Personality Traits And Loss Aversion Bias of Indian Investors

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Abstract:

The present research paper discusses the personality traits of Indian investors and the relation between these personality traits and loss aversion bias and subsequently the effect of these personality traits on their investment behavior through loss aversion bias. Data has been collected from 1,000 Indian investors by using judgment samplingthrough a structured questionnaire including 75questions where first part covered ten questions related to the investors' profile, second part contained, 64 question (statements) related to personality traits of individual investors by using MBTI personality model and in the third part ten questions were put related to the loss aversion bias of investors regarding financial decisions. The results of the study indicated a very significant relationship between personality traits and loss aversion bias of Indian investors. The findings of the study could be useful for individual investors in improving their investment decisions and consequently the investment return by understanding their personality traits clearly and they could also check whether they are getting biased in their investment decisions by their loss aversion behavior and as a result of that they could learn to earn a better overall investment return. Apart from this the financial advisors also could take advantage from the findings of the present study by understanding the personality type and behavioral biases of their clients and accordingly suggesting them the best investment option available for them in the Indian financial market.

Key Words: Behavioral Finance, Loss aversion Bias, Personality Traits and Investment Decision, MBTI Test.

Introduction:

The process ofinvestment decision making involves the consideration of many factors and risk could be said to be one of the most important considerable factor among them but risk perception of every individual is different as itdepends mainly on one's personality type and demographic variables. The present study is an attempt to explore these phenomena by analyzing the relationship between personality types of investors, using the personality traits defined by Myers Briggs Type Indicator and loss aversion bias of individual investors in India.

What is MBTI Personality Test?

Myers-Briggs theory is an adaptation of the theory of psychological types produced by Carl Gustav Jung. They act as useful reference points to understand your unique personality (Jung 1957, p. 304). At the heart of Myers Briggs theory are four preferences and it is assumed under this theory that one preference out of two is always dominant and that only decides the main preference and the particular personality trait of a human being. Let's have a look on the following four dichotomies which had been used in the MBTI personality types:

- **Extroversion and Introversion:** It is related to the attitude of a human being. Extroverts find energy in the external world and they prefer verbal communication. They prefer to work out ideas by talking. They have broad interests, are sociable and expressive and take initiative in work and in relationships. Introverts find energy in the inner world of thoughts, feelings and ideas. This type is more drawn towards their inner world. They prefer to communicate in writing and they want to work out ideas by reflecting on them. They are private and subdued but take initiative when something is important to them.
- **Sensing and Intuition:** It tells about information processing, how any person process the information in his mind. In sensing, people get information by using the five senses. They are oriented to facts and present realities. They build careful and thorough conclusions, understand ideas, observe and remember specifics and want to apply theories through practical applications. Intuitive people have great imagination and they are verbally creative. They move quickly towards conclusions based on

hunches; they trust inspirations and remember few specifics.

- **Thinking and Feeling:** It is regarding the decision making style of any person. Decisions are based on logic and objective analysis of cause and effect. They are analytical, reasonable and solve problems with logic. Sometimes they can come across as relentless. Feelers are empathetic and assess decisions by how people respond to them. They strive for harmony and positive interactions, which make them appear mild-mannered.
- **Judging and Perceiving:** It defines the lifestyle of any human being. People who prefer judging like a planned and organized approach to life. They work systematically, like to settle matters and try to avoid last-minute stress. Perceptive people, have a flexible and spontaneous approach to life and like to keep their options open, they are open to change and feel energized by last-minute stress.

What is Loss Aversion Bias?

In cognitive psychology and decision theory, loss aversion refers to people's tendency of preferring to avoid losses for acquiring an equivalent gain, for them it is better to not lose Rs.5 than to find Rs.5.Loss aversion is an important concept associated with prospect theory and is encapsulated in the expression "losses loom larger than gains" (Kahneman&Tversky, 1979). It is thought that the pain of losing is psychologically about twice as powerful as the pleasure of gaining.The basic principle of loss aversion can explain why penalty frames are sometimes more effective than reward frames in motivating people (Gächter, Orzen, Renner, &Starmer, 2009) and is sometimes applied in behavior change strategies.

