

IMPACT OF CONSERVATISM BIAS EFFECT ON INVESTMENT DECISIONS OF PAKISTANI STOCK INVESTOR

Adeel Rahim¹ Mumtaz Hussain Shah² and Alamzeb Aamir³

ABSTRACT

In this study researcher has analysed the impact of Conservatism bias effect on investment decisions of Pakistani Stock exchange (PSX) investors. Investors take many irrational investment decisions to beat the market dynamics but sometimes bear heavy loss in trading at PSX due to intervention of investor biases but they could not address it properly. This study made an attempt to address investor biases by taking Conservatism bias along with its sub variables as an independent variable and investment decision as dependent variable and determine the impact of both variables on investor decisions of Pakistani stock investor. He applied stratified random sampling technique to collect data from the sample profile of PSX investors i-e: Karachi stock exchange, Lahore Stock exchange and Islamabad Stock exchange. The study is quantitative in nature and for this Primary data was collected through Questionnaire survey technique through stock exchanges working under PSX. Prospect theory in behaviour finance is backing this study and has served the base for researcher. Researcher used descriptive statistics, rank correlation and its analysis, association method and applied logistic regression model. The findings of the study suggest that Conservatism bias has positive impacts on the investment decisions of PSX individual investors.

Keywords: Pakistan stock exchange, investor biases, irrational decisions and investment decisions.

BACKGROUND

Investor biases are often referred as capacity of irrational financial decisions that are caused by emotions. There are some studies which have shown the significance of investor biases in shaping investment decisions. Researcher used Conservatism bias effect to measure its impact level on the investment decision making of individual investors at the Pakistan Stock Exchange.

Prospect Theory on which the study is based is about how investors can manage risk in uncertain conditions it also explains the human behavior irregularity in risk assessment in uncertain conditions. Furthermore, this theory says that; “investors are risk-takers in profit but risk-averse in loss”. The value maximization function in the Prospect Theory differ from that in Modern Portfolio Theory as in the modern portfolio theory, final wealth position show us the wealth maximization whereas in prospect theory profit and losses in account show us wealth maximization function (Kahneman & Tversky, 1979). This theory also explains subjective decision-making influenced by the investors' value system and suggests that people react happily when it's a Gain in investment but express sorrow and grief when it a loss in investment and they go into stress and joy respectively. An investment advisor will receive number of rings when it posts a PKR.500,000 loss but will not receive a single call from client when she's reported, say, a PKR.500,000 gain in the client's portfolio as loss always appears larger than a gain of equal size - when it goes deep into our pockets, the value of money changes. Prospect theory also explains that why investors hold onto losing stocks and take risk in hope

¹ PhD Scholar, IMStudies, University of Peshawar

² Assistant Professor, IMStudies, University of Peshawar

³ Assistant Professor, FATA University, FR. Kohat

of that their shares price will get back in growth and they will earn profit on it. Gamblers brokers , agents and arbitrage exploits this situation and can give more loss to risky client holding on losing shares. This theory have some merits and demerits one was it failed to explain why investors get attracted to gambling and insurance. This theory shows that money flows out from funds that are underperforming than money flows into high-performance mutual funds more rapidly (Kahneman & Tversky, 1979).

Conservatism bias, is when people use old kept information in their mind to take decisions and cannot update themselves to the new information available in the market. Sometimes these types of people utilize old experiences in taking investment decisions. This type of bias is normally observed in people who have faced market crash and therefore, are more conscious than other decision makers in the same environment (Shefrin, 2000). Conservatism; when newly available information is not used and past information is usually referred in a situation this is conservatism bias. This type of bias is observed in investors who have previously experienced bad news such as market crash and Global financial crisis and take more precautionary steps in their investment decisions (Shefrin, 2000).

Lim (2012) conducted research on Malaysian stock exchange and found that overconfidence bias, conservatism bias and regret biases have positive impacts on investment decisions while, herding behavior have zero impact on investment decisions. Wamae (2013) carried out study on behavioral factors influencing investment decisions at Nairobi stock exchange (Kenya) and found that herding have the strongest impact, then prospect and anchoring and risk aversion factor was having the least impact. Nofsingera and Varmab (2013) examined availability bias influence on decision-making and found that this type of investor buy only those stocks about which he has knowledge not on the basis of market trend. Theory of behavior finance is grounded on psychology which merges emotions and biases to shape individual behavior of an investors (Kengatharan, 2014). Luu (2014) carried out study on individual investors behavior patterns in China (Ho Chi Minh stock market) where the results showed that overconfidence, anchoring, herding, loss aversion and regret aversion have medium level influences on the investment decisions while rest of investor biases have the highest influences on the investment decisions.

