A STUDY ON INVESTORS’ BEHAVIOR TOWARDS EQUITY AND MUTUAL FUNDS

1R.Jayaraman, 2Dr. G. Vasanthi & 1M.S.Ramaratnam
1Faculty of Management Studies, SCSVMV University, Kanchipuram, Tamil Nadu – 631561
2Department of Commerce, Annamalai University, Annamalainagar, Tamil Nadu -608 002.

Abstract

The Indian capital market is providing more opportunities to both institutional and individual investors for parking their investment and getting optimum return. Equity market is one of the major segments in the Indian Capital market. In the recent years Participation of individual investors in the equity market is getting increased. Dividend, capital appreciation/gain, Rights issue, bonus etc are some of the benefits extended by the equity market to the investors. Return in the form of dividend or capital appreciation is always related with the risk. In this context it is imperative to study the investor behavior in terms of taking risk while investing equity or equity related investment. By keeping the above fact in the view the current study is conducted to test the rationality of investors towards equity investment and to know the factors influencing the choice of investor in selecting mutual fund schemes.

Key words: Investor Behavior, Rationality of the Investors, Equity investment, Mutual fund schemes.

Introduction

Formation of capital is playing a vital role in determining the economic growth of a country. Without the formation of capital production and service activities can’t be carried out. The capital formation is equal to the sum of investment made by the financial institutions, government agencies, Individual/retail (individual households) investors, industries, etc. If a country is focusing on capital formation it should provide a platform which should be conductive and productive in motivating investments from the institutions as well as individuals. In the developing economies the level of contribution towards investment in financial assets by the individual investors is at an increasing trend. Hence the higher level of participation of individual households in the financial markets of developing economies is witnessed. Financial markets are not only facilitating the institutions in deploying their funds but also motivation and welcoming the individual investors to contribute their savings in the market as a retail investment. There is a huge scope for retail investors in the financial markets of the developing economies. Financial markets are providing wide range of financial products meeting the different needs of the retail investors. The investment of individual is majorly depending upon the savings made by the individual out of the earnings of the individual. However savings of the individual is possible only by sacrificing or minimizing the consumption. The Economic development of any country is mainly based on the savings and investment habit of the individual households of the country. It is highly necessary to study the trend and pattern of investment made by the general public and government and private institutions for making the assessment with respect to the growth of any economy.

The expectation of any individual investor is to earn something more or additional from the actual money invested either in the physical assets or financial assets. Any investment made in the financial securities or instruments is the investment in the financial assets. Shares, Bank Fixed Deposits, debentures, long term and short term bonds, treasury bills issued by the government, various mutual funds, Unit linked insurance plans etc are some of the financial instruments.

Every economy should inculcate the habit of savings and investments in the minds of the individual households to generate fund for the purpose of any productive usage by the country. Household sector is acting as one of the major sources of finance for industries, banks, government and the economy as the whole. So it is highly essential to study the investment activity of individual household investors. In case of studying the investment activity of individual households’ the investment behavior of the each individual household is an important factor to be studied.

After the implementation of New Economic Policy in India the Indian financial market is facing radical changes. Some of the radical changes in the Indian Financial Market are:

a) Online trading
b) Establishment of depositories
c) New Hybrid and Innovative financial products
d) Effective clearing house facility
e) Online banking facility
f) Automated lending and borrowing system for securities trading
g) Increasing in the Participation of Foreign institutional investors
h) Increasing in the Participation of Foreign individual investors inclusive of NRIs
i) Increasing in the Participation of domestic institutional investors
j) Increasing in the Participation of domestic individual investors
k) Mergers and acquisitions
l) Availability of venture capital, seed capital financing and bridge loans
m) Micro credit and financial inclusion
n) Establishment of Investor grievance redressal cell etc
Out of which one of the major changes in the Indian financial market is the shift from savings oriented market to investment oriented market. By taking a level of risk an individual investor can obtain an optimum return out the investment in the financial assets.

**Need for the Study**

As it is very important to study the investment activities of the individual households which in turn one of the major determinants of the capital formation of a country, an attempt has been made in this study to understand the savings pattern and investment preference of the individual households towards various financial assets available.

