

A Study on Analysis of Equity Share Price Movements of Nifty 50 Companies Using Technical Analysis

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Abstract

Technical analysis helps in predicting the future trend or price which can help in formulating buy-hold-sell decisions. It relies on price movement of a security and uses this data to predict its future price movements. This paper aims at technical analysis of selected five companies under nifty 50 based on different sector for a period from Nov 2014 to Oct 2018. The tools used for analysis include candlestick chart, support and resistance, moving average and RSI. Technical analysis helps the investors to improve their knowledge and increase the investment return. Technicians fully follow the trend and indicator only does not follow other factors like fundamental analysis. Investors can buy, hold and sell decisions with the help of technical analysis. By applying technical analysis tools such as Candlestick chart, Moving average, Support and Resistance, RSI support for investors for enjoying profits. Tata steel and SBIN are range bound generated its good for investing for making money in future. So it's advised not to make any investment blindly. In recent year technical analysis has grown popular.

Keywords: Technical analysis, Future trend, Predict, Candlestick chart, RSI, Moving average.

Introduction

This study focus on predicting stock price movement using technical analysis selected under Nifty 50 companies, by using technical analysis to predict the future trends in its share prices. The study will try to translate chart interpretations into buy or sell signals as a basis for investment decision makings. The result of the buy and sell signals will be confirmed with the actual market price returns or losses according to the time setting selected. Technical analysis method is used to forecast the direction of the market price or the strength of the trend by analyzing the past market price. Technical analysis trading focus on the charts and technical indicator to forecast the market. The majority of traders look at the technical analysis charts.

Technical analysis can help investors time in their investment actions by arming them with an in-depth comprehension of supply, demand and breakouts, as well as identifying short and long-term trends. The study and use of price, volume charts and other technical indicators for make trading decision. Technical analysis attempts to use past stock price and volume information to predict future price movements. Technical analysis takes an entirely different approach; it doesn't care about the "value" of a company. Technical analysis only shows its interest in the price movements of the market.

Technical analysts try to predict price movement by looking at chart patterns and using them to inform their decisions to buy, hold and sell a script. Technical analysis concentrates on the change of the price and to know the timing of buying and selling but not on the intrinsic value, and therefore investors would not know whether it is properly invested. Technical analysis concentrates on the study of market supply and demand. Useful trading techniques to guide us on when to enter the market and when to exit on taking target or cutting loss. The last part of risk/reward management is a good reminder to manage our risk so as to maximize our profit and limit our loss. Technical traders have to pay more attention to minimizing transaction costs while choosing a trading rule.

There are three basic tenets that technical analysis is built from:

1. Market action discounts everything
2. Prices move in trends
3. History repeats itself

Review of literature

C. Boobalan (2014) observed that technical analysis of utmost importance to predict trend of short and medium term price movement and help the investors to select the right plan and decisions to invest in the remunerative stocks. The technician also required a fundamental knowledge, which would clear an idea about the investment decision. Both Technical and Fundamental analysis helps in investment decision in the stock market and predict the future trend of the selected companies in which we have invested. Both the analysis gives guidance to the investors.

Sudheer, V. (2015), study on technical analysis will help the investors' in analyzing the script based on technical oscillators to earn fruitful investments. Technical analysis is all about education the art of making profits in all market situations whether increasing or declining. Knowledge of the stock markets is a key component to the success and emphasis should be on managing trading risk while technical analysis can help.

Jelena Stankovic, Ivana Markovic, Milos Stoanovic (2015), this paper examines the efficiency of technical analysis and analytical modeling in defining the optimal tactic for investing in stock markets. The paper covers rising market economies and uses technical indicators such as moving averages, MACD, RSI etc. it is based on least squares support vector machines model.

Mahantesh C. Angadi (2015), look at the experimental results obtained demonstrated the potential of ARIMA model to forecast the stock price indices on short-term basis. This could guide the investors in the stock market to make profitable investment decisions whether to buy, sell and hold a share. With the results acquire ARIMA model can compete reasonably well with emerging forecasting techniques in short-term forecast.