Investment decisions, all those decisions which are related to financial matters and profit making are known as Investment decision. After years growth of Pakistani stock market, investors' decisions are still difficult to be taken even if it is undertaken by financial analysts or investors. Many comments and recommendations given by security companies or even global financial organizations did not match with what has really happened. In April 2017, when KSE-100 Index was standing at around 50,000 points many Brokerage firms and stock exchange manager on media (Express Tribune, 5th, April, 2017) were confident to assert that KSE-100 Index would go up further. Belief in the growth of stock market did not help these analysts to save the Index from remarkable declination. Therefore, it is possible to state that the forecast methods based on the conventional financial theories are not suitable for Pakistani stock market in this context. These theories assume that investors rationally maximize their wealth by following basic financial rules and making investment decision on the risk-return consideration. However, level of risk acceptance of the investors depends on their personal characteristics and attitudes to risk (Maditinos, Sevic & Theriou, 2007). It is, therefore, necessary to explore investor biases impact on investment decisions of Pakistani stock investor to help them and the security companies to take profitable investment decisions. Behavioural finance can be helpful in this case because it is based on psychology to explain why people buy or sell stocks (Waweru, 2008).

Behavioural finance provides a different perspective, very complex and unconventional. Behavioural finance paradigm suggests that investment decision is influenced in a large proportion by psychological, emotional factors and investor biases. Human emotional complexity includes the following primary feelings: fear, panic, anxiety, envy, euphoria, greed, satisfaction, ambition or vanity. Very likely that all these emotions interfere in certain proportions in a financial investment decision making (Waweru, 2008).

RESEARCH OBJECTIVES

- To find out, impact of Conservatism bias effect on investment decision of Pakistani stock investor.
- To analyse, relationship between Conservatism bias and investment decisions of Pakistani stock investors.
- To enable the investors, to take normal and rational decisions by avoiding investor biases in decision making and to get regular and long term returns on their stock investments.

RESEARCH GAP

In Pakistan, according to the best of my knowledge so far no research paper is written on this topic. No doubt there are some foreign studies on behavioral effects on investors investment choices at Nairobi stock exchange but not specifically on Conservatism bias impact on investment decisions (Shikuku, 2013). This area of research in behaviour finance is still uncovered in Pakistan. This paper will address the research gap of finding impact of Conservatism bias on investment decision of individual investors of Pakistan stock exchange (PSX) by taking conservatism bias as independent variable and Investment decision as Dependent variable.

PROBLEM STATEMENT

Investors take many decisions in stock market on daily basis but could not avoid investor biases which they are facing during this decision-making process. To solve and tackle this investor biases problem researcher analysed the impact of conservatism bias on investment decision at PSX.

RESEARCH METHODOLOGY

Research is quantitative in nature and data was gathered through primary and secondary sources. Researcher applied Stratified random sampling technique by converting sample PSX into three Strata's such as : investors of KSE, LSE, ISE then Simple random sampling technique was employed to the study. Questionnaires were filled by respondents on the basis of this sampling technique. Pakistani stock investors listed at KSE, LSE and ISE. Existing literature was made use to propose some hypotheses about Impact of overconfidence bias on investment decisions of investors at the Pakistan Stock Exchange (PSX) and these hypotheses were tested by collecting data through self-administered questionnaires. The sample profile was created on the basis of stock investor characteristics such as : age and investment experience in the Pakistani stock market such as : Experienced Stock Investors, who would be above than thirty(30) years of age with at least three years of investing experience. Young Stock Investors, who would be below thirty(30) years of age, with less than 1 year or less than that of investing experience.

HYPOTHESIS

Null Hypothesis H_0 : The Conservatism bias have No impact on investment decision of PSX investors.

Hypothesis H_A : Conservatism bias have impact on investment decisions of PSX investors.

DATA ANALYSIS AND INTERPRETATION

Table 1: Distribution of sample size gender-wise

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	412	89.2	89.2	89.2
Female	50	10.8	10.8	100.0
Total	462	100.0	100.0	

Above table Shows distribution of total sample size of 462 respondents gender wise in data collected for the current study Male respondents were recorded to be 412 which were 89.2% of the total population of sample size. Female respondents were found to be 50 which shows 10.8 % of the total population.