**Statement of the Problem**

This study mainly focused finding out the preference, expectations, attitude and behaviour of the investors against various investment avenues available in the Indian stock market “Here the problem of the study is mainly focused on finding out the investor’s attitude and rationality in choosing their investment avenue.

**Objectives of the Study**

- To find the investor’s behaviour in choosing Equity as their investment choice
- To study the factor that influence In investing in mutual funds

**Sampling Method**

The research was made by the survey in accordance to the convenience, so the sample type is Non-probability convenience sampling.

**Sample Size**

This refers to the number of items to be selected from the universe to constitute a sample. The size of sample should not be excessively too large or too small, so it must be optimum, so a normal sample size of 75 is selected for research. An optimum sample is one, which fulfils the requirements of efficiency, representativeness, reliability and flexibility.

**Research Tool**

- The structured questionnaire was prepared and the same was distributed to the investors. For the purpose of data analysis we have many tools to be used.
  - Statistical tools
    - Factor Analysis
    - Z-test

**Limitations of the Study**

- Reluctance of the people to provide complete information about themselves can affect the validity of responses.
- Since analyzes has been made from the information given by the respondents, the accuracy of the findings are depended on the quality of the respondents.
- The sample size of 75 is only a small percentage of total investing public in Kanchipuram, therefore it is only a representation report based on the sample study.
- This study has been limited by time and cost factors.
- The information can be biased due to use of questionnaires.

**Hypotheses**

- 60% investors are Rational.
- Ho: 60% investors are affected by Disposition Effect
- Ho: 60% investors are conservative
- Ho: 60% investors are affected by Cognitive Dissonance.
- Ho: 60% investors are Regret Investor

**Analysis and Interpretation**

**Table 1: Hypothesis 1:-**

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Rational Option</th>
<th>Rational Investor</th>
<th>Irrational Investor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Option No. 2</td>
<td>25</td>
<td>50</td>
<td>75</td>
</tr>
<tr>
<td>10</td>
<td>Option No. 1</td>
<td>28</td>
<td>47</td>
<td>75</td>
</tr>
<tr>
<td>11</td>
<td>Option No. 1</td>
<td>22</td>
<td>53</td>
<td>75</td>
</tr>
</tbody>
</table>

*Source: Computed data*

Here in question-1, Investors who supposed to be rational would like to select option 2 because compare to option 1 option 2 is profitable. From the table 6.24 it is inferred that
25 investors selected option 2nd it show that 33% investors are rational and 50 investors select option 1st it means 67% investors are irrational.

In question-10, Under the rationality assumption of expected utility theory investors have to choose option 1 because option 1 offered loss of Rs. 100 and option 2 loss of Rs. 140. 28 investors select option 1st it show that 37% investors are rational and 47 investors select option 2nd it means 63% investors are irrational.

In question no. 11 As per Rationality theory of behavior finance, intuition of investors is not playing any role in deciding or taking decision. The investors who are Rational they select option 1, that contain “no effect” of intuition and who are irrational investors they select option 2 & 3, these contain “little effect” and “high effect”. 22 investors select option 1 means 29% investors are rational on the other hand 53 investors who select option 2 & 3 means 71% investors are irrational.

\[
Z_{cal} = \frac{\hat{p} - p}{\sqrt{pq/n}}
\]

\[
N = 75 p = 60 q=40 \hat{p} = (25+28+22)/3 = 25
\]

\[
| (25-60)/(60*40)/75)^{.5} | = 6.18718
\]

Zcal >Ztab , Ho is rejected and it can conclude that less than 60% investors are irrational

**Table 2: Hypothesis 2:-**

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Option for Disposition effect</th>
<th>Disposition Effect</th>
<th>No Disposition Effect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
<td>53</td>
<td>22</td>
<td>75</td>
</tr>
<tr>
<td>8</td>
<td>2, 3 &amp; 4</td>
<td>58</td>
<td>17</td>
<td>75</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>55</td>
<td>20</td>
<td>75</td>
</tr>
</tbody>
</table>

Source: Computed data

The disposition effect means sell the winner too soon and hold the looser too long. To check the disposition effect 3 questions were formed in a case form. Investors were asked about their decision for holding or selling winning stock and looser stock. The investors who prefer to sell winning stock and ready to hold looser stock were categorized as investors affected by disposition effect.

