

A Study on Implementation of Technical Trading Indicators on Steel Industry

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Abstract

“A STUDY ON IMPLEMENTATION OF TECHNICAL TRADING INDICATORS ON STEEL INDUSTRY”. The purpose of this paper is to make a study on the technical analysis of randomly selected ten companies from steel industry and to forecast the share price movement with the help of fifteen technical indicators. The analysis is completely based on the historical data i.e., day to day share price and trading quantity from the selected companies. Ranking of the best reflecting technical indicator on the basis of its success rate is also calculated company wise. On the basis of this analysis one can be able to identify the signals given by the share price movement and also determine the indicator which is reflecting the most accurate investment decision. The financial securities are considered to be the most profitable investment avenue at the same time they also have the highest level of risk. This study helps the individual investors and the stock brokers to take more profitable decision in stock market.

Keywords: Technical analysis, Technical indicators

Introduction

Technical analysis is a tool which analyzes the daily share price movement by using technical indicators and predicts the buy/sell position of the scrip's. One of the main assumptions in technical analysis is that the history repeats itself, the stock price is said to move in trend if it is persisted on a long term. Volatility of the stock market is said to be the challenging aspect for the market participants during the course of investment. The stock market indicators will identify the major turning point and the future price movement in the market and help the investors to minimize the chances of risk.

Review of Literature

A number of studies have been undertaken to study the various aspects related to the technical feasibility of the project.

Chitra (2011) observed that “investors must also take into account various factors like Union Budget, company performance, political and social events, climatic conditions, etc., before taking a decision of investing in stocks. The scrip should also be fundamentally good. Therefore, it is advisable for a trader or investor to make technical analysis of stocks for better return of investments”

Sowmya (2012) stated “Technical analysis is a method of predicting future prices of a share based on its past performance. Technical analysts use charts and other tools to identify patterns that can suggest future price movement of the share as they believe that the historical performance of stocks and markets are indications of future performance”

Rajan Sabari and Parimala (2013) examined in their research work that “the technical analysis helps investors to analyze the financial strength of corporate, growth of earnings and profitability”

Objectives of the Study

The main aim of the study is to identify the best suitable technical trading indicators which will help to predict the trend of share price movements of select companies in Steel Industry.

- To identify the indicators that influence the most on market price.
- To suggest the investors on buy or sell decision of the scrip.
- To find out overbought and oversold position in the selected scrip.
- To analyze and predict the future price movement of the chosen equity shares.

Scope of the Study

The research process is performed in selected scrip's of steel industries. This study helps a lot for the investors to take decision, as the financial market is frequently fluctuating in nature. The study helps to find out the future trends in the prices of steel industry and also Valuable hints can be identified by the investors for their future buying and selling. By using the technical indicators, the analyst could able to provide suggestions regarding the buying and selling decisions for the investors.

Research Methodology

The research methodology will explains the systematic plan and the frame work of the data collection for conducting the study. Research design used in this study is analytical approach in which the researcher has to use facts or information already available and to determine the most suitable result out of the analysis.

Data Collection

The secondary data is collected from ten companies from steel industry for a period of one year from 1st April 2016 to 31st March 2017. The companies which are selected for the analysis are TATA Steel Ltd, Jindal Steel and Power ltd, SAIL, JSW Steel Ltd, Bhushan steel ltd, Manaksia steel ltd, Visa steel ltd, MSP Steel & Power Ltd, OCL Iron & Steel Ltd, Ratnamani Metals & Tubes Ltd.

Tools Used For Analysis

1. Simple Moving Average [SMA]
2. Exponential Moving Average [EMA]
3. Moving Average Convergence and Divergence [MACD]
4. Average True Range [ATR]
5. On Balance Volume [OBV]
6. Rate of Change [ROC]
7. Bollinger Bands [B Bands]
8. Full Stochastic
9. Relative Strength Index [RSI]
10. Williams %R
11. Commodity Channel Index [CCI]
12. Money Flow Index [MFI]
13. Aroon Oscillator
14. True Strength Index [TSI]
15. Percentage Price Oscillator [PPO]

Limitations of the Study

- The data is collected through secondary sources only and limitations of secondary data is applicable.
- This study can be used for short term only.
- The period used for the study is limited and hence it may not reflect other periods of the year.
- This study only considers the share price movements, ignoring the fundamental factors of the company.

