



# THE INFLUENCE OF TECHNICAL ANALYSIS IN EQUITY MARKET

*Submitted by*

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**IN**

**BUSINESS ANALYTICS**

**SCHOOL OF BUSINESS**

**INTRODUCTION**

Fundamental analysis and technical analysis are the two categories that will be used to make investment decisions as a method of study. In fundamental analysis, the theoretical value of the company is analysed for long-term investment purposes, and the economy, industry, and company-based datasets are all carefully analyzed. Technical research, however, focuses exclusively on a market's supply and demand. The main objective is to study technical indicators using different databases. It emphasises intraday dealing, or short-term investments that must be made within one day. With the aid of charts, technical analysis will represent the data in order to determine the pattern of upcoming activity. It will use a variety of tools to forecast market activity. The investor can assess the power and weakness of the securities with the aid of technical analysis.

## **1.1 Need of Study:-**

The technical analysis method utilized in this study to analyse the stock uses simple moving averages like the 7-day and 12-day averages along with ROC and RSI. By comparing the price movement of the stock with the aid of these tools, day traders and investors with short-term objectives will be able to make the best investment decisions. These instruments are used to monitor everyday changes in stock market price.

## **1.2 Technical Analysis:-**

Technical analysis aids in analysing past stock market price movement to forecast future share price movement. The quantity and demand in the stock market determine how much a stock price changes. In this, a variety of tools are used to calculate technical analysis, and techniques are available to analyse the stock price. These tools can help investors make the best decisions possible regarding when to purchase or sell stocks on the stock exchange in order to maximise their returns.

Fundamental analysis and technical analysis are the two methods used to analyse stocks on the stock exchange. The fundamental data is in the financial and nonfinancial aspects of the company and concentrates on potential price movement. Technical analysts make the assumption that 90% of predictions are psychological and 10% are rational. Technical analysis is a way to assess market action, including previous price and volume.

Understanding the intrinsic value of a share will enable one to predict the future through the study of technical analysis of particular businesses. Additionally, it will assist in understanding the market behaviour of the shares. The signal denotes the market price's significant turning moment.

## 1. LITERATURE REVIEW

Dr. Pallavi, 2000: The purpose of the research is to understand the various systems, including those of the public, private, and banking sector. Indian banks are under the authority of the RBI. After 1969, the banking industry underwent changes, and there was an increase in the need for services based on the needs of the client.

Christoopher Neely and Paul Weller 2002: In the research, the profitability of trading in the exchange rate market is analysed or estimated. In order to determine profitability, a statistical instrument for stock issue prediction was used. These aid the purchaser in analysing the share price on the market.

Suresh A.S 2010: In their study, the researchers are attempting to determine how to recognise stocks that are appropriate for investment choices. This study utilised various types of analysis that are necessary for business decisions. It will analyse the volume trend and the investor's plan of action to maximise return.

Matthew C. Roberts 2010: There is evidence to back up the value of technical analysis and the stock market that has expanded throughout Indian markets. They are produced mechanically using basic arithmetic operations and are free from the data snooping bias that is prevalent in technical analysis study. Through the economic analysis of the investor, it may be able to perform both strong and weak important analyses of the market.

AsifUllah Khan and Dr.Bhupesh 2011: It is always difficult to choose the right stocks for business. Finding a stock with the potential to increase in value is every investor's primary goal in order to maximise their potential profits. Technical and basic analysis are two of the many traditional methods that are employed. A list of stocks that are suitable for investments must be produced, and this is the primary challenge with every method.

R Chitra 2011: The technical analysis of the stock market is used to make the study of research, which aids in understanding share values and displays undervalue and overvalue indicators. The investor will be able to determine the turning point and the stage in which to invest.

Sudheer V, 2012: The primary goal of technical analysis is to generate income by allowing people to choose when to enter and exit the security market. Technical analysis is the study of predicting the price of securities for the future. when the low peak line indicates a buying indication and the high peak line indicates a selling and significant profit.

