Influence of Risk Perception of Investors on Investment Decisions: An Empirical Analysis

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Abstract

Risk is an inherent feature of all types of financial investments due to the variability in the actual and expected returns on investment. The concept ‘risk perception’ means the way in which investors view the risk of financial assets, based on their concerns and experience. The risk perception of investors is an important factor that influences the investment decisions. Hence, in the present study, based on the review of literature and discussions with experts in the field a number of factors influencing the risk perception of investors were identified. These factors include unpredictability of returns, knowledge about the financial assets, chance for incurring loss, diversification of portfolios, and dependence on professional investment advice. The investors were provided with nine statements relating to risk, to measure their perception towards risk. In the present paper, the relation between risk perception of the investors in the Kerala State and their investment decisions in mutual funds is analysed.

Keywords: Investors, Risk Perception, Investment Decisions

1. Introduction

The influence of risk perception on the investment decisions of a prudent investor is an emerging subject in the behavioural finance literature. Risk is an inherent feature of all types of financial investments. It is the probability that the actual return on an investment will be lower than the expected return.

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Perception is the process by which an individual is in search of pre-eminent clarification of sensory information so that the investor can make a final judgment based on their level of expertise and past experience. The concept ‘risk perception’ means the way in which investors view the risk of financial assets, based on their concerns and experience. Risk perception is the belief, whether rational or irrational, held by an individual, group, or society about the chance of occurrence of a risk or about the extent, magnitude, and timing of its effects.is a critical success factor that promotes effective decision-making in risky situations. Complicating the analysis of financial risk is the fact that each investor has his or her own tolerance of risk and perception towards risk. The risk perception of investors is an important factor that influences the investment decisions.

Investment decision generally means the determination made by investors as to where, when, how, and how much funds will be invested on various avenues of financial products/instruments with the objective of generating income or appreciation in value. Here, the concept investment decision is defined as the decision taken by individual investors while investing in mutual funds. The behavioural finance scholars found out that decisions could be influenced by unavoidable psychological and emotional factors. Better understanding of these factors will help the investors to take an appropriate investment decision and also help them to avoid their repeating mistakes in future in extracting the best financial investment avenue. Usually, the investors are evaluating the risk and return of an investment decisions. The decision making behaviour of an investor is affected by their attitude towards risk. At different levels of perception towards risk, the individual investors think differently about their investment and make decisions differently. Investors take risks according to their interpretation and perception which ultimately affect their behaviour towards risky investment decisions. In this situation, in the present study an attempt is made to examine the influence of risk perception of individual investors on their investments in mutual funds.

2. Review of Literature

Investment Company Institute (1993) conducted a study based on the objective to examine mutual fund shareholder perceptions of risk. In examining investors' perception of risk-return trade-off, the ICI findings suggested that mutual fund shareholders have a better understanding of an investments' potential return of fixed-income products. A shareholders' family history could influence his or her investment behavior and tolerance for financial risk.
Madhumarthi (1998) carried out a research to find out the preferences of the investors and their perception about the risk in the Indian markets. Three classes of investors had been identified based on their risk perception namely, risk seekers, risk bearers and risk avoiders. The result indicated that a majority of the investors were influenced by the operating performance of the companies. The risk perception influenced the investment decisions of the investors and the profit earned by them.

Swarup (2000) conducted a study on investor risk-return perceptions towards various investment avenues and based on this, the strategies that need to be adopted by mutual funds to penetrate the markets were discussed.

Diacon (2004) presented the results of a detailed comparison of the perceptions by individual consumers and expert financial advisers of the investment risk involved in various UK personal financial services’ products. Factor similarity test showed that there were significant differences between expert and lay investors in the way financial risk were perceived. Financial investors were likely to be less loss averse than lay investors, but were prone to affiliation bias, believed that the products were less complex, and were less cyclical and distrustful about the protection provided by the regulators. The traditional response to the finding was that experts and non experts had different perception and understanding about risk.

Veld and Veld-Merkoulova (2008) studied risk perception of individual investors by asking experimental questions to 2,226 members of a consumer panel. Their responses were analysed in order to find which risk measure they implicitly used. They found that most investors implicitly use more than one risk measures. For those investors who systematically perceive risk according to the same risk measure, semi-variance return was most popular.

The investors stated that they considered that the original investment was the most important benchmark followed by the risk free rate of return and market return. However, their choices in the experimental questionnaire study revealed that market return was the most important benchmark.
From the review of studies cited above, it is found that most of the studies were analysed the risk perception of investors. The literature still lacks a comprehensive study establishing the influence of risk perception of mutual fund investors on their investment decisions. The present study is designed based on this background.

3. **Objective the study**

The objective of the study is to establish the influence of risk perception of individual investors on their investment decisions in mutual funds.

4. **Hypothesis**

The hypothesis formulated for the study is given below.

There exists a positive relationship between risk perception of individual investors and their investment decisions.

