A STUDY ON TECHNICAL ANALYSIS FOR SELECTED COMPANIES AT BSE

Mrs. B. Kishori1, K. Divya2
1Anna University, UCET-BIT campus, Tiruchirappalli
Department of Management Studies
2Department of Management Studies, 1Anna University, UCET-BIT campus,
Tiruchirappalli, Tamilnadu, India

Abstract: Technical Analysis is also a security analysis technique that claims the capacity to estimate the future movement of share prices through the study of past share prices primarily price and volume. Technical analysis does not result in absolutely forecast about the future pricing. Instead, technical analysis can help investor to expect what is possible to happen to share prices over a period of time. “A Study on Technical analysis for Selected Companies at BSE” was done based on historical data regarding price of shares of selected companies of BSE SENSEX. The present study Secondary Data of daily closing price of the shares of two years is collected for selected companies from BSE SENSEX. The analysis is done based on the technical tools like Candlestick Chart, Moving Average, Moving Average Convergence Divergence (MACD), and Relative Strength Index (RSI).

Keywords: Technical Analysis, BSE SENSEX

1. Introduction

Bombay Stock Exchange

The Indian stock exchange is one among the oldest markets in Asian markets. Its history dates back to two centuries when the record of securities dealing in India was scanty and unclear. The East Indian Company was ruling organization in those days and business in its loan securities was negotiated towards the close of the eighteenth century. In 1956, the Bombay Exchange became the primary exchange to be accepted by Indian Government under Securities Contracts Regulation Act. The BSE developed by BSE SENSEX in 1986, giving the BSE denote to measure overall performance of the market. BSE SENSEX, otherwise mentioned to as the S&P BSE Sensex index, is that the benchmark or index of the Bombay Stock Exchange (BSE). Sensex includes thirty of the most important and most actively-traded stocks on the BSE, providing a correct gauge of India’s economy. Stock Exchange Sensitive Index (SENSEX) may be a index or benchmark used to measure the performance of top thirty firms listed in BSE. If the sensex goes up, it implies that the price of the shares of most of the main firms on the BSE have goes up. If the sensex goes down it mean that the prices have goes down.

Technical Analysis

Technical analysis could be a method of forecasting price movements and future market trends by studying charts of historical data. The initial for a technical analysis are prices: the high, low open and close price within a certain period of time, and the volume of transactions. Technical analysis presupposes that all the information about the market and its future fluctuations is contained in the price chain. Any factor, that has some influence on the price, be it economic, political or psychological, has already been considered by the market and incorporated within the price. technical analysis examine with what has actually happened in the market, rather than what should happen and takes into account the price of instruments and the volume of trading, and creates chart from the data to use as the primary tool.

The basic assumptions of technical analysis are:

- The market discounts everything:
  Technical analysis assumes that, at any given time a share prices reflect everything that has price could affect the company including fundamental factors. This only leaves the analysis of price movements for a particular stock in the market.
- Price moves in trends:
  In technical analysis, price movement is believed to follow trends. This implies that after a trend has been confirmed, the future share price movements are more likely to be in the same direction.
- History tends to repeats itself:
  Individual do not modification their motivations overnight; so, traders can react the same things to condition as they did within the past once those conditions repeat themselves. As a result of individual react the same way, technical analysts will use the knowledge of however alternative traders react in the past to profit every time those conditions repeat them.

2. Objective of the study

- To study and understand the historical data regarding price of shares of selected companies of BSE SENSEX
- To analyze the price movement of the shares
- To identify the trading opportunity of the shares
3. **Literature Review**

The role of technical analysis has been mired in controversies since its beginning. Many studies have argued that it’s not valid or helpful in the market.

- Friedman (1953), Cootner (1964) and Fama (1966, 1970) have done some vital studies on the viability of technical analysis and identified that technical analysis is vain.
- Murray (1964) explains that technical analyst will expect higher amount of cyclical sway in the market than that of capital market analyst.
- Grossman and Stiglitz (1980) have argued that since the knowledge is expensive, prices cannot perfectly reflect the available information.
- Brock et al (1992) justify that technical trading rule will outplay the market.
- Rodriguez Martel and Rivero (2000) have opined that easy technical trading rule is usually superior to a buy-and-hold strategy in the absence of trading costs.
- Wong, Manzur and Chew (2002) observe that member companies of the stock market create substantial profit by applying technical indicators.

The present study is important in the contemporary era of economic liberalization which has led to an increase within the number of trading activities within the market and multiplied the use of technical analysis in the monetary field. Moreover, the affordability of pc and interest facilities, increasing variety of technical software and the opportunity of technical analysis in each broking company have multiplied the scope and significance of technical analysis.