Table 2: Distribution of sample size education level

	Frequency	Percent	Valid Percent	Cumulative Percent
0.00	8	1.7	1.7	1.7
Graduate	32	6.9	6.9	8.7
Master and above	196	42.4	42.4	51.1
Other	226	48.9	48.9	100.0
Total	462	100.0	100.0	

Above table shows distribution of total sample size of 462 respondents on the basis of Educational level. Graduate respondents were found to be 32 which shows 6.9 % of total population. Masters and above respondents were found to be 196 which shows 42.4 % of total population. Others Educational background respondents were recorded 226 which showed 46.9 % higher than Graduates and Masters Respondents percentage in the whole population under study.

Table 3: Distribution of sample size age-wise

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid .00	2	.4	.4	.4
18-25	39	8.4	8.4	8.9
26-30	187	40.5	40.5	49.4
36-45	105	22.7	22.7	72.1
46-55	56	12.1	12.1	84.2
55 above	73	15.8	15.8	100.0
Total	462	100.0	100.0	

Above table shows distribution of total sample size of 462 respondents on the basis of Age level. Respondents aged between 18 and 25 were found to be 39 which shows 8.4 % of the total population under study. Respondents aged between 26 and 30 were 187 which shows 40.5 % out of total population and was found to be higher than other Age groups respondents. Respondents aged between 36 and 45 were 105 which shows 22.7 % out of total population. Respondents aged between 46 and 55 were 56 which shows 12.1 % out of total population. Respondents aged 55 and above were 73 which shows 15.8 % out of total population under study.

Table 4: Distribution of sample size Martial Status –wise

	Frequency	Percent	Valid Percent	Cumulative Percent
0.00	6	1.3	1.3	1.3
Single	102	22.1	22.1	23.4
Married	315	68.2	68.2	91.6
Divorced	39	8.4	8.4	100.0
Total	462	100.0	100.0	

Above table shows distribution of the total sample size of 462 respondents on the basis of marital status. Single respondents were found to be 102 which shows 22.1% of the total population under study. Married respondents were found to be 315 which shows 68.2% of the total population and was found to be higher than other groups of respondents. Divorced respondents were found to be 39 which shows 8.4% of the total population under study.

Table 5: Distribution of sample size experience and gender wise

Variables	Years of experience	Male and Female			
		Male		Female	
		Count	Table N %	Count	Table N %
	Less than 1 year	61	13.2%	14	3.0%
	1 to 3 years	233	50.4%	20	4.3%
	More than 3 years	118	25.5%	16	3.5%

Above table shows distribution of total sample size of 462 respondents on the basis of Experience and Gender wise. Less than 1 year experience Male respondents were found to be 61 which accounts for 13.2% of total population under study. 1-3 years' experience Male respondents were found to be 233 which accounts for 50.4% of total population was found to be higher than other groups of respondents . More than 3 years' experience Male respondents were found to be 118 which accounts for 25.5% of total population under study.

Less than 1 year experience Female respondents were found to be 14 which accounts for 3% of total population under study. Female 1-3 years' experience respondents were found to be 20 which accounts for 4.3% of total population was found to be higher than other groups of respondents. More than 3 years' experience Female respondents were found to be 16 which accounts for 3.5% of total population under study.

Table 6: Distribution of sample size education and gender wise

Variables	Male and Female			
	Male		Female	
	Count	Table N %	Count	Table N %
00	8	1.7%	0	0.0%
under graduate	0	0.0%	0	0.0%
Graduate	28	6.1%	4	0.9%
Master and above	169	36.6%	27	5.8%
Other	207	44.8%	19	4.1%

Above table shows distribution of total sample size of 462 respondents on the basis of Education level and Gender wise. Undergraduates' Male respondents were found to be 0 which accounts for 0% of total population under study. Graduates Male respondents were found to be 28 which accounts for 6.1% of total population. Masters and above Males respondents were found to be 169 which shows 36.6% of total population. Others Educational background Male respondents were found to be 207 which accounts for 44.8% of total population under study and was found to be higher than other groups of respondents. Undergraduates' Female respondents were found to be 0 which accounts for 0% of total population under study. Graduates female respondents were found to be 4 which accounts for 0.9% of total population. Masters and above females respondents were found to be 27 which shows 5.8% of total population and was found to be higher than other groups of respondents. Others Educational background female respondents were found to be 19 which accounts for 4.1% of total population under study.

