

An analysis of equity share price movement of selected companies listed in nse**MRS.R.CHITRA¹ AND MRS.M.SATHYA²**¹Assistant Professor, GRG School of Management Studies, Coimbatore- 641 006.

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ABSTRACT: The stock market has an important role in the allocation of resources, both directly as a source of funds and as a determinant of firm's value and borrowing capacity. This study we made a study and analysis on Equity share price behaviour of selected companies listed in NSE India. The Purpose of the study is, attempted to test the equity price movements of IT, Pharmaceuticals, Banking and Automobiles sectors. These are taken as sample sectors. The objective of the study is to analyze the Equity share price movement of selected companies listed in NSE, India and to analyze the movements of the high priced equity shares of four sectors for the past 3 years. Data collections are to be used in the study is secondary data. The study uses tools such as Simple Moving Average, Rate of Change, Relative Strength Index, Stochastic oscillator and Trend analysis. The Monthly share prices of above mentioned companies were taken for a period of three years from January 2009 to Dec 2011. The closing prices of share prices were taken. All four sectors registered tremendous growth in the past 3 years, and as per the analysis all these sectors companies were predicted as best to invest for better rate of return for the investors.

Key Words: Equity share price, rate of change, relative strength index, rate of return.

Introduction

The stock exchange or secondary market is a highly organized market for the purchase and sale of second hand quoted of listed securities. Of all the modern service institutions, stock exchange plays a crucial agents and facilitators of entrepreneurial progress. The National Stock Exchange (NSE), located in Bombay, is India's first debt market. It was set up in 1993 to encourage stock exchange reform through system modernization and competition. It opened for trading in mid-1994. It was recently accorded recognition as a stock exchange by the Department of Company Affairs. The instruments traded are, treasury bills, government security and bonds issued by public sector companies. The National Stock Exchange of India Limited has genesis in the report of the High Powered Study Group on Establishment of New Stock Exchanges, which recommended promotion of a National Stock Exchange by financial institutions to provide access to investors from all across the country on an equal footing. NSE is not owned by brokers. It is a limited liability company and brokers or franchisees. Therefore NSEs' staff is free of pressures from brokers and is able to perform its regulatory and enforcement functions more effectively. equity is the residual claim or interest of the most junior class of investors in assets, after all liabilities are paid .

An equity investment generally refers to the buying and holding of shares of stock on a stock market by individuals and firms in anticipation of income from dividends and capital gains, as the value of the stock rises. Share or stock is a document issued by a company, which entitles its holder to be one of the owners of the company. By owning a share you can earn a portion and selling shares you get capital gain. So, your return is the dividend plus the capital gain. However, you also run a risk of making a capital loss if you have sold the share at a price below your buying price. The study on equity share price movement of selected companies listed in NSE based on Analytical sampling technique. It helps in understanding the upward and downward trends in the share price movements. It becomes essential to know the performance of the company so that the investment will be duly giving returns and ensure safety of the investment. Further it helps in understanding the price behavior of the shares, the signals given by them and the major turning points of the market price.

Review of Literature

[6]Eugene F.Fama (1965) has answered the questions to what extent can the past history of a common stock price can be used to make meaningful predictions concerning the future prices of the stock? The theory of random walk on stock prices is studied with two hypotheses. They are i) Successive price changes are independent and ii) The price changes conform to some probability distribution. The data for this study consists of daily prices for each of the thirty stocks of the Dow –Jones industrial average. This study concludes that there is strong and voluminous evidence in favour of random walk theory.

Ritter (1988) analyzed the buy/ sell details of NYSE stocks over a period of 15 years from Dec 17, 1970 to Dec 16, 1985. Ritter proposed the –parking- the –proceedsll hypothesis i.e., the individual investors who sell the stocks prior to the late December for tax loss selling and they buy the shares in early January, mostly small stocks. He concluded that the ratio of stock

purchases to sales by individual investor displays a seasonal pattern, with individuals having a below-normal and buy/sell ratio in late December and above normal ratio in early January.