![Figure 1: Model of the Study](image)

4. **Work of the Study**

The present study aims at analyzing the price movements of the shares of selected companies. The research type of this present study is analytical in nature. For technical analysis, secondary data the daily share price movements of the selected companies in BSE SENSEX were absorbed for the two years. The closing price of share prices was taken and also the future price movement was analyzed using important tools. Data were collected from BSE website, various books, journals, magazines and company websites and other websites.

**Time Period of the Study**

The period of two years from 1-Feb-2018 to 31-Jan-2020 have been taken to carry out the present study.

**Sample Size**

Sample size of the research study is four Automobile companies selected on the basis of market capitalization. The selected companies are:

- Bajaj Auto
- Hero Motocorp
- Mahindra and Mahindra
- Maruti Suzuki

**Tools and Techniques of the Study**

1. Candlestick Chart
2. Moving Average
3. Moving Average Convergence Divergence (MACD)
4. Relative Strength Index (RSI)

5. **Data Analysis and Interpretation**

Initially, we have draw candlestick chart and interpreted these charts for all the fifteen selected companies as regards their price fluctuations and their implications to the investors.
BAJAJ AUTO SHARE PRICES

The following interpretation is for candlestick chart of BAJAJ AUTO which we had taken into consideration in this study.

General Trends:
- Chart of BAJAJ AUTO represents the variation in different prices like open, high, low and close in respect of different months which we had take into consideration i.e. from 1st February 2018 to 31st January 2020.
- First of all we consider the Open price which is Rs.3325 in February 2018 and it decreases to Rs.3185 in January 2020 with slight variation in prices. The highest open price is Rs.3413 and the lowest open price is Rs.2455.
- Secondly we consider the High price which is Rs.3418.25 in February 2018 and it decreases to Rs.3191.25 in January 2020 with slight variation in prices. The highest price in high price is Rs.3472.6 and lowest price in high price is Rs.2493.25.
- Thirdly we consider the Low price which is Rs.3297.85 in February 2018 and it decreases to Rs.3137.45 in January 2020 with slight variation in prices. The highest price in low price is Rs.3297.85 and lowest price in low price is Rs.2400.
- Fourthly we consider the Close price which is Rs.3409.5 in February 2018 and it decreases to Rs.3146.95 in January 2020 with slight variation in prices. The highest price in close price is Rs.3413 and lowest price in close price is Rs.2455.

INTERPRETATION

From the CANDLESTICK chart of BAJAJ AUTO we can spot head and shoulder formation. In May 2019 that is point ‘A’ is a peak point, above which we have point ‘B’ (Feb-2019) and point ‘C’ (Aug-2019) the share price had reached a low of Rs.2560 followed by a new high of Rs.3008.7 and again had recovered at Rs.2940 this pattern of recovery is an indicator that in future the share price will face a bullish trend. Point ‘D’ (Jan-2020) shows the bullish trend of the share price to Rs.3150.

Next we consider the chart of three Technical Indicators for BAJAJ AUTO
- EMA
- MACD
- RSI
From the above chart we will see that: both the EMA-30 and EMA-50 are rising. The price is located above both the moving averages, EMA-30 (Fast Moving Average) is above the EMA-50 (Slow Moving Average). Hence the trend of BAJAJ AUTO is considered upward trend.

In the above chart it show that it makes a buying signal because it just crossed the zero in future. The investors may assume that the price will gone up in future because of these investor buy the shares.
INTERPRETATION
In the above chart the 14 day RSI line are plotted. After 2018 here, RSI is above 70, which is considered bullish. While near the end of the period, it is below 30, which indicates an oversold. So in future share price may be increase.

HERO MOTOCORP SHARE PRICES
The following interpretation is for candlestick chart of HERO MOTOCORP which we had taken into consideration in this study.

General Trends:
- Chart of HERO MOTOCORP represents the variation in different prices like open, high, low and close in respect of different months which we had take into consideration i.e. from 1st February 2018 to 31st January 2020.
- First of all we consider the Open price which is Rs.3720 in February 2018 and it decreases to Rs.2460 in January 2020 with variation in prices. The highest open price is Rs.3820.95 and lowest open price is Rs.2266.1.
- Secondly we consider the High price which is Rs.3743.95 in February 2018 and it decreases to Rs.2460.55 in January 2020 with slight variation in prices. The highest price in high price is Rs.3862 and lowest price in high price is Rs.2321.4.
- Thirdly we consider the Low price which is Rs.3694.85 in February 2018 and it decreases to Rs.2428.65 in January 2020 with slight variation in prices. The highest price in low price is Rs.3760.35 and lowest price in low price is Rs.2228.25.
- Fourthly we consider the Close price which is Rs.3734.4 in February 2018 and it decreases to Rs.2432.35 in January 2020 with slight variation in prices. The highest price in close price is Rs.3798.05 and lowest price in close price is Rs.2259.35.