Table 7: Distribution of sample size education and experience wise

Variables	Education level	Years of experience					
		Less than 1 year		1 to 3 years		More than 3 years	
		Count	Table N%	Count	Table N%	Count	Table N%
0.00		0	0.0%	4	0.9%	4	0.9%
under graduate		0	0.0%	0	0.0%	0	0.0%
Graduate		10	2.2%	20	4.3%	2	0.4%
Master and above		31	6.7%	110	23.8%	55	11.9%
Other		34	7.4%	119	25.8%	73	15.8%

Above table shows distribution of total sample size of 462 respondents on the basis of Experience and work experience wise. Less than 1 year experience respondents with under graduates degrees were found to be 0 which accounts for 0% of total population under study. 1-3 years' experience respondents with under graduate's degrees were found to be 0 which accounts for 0% of total population under study. More than 3 years' experience respondents with under graduate's degrees were found to be 0 which accounts for 0% of total population under study.

Less than 1 year experience respondents with graduates degrees were found to be 10 which accounts for 2.2% of total population under study. 1-3 years' experience respondents with graduate's degrees

were found to be 20 which accounts for 4.3% of total population under study. More than 3 years' experience respondents with graduate's degrees were found to be 2 which accounts for 0.4% of total population under study. Less than 1 year experience respondents with Masters and above degrees were found to be 31 which accounts for 6.7% of total population under study. 1-3 years' experience respondents with Masters and above degrees were found to be 110 which accounts for 23.8% of total population. More than 3 years' experience respondents with Masters and above degrees were found to be 55 which accounts for 11.9% of total population. Less than 1 year experience respondents with others degrees were found to be 34 which accounts for 7.4% of total population under study. 1-3 years' experience respondents with others degrees were found to be 119 which accounts for 25.8% of total population. More than 3 years' experience respondents with Others degrees were found to be 73 which accounts for 15.8% of total population under study and was found higher than other respondents groups with education and experience.

Descriptive statistics includes minimum, maximum, mean, standard deviation, skewness and kurtosis are used in this study for possible description and exploration of the selected sample data. Minimum and maximum are used to identify the minimum and maximum possible value while mean is used to find the average value and also their impact levels on the investment decision making.

The impact levels of investor biases on the investment decisions are identified by calculating the values of simple mean of each variable. In similar, the variables of investment decision are scored by identifying the mean values of the respondents' evaluations for each variable. In this part, only variables, which meet the requirements of above factor analysis and Cronbach's alpha test, are chosen to demonstrate their scores. Because 5-point Likert scales are used to measure the impact levels of these variables, the mean values of these variables can decide their impact levels on the investment decisions as the following rules: If mean value is between 3 and 4 it shows that the variables have high impacts.

Table 8: Descriptive Statistics of Conservatism Bias Factors

Sub Factors	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Statistic	Skewness Statistic	Kurtosis Statistic
C1	1.00	5.00	3.2857	1.45077	-0.614	-0.751
C2	1.00	5.00	3.6061	1.27406	-0.817	-0.232
C3	1.00	5.00	3.9719	1.09290	-1.286	1.241
C4	1.00	5.00	3.6017	1.21158	-0.912	0.212
C5	1.00	5.00	3.0433	1.39657	-0.322	-1.224
C6	2.00	5.00	3.9437	2.63488	1.749	1.932
C7	1.00	5.00	3.7554	1.30189	-0.919	-0.293

In the above Table, illustrate the results of descriptive statistics of each factor of over confidence bias, included in this research study. It include the minimum, maximum, mean, standard deviation, skewness and kurtosis of each factor. Maximum negative skewness -1.286 were recorded in C3 followed by C4, C2, C1 and C5 which shows that maximum values are in left side of the mean value 3.9719 or less from the mean while in C6 positive skewness 1.749 has been recorded which shows maximum vales are in right side of mean 3.9437 or greater than from mean. The maximum positive kurtosis 1.932 were recorded in C6 followed by C3 and C4 which shows that these factor has heavier

heavier tails or leptokurtic distribution as greater than zero. While in the rest of factors negative kurtosis were observed shows that these factor has light-tailed or platykurtic distribution as less than zero.