Jayakumar&Sumathi, 2013: To have an impact on the stock market, the financial companies in this study are dispersed throughout the nation. For price movement analysis and trend information, it will analyse the share price using trend analysis.

RajatSingla 2014: The relative strength index and the exponential moving average were two different tools that the researcher used in this study before making a choice regarding market stocks. According to the study's conclusion, EMA and RSI can be used to predict the markets if the right choices are made in a timely manner. RSI, EMA, Brock t data, Alpha ratio, Sharpe ratio are some of the key terms.

Sahana Jaen, Afghan Jabeen 2017: The primary goal of this paper is to evaluate the performance of the pharmaceutical stock, which is traded on the National Stock Exchange (NSE), and to assess the risk exposure that has been foreseen using the employed technical indicators. It would be the researcher's job to analyse daily earnings if a prospective investor's price factors changed on a daily basis. This effort is made to learn the typical daily moving price of each stock on the NSE.

## 3. OBJECTIVES OF THE STUDY:-

- To apply technical analysis to determine the trend of the stock prices of specific businesses that are listed on the NSE.
- By using the Relative Strength Index, Simple Moving Average, and Rate of Changes to assess price changes over a one-year period in three distinct industries.
- To research the role that technical analysis plays in the Indian financial market.
- To aid buyers in making decisions about their investments based on the line chart indicator.

## 4. RESEARCH METHODOLOGIES

Sample size: For the analysis of this paper's sample, three industries—the IT industry, the banking sector, and the automobile sector—were taken into account. Applied Sampling Methodology: Systematic sampling is the method of sampling used to create the sample for the article. Four of the top companies in each industry are chosen for this task. Data from NSE India was taken in order to complete the research. They selected the best 4 businesses as of March 31, 2021. This led to the discovery of a total of 12 businesses that satisfied this criterion and fell into the category of "top 4 businesses that are leading in their sector. Currently, we employ some signs, such as the SMA (Simple Moving Average), ROC, and RSI. Consequently, calculating the SMA (Simple Moving Average), ROC, and RSI values in Excel. Time Series Information One (1) year's worth of data was used for this study's purposes. SMA is merely the average price over the given period, according to the definition. It is determined by dividing the total number of periods by the number of prices within a given time period. The speed and change of market movements are gauged by the momentum oscillator known as the relative strength index, or RSI. The RSI fluctuates between zero and one hundred. The RSI is typically regarded as overbought when it rises above 70 and oversold when it falls below 30. It is determined using the typical price gains and losses over a specified time period. The meaning of ROC is A pure momentum oscillator is the Rate-of-Change (ROC) gauge, also known as just Momentum. The price today is compared to the price "n" periods back in the ROC calculation. The study employs one type of chart that displays closing stock prices at different time intervals, along with SMAs for seven and twelve days, ROC, and RSI. The only kinds of charts that have been utilised are line charts, which are created by joining the closing prices of a stock over a specified time period.

### 4.1 ANALYSIS AND INTERPRETATION:-

#### 1. IT INDUSTRY:-

The IT industry in India is crucial to the country's economic expansion. 7.7% of GDP is generated by this industry. The quality of living for the average person has changed as a result of IT industry policy. The majority of IT businesses are based in populated regions.

