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# A STUDY ON TECHNICAL ANALYSIS USING CANDLESTICK PATTERN OF SELECTED LARGE CAP STOCKS LISTED IN NATIONAL STOCK EXCHANGE (NSE), INDIA WITH REFERENCE TO STEEL SECTOR

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## Abstract

Technical Analysis is a study of the stock market relating to factors affecting the supply and demand of stocks and also helps in understanding the intrinsic value of shares and to know whether the shares are undervalued or overvalued. The stock market indicators would help the investor to identify major market turning points. This is a significant technical analysis of selected companies which helps to understand the price behaviour of the shares, the signals given by them and the major turning points of the market price. Any investor or trader must certainly consider technical analysis as a tool whether to buy the stock at a particular point of time though it is fundamentally strong. The objective of the study is the technical analysis on selected stocks of steel sector and interprets on whether to buy or sell them by using techniques. The study is purely based on secondary sources which includes the historical data available from the website. For the purpose of analysis, techniques like Candlestick Charts, Simple moving average, ROC and RSI is used for the analysis to know if the stock is technically strong.

Keywords: Stock, Shares, Market, Price, Technical, Average

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### INTRODUCTION

Technical Analysis can be defined as an art and science of forecasting future prices based on an examination of the past price movements. Technical analysis is not astrology for predicting prices. Technical analysis is based on analyzing current demand-supply of commodities, stocks, indices, futures or any tradable instrument. Technical analysis involve putting stock information like prices, volumes and open interest on a chart and applying various patterns and indicators to it in order to assess the future price movements. The time frame in which technical analysis is applied may range from intraday (5-minute, 10-minutes, 15-minutes, 30-minutes or hourly), daily, weekly or monthly price data to many years. There are essentially two methods of analyzing investment opportunities in the security market viz fundamental analysis and technical analysis. Fundamental information like financial and nonfinancial aspects of the company or technical information which ignores fundamentals and focuses on actual price movements a may be used. The technical analyst assumes that it is 90 percent psychological and 10 percent logical. Technical analysis is a method of evaluating securities by analyzing the statistics generated by market activity, such as past prices and volume. Technical analysts do not attempt to measure a securities intrinsic value, but instead use charts and other tools to identify patterns that can suggest future activity. The study on technical analysis of selected companies based on Stratified sampling technique is significant as it helps in understanding the intrinsic value of shares and to know whether the shares are undervalued or overvalued or correctly priced. Further it helps in understanding the price behaviour of the shares, the signals given by them and the major turning points of the market price. The concept of analysis comes into picture when decision has to be made on choosing a particular company's shares for investment. Technical analysis is a security analysis technique that claims the ability to forecast the future direction of prices through the study of past market data primarily price and volume.

### **REVIEW OF LITERATURE**

Boobalan (2014) study is based on significant technical analysis of selected companies which helps to understand the price behaviour of the shares, the signals given by them and the major turning points of the market price. This paper is aims at carrying out Technical Analysis of the securities of the selected companies and to assist investment decisions in this Indian Market. On the basis of prediction of 5 companies (i.e; WIPRO, SBIN, GAIL, ONGC, ITC). Different pattern of stock prices of these companies give an idea of future trend of these companies could be analyzed with the right technical analysis tools, 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.

Sathyapriya (2016) their study illustrates an analysis of four years' asset value, from 2008 to 2012, of companies picked from Infrastructure & Pharmaceutical sectors. In this regard, Sharpe Index Model is used, which is regularly employed to assess the performance of mutual funds and portfolio strategies. This study aims at evaluating the portfolio performance, thereby bringing out the optimal combination of assets to be invested in afore said two sectors. It is done basically by ranking the picked assets based on excess return to beta ratio and then finding out the cut off point (Ci), thereby the optimal combination of the assets. From the

analysis done in their study, Dr Reddy from pharmaceutical sector occupies the maximum proportion of 56% of the total investment being the most suggested stock amongst the 20 companies picked. Second to it stands Cipla again from pharma with a proportion of 26% of the investment. The lower proportion in the portfolio would be for Lupin in pharma sector constituting 5% of the total investment.

Syed Ibrahim (2017) studied the technical analysis of select steel companies in India, steel sector and interprets whether to buy or sell them by using techniques. This in turn would help investors to identify the current trend and risks involved with the scrip on par with market. Technical analysis which helps to understand the price behaviour of the shares, the signals given by them and the major turning points of the market price. This paper is aims at carrying out Technical Analysis of the securities of the select steel companies and to assist investment decisions in this Indian Market. Tata Steel have stabilized growth high return and high risk, coal India have high return and low risk, Hind zinc have high risk and low return (negative return), and Coal India medium risk an medium return. 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.

