Chapter 6

Findings, Conclusion and Suggestions

<table>
<thead>
<tr>
<th>Chapter No.</th>
<th>Contents</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>Introduction</td>
<td>141</td>
</tr>
<tr>
<td>6.1.1</td>
<td>Findings for Descriptive Analysis</td>
<td>141</td>
</tr>
<tr>
<td>6.1.2</td>
<td>Findings for Factor Analysis (Market Specific Variables)</td>
<td>141</td>
</tr>
<tr>
<td>6.1.3</td>
<td>Findings of Regression Analysis (Impact of M.S.F. on Individual Investor’s Optimism)</td>
<td>142</td>
</tr>
<tr>
<td>6.1.4</td>
<td>Findings for Factor Analysis (Stock Specific Variables)</td>
<td>143</td>
</tr>
<tr>
<td>6.1.5</td>
<td>Findings of Regression Analysis (Impact of S.S.F. on Individual Investor’s Participation)</td>
<td>144</td>
</tr>
<tr>
<td>6.1.6</td>
<td>Findings of Regression Analysis (Impact of M.S.F and S.S.F on the Investor’s Stock Market Outlook)</td>
<td>145</td>
</tr>
<tr>
<td>6.1.7</td>
<td>Findings based on Risk Attitude</td>
<td>146</td>
</tr>
<tr>
<td>6.2</td>
<td>Conclusion, Implications of the Study and Suggestions</td>
<td>147</td>
</tr>
<tr>
<td>6.3</td>
<td>Limitations of the Study</td>
<td>149</td>
</tr>
<tr>
<td>6.4</td>
<td>Future Scope of Research</td>
<td>150</td>
</tr>
</tbody>
</table>
Chapter 6: Findings, Conclusion and Suggestions

6.1 Introduction

This chapter describes findings, conclusion and implications of the study. It covers output of data analysis and throws light on findings of the study. Conclusive remarks have been provided to explain the factors affecting individual investor’s sentiment in India and types of information is taken into consideration by individual investor at the time of investment. It also covers the future scope of research.

6.1.1 Findings based on Descriptive Analysis

- Descriptive analysis shows that majority of respondents were male (n = 517, 95.9 percent) in comparison to female respondents (n = 22, 5.1 percent). It reveals that majority of investors who invest in stock market belong to male category.
- The majority of respondents were from the age group between 26 and 35 (n = 238, 44.2 percent).
- As far as statistics of highest educational qualification of respondents is concerned majority of respondents were having education up to higher secondary (n = 216, 40.1 percent).
- Maximum number of respondents were having annual family income between Rs.2,00,001 to Rs.4,00,000 (n = 166, 30.8 percent) and belong to the service sector. Majority of respondents were married.

6.1.2 Findings for Factor Analysis Performed for Market Specific Variables

Based on factor analysis of market specific variables six factors are extracted and it is found that the first factor “Herd Behaviour” explains the maximum variance 13.76 percent, the second factor “Macro-Economic factors” explains 12.14 percent variance, third factor “Internet Led Access to Information and Trading” explains 11.01 percent variance, fourth factor “Best Game in Town” explains 9.19 percent of variance, fifth factor “Performance Factor and Confidence of Institutional Investors” explains 8.71 percent of variance and the sixth factor “Risk and Cost Factors” explains 8.12 percent of variance.
6.1.3 Findings of Regression Analysis Conducted to assess the Impact of Market Specific Factors on Individual Investor’s Optimism

Multiple regression analysis is conducted to test the impact of market specific factors on investor’s optimism. It is found that the regression model is significant ($R^2 = 0.644$, $p < 0.05$). In this study the VIF value of all independent variables is between 1.016 to 6.735 which are below 10. So there is no multicollinearity problem in the regression model (Hair et al. 1998). Out of the six market specific factors, Herd Behaviour, Macro-Economic Factors, Internet Led Access to Information and Trading and Performance Factors and Confidence Level of Institutional Investors are significantly affecting the dependent variable Investor’s Optimism whereas the Best Game in Town and Risk and Cost Factors are not having the significant impact on investor’s optimism.

Herd Behaviour means tendency of the individual investors to mimic the actions of other people. If experienced and well informed investor is investing in particular stock then other investors blindly follow him/her as far as investment is concerned. This has already been established by Singhvi (2001) in her study. According to Devenow and Welch (1996) and Hoffmann et al. (2007) investors disregard their prior beliefs and follow other investors blindly. Chang Eric C. et al. (2000) documented partial evidence of herding in Japan and significant evidence of herding in South Korea and Taiwan. Hwang and Salmon (2004) and Wang and Canela (2006) documented higher level of herding in emerging market in comparison to developed markets. The current study result is consistent with the previous research that herd behaviour is significantly affecting investor’s optimism but varies from the finding of E. Bennet et al. (2012) in Tamilnadu and Ghana.