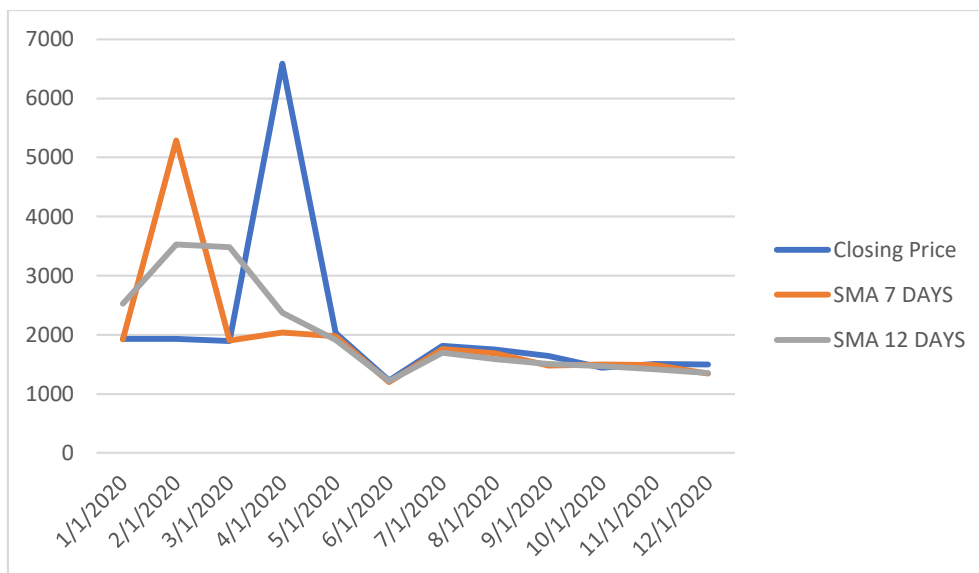
The following leading IT firms are taken into consideration for analysis:

- TCS
- WIPRO
- INFOSYS
- TECHMAHINDRA

1)Tata Consultancy Service(TCS)

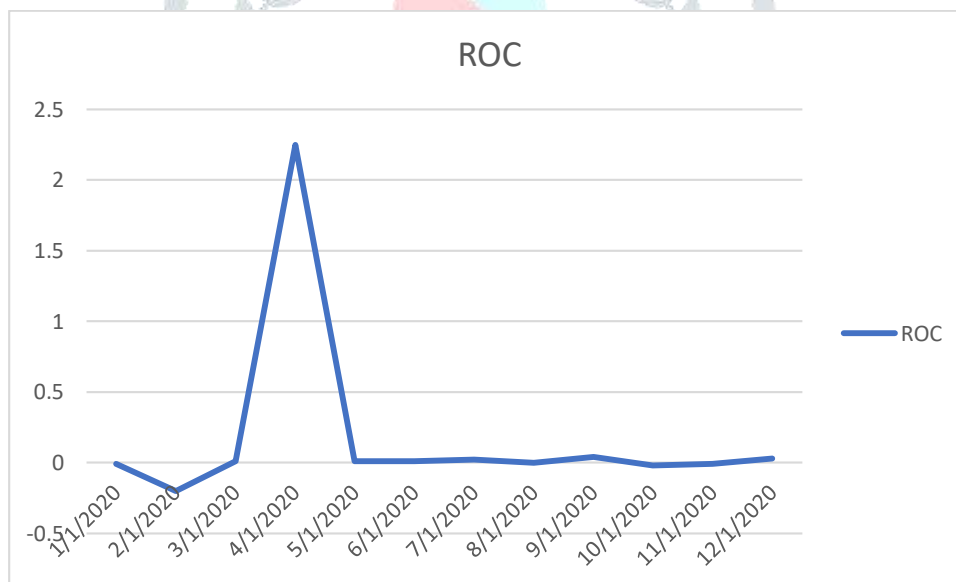
Date	Closing price	SMA 7 DAYS	SMA 12 DAYS	ROC	RSI
01-01-20	1930.73	1918.04	2527.73	-0.01	46.27
01-02-20	1929.29	5290.93	3526.89	-0.20	46.07
01-03-20	1894.15	1904.37	3478.42	0.01	46.12
01-04-20	6585.53	2039.23	2376.72	2.25	79.28
01-05-20	2031.81	1977.46	1915.00	0.01	78.23
01-06-20	1222.77	1202.06	1215.67	0.01	54.14
01-07-20	1811.18	1760.91	1700.04	0.02	71.95
01-08-20	1752.21	1684.80	1591.78	0.00	76.52
01-09-20	1640.27	1482.64	1510.00	0.04	72.41
01-10-20	1441.04	1497.41	1472.24	-0.02	48.34
01-11-20	1502.28	1488.34	1416.27	-0.01	63.24
01-12-20	1496.96	1345.73	1348.96	0.03	78.61