CHART: 21 CANDLESTICK CHART OF HERO MOTOCORP

INTERPRETATION
From the above chart of HERO MOTOCORP we can spot triple bottom position in the share prices of HERO MOTOCORP. The points ‘A’, ‘B’, ‘C’ plot the triple bottom in the graph, that is, in Feb- 2019 it is Rs.2620, in Jul- 2019 it is Rs.2594.2 and in Dec-2019 it is Rs.2437. the triple bottom signals the end of the down trend. All the low prices trend to indicate the resistance level and help in pushing the price to a bullish trend in the market.

Next we consider the chart of three Technical Indicators for HERO MOTOCORP
- EMA
- MACD
- RSI
INTERPRETATION
From the above chart we will see that: Both the EMA-30 and EMA-50 are rising. The price is located above both the moving averages. The EMA-30 (Fast Moving Average) is above the EMA-50 (Slow Moving Average). Hence the trend of HERO MOTOCORP is considered bullish.

INTERPRETATION
In the above chart it show that it makes a buying signal line because it just crossed the zero line. The investors may assume that the prices will be gone up in future because of these investors buy the shares.
INTERPRETATION
In the above chart the 14 day RSI line are plotted. After 2018 here, RSI is above 70, which is considered bullish or upward trend. At present RSI is below 30 which indicates an oversold, so the share may rise.

MAHINDRA AND MAHINDRA SHARE PRICES
The following interpretation is for candlestick chart of MAHINDRA AND MAHINDRA which we had taken into consideration in this study.

General trends:
- Chart of MAHINDRA AND MAHINDRA represents the variation in different prices like open, high, low and close in respect of different months which we had take into consideration i.e. from 1st February 2018 to 31st January 2020.
- First of all we consider the Open price which is Rs.765 in February 2018 and it decreases to Rs.534.4 in January 2020 with slight variation in prices. The highest open price is Rs.989 and lowest open price is Rs.507.9.
- Secondly we consider the High price which is Rs.802.8 in February 2018 and it decreases to Rs.537.75 in January 2020 with slight variation in prices. The highest price in high price is Rs.992 and lowest price in high price is Rs.511.2.
- Thirdly we consider the Low price which is Rs.765 in February 2018 and it decreases to Rs.529.6 in January 2020 with slight variation in prices. The highest price in low price is Rs.978 and lowest price in low price is Rs.502.7.
- Fourthly we consider the Close price which is Rs.797.35 in February 2018 and it decreases to Rs.536.6 in January 2020 with slight variation in prices. The highest price in close price is Rs.982.4 and lowest price in close price is Rs.505.65.

INTERPRETATION
From the above chart of MAHINDRA AND MAHINDRA we can spot triple bottom position in the share prices of MAHINDRA AND MAHINDRA. The points ‘A’, ‘B’, ‘C’ plot the triple bottom in the graph, that is, in Nov- 2018 it is Rs.769 , in Feb- 2019 it is Rs.689 , and in Aug- 2019 it is Rs.549.4 . The triple bottom signals the end of the down trend. All the low prices trend to indicate the resistance level and help in pushing the price to a bullish trend in the market.
Next we consider the chart of three Technical Indicators for MAHINDRA AND MAHINDRA

- EMA
- MACD
- RSI

**CHART: 26 EMA OF MAHINDRA AND MAHINDRA**

**INTERPRETATION**

From the above chart we will see that: Both the EMA-30 and EMA-50 are rising. The price is located above the moving averages. The EMA-30 (Fast Moving Average) is above the EMA-50 (Slow Moving Average). Hence the trend of MAHINDRA AND MAHINDRA is considered upward trend.

**CHART: 27 MACD OF MAHINDRA AND MAHINDRA**

**INTERPRETATION**

In the above chart it show that it makes a buying signal because it just crossed the zero line. The investors may assume that the prices will be gone up in future because of these investors buy the shares.
CHART: 28 RSI OF MAHINDRA AND MAHINDRA

INTERPRETATION
In the above chart the 14 day RSI line are plotted. At present RSI is above 40 which are considered that the prices may rise in future.

MARUTI SUZUKI SHARE PRICES
The following interpretation is for candlestick chart of MARUTI SUZUKI which we had taken into consideration in this study.

