

# INVESTMENT DECISION MAKING OF THE INVESTORS AND ITS IMPACT ON THEIR PROFITABILITY

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**ABSTRACT:** Behavioral finance studies the effect of emotions and human psychology on the actions of investors, its importance stems from the fact that it identifies major factors behind the investment decisions of individuals either they are rational or irrational. For this study primary data was collected through questionnaire from 150 individual investors comprising of 100 male investors and 50 female investors from Hyderabad and Karachi. Rational behavior of individual investors was measured by Hira and Loibl [1], irrational investment behavior was measured following Michael M. Pompian [2]. Satisfaction from investment profitability scale was measured through instrument designed by Ehsan ul Hassan [3]. We use Correlation, Independence sample t-test and ANOVA (One-way) for analysis. Findings showed that rational decision making significantly increases the profitability of individual investors whereas irrational decision making does not significantly increase the profitability. It was also found the male individual investors are not more irrational investment decision makers as compared to female. One major finding is that rational decisions are not taken more by highly qualified investors as compared to middle and low qualified investors.

**Keywords:** Irrational behavior, rational behavior, investment decision and profitability.

## 1. INTRODUCTION

Amin *et al.* [4] describes behavioral Finance is a sub field of finance, which assumes that characteristics and emotions of investors affect their investment decisions. Birau [5] finds that investors personality has major impact on his or her investment decisions. Ricciardi and Simon [6] state that behavioral finance explains all the issues related to finance and investment from an individual perspective.

According to Shanmugasundaram and Balakrishnan [7] there is growing importance of behavioral finance in stock markets as most of the decisions are based upon greed, irrationality and insufficient knowledge. Rational decision making demands technical knowledge and practical experience. According to Bhat, *et al.* [8] rational investors form rational expectation about asset return, motivated by maximizing principal. They collect available and relevant information for making decisions. Dhar and Dey [9] examined the impact of human psychology on investment decisions in Indian perspective. Qualitative data was collected from both male and female individual investors from different part of the country by using a structured questionnaire. Results of this study prove that most individual investors try to cut down their feelings of uncertainty and take decisions by gaining investment related information by observing the behavior of other investors.

Zaidi and Tauni [10] studied the relationship between demographics, personality traits of investors and overconfidence bias in the Lahore Stock Exchange. They found that investors are purely rational. Warne [11] focused on investment behavior of individual investors in the stock market. Findings suggest the impact of investment duration and knowledge on investment decisions. Javed. T. *et al* [12] conducted research on herding behavior in Karachi Stock Exchange. They did not find the evidence of herding behavior in the Karachi Stock market. Aduda and Onsongo [13] analyzed the behavioral aspects of investors and its impact on their financial performance at Nairobi stock. They found that some investors' decisions were rational whereas other investors' decisions were irrational.

## 2. MATERIALS AND METHODS

We use questionnaire to collect the data. We measure rational and irrational behavior of individual investors and its impact on profitability. Correlation is measured among three variables, namely rational decision, irrational decision making and profitability. T-test is used to compare the mean score for two groups – Male and Female.

One way ANOVA is employed to compare the different sources of variance within the data set. Major objective is to determine significant differences between two or more groups. Refer Table 1 and 2. This test is an extension of T-test. One categorical variable used for this test was “Qualification (undergraduate, graduate, masters and M.Phil)” and continuous variable was “Rational decision making”.

Mainly we test for following hypothesis:

- H1: The profitability of individual investors increases by rational decisions.
- H2: Rational decisions are taken more by highly qualified investors as compared to middle and low qualified investors.
- H3: Males make more irrational investment decision as compared to females.

## 3. RESULTS

Hypothesis 1 was examined by analyzing the correlation between rational decision making and profitability. The correlation is 0.223, P-value (sig) .033 that means both the continuous variables are significantly correlated, but with a weak relationship with the strength of 0.60. Hence investors can increase profitability by rational decision making. Hence we accept the alternative hypothesis and reject the null hypothesis. Our this finding is in line with the findings of Dr. Kaushal A. Bhatt [14] who conducted research on investment and trading pattern of individuals' in Gujarat (India) stock market. He concluded that investors of Jamnagar city invest their funds keeping in view safety and return on investment.

