Findings and Conclusion
CHAPTER VI

FINDINGS AND CONCLUSION

This is a new attempt of finding the risk return relationship using Capital Asset Pricing Model in the Indian Market, Generally in behavioural finance, it is considered that the security return is determined by the market risk (systematic risk) which is estimated by beta. The market is functioning in the tune of macroeconomic environment. Hence, the first chapter covers the introduction, GDP performance in India, export, import and foreign investment for last ten years and it have been demonstrated with tables and charts. Besides, some basic concept of the model and capital market is explained. The second part of the introduction chapter precisely elaborated the design of the study. The research design contains need for the study, statement of the problem, objectives of the study, hypotheses and research methodology. Research Methodology describes sample size, duration of the study, tools used in the study, limitation and finally scheme of chapterisation.

The basic requirement of the research is strong and depth review of literature to understand previous researches carried out in the field of asset pricing and to find the research gap which facilitate to further research. Therefore, in the second chapter an extensive review was carried out on previous studies on asset pricing from both Indian and international perspective is explained. In the same way, since the equity shares are quoted and traded in the stock market, it is necessary to understand the security market in terms of origin, development, technology and legal frame. Thus, the third chapter demonstrates the overview of Indian security market. Besides, it elaborates the origin, growth and development of NSE in different dimension.

In the fourth chapter the core concept of the study is significantly explained. There are different models explained adequately for the study. Firstly, it started from the expected utility hypothesis stems from Daniel Bernoulli's (1738) and secondly explained modern portfolio theory. Then, the explanation gets in to actual model of this study CAPM and finally ends with APT model developed by Stephen Ross (1975). Besides, the basic concepts of risk and return have been dealt.
Eventually, in the fifth chapter the results of empirical analysis and discussions have been drafted. The following are the findings of data analysis. As described in the research design, there are five unconditional models and five conditional models were developed for the purpose of testing the risk return relationship between portfolio excess return and the beta including statistical risk measures. In those models, different independent variables were used to build multiple regression equation. Thus, the predictive ability of the models and level of significance are furnished hereunder.

Findings

Model Validity

Across the testing period the p-values of the calculated ANOVA F-score are significant at 0.05 level. Therefore, it is understood that the forecasting models are valid in both conditional and unconditional market.

Adjusted Coefficient of Determination (Adjusted $R^2$)

The adjusted coefficient of determinations are not adequately confined in the entire 30 testing, the predicting power of the forecasting equations are not satisfactory. Only one equation is predicting the excess return around 30% level that is beta and skewness.

Significance of Regression Co-efficient

1. Intercept $\hat{\beta}_{0t}$ is significant at 0.05 level for the overall testing periods and found significance with skewness. Moreover, it is also found significant with variance which is to be ignored because of multicollinearity existence.

2. Unconditional Beta ($\hat{\beta}_{lt}$) is not significant at 0.05 level for the overall testing periods and found significance with skewness. Moreover, it is also found significant with variance which is to be ignored because of multicollinearity existence.

3. Conditional up market Beta $\hat{\beta}_{2t}$ is not significant at 0.05 level for the overall testing periods and found significance with skewness. Moreover, it is also found significant with variance which is to be ignored because of multicollinearity existence.
4. Conditional down market Beta $\beta_{3t}$ is not significant at 0.05 level for the overall testing periods and found significance with skewness. Moreover, it is also found significant with variance which is to be ignored because of multicollinearity existence.

5. Unconditional unsystematic risk $\beta_{4t}$ is significant at 0.05 level across the testing period

6. Conditional up market Unsystematic risk $\beta_{5t}$ is significant at 0.05 level across the testing period

7. Conditional down market Unsystematic risk $\beta_{6t}$ is significant at 0.05 level across the testing period

8. Unconditional Skewness $\beta_{7t}$ is significant at 0.05 level across the testing period

9. Conditional up market Skewness $\beta_{8t}$ is significant at 0.05 level across the testing period

10. Conditional down market Skewness $\beta_{9t}$ is significant at 0.05 level across the testing period

11. Unconditional variance $\beta_{10t}$ is significant at 0.05 level across the testing period

12. Conditional up market variance $\beta_{11t}$ is significant at 0.05 level across the testing period

13. Conditional up market variance $\beta_{12t}$ is significant at 0.05 level across the testing period

14. Unconditional kurtosis $\beta_{13t}$ is significant at 0.05 level across the testing period

15. Conditional up market kurtosis $\beta_{14t}$ is significant at 0.05 level across the testing period

16. Conditional up market kurtosis $\beta_{15t}$ is significant at 0.05 level across the testing period
Conclusion

In this study, the relationships between various risk measures and realized returns of the sample of 432 stocks of NSE are examined for the period 1997 to 2008. The conditional and unconditional relationship between beta and returns is found weak and insignificant. Furthermore, unsystematic risk, total risk, and kurtosis play a significant role in pricing the securities in Indian Market. However, the signs of risk premiums are different from what we expect from the finance theory.

When the conditional relationship between beta and returns is considered, it is not significant in up and down market. Investors are not only compensated for bearing systematic risk, but also for bearing unsystematic risk. Skewness, kurtosis and total risk are found to play a significant role in pricing the risky assets in the Indian Market with the expected signs of risk premiums. These results are generally the same whether equally weighted or value-weighted market returns are used as the market proxy. Realized returns have a significant positive relationship with unsystematic risk, total risk and kurtosis in up and down market. They also have a significant positive relationship with skewness in up and down market. Our results strongly support that investors prefer positive skewness but ask for compensation for bearing higher unsystematic risk, total risk and kurtosis. We also find evidence that investors do not hold diversified portfolios in the Indian Market.

Nevertheless, the explanatory power of the conditional risk-return relationship is not significantly different from the unconditional one in all cases. Overall speaking, high-beta portfolios do capture higher returns in up market and poorer returns in down market than low-beta portfolios. Beta is still a good measure of risk and other risk measures are also useful in explaining cross-sectional variations in stock returns. Our results provide useful guidance on investing in the Indian stock market.