General trends:
- Chart of MARUTI SUZUKI represents the variation in different prices like open, high, low and close in respect of different months which we take into consideration i.e. from 1st February 2018 to 31st January 2020.
- First of all we consider the Open price which is Rs.9530.2 in February 2018 and it decreases to Rs.7380.05 in January with variation in prices. The highest open price is RS.9869.9 and lowest open price is Rs.5460.
- Secondly we consider the High price which is Rs.9560.95 in February 2018 and it decreases to Rs.7408.8 in January 2020 with slight variation in prices. The highest price in high price is Rs.9922.85 and lowest price in high price is Rs.5584.4.
- Thirdly we consider the Low price which is Rs.9314.55 in February 2018 and it decreases to Rs.72888.5 in January 2020 with slight variation in prices. The highest price in low price is Rs.9730.05 and lowest price in low price is Rs.5447.
- Fourthly we consider the Close price which is Rs.9402.95 in February 2018 and it decreases to Rs.7311.85 in January 2020 with slight variation in prices. The highest price in close price is Rs.9820.35 and lowest price in close price is Rs.5472.15.

CHART: 29 CANDLESTICK CHART OF MARUTI SUZUKI

INTERPRETATION
From the above chart of MARUTI SUZUKI we can spot inverse head and shoulder pattern. In August 2019 that is point ‘A’ is a peak point, along with point ‘B’ (May 2019) and point ‘C’ (October 2019) as the shoulders. The share price has reached a high of Rs.6595.05 followed by a new low of Rs.5460 and again has removed to Rs.6732. point ‘D’ (January 2020) shows the bearish trend of the share price to Rs.7042.

Next we consider that chart of three Technical Indicators for MARUTI SUZUKI
- EMA
- MACD
- RSI
INTERPRETATION
From the above chart we will see that: Both the EMA-30 and EMA-50 are falling. The price is located between the moving averages. The EMA-30 (Fast Moving Average) is below the EMA-50 (Slow Moving Average). Hence the trend of MARUTI SUZUKI is considered bearish or downward trend.

INTERPRETATION
In the above chart it shows that it makes a selling signal because it is near the zero. The investors may assume that the prices will be gone down in future because of these investors selling the shares or investors may also hold shares.

INTERPRETATION
In the above chart the 14 day RSI line are plotted. At present RSI is more above 70 which indicates an overbought, so the share may fall.
6. Findings

1. Automobile Sector
   a. Bajaj Auto

According to the Candlestick chart, the BAJAJ AUTO share price would increase in future. As the graph shows the increase trend this would come up as a positive result. The EMA output also bullish trend, as the EMA- 30D is greater than EMA- 50D. According to MACD analysis, the MACD line is crossed to the zero line. So the share price may be rise in future. In the RSI, the graph is below 40. It indicates an oversold, so the share may increase.

b. Hero Motocorp

According to the Candlestick chart, the HERO MOTOCOR share price would increase in future. As the graph shows the increase trend this would come up as a positive result. The EMA output is buying signal, as the EMA- 30D is greater than EMA- 50D. According to MACD analysis, the MACD line is crossed to the zero line. So the share price may be rise in future. In the RSI, the graph is below 30. It indicates an oversold, so the share may rise.

c. Mahindra and Mahindra

According to the Candlestick chart, the MAHINDRA AND MAHINDRA share price would increase in future. As the graph shows the increase trend this would come up as a positive result. The EMA output is buying signal, as the EMA- 30D is greater than EMA- 50D. According to MACD analysis, the MACD line is crossed to the zero line. So the share price may be rise in future. In the RSI, the graph is above 40. So the share holders can buy the share.

d. Maruti Suzuki

According to the Candlestick chart, the MARUTI SUZUKI share price would decrease in future. As the graph show the downward trend. The EMA output is selling signal, as the EMA- 30D is below the EMA- 50D. According to MACD analysis, the MACD line is parallel and very close to the zero line. So the share holders are advised to either hold or sell the share. In the RSI, the graph is above 70. It indicates an overbought, so the share may fall.

Conclusion

Technical analysis is a technique which gives an idea about future price of shares of selected companies of BSE Sensex in which we invest. On the basis of the knowledge of technical analysis one can predict the investment decision of the stock market. Technical analysis of price of shares of different companies gives an idea that after the analysis the market position of share of selected companies can be known and investor get a perfect knowledge of investment decision.

The present study will find with the technical analysis of 15 selected companies of 5 different sectors by using the chart and technical indicators the future market of securities would be known in which we invest. Technical analysis helps to predict future share price of a selected companies and also forecast a trading opportunity for the shares of a selected companies by which we make a perfect investment decision in the stock market. The analysis gives guidance to the investors. This present study is collect the data of daily closing price of the 15 selected companies of 5 different sectors for two year.

References

[8] Rajesh Kumar 2012, Technical and Fundamental analyses of Sensex Representative Companies