Table 9: Descriptive Statistics Conservatism Bias

Variable	Minimum	Maximum	Mean	Std.	Skewness	Kurtosis
Conservatism bias	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
	1.43	11.57	3.6011	0.67072	3.325	42.435

In above table, Mean value is 3.60 which lies between 3 to 4 it shows that the Overconfidence bias have high impact on investment decisions of Pakistani stock investors.

CORRELATION ANALYSIS

Correlation analysis is used to know whether linear relationship exists between different factors of same variable. If linear relationship exists then it's positive or negative also its statistically significant or not, for this purpose Researcher used Rank Correlation method as the data is Categorical in Nature. Chaudhry and Kamal (2016) in there book Introduction to Statistical theory says ; Rank Correlation is the best method when you have data in Categorical nature.

Table 10: Rank Correlation in Conservatism bias

Correlation between sub factors of conservatism bias							
Factors	C1	C2	C3	C4	C5	C6	C7
	1.000	.142**	.016	.078	.145**	.007	.033
C1	.	.002	.731	.092	.002	.878	.477
C2	.142**	1.000	-.063	.100*	.004	-.033	-.035
	.002	.	.177	.031	.934	.475	.453
C3	.016	-.063	1.000	.008	.031	-.067	.144**
	.731	.177	.	.865	.506	.150	.002
C4	.078	.100*	.008	1.000	.196**	.115*	.021
	.092	.031	.865	.	.000	.013	.655
C5	.145**	.004	.031	.196**	1.000	.192**	.024
	.002	.934	.506	.000	.	.000	.601
C6	.007	-.033	-.067	.115*	.192**	1.000	.070
	.878	.475	.150	.013	.000	.	.132
C7	.033	-.035	.144**	.021	.024	.070	1.000
	.477	.453	.002	.655	.601	.132	.

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The above table illustrates the strength of linear relationship among different factors used in making conservatism bias through correlation matrix. As the data set involving these factors all are categorical type thus correlation matrix contains the results of rank correlation coefficients and p-value of significance and non-significance. It is evident that, factor C1 is positive correlated with all others factors but positive and significantly correlated with C2 and C5 with p-value = .002 for both. Positive and significant correlation is recorded between C2 and C4, while positive but insignificant correlation between C2 and C5 were also noticed. Correlation between C2 and other factors are recorded negative and insignificant. Correlation of C3 with C4, C5, and C7 are recorded positive but significant except with C7 which is found significantly correlated with C3, also correlation between C4 and C5 were recorded negative and insignificant. The results of correlation of C1 with C2, C3 and C4 showed positive and highly significant except C7 which relation with C4 is positive and significant. Similarly the correlation of C5 with C6, C7 and Correlation of C6 and C7 are noted positive and significant.

ASSOCIATION METHOD

Measure of association in statistics is used to quantify a relationship between two or more variables. Association method evaluates hypothesis which are not justified by logistic regression model.

Table 11: Association of Investor decisions and gender

Status		Male	Female	Total
Investor decisions	Disagree	68	6	74
	Agree	344	44	388
Total		412	50	462

Chi square 0.673 P-value = 0.412

From the table 1.11 it is evident that out total 462 respondents 74 are disagree that investor biases influencing investment decisions in which 68 are male and remaining 6 are female respondents. The remaining 388 respondents agrees that investor biases influencing investment decisions. But overall the association between gender and investor decisions are found insignificant with Chi-square = 0.673 and P-value = 0.412 > 0.005, which means that respondent gender have no significant impact on investment decisions.

Table 12: Association of Investor decisions and Education

Status		Education level				Total
		.00	Graduate	Masters	Other	
Investor decisions	Disagree	2	12	32	28	74
	Agree	6	20	164	198	388
Total		8	32	196	226	462

Chi square 13.684 P-value = 0.003

From the table 1.12 it is recorded that out total 462 eight respondents were not mentioned their education however two of are disagree and six of them are agrees that investor biases influencing investment decisions. Respondents having graduation degree are 32 in which 12 are disagree and 20 are agreed that investor biases influencing investment decisions. Similarly, 196 respondents having master's degree and above 164 of them are agreed to that investor biases influencing investment

decisions and the remaining 32 are disagree. Maximum number of respondents which is 226 having education degrees others in which 28 are disagree and the remaining 198 are agreed that investor biases influencing investment decisions. Overall 74 are disagree that investor biases influencing investment decisions and the remaining 388 respondents agreed to that. However the association between education and investor decisions are found significant with Chi-square = 13.684 and P-value = 0.003 < 0.05, which means that respondent education have significant impact on investment decisions of investor.