Macro-Economic Factors like Rate of Interest, Rate of Inflation, Price of Crude Oil, GNP and GDP, are having significant impact on investor’s attitude towards investing in stock market of India. This finding is consistent with the result of Singhvi (2001), E. Bennet et al. (2011), E. Bennet et al. (2012), Maysami and Koh (2000), Clerc and Pfister (2001), Hassan Al – Tamimi (2007) and Chaudhuri and Smiles (2004).
New generation of investors are using more technology to avail information. Investors are hungry for more information and internet has made easy and speedy access to information and trading. The finding of the current study is consistent with the result of Freund and Diana (2001), Brad and Terrance (2001) and E. Bennet et al. (2012) (in Tamilnadu). The current study finding differs from the outcome of E. Bennet et al (2012) study conducted in Ghana.

Performance factor and confidence level of Institutional Investors factor is significantly affecting investor’s optimism. The result of current study is in line with the result of Singhvi (2001) in USA and findings of E. Bennet et al. (2012) in Ghana as well as Tamilnadu.

Best Game in Town means belief that there is no alternative investment option of stock market for good returns. It is not significantly affecting investor’s optimism. The result of current study differs from the findings of Singhvi (2001) in USA and E. Bennet et al. (2012) in Tamilnadu and Ghana.

Risk and Cost Factor is not significantly affecting Investor’s Optimism. The result of current study is supported by the findings of E. Bennet et al. (2012) in Tamilnadu and Ghana but it varies from the results of Singhvi (2001) in USA.

**6.1.4 Findings for Factor Analysis Performed for the Stock Specific Variables**

Based on factor analysis of stock Specific variables six factors are extracted and it is found that the first factor “Expected Events Surrounding the Stock and Book Value” explains 11.75 percent of variance, the second factor “Financial Characteristics” explains 11.40 percent of variance, the third factor “Psychological Factors and Quality of Management” explains 11.04 percent of variance, the forth factor “Past Price Performance and Sector Attractiveness” explains 9.37 percent of variance, the fifth factor “Who else is Buying” explains 8.98 percent of variance and the sixth factor “Recommendations of the Financial Community” explains 8.60 percent of variance.
6.1.5 Findings of Regression Analysis Performed to assess the Impact of Stock Specific Factors on Individual Investor's Participation in Stock Market

Multiple regression analysis is conducted to test the impact of stock specific factors on investor’s participation in stock market. The results of the study show that the regression model is significant ($R^2 = 0.597, p < 0.05$). In this study the VIF value of all independent variables are between 1.044 to 5.889 which are below 10. So there is no multicollinearity problem among independent variables (Hair et al. 1998). Out of the six stock specific factors Expected Events surrounding stock and Book Value, Financial Characteristics, Psychological Factors and Quality of Management, Past Price Performance and Sector Attractiveness and Recommendations of the Financial Community are significantly affecting the dependent variable investor’s participation in stock market whereas Who else is Buying is not affecting significantly the dependent variable investor’s participation in stock market.

Expected events surrounding the stock and book value include the variables like Merger and Acquisitions in the corporate sector, expected stock split, potential takeover target and book value. This factor is significantly affecting the dependent variable investor’s participation and the result of current study is supported by the findings of Singhvi (2001) but it is contradicting with the result of E. Bennet et al. (2013) in Tamilnadu.

Financial characteristics comprise variables like Dividends Yield Ratio, Earning per Share, Turnover ratio (Receivables, Inventory and Account Payables), Return on Investment and Cash flow per Share. Financial Characteristics factor is affecting significantly dependent variable investor’s participation in stock market. The finding of the present research is supported by outcome of E. Bennet et al. (2013) in Tamilnadu.

Psychological Factors and Quality of Management includes variables like Gut Feeling and intuition, Rumors, Recommended by friend, family and peers, Quality of Management and CEO Track Record and Expertise. Psychological Factors and Quality of Management is significantly affecting the dependent variable investor’s participation. Finding of the current research is contradicting with the finding of E. Bennet et al. (2013) in Tamilnadu.
Past Price Performance and Sector Attractiveness comprises variables like past price performance including any recent price over reaction and hot sector, hot stock. Past price performance and sector attractiveness is significantly affecting the dependent variable investor’s participation. Finding of the current research is supported by the findings of Singhvi (2001) but it is contradicting with the finding of E. Bennet et al. (2013) in Tamilnadu.