\[
N = 75 p = 60 q=40 \hat{p} = (53+58+55)/3 = 53
\]

\[
| (53-60)/(60*40)/75)^{.5} | = 1.237
\]

H0 is accepted, it means 60% investors are affected by Disposition Effect

**TABLE 3 Hypotheses 3:-**

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Option for Conservatism</th>
<th>Conservative Investors</th>
<th>Non Conservative Investors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1 &amp; 2</td>
<td>59</td>
<td>16</td>
<td>75</td>
</tr>
<tr>
<td>14</td>
<td>3 &amp; 4</td>
<td>23</td>
<td>52</td>
<td>75</td>
</tr>
</tbody>
</table>

Source: Computed data

Conservative is simply means traditional. Conservative investors believe in past information. They are very slow to accept any new information that available in market regarding particular stock. Here, in question 4 and 14 particular case was given for their investment and asked about their decision regarding current investment. From the table it can observe that at the time of negative news (Question 4) investors were more conservative compared to positive news (Question 14).

\[
N = 75 p = 60 q=40 \hat{p} = (59+23)/2 = 41
\]

\[
| (41-60)/(60*40)/75)^{.5} | = 3.35876
\]

Ho is rejected and it can conclude that less than 60% investors are conservative.

**Table 4 Hypothesis 4:-**

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Option for Cognitive Dissonance</th>
<th>Cognitive Dissonance</th>
<th>Non Cognitive Dissonance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>3 &amp; 4</td>
<td>19</td>
<td>56</td>
<td>75</td>
</tr>
</tbody>
</table>

Source: Computed data
Cognitive Dissonance investors believe in changing their portfolio or change their investment patterns to support their financial decision or support new information that is given by faithful resources. The investors were asked to sell all stocks from portfolio and invest that money in another industry investors select options 3 or 4 so it is said that 53% investors are Cognitive Dissonance investors. They are ready to change in investment pattern to support financial information that available in market. 61 investors select options 1 or 2 that mean 47% investors are non cognitive dissonance investors that means they are stick to their past experience and investment (Conservatism).

\[ N = 75 \ p = 60 \ q=40 \ p^a = 19 \]

\[ | (19-60)/((60*40)/75)^.5 | = 7.24784 \]

H0 is rejected; it means less than 60% investors are affected by Cognitive Dissonance

Table: 5 Hypothesis 5:-

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Option Regret</th>
<th>Regret No.s</th>
<th>Regret %</th>
<th>No Regret %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1</td>
<td>37</td>
<td>49.3</td>
<td>50.7</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>2 &amp; 5</td>
<td>17</td>
<td>22.67</td>
<td>77.33</td>
<td>100</td>
</tr>
<tr>
<td>15</td>
<td>2 &amp; 5</td>
<td>30</td>
<td>40</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Computed data

In stock market we found regret as that in order to avoid the regret of pain people try to justify their bad investment decisions by putting responsibility on some other reference point. In other words in profit situation they give credit to themselves and on the other hand in loss situation they give credit for this situation to other like their broker advice or friend advice or suggestion by TV or News Papers. In question 5 investors offer credit to friends’ mistake compare to bad luck. In question 6 investors give credit to others for their losses but in question 15 investors give credit to self for their profit. It supports the theory of Regret.

\[ N = 75 \ p = 60 \ q=40 \ p^a = (37+17+30)/3 = 28 \]

\[ | (28-60)/((60*40)/75)^.5 | = 5.65685 \]

H0 is rejected; it means 60% investors are No Regret Investors.

Factor Analysis

Importance in the choice of Mutual fund scheme

Table: 6 KMO and Bartlett's Test

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</th>
<th>Bartlett's Test of Sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx. Chi-Square</td>
<td>626.024</td>
</tr>
<tr>
<td>df</td>
<td>105</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Computed data

From the table it is inferred that the value of KMO statistics is greater than 0.5 indicate that Factor Analysis could be used for give set of data.