T. Deva Prasad, C.Chaitanya (2018), opinion that technical analysis is one of the best tools to present practical exposure to investors. Author can conclude from the outcome that technical

indicators can play helpful role in the timing stock market entry and exit. By applying technical tools brokers, investors enjoy substantial profit.

Research gap

Majority of technical analysis trader to trade is emotionally not able to follow discipline in technical analysis assumptions and rules, do not trade without looking at technical chart like Candlestick, MA and RSI clearly give an idea about the future trends. Technical analysis easily takes decision when to buy or sell the script. Technical analysis and indicators follow to increase their profit.

Statement of the problem

In order to forecast future price, technical analysis is the study of price movement trend in markets. For trading stock market investment timing plays a crucial role. The investors feel difficult to predict the stock price movement. Investors have not keep good enough idea what to select and how to invest. So this technical analysis is directed towards the use of different tools of investors to identify and decide when and where to buy, hold and sell.

Research methodology

This study focus on the subject of technical analysis. It is a method to evaluate the securities by analyzing past data such as share price movement, chart and etc. to understand the stock price movement.

Objectives

1. To identify the equity share price movements of nifty 50 companies using RSI and Moving average.
2. To study the prediction of future price behavior using technical analysis.
3. To summarize the buy and sell strategies based on Candlestick chart, indicators and after suggestions for investors.

Scope of the study

This study is based on secondary data. It is related to technical analysis to predict the future behaviour of stock price. This analysis involves in using of limited technical chart act of various tools.

Sampling Design

Simple random sampling is the basic sampling technique applied here. These samples selected from the nifty 50 stocks. The selected companies are ITC, CIPLA, SBIN, TCS and TATASTEEL.

Data source

It is based on secondary data collected from website, stock exchange, money control, books, magazines and journal.

Research design

The study is based on descriptive research design.

Tools for the analysis

The data so collected have been analyzed with the help of the following tools.

1. Candlestick Chart
2. Moving Average
3. Resistance and support level
4. Relative Strength Index (RSI)

Candlestick chart

Candlesticks chart are most popular chart choice among traders as compared to line chart, point & figure, bar chart. It has gained popularity among the traders. Candlestick chart are also simple to read and interpret. Candlestick chart is technical tools that pack data from multiple time frames into single price bars. This makes them more useful than traditional open, high, low and close bars (OHLC). The trader based on his trading horizon sets the time frame of the candlestick chart and candlesticks build patterns that predict price direction once completed. Proper color coding adds depth to this colorful technical tool, which dates back to 18th century Japanese rice traders.

Steve Nison brought candlestick patterns to the Western world in his popular 1991 book, "Japanese candlestick charting techniques." Many traders can now identify dozens of these formations, which have colorful names like bearish dark cloud cover, evening star and three black crows. In addition, single bar patterns including the Doji and hammer have been incorporated into dozens of long- and short-side trading strategies.

Relative Strength Index (RSI)

The momentum oscillator measures the speed and change of price based on The Relative Strength Index range between zero and 100 was developed by J. Welles Wilder. The RSI oscillates between zero and 100. Traditionally the RSI is considered overbought when above 70 and oversold when below 30. Signals can be produce by looking for divergences and failure swings. RSI can also be used to identify the general trend.

$$RSI = 100 - [100 / (1 + (\text{Average of Upward Price Change} / \text{Average of Downward Price Change}))]$$

Moving Averages

Moving average creating trend forecasting strategies, which compare predicted moving average with actual Moving averages, it can get an early warning of an impending change in trend direction. Investors who plan to hold a security for multiple years might watch a 52-day moving average, which would give them a long-term view of the stock trend. Day traders, who make profits from flipping stocks frequently, might use a 21-day moving average, which is more responsive to price movements on any single day.

Support

A support level is where demand is perceived to be strong enough to prevent a stock from falling further. Support is said to be found when a stock rebounds multiple times off a certain price.