In investment, loss aversion bias is mainly found in the beginners, when they don't have knowledge and more experience about the financial market. It creates mainly the following three biases among the investors:

Endowment Effect: In psychology and behavioral economics, the endowment effect (also known as divestiture aversion and related to the mere ownership effect in social psychologyis the hypothesis that people ascribe more value to things merely because they own them. One of the most famous examples of the endowment effect in the literature is from a study by Daniel Kahneman, Jack Knetsch & Richard Thaler, in which participants were given a mug and then offered the chance to sell it or trade it for an equally valued alternative (pens). They found that the amount participants required as compensation for the mug once their ownership of the mug had been established ("willingness to accept") was approximately twice as high as the amount they were willing to pay to acquire the mug ("willingness to pay").

Sunk Cost Fallacy: In economics and business decision-making, a sunk cost is a cost that has already been incurred and cannot be recovered (also known as retrospective cost).Individuals commit the sunk cost fallacy when they continue a behavior or endeavor as a result of previously invested resources (time, money or effort) (Arkes&Blumer, 1985). This fallacy, which is related to status quo bias, can also be viewed as bias resulting from an ongoing commitment.

Status Quo Bias: This bias is more dangerous than the other two, because this bias tends to make people closed to other opportunities and solutions.Status quo bias is an emotional bias; a preference for the current state of affairs. The current baseline (or status quo) is taken as a reference point, and any change from that baseline is perceived as a loss.Status quo bias is evident when people prefer things to stay the same by doing nothing or by sticking with a decision made previously (Samuelson, &Zeckhauser, 1988). This may happen even when only small transition costs are involved and the importance of the decision is great.

Review of Literature:

Many studies have been reviewed for the present research paper and the main out them are following:

- Isidor R (2017) concluded in her study that when the behavioral factors expressed by each investor personality type is known, financial advisors would be well equipped to guide the investors in making the right

investment decisions thereby helping them avoid financial blunders.

- SarwarA et. al. (2016) have shown in the findings of their study that there is significant relationship of psychological factors and economic factors with individual investor's decision-making. Regression analysis shows that psychological factors as compared to economic factors have more effect on decision-making behavior.
- Charles A and KasilingamR(2016) Findings of discriminant analysis explore that investors frames, personality and mood bias factors influence their general investment decisions.
- Rajagopalan P and Guruswami H (2015) have analysed ten psychological biases and seven personality traits of Indian stock market retail investors and revealed that three distinct personalities had significant relation with unique psychological biases.
- Purohit H et.al. (2014) has shown through the results of their study that investors' combine their behavioral and cognitive psychology with financial decision making process.
- Lin H.W (2011) has examined the relationship between Big Five personality traits of investors and the investment biases and he found that there was a significant relation between four personality traits and three behavioral biases.
- Mayfield et. al.(2008) have used big five personality traits to analyse the relation between personality traits and investment behavior and the results of their study indicated that individ-uals who were more extraverted intended to engage in short-term investing, while those who were higherin neuroticism and/or risk aversion avoid this activity. Risk adverse individuals also had not engaged inlong-term investing. Individuals, who were more open to experience, were inclined to engage in long-term investing however openness had not predicted short-term investing.

Objectives of the Study:

Following are the main objectives of the present study:

1) To study the personality traits of investors.
2) To study the loss aversion bias of investors.
3) To find out the relationship between investor's personality traits and loss aversion bias.

Research Methodology:

It's an exploratory study to find the relation between loss aversion bias and MBTI personality traits. Data for the study has been collected by using a structured questionnaire containing three types of questions, first, personal information of investors, second was containing the questions related to personality traits (MBTI Test questions) and third part included the questions related to loss aversion bias in investment decisions. SPSS version 24 has been used to applylinear multiple regression analysis to find out the relationship significance between personality traits and loss aversion bias of individual Indian investors.

Hypothesis:

The following hypothesis had been formed for the study:

H0: There is no significant relationship between the personality traits and loss aversion bias of investors.

H1: There is a significant relationship between the personality traits and loss aversion bias of investors.

Data Analysis:

First the frequency of respondents belonged to each personality traits were computed by descriptive statistics.

Descriptive Statistics:

The personality traits percentage scores of the respondents were found as per Table No:1 below:

Extroversion (%)	Introversion (%)	Total
42.66	57.24	100
Sensing (%)	**Intuition (%)**	
56.74	43.16	100
Thinking (%)	**Feeling (%)**	
42.26	57.64	100
Judging (%)	**Perceiving (%)**	
41.46	58.44	100

From the above table, it was interpreted that the number of introverts was more than extroverts, Sensing personality respondents score were more than Intuition, Feelers were more than thinkers and perceivers' score was found more than judgers.