Chan and Chen (1991) examined the difference in structural characteristics that lead firms of different size to react differently to the same economic news. By using time series analysis they found that return difference between small and large firms could be captured by the responses of high leverage firms and marginal firms to economic views. They have made the study using the time series analysis which gives the adequate results for their study on the return differences.

N.K.liu and K.K.Lee(1997) presents an intelligent system to assist small investors to determine stock trend signals for investment in stock business. A pilot system is built providing three main categories of technical analysis theories, namely momentum, moving average, support or resist line. For novice investors, the system is associated with tutoring features and it supports analysis study of the rationale behind some system recommendations. Skillful investors can explore the various theories for the prediction by means of adjusting the weightings, combinations and even some independent variables allocated by the intelligent system. General users can therefore formulate their investment strategies upon system recommendations under different investment criteria accordingly.

Debjiban Mukherjee(2007) captures the trends, similarities and patterns in the activities and movements of the Indian Stock Market in comparison to its international counterparts The time period has been divided into various eras to test the correlation between the various exchanges to prove that the Indian markets have become more integrated with its global counterparts and its reaction are in tandem with that are seen globally. They compare the various stock exchanges based on certain parameters in order to understand the impact of integration of the financial world on the various entities within it especially in the context of globalization and increased interest in the capital markets fuelled by surging growth. However, they have tried to use the comparison method to benchmark the performance of our stock market with that of a selection of global stock exchanges on the basis of their diversity.

Objectives of the Study

- To analyze the equity share price movement of selected companies listed in nse, India.
- To analyze the movements of the high priced equity shares of four sectors for the past 3 years
- To predict the best equity share to invest among the 16 High priced company equity shares in 4 sectors(Auto, Banking, IT and pharmaceuticals)

Research Methodology

The study aims at analyzing the price movements of selected companies in nse. As the study describes the equity share price movements of the selected companies, the research design followed is analytical in nature. For equity share price movement, the monthly share price movements of the selected companies in NSE were absorbed for the 3 years i.e. 01-January-2009 to 31-December -2011. The closing prices of share prices were taken and the price movement was analyzed using various tools. For the purpose of relative strength index and rate of change calculations, closing prices of the companies in NSE and the closing value of NIFTY were taken. Data were collected from trading of equity market in NSE, various books, journals, magazines and websites. All the listed companies in the National Stock Exchange constitute the population for the study. 16 companies in four sectors (IT, Banking, Auto and Pharmaceuticals) which are high priced traded in NSE were taken on judgmental sampling basis for the study. The selected companies are

- Infosys Technologies limited
- Oracle financial services software limited
- Tata consultancy services limited
- CMC limited
- State bank of India(SBI)
- Punjab national bank(PNB)
- Axis bank limited
- HDFC bank limited
- Hero Honda limited
- Maruti Suzuki India limited
- Tata motors limited
- Eicher motors limited
- Dr Reddys labs
- Abbott India

- GlaxoSmithKline
- Sanofi India

Tools Used For the Analysis

A. Simple Moving Average

Simple moving average that is calculated by adding the closing price of the security for a number of time periods and then dividing this total by the number of time periods

$$\text{Simple Moving Average} = \frac{\text{3 period sum}}{3}$$

B. Rate of Change (ROC)

Rate of change (ROC) are simple technical analysis indicators showing the difference between today's closing price and the close N days ago.

$$\text{Roc} = \frac{(\text{Close price today} - \text{Close (periods ago)})}{\text{Close (periods ago)}} * 100$$

C. Trend analysis

Trend analysis is rooted in the idea that historical trading trends can give traders an idea of what may happen in the future. Forecasting technique that relies primarily on historical time series data to predict the future.