Resistance

When a stock repeatedly falls back after rising to a certain level, it is said to have hit resistance level.

Limitations of the study

1. Analysis involves using of limited technical tools.
2. The study is restricted of five selected stock under nifty 50 only.
3. It can't predict the price accuracy.

CHART ANALYSIS

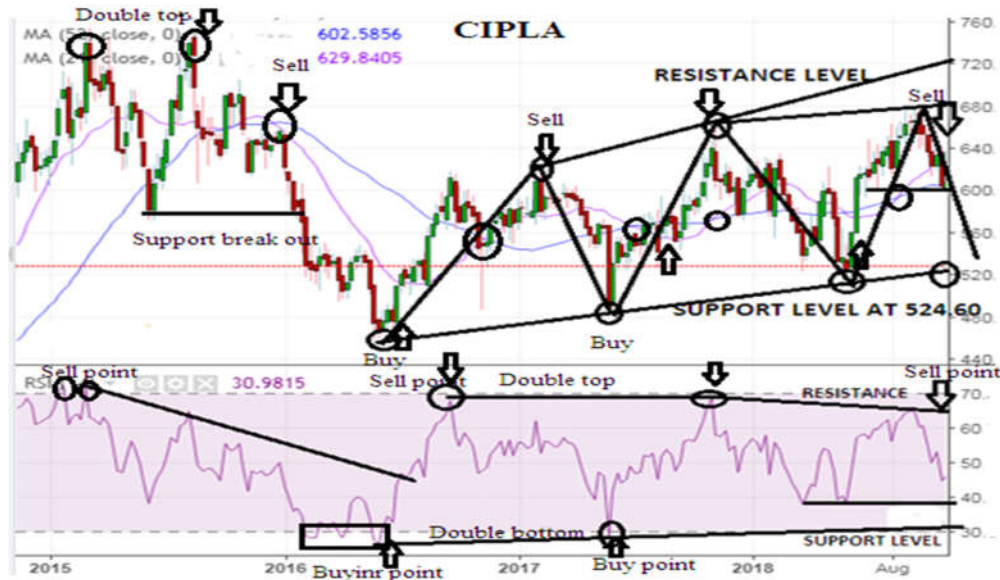
Chart 1: ITC



From the above chart 1 shows, chart pattern are such as residence, support, double top and breakout formation have been generated which indicate bullish trend and bearish trend of the past 4 years. ITC trading unchanged and having both support and resistance, it's to indentify a direction at the time. This week bearish candle generated, short term moving average crossed below the long-term moving average indicates that market in downtrend and RSI also indicate

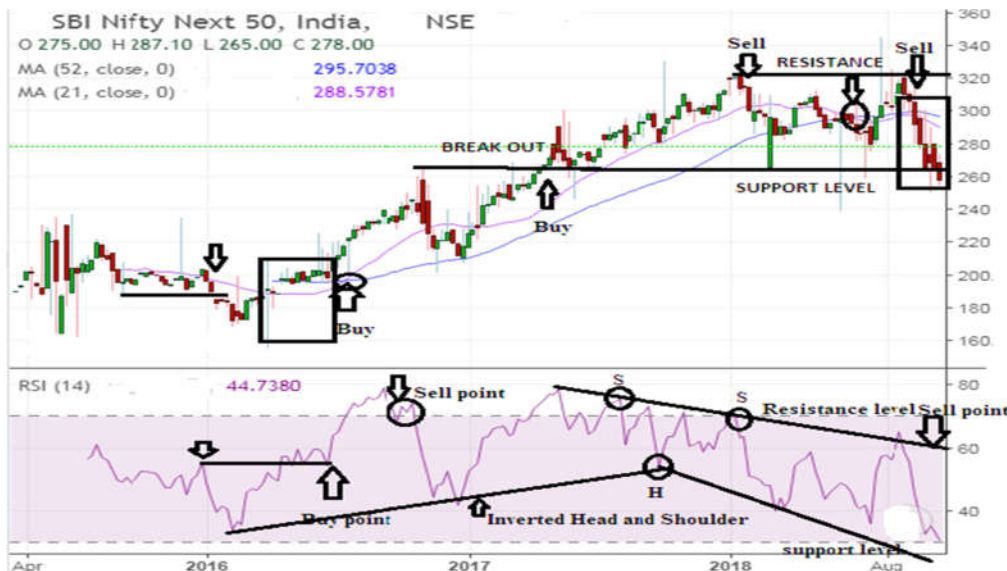
the near support. ITC expecting down trend so it is good for sell the script with stop loss for short sell. On the downside support is 252. If it fails the see a further breaks into another level of 244, 228 and 205. The resistance level at 295 and 322.