Pravin Chowdary (2018) examines the technical analysis for the Indian stock market using monthly stock returns for five Public sector units listed on the Bombay stock exchange for the period of Jan 2017 to Dec 2017. This study provides the impact of market indices on Top PSUs. Only one PSU (NTPC) is not affected from market indices for a particular year. It gives better insights in terms of understanding the impact of BSE Indices and PSUs in India. They conclude that this work could be used as an impact of BSE Indices on the Top PSUs.

Thuy- An Dinh (2018) study generated input variables by considering both price and volume information with even weight. They also defined three modelling parameters: the input and the target window sizes and the profit threshold. These specify the input and target variables, between which the underlying functions are learned by multilayer perceptions and support vector machines. They tested approach over six stocks and 15 years and compared with the expected performance over all considered parameter specifications. Their approach dramatically improved the prediction accuracy over the expected performance. Their approach was shown to be stably more profitable than both the expected performance and the buy-and-hold strategy.

Ameya Sunil Pawar (2019) focuses on knowing what kind of analysis is done by the traders and investors, who are members of the face book group "Day Trading Stocks and Options", and the reason for that particular analysis. This is done with a view to find reason why people rarely use the complementing nature of technical and fundamental analysis, both together.

## STATEMENT OF PROBLEM

India was the world's second largest steel producer with production standing at 106.5 MT in 2018. The growth in the Indian steel sector has been driven by domestic availability of raw

materials such as iron ore and cost effective labour. Consequently, the steel sector has been a major contributor to India's manufacturing output. The steel industry is critical to daily life, domestic infrastructure and national security, providing fuel-efficient vehicles, innovating infrastructure with lighter utility poles and bridges, lowering energy consumption and costs with steel roofing, and giving access to nutrition in times of emergency and financial need. The steel industry is in downward trend because of GDP, but Steel industry is fundamental to the manufacturing sector. In 2018 steel consumption in India was only 8%, but in 2019 it is expected to grow by 7% more.

## **OBJECTIVES OF THE STUDY**

- To study the relevance of technical analysis in steel sector in India.
- To study the market share price movement in large cap companies.
- To observe which company performs well in the stock market.
- To analyze the performance of select steel sector and to forecast the future trends in the share prices through technical analysis.
- To provide suitable suggestions to the investors.

# **RESEARCH METHODOLOGY**

In this research paper the consequence of movement of stock price is taken from the selected steel companies listed in National stock exchange (NSE), India. The information and data has been taken from the secondary source for example newspapers, magazines, company's website and NSE websites. The sample unit covers 5 Indian steel companies out of 46 companies listed in NSE.

Research design is a conceptual structure within which research is conducted and it constitutes the blueprint for the collection, measurement and analysis of data. Decisions regarding what, where, how much, by what means concerning an inquiry constitutes a research design. The study is of analytical nature and secondary data are used. The sampling technique is stratified random sampling technique is used for analysis. The data is taken from the website. The study covers a period of three years from 31st March 2016 to 31st March 2019. The 5 large cap companies in the Indian steel companies were assessed on the market capitalization.

Stocks selected for the analysis include the following companies:

- Tata Steel
- Jindal Steel
- JSW Steel
- SAIL
- Visa Steel

Since the sample unit comprises only 5 large cap companies as per the market value of NSE, there is likelihood for differences in the stock price movement's trends in other companies. The inferences may not be generalized.

# DATA ANALYSIS AND INTERPRETATION



Figure 1. Candle Stick Pattern for Tata Steel



Figure 2. Candle Stick Pattern for Jindal Steel

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## Figure 4. Candle Stick Pattern for SAIL







### CONCLUSION

As we all know India is one of the fastest growing economies in the world. 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.

#### SCOPE FOR FURTHER RESEARCH

In the current study the technical analysis plays an important role for valuation of securities by the investor in the stock market. Entering into the stock market the investor's looks for various parameters and criteria and after that only he is ready for the investment and put the money to buy the script. This analysis gives tips for the investor using candle stick pattern and encourage the investors to go for investment. Based on the past year performances the investor can predict the future price of the shares. Candle stick pattern is one of the best technical tools for prediction of the shares price and to predict the momentum of the market. Hence, technical analysis gives further more options to analyse and predict the value of shares using Relative strength Index (RSI), Rate of Change (ROC) and Stockstics models. This leads

to do the possibility do further analysis pertaining to the forecasting the stock price for upcoming future and predict the actual movements of the share prices with relation to the market capitalisation.

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