment decisions.					
	b.	I analyze the market condition before purchasing share.					
8.		I think I have enough experience to judge the profitable share.					
		I think in coming years I can make a profit.					
9.		I have earned a profit previously from the shares which were recommended by my friend. Now I will purchase shares next time according to his recommendation.					
	b.	I prefer to invest in the share of that company which gave me a profit in past.					
10.		decision to purchase shares of a specific company.					
	b.	I think only a particular sector which I prefer will give me a profit.					

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