Chart 2: CIPLA



Regarding chart 2 confirm that double top, support breakout, resistance, support level, double bottom and rising wedge formation have been generated, which indicate the upward trend and downward trend for the past 4 years. Rising wedge formation has been generated for past three years, short term moving average near CIPLA price and RSI has indicate oversold. CIPLA share price closed below at 500 and its recommend to sell with stop loss. Its expect stock to react on following levels. If the stock manages to close below 500 these levels then the stock can drift to the levels of 465 to 440 and buy above 592 targets 662 and 688. Critical point at 460.

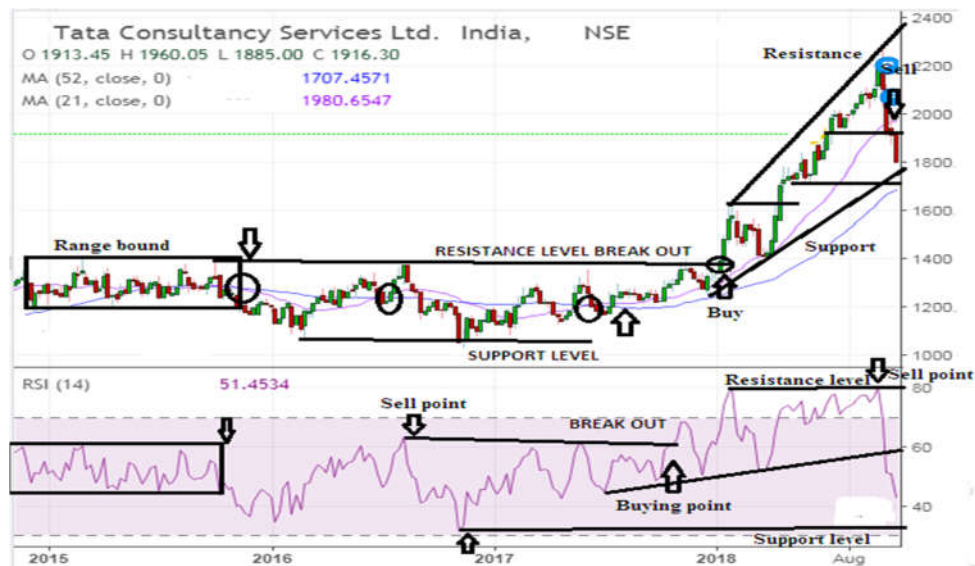
Chart 3: State Bank of India



The above chart 3 point to technical analysis in State Bank of India shares and potentially its market environment has been in bearish cycle. SBI shares might be good for investing and making money. Past six weeks bearish candle formation generated, Moving average below the SBI price and RSI near oversold region. Current trend is range bound but bullish trend expected based on market support.