Table No.1

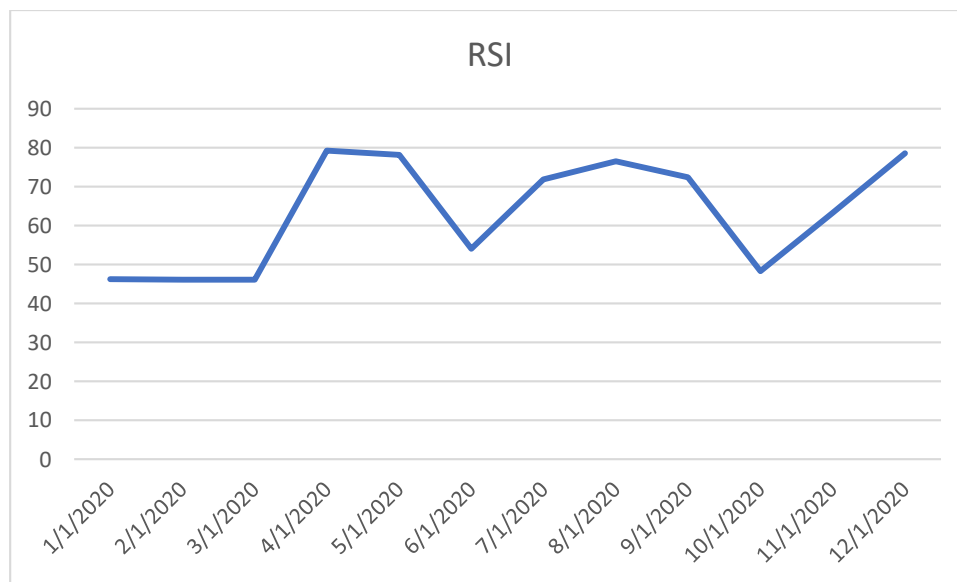


**Analysis and Interpretation:-**

- The closing price, SMA for 7 days, and SMA for 12 days trends in the above chart have all moved in the same way for the past 7 months.
- An indication of a buying indicator is when the 7-day SMA crosses above the 12-day SMA from September, November, and December.
- The selling indication can be seen in the above chart where the 7-day SMA crossed below the 12-day SMA in October.



- Overbought and overpriced areas are indicated by ROC.
- In the chart above, ROC shows that the month of August is overbought and the month of October is in the oversold area.
- Head and shoulders begin in August, and the opposite head and shoulder occur in October.



- In RSI research, there is a board guideline that states that securities should be bought if the RSI is below 30, and sold if it is above 70.
- When the RSI crosses above 70 in January, May, August, or September, it's time to sell.
- When the RSI is lower in October, November, and December, it is time to purchase.

## 2) WIPRO:-

Date	Closing price	SMA 7 DAYS	SMA 12 DAYS	ROC	RSI
01-01-20	313.97	305.50	300.32	-0.01	63.10
01-02-20	290.88	291.43	301.49	-0.01	41.92
01-03-20	286.65	287.42	300.90	-0.01	41.25
01-04-20	284.44	278.39	291.97	-0.01	44.02
01-05-20	266.69	265.89	283.09	-0.01	32.42
01-06-20	262.66	267.36	274.98	0.00	35.08
01-07-20	275.83	279.03	209.21	0.01	54.44
01-08-20	288.08	301.59	271.93	0.02	65.70
01-09-20	328.53	323.04	288.03	0.02	80.97
01-10-20	320.75	321.03	306.69	0.00	63.27
01-11-20	320.70	324.15	320.31	0.01	57.51
01-12-20	328.60	305.40	323.54	0.00	57.88