D. Relative Strength Index (RSI)

$$\text{RSI} = 100 - \frac{100}{1 + \text{RS}}$$

$$\text{Average Gain} = \frac{(\text{Total Gains}/n)}{n}$$

$$\text{Average Loss} = \frac{(\text{Total Losses}/n)}{n}$$

$$\text{First RS} = \frac{(\text{Average Gain}/\text{Average Loss})}{n}$$

For a 14-period RSI, the Average Gain equals the sum total all gains divided by 14. Even if there are only 5 gains (losses), the total of those 5 gains (losses) is divided by the total number of RSI periods in the calculation (14 in this case). The Average Loss is computed in a similar manner. When the Average Gain is greater than the Average Loss, the RSI rises because RS will be greater than 1.

E. Stochastic Oscillator

Stochastic Oscillator is a momentum indicator that shows the location of the close relative to the high-low range over a set number of periods. It doesn't follow price, it doesn't follow volume or anything like that.

$$\%K = \frac{(\text{Current Close} - \text{Lowest Low})}{(\text{Highest High} - \text{Lowest Low})} * 100$$

Analysis and Findings

1. Infosys Technologies Limited

Momentum showed in negative and positive for 14 and 22 months respectively in the last 36 months (i.e., 3 years). Using 3 months Simple Moving Average, its movement for every quarter is calculated. The ROC of share price indicates that the fluctuations in the share price movements and the investor could buy the shares in the period which showed negative change, (for e-g) in the months of February and March, etc., in 2009, and could sell the shares in the period which showed positive for better rate of return on their investment. The Trend value of the share shows it has been in the upward/positive trend for the past 3 years.. The RSI which shows the shows sell signal.

2. Oracle financial services software limited,

Momentum fluctuates in negative and positive for 22 and 14 months respectively in the last 3 years. Using 3 months Simple Moving Average, its movement for every quarter is calculated. ROC of share price indicates the investor could buy the shares in the period which showed negative change, (for e-g) in the month of January. 2009, and could sell the shares in the period of positive change. The Trend value of the share shows it has been in the upward/positive for two years and heavy fluctuations in the third year. The RSI which shows the sell signal.

3.Tata Consultancy Services Limited

Momentum showed in negative and positive for 19 and 17 months respectively in the last 3 years. Using 3 months Simple Moving Average, the movement of share price for every quarter is calculated. The ROC of share price indicates that the investor could buy the shares in the period which showed negative change, (for e-g) in the months of April, May, etc., in 2010 and could sell the shares in the period which showed positive change, (for e-g) in the months of September, October, etc., in the same year for better rate of return on their investment. The Trend value of the share shows it has been in the upward/positive trend for the past 3 years. The RSI which shows the sell signal.

4.CMC Limited

Momentum showed in negative and positive for 11 and 25 months respectively in the last 3 years. Using 3 months Simple Moving Average, the movement of share price for every quarter is calculated. The ROC of share price pinpoints that the investor could buy the shares in the period which specifies negative change, (for e-g) in the months of January, February, etc., in 2010, and could sell in the period which indicates the positive rate of change, (for e-g) in the months of March, July, etc., in the same year for better rate of return on their investment. The Trend value of the share shows it has been in the upward/positive trend for the past 2 years and the downward trend for the last year. The RSI which shows the fluctuations in the value and shows the buy signal.

5. State Bank of India

Momentum showed in negative and positive for 27 and 9 months each in the last 3 years. Using 3 months Simple Moving Average, the movement of share price for every quarter is calculated for analysis. The ROC of share price indicates the investor could buy the shares in the period which showed negative change, (for e-g) in the months of January, February, etc., in 2010 and could sell the shares in the period which showed positive rate of change, (for e-g) in the months of April, May in the same year for better rate of return on their investment. The Trend value of the share shows it has been in the down trend for the past 1 year. The RSI which shows the buy signal.