5. **Research Methodology**

The present study is descriptive and explanatory in nature. Both secondary and primary data were collected and used for the study. The secondary data source of the study include books, journals, periodicals, publication of various mutual fund organisations, website of AMFI, website of SEBI, government publications and websites of various mutual fund companies. Primary data required for the study were collected from 900 individual investors in Kerala who have investments in mutual funds. Multi-stage sampling was adopted for selection of respondents for the study. In the first stage, the State of Kerala was divided into three regions namely Southern, Central and Northern regions. Southern Region consists of Thiruvananthapuram, Kollam, Pathanamthitta and Alappuzha revenue districts of the State. The Central Region includes Kottayam, Idukki, Eranakulam and Thrissur revenue districts of Kerala. Northern Region of the State covers Palakkad, Malappuram, Kozhikode, Wayanad, Kannur and Kasargod revenue districts.

In the second stage, Thiruvananthapuram district from the Southern Region, Ernakulam district from the Central Region and Kozhikode district from the Northern Region were selected for the study.
These districts were selected based on judging criteria on the presumption that there are more individual investors in mutual funds in these districts and also by giving due consideration to geographical location. The features of these districts are Thiruvanathapuram district the State capital, Ernakulam district the industrial capital and Kozhikode district the trade capital of the state. In the third stage, 300 mutual fund investors each from these three districts were selected by using convenience sampling method subject to the fulfillment of the inclusion criteria such as gender, income, age, education, occupation and area of residence. In order to achieve the objective of the study, a well structured questionnaire was developed and used for collecting primary data. The questionnaire was finalised after conducting a pilot study among 50 individual investors in mutual funds in Ernakulam district.

On the basis of the experience from the pilot study, some of the questions were refined with a view to ensuring the correctness of the responses and included in the final questionnaire. A number of experts/consultants in the mutual fund industry have been consulted and their suggestions were incorporated while finalising the questionnaire to ensure the content validity of the instrument. An assessment of the reliability of the scale of measurement used for measuring the variables is necessary because reliability refers to the degree of dependability, consistency or stability of a scale of measurement. In the present study, the reliability of the scale of measurement was assessed by using Cronbach Alpha coefficient, which was above the minimum acceptable level, 0.845 thereby confirmed the reliability of the scale of measurement. The questionnaire developed for collecting primary data was administered to the respondents and their responses were collected through filled up questionnaire. The collected data were tabulated and analysed with the help of SPSS. The statistical tools used for analysis include Weighted Average Mean, Standard Deviation, Co-efficient of Variation, and Simple Regression Analysis.
6. Data Analysis and Discussions

6.1. Risk Perception of Investors

Investment decision of individual investors in financial assets is usually affected by their risk perception. Hence, in the present study based on the review of literature and discussions with experts in the field a number of factors influencing the risk perception of investors were identified. These factors include unpredictability of returns, knowledge about the financial assets, chance for incurring loss, diversification of portfolios, and dependence on professional investment advice. The concept ‘risk perception of individual investors’ is operationally defined here as their beliefs, feelings, concerns, experiences and judgments about these factors. In order to measure the risk perception of individual investors, nine statements were developed based on these factors and the opinions of the respondents were measured on a five point rating scale. These statements include ‘my approach is to be cautious and avoid all risky investment’; ‘an investment that involves a great deal of risk is not really investments but it is gambling’; ‘the more money one has, the more investment risk one can take’; ‘my broker decides the best investment level for me’; ‘the more familiar an investment, the less risky it is’; ‘a diversified portfolio reduces risk’; ‘the older people take lesser investment risk’; ‘the need to liquidate quickly prohibits me from considering riskier products’; and ‘the higher an investments' yield or rate of return, the greater is its associated risk’. 
The responses, thus, collected from the respondent investors were analysed and presented in Table 1.

**Table 1 Risk Perception of Investors**

<table>
<thead>
<tr>
<th>Risk Perception</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>C. V.</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>A diversified portfolio reduces risk.</td>
<td>4.48</td>
<td>0.73</td>
<td>16.36</td>
<td>1</td>
</tr>
<tr>
<td>The higher an investments' yield or rate of return, the greater is its associated risk.</td>
<td>4.08</td>
<td>0.97</td>
<td>23.84</td>
<td>2</td>
</tr>
<tr>
<td>The more familiar an investment, the less risky it is.</td>
<td>3.98</td>
<td>0.98</td>
<td>24.67</td>
<td>3</td>
</tr>
<tr>
<td>My approach is to be cautious and avoid all risky investment.</td>
<td>3.93</td>
<td>1.02</td>
<td>25.95</td>
<td>4</td>
</tr>
<tr>
<td>The need to liquidate quickly prohibits me from considering riskier products.</td>
<td>3.88</td>
<td>0.92</td>
<td>23.83</td>
<td>5</td>
</tr>
<tr>
<td>The more money one has, the more investment risk one can take.</td>
<td>3.82</td>
<td>0.9</td>
<td>23.46</td>
<td>6</td>
</tr>
<tr>
<td>My broker decides the best investment level for me.</td>
<td>3.58</td>
<td>1.22</td>
<td>34.04</td>
<td>7</td>
</tr>
<tr>
<td>An investment that involves a great deal of risk is not really investments but it is gambling.</td>
<td>3.36</td>
<td>0.98</td>
<td>29.22</td>
<td>8</td>
</tr>
<tr>
<td>The older people take lesser investment risk.</td>
<td>3.23</td>
<td>1.26</td>
<td>39.16</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: Field Survey

From the Table 1, it is clear that a diversified portfolio reduces risk is ranked first (Mean Value 4.48) followed by the higher an investments' yield or rate of return, the greater is its associated risk (Mean Value 4.08).