Table No.2

### Analysis and Interpretation:-

- SMA analyses the purchasing and selling signals using the 12 and 7-day moving averages.
- When the 7-day moving average crosses over the 12-day moving average and is above it, a purchase or sell signal is indicated.
- When the 7-day moving average from January to June is higher than the 12-day moving average, a buy indication is given.
- The selling indication occurs from July to December when the 12-day moving average is higher than the 7-day SMA.
- The overvalued and oversold areas are displayed by ROC.
- This year, the area of ROC from June to September is overbought.
- The ROC is an area that is overloaded from February to May.

- In RSI research, there is a board guideline that states that securities should be bought if the RSI is below 30, and sold if it is above 70.
- When the RSI is above 70 in September, it is time to sell.
- The RSI is cheaper to purchase stocks in May.

### 3. INFOSYS:

Date	closing price	SMA 7DAYS	SAM 12 DAYS	ROC	RSI
01-01-20	550.90	520.59	504.13	0.02	72.34
01-02-20	564.73	557.07	535.90	0.00	65.66

01-03-20	574.79	570.55	559.87	-0.01	65.91
01-04-20	578.94	574.76	571.78	0.01	62.29
01-05-20	596.91	584.61	580.24	0.01	69.55
01-06-20	635.81	608.58	595.75	0.02	76.87
01-07-20	668.73	644.83	624.97	0.01	74.74
01-08-20	629.40	639.31	636.63	0.10	47.20
01-09-20	725.46	678.62	666.81	0.00	58.20
01-10-20	676.56	707.39	685.27	-0.02	48.53
01-11-20	649.64	665.46	688.24	0.00	44.89
01-12-20	668.46	660.32	667.91	0.00	50.47

**Table No.3**

- The 7-day SMA is above the 12-day SMA from January to October in this instance, indicating a buying indication.
- The 7-day SMA crosses below the 12-day SMA in November and December, indicating a selling opportunity.
- The overbought and oversold area is indicated by the ROC.
- The high value denotes an overbought area, while the low value denotes an oversold region.
- ROC is overbought between January and August.
- ROC is overloaded in March and October.
- In RSI research, there is a board guideline that states that securities should be bought if the RSI is below 30, and sold if it is above 70.
- To sell the assets, wait until the RSI rises to 70 in the months of January, June, and July.

In November, RSI has lower values at which to purchase securities.

## 4. TECHMAHINDRA:

Date	closing price	SMA 7 DAYS	SAM 12 DAYS	ROC	RSI
01-01-20	569.40	520.69	505.01	0.04	81.67
01-02-20	603.24	581.40	547.88	0.00	71.35
01-03-20	628.99	612.86	589.21	0.01	71.84
01-04-20	664.68	640.98	625.66	0.01	67.43
01-05-20	690.83	674.13	654.89	0.01	68.38
01-06-20	690.20	691.78	679.51	-0.02	61.33
01-07-20	648.65	670.23	677.56	0.00	42.54
01-08-20	704.50	663.12	672.17	0.04	62.41
01-09-20	754.05	721.01	691.75	-0.01	68.43
01-10-20	688.66	726.97	714.68	-0.01	42.32
01-11-20	707.99	696.29	717.01	0.01	52.01
01-12-20	699.46	701.97	699.98	-0.01	48.91

Table No.4

Analysis and Interpretation:-

- Using the 7-day and 12-day moving averages, SMA analyses the purchasing and selling signals.
- From January to June and in October, the 7-day SMA is higher than the 12-day SMA, indicating a buying indication.
- The months of July, August, and November show a selling indication.
- The overbought and oversold area is indicated by the ROC.
- The high value denotes an overbought area, while the low value denotes an oversold region.
- The area of ROC is overbought between May and August.
- The area of ROC is oversold in the months of June, September, and November.
- In RSI research, there is a board guideline that states that securities should be bought if the RSI is below 30, and sold if it is above 70.
- When the RSI is above 70 from January to April, it is time to sell.