Recommendations of Financial Community comprises the variables like recommended by analysts and research reports, recommended by brokers and recommended by street experts and stock market gurus. Recommendation of the financial community is significantly affecting the dependent variable investor’s participation. The finding of the current research is contradicting with the finding of E. Bennet et al. (2013) in Tamilnadu.

Who else is Buying factor comprises variables like insider buying and major institutions and corporations are currently buying the stocks of the company. Who else is Buying factor is not significantly affecting the dependent variable investor’s participation. The present research finding is supported by the finding of E. Bennet et al. (2013) in Tamilnadu.


Regression analysis is conducted to test the impact of Herd Behaviour, Macro-Economic Factors, Internet Led Access to Information and Trading, Performance Factor and Confidence Level of Institutional Investors, Risk and Cost Factors, Psychological Factors and Quality of Management and Who else is Buying factors on dependent variable Stock Market Outlook. It is found that the regression model was significant ($R^2 =0.568$, $p < 0.05$). In this study the VIF value of all independent variables are between 1.134 to 7.038 which are below 10. So there is no multicollinearity problem among independent variables (Hair et al. 1998).

Herd Behaviour, Performance Factor and Confidence Level of Institutional Investors factor and Psychological Factors and Quality of Management are significantly affecting investor’s stock market outlook. The finding of the present research is supported by the finding of the Singhvi (2001) in USA
Macro-Economic Factors, Internet Led Access to Information and Trading and Risk and Cost Factors are not significantly affecting investor's stock market outlook. The result of current study is contradicting with the result of Singhvi (2001) in USA.

6.1.7 Findings based on Risk Attitude

Question no. 16 is about loss making situation and question no. 17 is about profit making situation and in each situation both the options have the same expected utility. The result of current study shows that individual investors have inconsistent attitude towards Risk. In the first case under the loss making situation the sample of respondents show risk seeking behaviour and in second question of profit making situation the sample of respondents shows risk averse behaviour. The current study reveals that the individual investors are not rational and do not behave as per the principles of Expected Utility Theory. The findings of present research are in line with findings of Kahnemann and Tversky (1979) and Singhvi (2001).

Investors do mental accounting, which means they view each investment as separate and they do not view it as whole portfolio. As per the rational expectations hypothesis money is fungible i.e. Rs.100 is exactly equal to any other Rs.100 and can be perfectly substituted. Question no.18 and 19 assess the same thing in stock market context whereas question no. 20 and 21 are replicated from the study of Kahnemann and Tversky (1984) to find out the same.

The present research findings show that 62.3 percent investors would prefer to buy the shares of ABC Company if they do not own the shares. If they already own the shares of ABC Company, only 48.2 percent investors prefer to buy the shares of ABC Company under the situation of last quarter result of ABC Company is poor but the long term prospects of the company is good. It means the respondents view two situations differently. The findings reveal that investors do mental accounting as far as investment in shares is concerned.

In the case where respondents have lost the ticket 52.1 percent respondents would buy another ticket to see the film and 65.1 percent of respondents would buy the ticket after losing Rs.150 cash. So the current study shows that the respondents view two situations differently.
The above results show that individual investor is not behaving rationally. The result of present research is supported by the finding of Kahnemann and Tversky (1984) and Singhvi (2001).

6.2 Conclusion, Implications of the Study and Suggestions

Traditional research on asset pricing has focused on firm-specific and economy-wide factors that affect asset prices. Human Behaviour has largely been ignored in understanding financial market. It is suggested that understanding investor’s sentiment can provide a better explanation of stock price performance. Present research focuses on individual investor’s sentiment towards equity market and the factors affecting it. Based on past literature review it is found that many factors are affecting individual investor’s investment decision that can be classified in two groups: market specific factors and stock specific factors. The investor’s sentiment is defined as investor’s attitude and opinion toward investing in the stocks. The investor’s sentiment is measured directly through the responses from the individual investors by survey in place of indirect methods like call-put ratio and short interest ratio. In the present research investor’s sentiment is measured through three aspects: (1) Investor’s Optimism (2) Investor’s Participation and (3) Investor’s Stock Market Outlook (Shiller 1999) as dependent variables and independent variables comprise Market Specific Factors and Stock Specific Factors.

Individual Investor’s Optimism is measured through two statements: 1) Indian stock market will rise for the next 12 months and 2) If the Indian stock market Index dropped on tomorrow, I would guess that it would recover most of losses in few days.

Individual Investor’s Participation is measured through two statements: (1) Presently I will stay invested in Indian stock market and (2) I plan to increase my investments in the Indian stock market in the next 12 months.

