Abstract

The study has used secondary data from BSE site. The study is empirical in orientation. It examines the behaviour of observed equity prices in Bombay Stock Exchange. The study explores the validity of different models with the data of observed prices. The study applies theory to data with the help of methods/models of data analysis. An attempt is made to evolve theoretical postulation. Research investigation does not move on merely with reporting of observations; it analyzes the relevance of theories with reference to data which needs evaluation by means of methods and models. The study is based on application of mathematical-econometric models to evaluate the validity of underlying theories. Hence, it explores the possible cause of the observed effect. Observed equity prices are consequences of systematic factors which the investigation attempts to discover and discern.

Role of expectation is greatly emphasized in the study. But expectations are unobservable as well as difficult to quantify. There exist two approaches for analysis of expectations: survey of investors and other stakeholders; and use of Samuelson’s revealed preference paradigm. First approach is ruled out on the following grounds: (i) equity prices and underlying expectations change from moment tp moment. Expectations change with prices. It is possible to capture such ever changing profile of expectations in a continuum. So survey at any given point of time loses its relevance even in a short span of time; (ii) number of investors and other operations is quiet large while expectations vary both between time and individuals. So the alternative approach is preferred. Revealed preference theory assumes that the actual behaviour (buying/selling) reveals the preference either for holding on to the stock of shares for future or sell it; or postpone
buying to future. Thus, the choice is exercised between hold rather than to sell and the preference for purchase or deferment to future. In both cases, expectations are the drivers. Expectation relate to change in price in either direction. Besides, the difficulty of un-observability and direct measurement of expectation is overcome by distributed lag model, which treats expectations as being a function of past experience and adaptation with regard to evolving scenario.

This study attempts to overcome the lacunae of hypothesis of efficient market about which Fama himself raised doubts. This study explain’s the behaviour of equity prices in Flex Price framework. Flex prices move on expectations and accumulation or decumulation of stocks in possession according to expectation of rise or fall in prices in future. This is also the main trait of stock market behaviour. Cobweb Model, which differentiates between the three categories of price oscillations, is the feature that makes this study broader, innovative and different from other studies. It may also be added that the study has also introduced a new and different concept and measure of volatility which is again broader in coverage and objective in nature compared to the concept and measure of volatility.

Equity prices are determined on the basis of returns which are associated with the closing prices of days, ask/ bid spread where market makers fill-up the supply/demand gap at their own price, demand generated in future market through put/call option and fundamentals like profitability, P/E ratio, dividend distribution are the determinants of intrinsic value, which in long run reflects the market price of the equity. Till date all other prices reported in the stock market that is opening, highest ,lowest and average are ignored considering perfect market where all prices are the same and equal. This raises
question mark on the above thought and innovation of the study highlights the role of each price in the market. Each price is a function of different prices and other systematic factors; this may be interpreted as interdependency among prices as all prices of the day are not equal. Moreover, each price of the day indicates different aspect of behaviour of equities. As we proceed this research also emphasizes that even volatility index cannot be measured by neglecting the magnitude of any price reported by stock market in the day, the study has also explored and examined the effect of non-synchronous trading on opening price of the day. Besides, the study does not put the blind faith in the efficacy and efficiency of one single method or model and experiments with different econometric models to eliminate the possibility of accepting some empirical result which is specific to one particular model/method. The research investigation also explores the differential behaviour of equity prices of different companies which brings out the impact of diversity on market behaviour. Main findings reveal that (i) Roots of opening prices, closing prices, highest prices and weekly prices are less than unit. This indicates that equity prices of all companies are stationary. The results indicate that regression models will provide genuine results which is further validated in the study by application of Engle Granger test; (ii) Auto regression models provide realistic results and are considered to be better way to identify lags in comparison to ACF; (iii) Volume of trade, showing effective demand, affects the average price significantly; (iv) Highest price of the day is found to be more decisive determinant of closing price than the lagged closing price; (v) Non-synchronous trading jointly with the closing price of the preceding day emerges as the main determinant of the opening prices of equities in BSE; (vi)
Alternative approach of volatility measurement indicates that volatility is a rare phenomenon in the stock market and daily fluctuation cannot be considered as volatility.

The study has been presented following eight chapters:

Chapter 1: Introduces the concept of price determination, rational of choice of the topic, nature and scope of the study and importance of the study.

Chapter 2: It covers Review of Literature. This enables us to highlight the knowledge gaps that our study is designed to fill up.

Chapter 3: This deals with methodology, sample size and data analysis and tools of analysis employed for this study.

Chapter 4: This covers the analysis of Determination of Opening Prices of the Day.

Chapter 5: It deals with determination of closing prices of the Day at BSE.

Chapter 6: It covers determination of highest prices of the day and analysis of behaviour of Weekly Prices in Bombay Stock Market.

Chapter 7: This chapter focuses on the concept of volatility measurement and also experimented with alternative methods of measuring volatility.

Chapter 8: It covers major Findings and conclusions, suggestions and recommendation and direction for future research.