Analysis and Interpretation

During the course of study, the Buy/Sell signals were generated for each company in the Steel Industry by using the fifteen technical indicators for the study period of 231 days ranging from April 2016 to March 2017 and Success Percentage (%) of Matched, Non Matched counts is also determined. One basis of the success percentage the ranking of Indicators were done both in company- wise and indicator wise overall ranking for the ten companies has also generated. Table I shows the indicator wise overall ranking for ten steel companies.

Table I: Shows the overall ranking of technical indicators

OVERALL RANKING OF TECHNICAL INDICATORS

S/NO	INDICATORS	TATA	SAIL	JINDAL	JSW	VISA	MSP	OCL	RATNA MANI	BHUSHAN	MANAKSIA	RANK
1	MFI	3	2	1	1	14	10	12	2	14	1	1
2	D%	5	12	12	13	1	2	1	13	1	3	2
3	RSI	5	12	12	13	1	2	1	13	1	3	2
4	CCI	1	1	5	3	9	14	14	1	8	8	4
5	TSI	2	5	2	8	12	10	13	4	11	2	5
6	OBV	7	5	3	11	7	8	4	13	4	9	6
7	ROC	8	5	5	11	7	1	9	12	5	9	7
8	ATR	9	2	15	7	3	6	6	11	3	13	8
9	B BAND	3	4	3	2	15	13	15	3	12	5	8
10	AROON	11	8	9	5	4	10	3	5	7	14	10
11	SMA	11	11	12	8	10	4	7	8	9	9	11
12	PPO	11	15	10	10	5	5	8	9	9	7	11
13	EMA	15	9	8	4	13	6	5	5	15	15	13
14	MACD	14	14	10	15	5	8	9	9	6	6	14
15	R%	10	10	7	6	11	15	11	5	12	9	14

Interpretation

The above table shows the indicator wise ranking for the ten selected companies. Each company reflect its best reflecting indicator as rank 1 and followed by rank 2 and so on. On the basis of company wise ranking overall ranking of the indicator is determined. Based on the ranking Money Flow Index (MFI) is said to be the best success reflecting indicator among the fifteen indicators which is followed by full stochastic oscillator (D %) and Relative Strength Index (RSI). Least success reflecting indicators are William R% and Moving Average Convergence and Divergence (MACD) because both these indicators are ranked 14th.

Findings and Suggestions

- Technical analysis tools to be used to predict the bullish and bearish movement in the stock market for short term.
- It is suggested that out of ten Steel companies selected for the study, the most powerful indicators is Money Flow Index (MFI) because MFI is ranked first out all the fifteen indicators.
- The market participants who are dealing the scrip's of steel industry it is better to observe the Money Flow Index first, followed by Full Stochastic indicator and Relative Strength Index (RSI) and thirdly Commodity Channel Index (CCI) may be used to predict the movement of share price because its success ratio is higher than other indicators.
- For VISA Steel ltd, OCL Iron & Steel Ltd and Bhushan Steel Ltd companies' stochastic indicators and Relative Strength Index (RSI) are ranked one that is after looking over the Money Flow Index (MFI) indicator the attention may be given to stochastic indicator and RSI .
- For JINDAL Steel, Manaksia Steel Ltd and TATA Steel Companies, True Strength Index (TSI) is ranked two that is after looking after the Money Flow Index the attention may be given to the True Strength Index.

- For TATA Steel, Ratnamani Metals & Tubes and SAIL Steel companies, Commodity Channel Index is ranked one that is after looking over the Money Flow Index indicator the attention may be given to the Commodity Channel Index.
- For VISA Steel and Bhushan Steel companies, Average True Range (ATR) is ranked three that is looking after Money Flow Index (MFI) the attention may be given to the Average True Range (ATR).
- Market participants used to look into the Simple Moving Average (SMA) indicator for taking investment decisions. But based on the analysis SMA stands 11th position in the ranking.

Conclusion

The study is about Technical analysis of selected companies listed on the National Stock Exchange from steel industry. This study is accompanied with fifteen technical indicators. It was found that the buy/sell signals generated out of the study by using the selected technical indicators reflected the right timing of buying and selling of scrip's in majority of the cases. Ranking of the best reflecting technical indicators on the basis of its success ratio was done for company wise. By and large, market participants use the Simple Moving Average, Exponential Moving Average, Moving Average Conversion and Divergence frequently. But as per the analysis the market participants who are dealing with the scrip's of Steel industry, it is better to observe the Money Flow Index (MFI) first followed by Full Stochastic Indicator and Relative Strength Index (RSI) and thirdly Commodity Channel Index (CCI) may be used to predict the movement of the share price because its success ratio is higher than other indicators.

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