**H<sub>0</sub>:** The profitability of individual investors increases by irrational decisions.

**H<sub>A</sub>:** The profitability of individual investors increases by rational decisions.

Hypothesis 2 was tested through one way ANOVA, for one way ANOVA continuous variable is rational decision making and categorical variable is education (undergraduate, graduate, masters, M.phil). The results are analyzed by taking into consideration sum of squares (SS) between groups, within groups and total sums of squares. We have  $SS_{\text{between}} = 45.92$ ,  $SS_{\text{within}} = 17.5417$ , and the  $SS_{\text{total}} = 2652.901$ . Mean squares (MS) between groups:  $MS_{\text{between}}$  is obtained by dividing the  $SS_{\text{between}}$  with degrees of freedom (*df*) i.e.  $df_{\text{between}}$  so the  $MS_{\text{between}} = 15.317$ . Likewise Mean squares (MS)

within groups:  $MS_{\text{within}}$  is obtained by dividing  $SS_{\text{within}}$  with (degree of freedom) i.e.  $df_{\text{within}}$  so the  $MS_{\text{within}} = 2606.949$ . The level of significance is  $\alpha = .05$ . Thus, we can conclude that the difference was not found between the groups because the significance level was greater than 0.05. Therefore, we accept the null hypothesis and reject the alternative hypothesis. Our results support the findings of Hisashi Kaneko (2004) who conducted research on individual investors and investments trusts in Japan. He concluded that most of the investor behavior is irrational.

**H<sub>0</sub>:** Rational decisions are not taken more by highly qualified investors as to middle and lowly qualified investors.

**H<sub>A</sub>:** Rational decisions are taken more by highly qualified investors as compared to middle and lowly qualified investors.

**Table 1. Details of categorical variable "qualification".**

Qualification	N	Subset for Alpha = 0.05 1
Undergraduate	4	30.0000
Graduate	7	31.7931
Masters	29	32.3333
M.Phil	51	30.1429
Sig		.804

**Table 2 Post hoc test – Multiple comparisons of rational decision making.**

(I) Qualification	(J) Qualification	Mean Difference (I-J)	Sig.
Undergraduate	Graduate	-1.79310	.927
	Masters	-2.33333	.844
	M.Phil	-.14286	1.000
Graduate	Undergraduate	1.79310	.927
	Masters	-.54023	.974
	M.Phil	1.65025	.891
Masters	Undergraduate	2.33333	.844
	Graduate	.54023	.974
	M.Phil	2.19048	.754
M.Phil	Undergraduate	.14286	1.000
	Graduate	-1.65025	.891
	Masters	-2.19048	.754

Hypothesis 3 was tested through Independent sample t-test. For independent sample t-test, one continuous and one categorical variable was required. In our analysis categorical variable is Gender (Male and Female) and continuous variable is irrational decision making. By Leven’s test we obtain .285 as it is greater than cut out of .05 the condition of equal variances is not violated. On the basis of this, 2-tailed significance level is chosen. The value of 2-tailed significance is higher than .05(.285), there is significant variation in the mean scores of rational decision making for females and males. Scores for males were significantly different ( $M = 16.8317$ ,  $SD = 3.69884$ ) from females ( $M = 17.5417$ ,  $SD = 3.93002$ );  $P = .285$  (two-tailed). Hence males are not more irrational decision makers in comparison to females.

These findings are in accordance with the findings of J. Kartasova [15]. He concluded that women are more overconfident investors than men, the more experienced is an investor the more overconfident he or she is.

**H<sub>0</sub>:** Males are not more irrational decision makers as compared to females.

**H<sub>A</sub>:** Males make more irrational investment decisions as compared to females.

**4. CONCLUSIONS**

This study analyzes the impact of rational decision making on investors' profitability. The correlation was used to test the hypothesis. We also find that male individual investors are not more irrational decision makers as compared to female individual investors. This hypothesis was tested by

Independence sample t-test. Overall, we found that rational decision making increases the profitability of the individual investors.

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