## 2. BANKING SECTOR:-

Providing services to businesses, it is a financial organisation. By keeping financial assets for other people, it will dedicate the economy. The stock market also includes it as one of the important industries. Bank shares are where the majority of investors spend.

According to the few institutions,

- ICICIBANK
- HDFCBANK
- SBI
- PUNJABNATIONALBANK

*1. ICICI Bank:*

Date	closing price	SMA 7DAYS	SAM 12 DAYS	ROC	RSI
01-01-20	336.02	319.38	316.58	0.01	24.31
01-02-20	318.88	332.55	323.67	-0.02	1.16
01-03-20	289.76	311.68	320.31	-0.02	3.04
01-04-20	283.46	288.03	302.63	0.01	8.82
01-05-20	293.89	287.13	289.11	0.01	17.40
01-06-20	290.18	291.60	288.12	0.00	9.05
01-07-20	274.44	282.84	286.67	0.00	8.76
01-08-20	325.94	292.31	290.33	0.03	27.47
01-09-20	330.79	325.42	305.45	-0.01	8.38
01-10-20	312.67	321.64	319.50	0.00	6.46
01-11-20	357.73	329.56	328.73	0.03	27.88
01-12-20	354.84	352.71	338.75	0.00	10.12

Table No.5

## Analysis and Interpretation:-

- The SMA analyses the purchasing and selling signals using the 7-day and 12-day moving averages.
- The 7-day SMA is above the 12-day SMA from August to December, signalling a buy indication.
- The area that is overbought and oversold is indicated by ROC.
- High values indicate overbought regions, while low values indicate bearish regions.
- The ROC is an overbought area in May, August, October, and December.
- The ROC area is oversold in March, April, and September.
- In RSI research, there is a board guideline that states that securities should be purchased if the RSI is below 30, and sold if it is above 70.
- If the value is below 30, one can only purchase and hold the asset for later sale.

*2. HDFC Bank:*

Date	closing price	SMA 7DAYS	SAM 12 DAYS	ROC	RSI
01-01-20	1920.81	1881.19	1861.41	0.01	72.27
01-02-20	1870.75	1905.91	1888.43	-0.01	47.36
01-03-20	1857.93	1874.49	1888.30	0.00	44.73
01-04-20	1943.24	1892.93	1891.50	0.01	65.87
01-05-20	2035.67	1971.05	1928.75	0.02	76.15
01-06-20	2067.69	2036.45	1993.48	0.00	65.73
01-07-20	2161.78	2109.92	2070.27	0.00	73.52
01-08-20	2080.71	2136.56	2112.28	-0.01	46.37
01-09-20	2015.71	2067.34	2103.65	-0.01	34.07
01-10-20	1965.11	1996.91	2038.36	-0.01	32.17
01-11-20	2020.91	1976.06	1992.14	0.02	52.28
01-12-20	2110.97	2057.17	2020.56	0.00	67.86

Table No.6



## Analysis and Interpretation:-

- Using the 7-day and 12-day moving averages, SMA analyses the purchasing and selling signals.
- When the 7-day moving average from May to August is above the 12-day moving average, a buy indication is given.
- The 12-day moving average surpasses the 7-day moving average from September to November. SMA stands for the sell indication.
- The overbought and oversold area is indicated by the ROC.
- The high value denotes an overbought area, while the low value denotes an oversold region.
- The ROC area is overbought in the months of March, May, and November.
- ROC is an oversold area in February, September, and October.
- There is a board policy in RSI research that says to purchase securities if the RSI is below 30, and to sell them if it is above 70.
- When the RSI high value is greater than 70 between May, June, and September, it is a sell signal.