6. Punjab National Bank

Momentum has been in negative and positive for 15 and 21 months respectively in the last 3 years. Using 3 months Simple Moving Average, movement for every quarter is calculated for analysis. The ROC of share price states the investor could buy the shares in the period which showed negative change, (for e-g) in the months of January, February, etc., in 2009 and could sell the shares in the period which showed positive change, (for e-g) in the months of March, May, etc., in the same year for better rate of return on their investment. The Trend value of the share shows it has been in the upward/positive trend till July 2011. But the RSI which shows the buy signal.

7. Axis Bank Limited

Momentum fluctuates in negative and positive for 17 and 19 months respectively in the last 3 years. Using 3 months Simple Moving Average, the movement for every quarter is calculated. The ROC of share price denotes that the investor could buy the shares in the period which showed negative change, (for e-g) in the months of January, February, etc., in 2009 and could sell the shares in the period which showed positive change, (for e-g) in the months of April, May, etc., in the same year for better rate of return on their investment. The Trend value of the share shows the fluctuations in trend for the past 3 years. The RSI which shows the buy or hold signal.

8.HDFC Bank Limited

Momentum has been in negative and positive for 14 and 22 months respectively in the last 36 months. Using 3 months Simple Moving Average, movement of share price for every quarter is calculated. The ROC of share price denotes that the investor could buy the shares in the period which showed negative change, (for e-g) in the months of January, February, etc., in 2009 and could sell the shares in the period which showed positive change, (for e-g) in the months of April, May, etc., in the same year for better rate of return on their investment. The Trend value of the share shows it has been in the downtrend for the past 6 months. The RSI which shows the buy signal.

9.Hero Honda Motors Limited

Momentum reflects in negative and positive for 13 and 23 months respectively in the last 3 years. Using 3 months Simple Moving Average, the movement of share prices for every quarter is calculated for analysis. The ROC of share price denotes that the investor could buy the shares in the period which reflects negative change, (for e-g) in the months of May, June, etc., in 2008 and could sell in the period which reflects positive change, (for e-g) in the months of July, August and September in

the same year for better rate of return on their investment. The Trend value of the share shows it has been in the upward/positive trend for the past 3 years. The RSI which shows the sell signal.

10. Maruti Suzuki India Limited

Momentum has been in negative and positive for 17 and 19 months respectively in the last 3 years. Using 3 months Simple Moving Average, the movement of share prices for every quarter is calculated. The ROC of share price reveals that the investor could buy the shares in the period which showed negative change, (for e-g) in the months of October, November 2008 and could sell in the period which reflects positive change, (for e-g) in the months of February, March in the year 2009 for better rate of return on their investment. The Trend value of the share shows it has been in the down trend for the past 1 year. The RSI which shows the buy signal.

11. Tata Motors Limited

Momentum fluctuates in negative and positive for 13 and 23 months respectively in the last 3 years. Using 3 months Simple Moving Average, the movement of share price for every quarter is calculated for analysis. The ROC of share price denotes that the investor could buy the shares in the period which showed negative change, (for e-g) in the months of October, November, etc., in the year 2008 and could sell the shares in the period which reveals positive change, (for e-g) in the months of April, May, etc., in the year 2009 for better rate of return on their investment. The Trend value of the share shows it has been in the down trend for the past 1 year. The RSI which shows the buy signal.

12. Eicher Motors Limited

Momentum has been in negative and positive for 11 and 25 months respectively in the last 3 years. Using 3 months Simple Moving Average, the movement of share price for every quarter is calculated. The ROC of share price reflects that the investor could buy the shares in the period which showed negative change, (for e-g) in the month of March, April, etc., in the year 2009 and could sell the shares in the period which reflects positive change, (for e-g) in the months of August, September in the same year for better rate of return on their investment. The Trend value of the share shows it has been in the upward/positive trend for the past 3 years. The RSI which shows the sell signal.