Table 13: Association of Investor decisions and Age

Status		Age						Total
		.00	18-25	26-30	36-45	46-55	55 above	
Investor decisions	Disagree	1	8	26	13	7	19	74
	Agree	1	31	161	92	49	54	388
Total		2	39	187	105	56	73	462

Chi square 9.909 P-value = 0.078

Table 1.13 indicates the result of association between respondent investment decision and age. Two respondents did not mentioned their age as denoted by 0.00 in which 1 disagree and 1 agreed to that investor biases influencing investment decisions. Respondents having age group 18-25 are 39 in which 8 disagree and the remaining 31 agreed to that. Maximum number of respondents lie in the age group 26-30 are 187 in which 26 disagreed and 161 to that, that investor biases influencing investment decisions. However out total 462 respondents 74 are disagreed and 388 are agreed that investor biases influencing investment decisions. But overall the association between respondent age and investment decisions are found significant with Chi-square = 09.909 and P-value = 0.008 < 0.05, which means that respondent age have statistically significant impact on investment decisions.

Table 14: Association of Investor decisions and experience

Status		Years of experience			Total
		Less than 1 year	1 to 3 years	More than 3 years	
Investor decisions	Disagree	13	49	12	74
	Agree	62	204	122	388
Total		75	253	134	462

Chi square 7.176 P-value = 0.028

Table 1.14 presents result of association between respondent investment decision and their experience. Respondents having less than one year of experience are 75 in which 13 disagree and the remaining 62 agreed to that, that investor biases influencing investment decisions. Maximum number of respondents lie in the group having one to three year of experience which 253 out of them 49 disagreed and 204 agreed to that investor biases influencing investment decisions. Total respondents having experience more than three years are 134 in which 12 disagreed and remaining 122 agreed to that. However out of total 462 respondents 74 are disagreed and 388 are agreed that, experience of respondents influencing investment decisions. But overall the association between respondent experience and investment decisions are found significant with Chi-square = 7.176 and P-value = 0.028 < 0.05, , which means that respondent experience have statistically significant impact on

investment decisions.

Table 15: Association of Investor decisions and Martial Status

Status		Marital Status				Total
		.00	Single	Married	Divorced	
Investor decisions	Disagree	1	13	57	3	74
	Agree	5	89	258	36	388
Total		6	102	315	39	462

Chi square 3.834 P-value = 0.280

Table 1.15 illustrate result of association between respondent investment decision and marital status. Six respondents did not showed their marital status in which 1 disagreed and 5 agreed that investment decision can effect from marital status of investors. Hundred and two respondents were recorded single in which 13 disagreed and remaining 89 agreed to that marital status have impact on investment decision. Maximum number of respondents lie in the group of married which is 315 out of them 57 disagreed and 258 agreed to that marriage influencing investment decisions. Minimum number of respondents recorded in group of divorced which is 39 out of them 3 disagreed and 39 agreed to that divorced life influencing investment decisions. However out of total 462 respondents 74 are disagreed and 388 are agreed that, marital status of respondents influencing investment decisions. But overall the association between respondent marital status and investment decisions are found insignificant with Chi-square = 3.834 and P-value = 0.280 > 0.05, which means that respondent marital status have no statistically significant impact on investment decisions of investors.

LOGISTIC REGRESSION

The purpose of logistic regression is used to identify the significant impact of each independent variable on dependent variables also to identify the positive and negative impact of independent variables on dependent variable.

Table 16: Logistic Regression Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	383.150 ^a	49.547	64.764

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Table 1.16 shows the results of model performance through -2 Log likelihood and two type's pseudo R Square to estimate the explained variance in the fitted model. The recorded values of Cox & Snell R Square = 49.547 and Nagelkerke R Square = 64.764, indicates that about 50 percent and 65 percent variation is explained in dependent variable on the basis of given independent variables, which are quite good.

CONTRIBUTION TO THE FIELD

This Paper will help academia to develop theories which can avoid Conservatism bias during investment decision making in Asian stock exchanges especially in Pakistan Stock Exchange. To

investors and stock market; the findings of the study will assist stock investors, brokers and portfolio managers who take hundreds of investment decisions on daily basis on behalf of their customer to avoid investor biases in taking rational and long term rewarding investment decisions.