## 3. State Bank of India:

Date	closing price	SMA 7 DAYS	SAM 12 DAYS	ROC	RSI
01-01-20	305.67	311.06	315.92	-0.01	48.93
01-02-20	276.56	297.26	304.03	-0.03	30.51
01-03-20	247.56	268.78	284.61	-0.01	22.82
01-04-20	247.28	249.88	262.78	-0.01	35.41
01-05-20	255.71	247.99	249.42	0.03	48.58
01-06-20	270.72	260.62	255.04	-0.01	58.36
01-07-20	272.49	267.59	261.75	0.03	57.01
01-08-20	304.15	284.70	277.99	0.01	75.16
01-09-20	279.60	296.16	285.34	-0.04	45.03
01-10-20	263.33	272.84	283.58	0.02	37.56
01-11-20	285.38	271.69	275.50	0.00	57.10
01-12-20	289.79	284.73	276.81	0.01	58.48

Table No.7

## Analysis and Interpretation:-

- SMA analyses the purchasing and selling signals using the 12 and 7-day moving averages.
- This 7-day moving average is above the 12-day moving average from June to August, which is a buy indication.
- The 12-day moving average is higher than the 7-day from January to April. SMA stands for the sell indication.
- The area that is overbought and oversold is indicated by ROC.
- High values indicate overbought regions, while low values indicate bearish regions.
- The ROC area is overbought in the months of May through August.
- The area in ROC is oversold between March and September.
- There is a board policy in RSI study that states that securities should be bought if the RSI is below 30, and sold if it is above 70.
- The RSI number in august is 70, indicating that it is time to sell.
- The RSI value in March is 30, which indicates to purchase.

**4. Punjab National Bank:**

Date	closing price	SMA 7 DAYS	SAM 12 DAYS	ROC	RSI
01-01-20	173.87	174.29	178.94	-0.01	52.68
01-02-20	123.96	159.01	165.21	-0.11	21.71
01-03-20	95.73	117.56	140.92	-0.01	16.61
01-04-20	96.40	97.55	112.26	-0.01	26.10
01-05-20	82.46	90.96	93.91	-0.02	24.04
01-06-20	84.59	84.94	89.59	-0.02	36.64
01-07-20	79.30	80.83	82.77	0.03	37.95
01-08-20	85.16	81.34	82.11	0.00	50.93
01-09-20	74.94	83.18	81.19	-0.09	35.92
01-10-20	66.31	71.25	76.79	0.03	34.51
01-11-20	71.61	68.26	71.30	0.00	47.59
01-12-20	74.95	71.65	69.60	0.03	55.94

**Table No.8****Analysis and Interpretation:-**

- The SMA analyses the purchasing and selling signals using the 7-day and 12-day moving averages.
- The selling indication occurs from January to December when the 12-day moving average is higher than the 7-day SMA.
- The area that is overbought and oversold is indicated by ROC.
- High values indicate overbought regions, while low values indicate bearish regions.
- During July and October, a portion of ROC is overvalued.
- ROC is an oversold area between February and September.
- In RSI research, there is a board guideline that states that securities should be purchased if the RSI is below 30, and sold if it is above 70.
- The RSI value in March is 30, which is a purchase signal.

**3. AUTOMOBILE SECTOR:-**

The automobile industry in India is the fourth-largest in the globe, with sales rising at a rate of 9.5%. Through this, investments in these industries have begun through foreign direct investment. It has added to the 7% growth in the GDP. The automobile industry, which is the best manufacturing sector in the world, also helps to sustain the Indian economy.