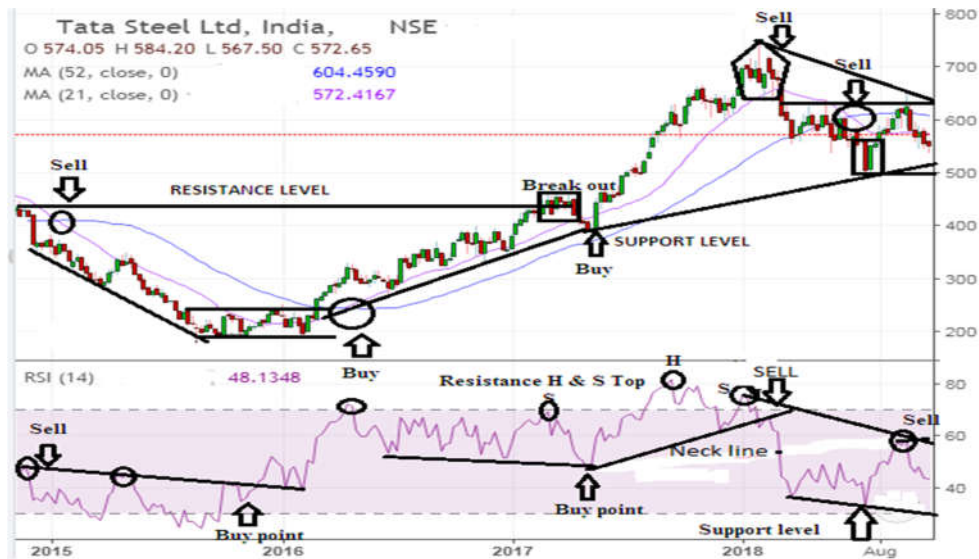
- Critical point to 232
- Support level 216 and 193
- Buy above 316 targets 335 and 364

CHART4: TCS



From the above chart 4 viewing the TCS for the past 3 years shows that stock have been shown in range bound market February 2018 residence breakout the market moved bullish trend, October 2018 three bearish candles formatted. Moving average strong support at 1708. RSI in Sep and Oct 2018 it crossed the range of 70 which indicates the stock have been over bought. In this period the investors has to sell the stocks. As a result the share price has been falling down trend. The main trend is down according to the weekly chart. A trade through 1780 will signal a downtrend. The trend will change to up on a move through 1980. The market is currently trading a long term resistance one at 1980, 2206 and 2316. The support levels at 1710, 1640 and 1520.

CHART 5: TATASTEEL



The above chart 5 was found that candlestick chart formation in range bound market 493 to 648. Short term moving average is less than long-term moving average, it indicates declining trend RSI showing there is no oversold region in past 3 years, that stock have been shown in sideways region, which range below 30, it indicates investors purchased the script and buy for medium term with stop loss. Long term buy above 648 upper target 680,725 and 790 and sell below 493 down target at 468, 456 and 412.

Findings and Suggestion

1. ITC showing bearish trend.
2. CIPLA share is wedge pattern generated its MA and RSI also indicate weak signal.
3. Tata steel and SBIN are range bound generated its good for investing and making money at entry for current level.
4. TCS share price has been fallen down trend expected.
5. Don't try to forecast the market, instead follow the market trend.
6. Technical analysis and technical indicators follow to increase their profit.
7. Technical analysis to improve knowledge and increase investment return.
8. Enter long if the price move above resistance line (buy) and enter shot if the price move through the support line (sell).
9. Breakouts can be traded as the entry, target and stop loss level are provided by the formation.
10. Chart pattern analysis can be used to make forecasts the trend.
11. To follow RSI and Moving average, in near time period market will be bullish and medium time market will be expected correction.

Conclusion

Technical analysis gives a new skill and idea that will enable better to trader. Technical analysis will help the investors to gain knowledge about the usage to increase their profitable trading and improve investment return. Investors can take buy, hold and sell decisions with the help of technical analysis. By applying technical analysis tools such as Candlestick chart, Moving average, Support and Resistance, RSI and etc. this study will help the investors to know the price movements by applying and also the contribute to indentify trend by enjoying profits. An investor is satisfied from the reasonable return from investment in shares. An investor can succeed in his investment only when he is able to select the right shares at right time. The investors should advise to watch the other factor like economy, market price, GDP, global market, company progress, returns and risk involved in particular share etc. for investment. Tata steel and SBIN are range bound generated so it is good for investing, making money and entry for correct level. Blind decision on investment without technical analysis will not be benefited.

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