FUTURE AVENUE

This study could further be extended to other Stock Markets ; Asian or Western Stock exchanges of the World or same study can be carried in other sectors of Economy. Upcoming scholars can analyse impact of other investor biases than Conservatism effect bias on investment decisions of Pakistani stock investor or any other stock investors of the World.

CONCLUSION

The findings of the study suggest that the first Hypothesis/ Null Hypothesis is rejected that Conservatism effect bias have No impact on investment decisions of PSX investors. While main Hypothesis is almost supported as researchers found that Conservatism bias effect have positive impacts on the investment decisions of PSX individual investors. Descriptive statistics mean value of Conservatism effect bias was found to be 3.60 which shows that the Conservatism bias have high impact on investment decisions of Pakistani stock investors. Therefore, individual investors at the PSX should be Conservative at an acceptable level to utilize their skills, and trading experience in certain circumstances to improve the investment decisions results. In the uncertainty, the Conservatism can be useful for the investors to do difficult tasks and help them to forecast the future trends. Pakistanis are very reactive and tend to be under-confident in some cases, so that this recommendation seems to be suitable for Pakistanis investors to improve their investment performance. However, Conservative traders tend to underestimate the associated risks of active stock investment, which can affect badly to their investment decisions result. Therefore, best advice for the Pakistani stock investors is that conservatism is great for their investment if they can use it in the clever and suitable ways.

REFERENCES

- DeBondt, W., Thaler, R. (1985), Does the stock market overact? *Journal of Finance*, 40(3), 793-805.
- DeBondt, W. F. M., & Thaler, R. H. (1995). Financial Decision Making in Markets and Firms: A *Behavioral Perspective*, 385-410.
- Evans, D.A. (2006). Subject perceptions of confidence and predictive validity in financial cues. *Journal of behavioral Finance*, 7(1), 12–28.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica* 47(2), 263–291.
- Kadiyala, P. & Rau, R. (2004). Investor reaction to corporate event announcement: Underreaction or overreaction, *Journal of Business*, 77(1), 285-292.
- Kim, K., & Nofsinger, J. (2008). Behavioral finance in Asia. *Pacific-Basin Finance Journal*, 16(1-2), 1–7. <http://dx.doi.org/10.1016/j.pacfin.2007.04.001>.
- Kim, K. & Nofsinger, J. (2003). The Behavior and Performance of Individual Investors in Japan. *John Wiley & Sons Inc.*
- Kengatharan, L., & Kengatharan, N. (2014). The influence of behavioral factors in making investment decisions and performance: Study on investors of Colombo stock exchange, Sri Lanka. *Asian Journal of Finance & Accounting* 6(1), 1-23.

- Lim, L.C., (2012). The Relationship between Psychological Biases and the Decision Making of Investor in Malaysian Share Market. *John Wiley & Sons Inc.*
- Luu, T. B., (2014). Behavior pattern of individual investors in stock market. *International Journal of Business and Management* 9(1), 1-16.
- Maditinos, D. I., Sevic, Z., & Theriou, N. G. (2007). Investors' behavior in the Athens Stock Exchange (ASE). *Studies in Economics and Finance*, 24 (1), 32-50.
- Nofsinger, John. The Psychology of Investing, Third Edition (Prentice Hall, Englewood Cliffs, New Jersey: 2007).
- Nofsingera, J. R. & Varmab (2013). Availability, recency and sophistication in the repurchasing behavior of retail investors. *Journal of Banking & Finance* 37(7), 2572–2585.
- Oberlechner, Thomas, & S. Hocking(2004). Information sources, news, and rumors in financial markets: Insights into the foreign exchange market. *Journal of Economic Psychology* 25 (4), 407-424.
- Shefrin, H. (2000). Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing. New York: Oxford University Press.
- Shikuku, C.A. (2013). *The Effect Of Behavioral Factors On Individual Investor Choices At The Nairobi Securities Exchange*, School of Business, University of Nairobi, Kenya.
- Thaler, Richard J., (1999). Mental Accounting Matters, “Journal of Behavioral Decision Making” (12), 183-206
- Waweru, N., M., Munyoki, E., & Uliana, E. (2008). The effects of behavioral factors in investment decision-making: a survey of institutional investors operating at the Nairobi Stock Exchange. *International Journal of Business and Emerging Markets*, 1(1), 24-41.
- Wamae, J. N.(2013). Behavioral factors influencing investment decision in stock market: A survey of investment banks in Kenya. *International Journal of Social Sciences and Entrepreneurship* 1(6), 68-83.