6.2. Investments in Mutual Funds

There are various avenues of investments available for investors to allocate their savings. From the analysis of the risk perception of investors, it is clear that investors are highly financial conservative. Therefore, they prefer efficient portfolio which will give maximum return with minimum risk.
As mutual funds ensure a reasonable level of return, it is essential to know how much they invest in mutual funds. In this study the investment decision of individual investors is measured based on the amount of funds invested in mutual funds out of their total amount of investments in financial assets.

The percentage of amount of investment in mutual funds to the total investments was grouped into four categories namely, less than 25 per cent, 25-50 per cent, 50-75 per cent and 75-100 per cent. To understand the percentage of investments in mutual funds by the investors, they were asked to mention their investments in mutual funds. The Table 2 shows the amount of investments in mutual funds by the respondents under study.

**Table 2 Investments in Mutual Funds**

<table>
<thead>
<tr>
<th>Investments in MFs (Percentage to Total Amount of Investments in Financial Assets)</th>
<th>Number of Investors</th>
<th>Percentage to Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25%</td>
<td>166</td>
<td>18.4</td>
</tr>
<tr>
<td>25% - 50%</td>
<td>135</td>
<td>15.0</td>
</tr>
<tr>
<td>50% - 75%</td>
<td>133</td>
<td>14.8</td>
</tr>
<tr>
<td>75% - 100%</td>
<td>466</td>
<td>51.8</td>
</tr>
<tr>
<td>Total</td>
<td>900</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey

From Table 2, it is clear that, out of the 900 investors, 18.4 per cent of the respondents having less than 25 per cent investment, 15 per cent of the respondents are having 25-50 per cent investment, 14.8 per cent have invested between 50-75 per cent and 51.8 per cent have invested 75-100 per cent of their total financial investments in mutual funds. So, majority of the respondents 734 (81.56 per cent) covered in the study have invested more than 25 per cent of their total amount of financial investments in mutual funds.

6.3. Influence of Risk Perception of Investors on Investment Decisions in Mutual Funds

Investment decisions of mutual fund investors are very much influenced by their risk perception. In 1993, Investment Company Institute carried out a study titled ‘piecing together shareholder perception of investment risk.’ A major objective of the study was to understand shareholders attitudes about risk.
To this end, shareholders were asked to indicate their level of agreement with a number of risk related statements. In the same way, for the present study also, nine risk related statements were asked to the investors in order to know the influence of their risk perception on investment decisions in mutual funds.

Reliability was measured and the Cronbach Alpha was found to be 0.734, which was above the acceptable minimum of 0.70.

The investors’ were asked to rate these statements according to their perception on a five point Likert Scale. A score of 1, 2, 3, 4 and 5 was given to each statement for the responses strongly disagree, disagree, no opinion, agree and strongly agree, respectively. Then a total score for risk perception was obtained by adding the scores of all the statements related to risk perception. Then this score was compared with the respondents’ mutual fund investment decisions to study the level of its influence on their investment decisions. The test of significance was achieved with the help of simple regression analysis and the results thus obtained are presented in Table 3.

Table 3. Risk Perception of Investors and Investment Decisions in Mutual Funds - Regression Analysis

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Risk Perception of Investors</td>
<td>0.093</td>
<td>0.001</td>
<td>0.978</td>
<td>141.915*</td>
</tr>
<tr>
<td>Adjusted R^2 = 0.957</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 0.01 levels

From the regression analysis (Table 3), it is clear that investment decisions of investors is very much influenced by their risk perception of investors as the result is significant at one per cent level. The Standardised regression coefficient for risk perception is 0.978 and adjusted R^2 is 0.957. Hence, the result supported and proved the hypothesis formulated for the study.
7. Conclusion

From the foregoing analysis, it is clear that mutual fund investors are financial conservatives. They are aware about the principle higher the risk, higher will be the return and at the same time they understand that diversified portfolio will reduce the risk.

So the investors should consider investing in a combination of schemes to achieve their specific goals. There is a need for Indian Mutual Funds to come out with innovative products that cater to the ever changing customer requirements.

Diversified products will keep the present momentum going for the industry in a more competitive and efficient manner. The Asset Management Companies must consider the changing perceptions, especially risk perception of investors while launching new products. This will help the Mutual Funds to capture the market.
References