Table: 7 Rotated Component Matrix

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital appreciation</td>
<td>.705</td>
<td>.259</td>
<td>-.090</td>
<td>-.157</td>
<td>.180</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>.848</td>
<td>.226</td>
<td>.128</td>
<td>-.030</td>
<td>-.109</td>
</tr>
<tr>
<td>Tax benefit</td>
<td>.657</td>
<td>-.205</td>
<td>-.144</td>
<td>.228</td>
<td>.250</td>
</tr>
<tr>
<td>Liquidity</td>
<td>.789</td>
<td>.000</td>
<td>-.017</td>
<td>.362</td>
<td>.085</td>
</tr>
<tr>
<td>Safety</td>
<td>.506</td>
<td>-.062</td>
<td>-.138</td>
<td>.387</td>
<td>.431</td>
</tr>
<tr>
<td>Loan facility</td>
<td>-.109</td>
<td>-.118</td>
<td>.877</td>
<td>.088</td>
<td>-.025</td>
</tr>
<tr>
<td>Convenience</td>
<td>-.091</td>
<td>.037</td>
<td>.824</td>
<td>.327</td>
<td>-.043</td>
</tr>
<tr>
<td>Fund manager background</td>
<td>.148</td>
<td>.116</td>
<td>.111</td>
<td>.909</td>
<td>.065</td>
</tr>
<tr>
<td>Early bird incentive</td>
<td>.129</td>
<td>.150</td>
<td>.351</td>
<td>.807</td>
<td>.091</td>
</tr>
<tr>
<td>Investor services</td>
<td>.104</td>
<td>.093</td>
<td>.664</td>
<td>-.018</td>
<td>.397</td>
</tr>
<tr>
<td>Past performance of the fund</td>
<td>.134</td>
<td>.093</td>
<td>.057</td>
<td>.103</td>
<td>.864</td>
</tr>
<tr>
<td>Investment philosophy</td>
<td>.002</td>
<td>.563</td>
<td>.229</td>
<td>.017</td>
<td>.690</td>
</tr>
<tr>
<td>Transparency in operation</td>
<td>.042</td>
<td>.851</td>
<td>-.006</td>
<td>.193</td>
<td>.060</td>
</tr>
<tr>
<td>Professional management</td>
<td>.142</td>
<td>.886</td>
<td>-.041</td>
<td>-.023</td>
<td>.197</td>
</tr>
<tr>
<td>Wide investment opportunities</td>
<td>.596</td>
<td>.560</td>
<td>-.031</td>
<td>.219</td>
<td>-.103</td>
</tr>
</tbody>
</table>

Source: Computed data
The table 7 explains the obtained factors after rotation. Factor 1 comprises of Capital appreciation, Return on investment, Tax benefit, Liquidity; Factor 2 comprises of Transparency in operation, Professional management, Factor 3 comprises of Loan facility, Convenience, Investor services; Factor 4 comprises of Fund manager background, Early bird incentive; Factor 5 comprises of Past performance of the Fund and Investment philosophy. The obtained reduced factors are labelled as follows, Factor 1- Core Factor, Factor 2-Operational Factor, Factor 3- Services Factor, Factor 4-Management Factor, Factor 5- Scheme Highlight Factor and which are found to be the important elements considered by the investors while choosing the mutual fund scheme.

**Key Findings**

- 60% of the investors are irrational.
- 60% of the respondents are affected by disposition effect.
- 40% of the investors are conservative.
- 60% of the investors are affected by cognitive dissonance.
- 60% of the investors are no regret investors.
- Factor analysis is performed to know the important elements considered by the investors while choosing the mutual fund scheme. Four factors were extracted from the factor analysis such as Core Factor, Operational Factor, Services Factor, Management Factor and Scheme Highlight Factor. These factors are the important elements considered by the investors while choosing the mutual fund scheme.

**Conclusion**

The study has made an attempt to analyse the behavior of investor in selecting the avenues with respect to the equity and mutual fund investment. In order to identify the behavior of investor the important heuristic driven biases were taken into consideration and they were tested with z statistic and it was proved that most of the above said biases were rejected in choosing equity as the mode of investment. Further it was also brought to light through factor analysis that the selection of mutual fund scheme was based on certain factors like Core Factor, Operational Factor, Services Factor, Management Factor and Scheme Highlight Factor.

**References**