Regression Analysis:

Regression analysis is a suitablestatistical method to find out the impact of relationship between dependent and independent variables therefore multiple linear regression analysis has been applied for the data analysis. Following Table No:1, 2 and 3 are showing the results of the analysis where dependent variable was loss aversion bias and independent variables were the eight personality traits of investors.

Table:1

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.753[a]	.567	.563	3.38754	.567	161.996	8	991	.000	1.119

a. Predictors: (Constant), Perceiving, Intuition, Introversion, Sensing, Feeling, Judging, Extroversion, Thinking

b. Dependent Variable: Loss Aversion

Table: 2

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	14871.720	8	1858.965	161.996	.000[b]
	Residual	11372.119	991	11.475		
	Total	26243.839	999			

a. Dependent Variable: Loss Aversion

b. Predictors: (Constant), Perceiving, Intuition, Introversion, Sensing, Feeling, Judging, Extroversion, Thinking

Table: 3

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
(Constant)	21.75	1.89		11.54	0.00			
Extroversion	0.68	0.27	0.10	2.52	0.01	0.66	0.08	0.05
Introversion	0.19	0.15	0.03	1.25	0.21	0.01	0.04	0.03
Sensing	-0.25	0.15	-0.04	-1.68	0.09	-0.09	-0.05	-0.04
Intuition	-0.64	0.15	-0.09	-4.19	0.00	-0.10	-0.13	-0.09
Thinking	-1.49	0.23	-0.27	-6.37	0.00	-0.70	-0.20	-0.13
Feeling	0.64	0.26	0.08	2.46	0.01	0.59	0.08	0.05
Judging	1.18	0.25	0.18	4.78	0.00	0.66	0.15	0.10
Perceiving	-1.45	0.25	-0.20	-5.83	0.00	-0.66	-0.18	-0.12

From the above regression analysis tables, R square value was found 0.567, F(8,991) = 161.996 with a significant P value (.000) at 0.05 level of significance therefore it could be interpreted that there is a great impact of personality traits of investors on their loss aversion bias therefore, the null hypothesis was not accepted. The model summary table has taken all the personality traits as predictors where Extroversion, Introversion, Feeling and Judging were found to be positively related and Sensing, Intuition, Thinking and Perceiving were found negatively related with loss aversion bias however Introversion and Sensing were not found significantly related at 5% level of significance. Thefollowing regression equation was formed:

Loss Aversion= 21.75 + Extroversion (0.68) + Introversion (0.19)+Sensing (-0.25)+Intuition (-0.64)+Thinking (-1.49)+Feeling (0.64)+Judging (1.18)+Perceiving (-1.45)

Findings of the Study:

Following are the main findings of the present study:

1) From the descriptive statistics of the personality traits of respondents, it has been found that the number of introverts was more than extroverts, Sensing personality respondents score were more than Intuition, Feelers were more than thinkers and perceivers' score were found more than judgers.

2) Multiple regression analysis has been performed to test the hypothesis of the study between the dependent variable loss aversion and independent variables extroversion, Introversion, Sensing, intuition, Thinking, Feeling, Judging and Perceiving, it has been found that there was a relation between all the eight personality traits and loss aversion bias of investors though the significant relation has been found in Extroversion, Feeling and Judging personalities (positively) and Intuition, Thinking and Perceiving (negatively).

Conclusion:

The present study has been performed with the main objective of finding out the relationship between the personality traits and loss aversion bias of investors, the results of the data analysis of the study, has shown a very significant relation between the six personality traits out of eight and loss aversion bias. After the data analysis of the study and rejecting all the three hypotheses it is concluded that there is a significant difference between the personality types as well as overconfidence bias, thus the null hypothesis of the study was rejected. The findings of the present study would be very helpful for the individual investors to understand their particular personality traits by using MBTI personality test and after the evaluation of their they could check with themselves how much they are getting affected in their investment decisions due to their personality traits, whether positively or negatively. Apart from this the investors could also have an assessment of loss aversion and behavioral biases and its effects on their investment decisions. The financial advisors of the investors must also help their clients in assessing their personalities and behavioral biases and that's how they could help them in making better investment decisions.

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