13. Dr Reddys Labs

Momentum has been in negative and positive for 13 and 23 months respectively in the last 3 years. Using 3 months Simple Moving Average, the movement of share price for every quarter is calculated. The ROC of share price reflects that the investor could buy the shares in the period which showed negative change, (for e-g) in the month of November, December, etc., in the year 2009 and could sell the shares in the period which reflects positive change, (for e-g) in the months of April, May in the year 2011 for better rate of return on their investment. The Trend value of the share shows it has been in the upward/positive trend for the past 3 years. The RSI which shows the sell signal.

14. Abbott India

Momentum has been in negative and positive for 16 and 20 months respectively in the last 3 years. Using 3 months Simple Moving Average, the movement of share price for every quarter is calculated. The ROC of share price reflects that the investor could buy the shares in the period which showed negative change, (for e-g) in the month of July, August, etc., in the year 2009 and could sell the shares in the period which reflects positive change, (for e-g) in the months of April, May in the year 2011 for better rate of return on their investment. The Trend value of the share shows it has been in the upward/positive trend for the past 3 years. The RSI which shows the investor can hold shares for the adequate period for the better returns.

15. Glaxo SmithKline

Momentum has been in negative and positive for 16 and 20 months respectively in the last 3 years. Using 3 months Simple Moving Average, the movement of share price for every quarter is calculated. The ROC of share price reflects that the investor could buy the shares in the period which showed negative change, (for e-g) in the month of March, April, etc., in the year 2009 and could sell the shares in the period which reflects positive change, (for e-g) in the months of June, July in the year 2011 for better rate of return on their investment. The Trend value of the share shows it has been in the upward/positive trend for the past 3 years. The RSI which shows the sell signal.

16. Sanofi India

Momentum has been in negative and positive for 14 and 22 months respectively in the last 3 years. Using 3 months Simple Moving Average, the movement of share price for every quarter is calculated. The ROC of share price reflects that the investor could buy the shares in the period which showed negative change, (for e-g) in the month of March, April, etc., in the

year 2009 and could sell the shares in the period which reflects positive change, (for e-g) in the months of November, December in the year 2011 for better rate of return on their investment. The Trend value of the share shows it has been in the upward/positive trend for the past 3 years. The RSI which shows the sell signal.

Limitations

- We cannot predict the price movements accurately but we can predict the price movements based on past data and assumptions.
- There is no guarantee that what has worked in the past may continue to work in the future.
- The study confined of only the last 3 years monthly performance of the equity shares and hence the changes taken place before the period have not been taken into considerations.
- The study considers only four sectors namely IT, Banking, Auto and pharmaceuticals.

Table Shows That Stochastic Oscillator of Top Companies in Each Sector

| Date | Infosys | P N Bank | Hero Honda | Glaxo Smith |
|--------|----------|----------|------------|-------------|
| 09-Feb | 19.58035 | 6.33777 | 93.97172 | 92.21812 |
| 09-Mar | 29.07881 | 28.67985 | 94.81378 | 66.41688 |
| 09-Apr | 47.83009 | 44.13523 | 97.84144 | 86.2232 |
| 09-May | 57.52303 | 88.43146 | 83.05644 | 83.76758 |
| 09-Jun | 75.42477 | 90.0414 | 84.60722 | 78.998 |
| 09-Jul | 98.7415 | 86.89863 | 85.68499 | 98.51754 |
| 09-Aug | 93.94513 | 85.19115 | 77.96144 | 95.23308 |
| 09-Sep | 92.2674 | 97.25086 | 90.9475 | 92.33209 |
| 09-Oct | 84.77486 | 92.69388 | 82.42822 | 93.09809 |
| 09-Nov | 94.78454 | 94.40469 | 93.78234 | 95.06523 |
| 09-Dec | 99.38726 | 94.49604 | 93.42254 | 88.43823 |
| 10-Jan | 86.02994 | 91.02107 | 80.66785 | 76.53029 |
| 10-Feb | 93.50898 | 91.31048 | 97.9261 | 97.29012 |
| 10-Mar | 88.41922 | 99.51423 | 91.08921 | 99.27411 |
| 10-Apr | 95.08633 | 97.74974 | 87.66797 | 96.93421 |
| 10-May | 88.15531 | 92.42424 | 89.81083 | 88.77974 |
| 10-Jun | 95.28883 | 97.37533 | 96.92759 | 94.54453 |
| 10-Jul | 93.44394 | 95.7495 | 81.82648 | 82.65126 |
| 10-Aug | 89.0759 | 94.72933 | 80.28702 | 72.1414 |
| 10-Sep | 98.32924 | 96.71571 | 84.20744 | 94.93569 |
| 10-Oct | 87.35174 | 93.51024 | 85.11416 | 89.50974 |
| 10-Nov | 90.9665 | 83.91955 | 92.13307 | 83.82464 |
| 10-Dec | 99.62717 | 84.38402 | 92.96151 | 96.95789 |
| 11-Jan | 84.61053 | 73.61111 | 69.76517 | 90.7337 |
| 11-Feb | 79.99552 | 69.31367 | 58.96608 | 86.93945 |
| 11-Mar | 89.51894 | 84.2307 | 66.89824 | 79.40924 |
| 11-Apr | 76.03863 | 81.13727 | 74.92825 | 89.32888 |
| 11-May | 71.38899 | 73.3676 | 84.28898 | 93.39918 |