Individual Investor’s Stock market outlook is measured through two statements: 1) In India most stocks are overvalued relative to their fundamental value and 2) A major stock market correction like 2008 could happen in next 12 months.
Market specific factors include Herd Behaviour, Macro-Economic Factors, Internet Led Access to Information and Trading, Best Game in Town, Performance Factors and Confidence and Risk and Cost Factors.

Stock specific factors include Expected Events Surrounding the Stock and Book Value, Financial Characteristics, Psychological Factors and Quality of Management, Past Price Performance and Sector Attractiveness, Who else is Buying and Recommendations of Financial Community.

Based on analysis, it is found that investor’s optimism is explained by Herd Behaviour, Macro-Economic Factors, Internet Led Access to Information and Trading, Performance Factors and Confidence Level of Institutional Investors factors whereas Best Game in town factor and Risk and Cost Factors do not play any significant role in explaining Investor’s Optimism. Investor’s Participation is explained by Expected Events Surrounding the Stock and Book Value Factor, Financial Characteristics, Psychological Factors and Quality of Management, Past Price Performance and Sector Attractiveness, Recommendations of Financial Community whereas Who else is Buying do not play any significant role in explaining Investor’s Participation. Investor’s stock market outlook was explained by Herd behaviour, Performance Factor and Confidence Level of Institutional Investors factor and Psychological Factors and Quality of Management whereas Macro-Economic Factor, Internet Led Access to Information and Trading, and Risk and Cost Factors do not play any significant role in explaining Investor’s stock market outlook.

It is found that individual investors are optimistic as majority of investor’s believe that the stock market is going to rise in next 12 months and if it will fall on any day then it will be recovered in few days. They support investor’s optimism by staying invested under the prevailing market conditions and increasing their investment by purchasing more shares in stock market. They perceive that most of stocks are not overvalued as compared to relevant fundamental value as well as they don’t see any major stock market correction like 2008 in the next 12 months.

The present study identifies the factors affecting Individual Investor’s sentiments towards equity market in India and which kind of information an investor look at while making investment in stock market. The result of the study is useful to stock
broking firms to increase their business. Individual investors are giving importance to the news in media about stock, stories of successful investors in stock market, if everyone else is investing in stock market, information available on internet like blog, merger and acquisitions in stock market, potential takeover target, expected stock split, Dividend Yield Ratio, Earning per Share, quality of management, recommendations by family, friends and peers, recommendations of brokers, recommendations by analysts, recommendations by stock market gurus, past price performance including any recent price overreaction, rumors, confidence level of institutional investors like FII and FDI, corporate earnings, political stability, rate of interest, rate of inflation and price of crude oil. If share broking firms will focus on the above variables then they can get the more business without offering reduced brokerage charges.

The findings of the present research will be useful to stock market regulator in understanding the existing individual investor’s sentiment towards equity market and the factors affecting it. If the stock market regulator can control the rumors, simplify the regulation for merger, acquisition and takeovers, improve confidence level of institutional investors they can strengthen the stock market activity and can increase individual investor’s participation in stock market. If stock market regulator can increase individual investor’s participation in stock, it can support the growth of the country.

The findings of the present research are also useful to the Government. Currently the individual investor’s sentiment towards equity market is positive so Government can go for disinvestment in Government companies to fund the new projects for the development of the country.

6.3 Limitations of the Study:

The present research study is subject to following limitations.

- As survey of whole population was not possible due to time and cost constraints, researcher had selected samples from the universe.
- At the time of primary data collection in the questionnaire the halo effect in giving response by respondents may affect the study to some extent.
The data was collected during September 2014 to February 2015. So the result may vary if study conducted at any other point of time.

The majority of respondents were from the Gujarat state.

6.4 Future Scope of Research

- The study was conducted among the individual investors that comprised the investors who have participated in the upside as well as downside of the market and those who have participated in the stock market during the upside of the market only. Their opinion and attitude for investment in stock market is shaped by their experiences. The factors affecting investor’s view of investment decision is shaped by their experiences. It would be interesting to assess that whether the behaviour or investor's sentiment of different class of individual investors is similar or different.

- It would be interesting to assess that those factors having significant effect on individual investor’s sentiment towards equity market during the upside of the market are significantly affecting during the downside of the market.

- It would be interesting to do comparative study among different states of India as far as factor affecting individual investor’s sentiment towards equity market is concerned.

- It would be interesting to assess that those factors affecting individual investor's sentiment which are significant in India are significantly affecting the individual investor’s sentiment in other countries as well. As the buying behaviour of individuals of different countries differ for clothing, food and lifestyle due to the culture, education and financial literacy level, in the similar way, it is logical to assume that their stock picking behaviour may be different and relative importance given by them to different features of stocks.