| | | | | |
|--------|----------|----------|----------|----------|
| 11-Jun | 76.09772 | 72.45671 | 85.89367 | 92.76716 |
| 11-Jul | 70.36818 | 75.58171 | 79.98695 | 92.32239 |
| 11-Aug | 53.08992 | 58.10786 | 96.98956 | 78.82388 |
| 11-Sep | 60.87329 | 60.02435 | 82.65098 | 76.96119 |
| 11-Oct | 74.78555 | 62.25649 | 96.64811 | 75.25075 |
| 11-Nov | 63.87864 | 53.81494 | 85.492 | 67.06269 |
| 11-Dec | 70.29687 | 44.89538 | 79.68287 | 67.85075 |

Suggestions and Discussions

As far as the study is concern, even though all 16 companies share prices are estimated to go in fluctuations in trend values. but Infosys, Oracle, Eicher and Hero Honda have registered its high price because Infosys has registered its high revenue of 8,696.00 with the net profit of 2,235.00 in dollars and Oracle Financial Services Software Ltd has allotted 3,900 equity shares of face value of Rs. 5/- each to the eligible employees of the Company .With this allotment, the paid up capital of the Company increased to Rs. 419,761,885/- divided into 83,952,377 equity shares of face value of Rs. 5/- each.TCS registered its Revenue of 10,544.039 in dollars. Eicher motors and GlaxoSmithKline is predicted as the best share to invest the money for better rate of return which likely to grow upward in the upcoming financial year. It is better for the investors to hold the shares at least for the 2 years and they can able to make a better rate of returns. Hero MotoCorp Rides on Highest-Ever Quarterly Sales to Report its Best-Ever Turnover of Rs. 6031 Crore in financial year 2011. Eicher Motors Ltd have recommended 160% dividend on the equity share capital (Rupees 16/- per share). So that the dividend increased to 11%

Investors must also take into account various factors like government of India budget, company performance, political and social events, climatic conditions etc. before any decision is made. The scrip should also be fundamentally good. Therefore, it's advisable for a trader or investor to make technical analysis of stocks for better return of investments

Conclusion

Today, the health of stock exchange is solely dependent on the pattern of investment by the investor. As the financial market goes through brisk changes, investors should look for right opportunities keeping in tune with the dynamics of market environment. Financial market reflects a country's economic growth as they supply necessary financial inputs for the development of the country. Technical analysis gives investor a better understanding of the stocks and also gives them right direction to go on further to buy or sell the stocks .Therefore, the small investors and traders should not blindly make an investment rather they should analyze using the various tools to check if the scrip is technically strong.

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