The small number of businesses chosen for study are:

- TATA Motors
- Mahindra and Mahindra
- Maruti Suzuki
- Hero MotoCorp

*1. Tata Motors:*

Date	closing price	SMA 7 DAYS	SAM 12 DAYS	ROC	RSI
01-01-20	414.16	419.75	420.77	-0.02	46.94
01-02-20	367.61	396.18	405.29	-0.01	27.87
01-03-20	334.74	359.09	383.19	-0.03	21.95
01-04-20	345.69	343.96	355.22	0.01	40.67
01-05-20	304.19	331.00	336.30	-0.04	24.19
01-06-20	297.55	306.28	321.57	-0.01	35.13
01-07-20	262.89	281.72	294.68	-0.01	27.59
01-08-20	257.84	259.84	273.56	0.01	35.41
01-09-20	254.51	260.51	262.35	-0.04	39.51
01-10-20	186.70	226.49	240.49	-0.03	19.94
01-11-20	182.41	185.69	212.02	-0.02	31.57
01-12-20	169.48	175.66	181.97	0.00	32.75

**Table No. 9**

Analysis and Interpretation:-

- The SMA analyses the purchasing and selling signals using the 7-day and 12-day moving averages.
- The 12-day moving average is above the 7-day SMA from January to December, signalling a sell.
- The area that is overbought and oversold is indicated by ROC.
- High values indicate overbought regions, while low values indicate bearish regions.
- During April, the area of ROC in August is overbought.
- During the months of March, May to July, and September to December, the ROC area is oversold.
- In RSI research, there is a board guideline that states that securities should be purchased if the RSI is below 30, and sold if it is above 70.
- The RSI number in January is 70, indicating that it is time to sell.
- The RSI value in October is 30, which is a purchase signal.

*2. Mahindra & Mahindra:*

Date	closing price	SMA 7DAYS	SAM 12 DAYS	ROC	RSI
01-01-20	763.46	745.59	726.79	0.01	73.21
01-02-20	736.25	755.05	746.57	-0.01	48.50
01-03-20	735.26	738.19	747.55	0.00	49.43
01-04-20	815.61	762.50	754.47	0.03	77.11
01-05-20	866.10	832.82	794.44	0.01	73.58
01-06-20	906.75	880.32	847.87	0.00	75.70
01-07-20	914.38	908.12	889.95	0.01	68.65
01-08-20	960.26	928.53	919.06	0.01	79.92
01-09-20	936.61	953.59	936.70	-0.03	59.25
01-10-20	758.20	860.49	897.80	-0.02	19.88
01-11-20	774.96	767.29	830.04	0.00	37.36
01-12-20	757.73	764.20	768.99	-0.01	42.88

**Table No.10**

## Analysis and Interpretation:-

- Using the 7-day and 12-day moving averages, SMA analyses the purchasing and selling signals.
- When the 7-day moving average from April to August is above the 12-day moving average, a buy indication is given.
- The 12 day moving average is higher than the 7 day moving average from September to December. SMA stands for the sell indication.
- The overbought and oversold area is indicated by the ROC.
- The high value denotes an overbought area, while the low value denotes an oversold region.
- During March, May, and August, the ROC area is overbought.
- In the ROC, the months of February, October, and December are overloaded.
- There is a board policy in RSI research that says to purchase securities if the RSI is below 30, and to sell them if it is above 70.
- The RSI number in August is 70, which is a sell signal.
- The RSI value in October is 30, indicating that it is time to purchase.

## 3. Maruti Suzuki:

Date	closing price	SMA 7 DAYS	SAM 12 DAYS	ROC	RSI
01-01-20	9197.60	9375.76	9044.72	-0.01	59.77
01-02-20	8767.45	9035.55	9196.84	-0.01	40.63
01-03-20	8837.78	8777.19	8975.53	0.02	47.91
01-04-20	8872.16	8890.47	8858.53	-0.01	48.38
01-05-20	8700.10	8771.96	8804.25	0.01	44.93
01-06-20	8992.40	8795.33	8837.38	0.01	57.87
01-07-20	9295.13	9141.38	8965.57	0.00	63.78
01-08-20	9032.88	9213.24	9135.73	-0.01	46.21
01-09-20	7729.79	8681.60	8930.95	-0.06	13.65
01-10-20	7035.98	7457.29	8106.64	0.01	26.51
01-11-20	7431.96	7161.73	7427.91	0.00	44.41
01-12-20	7451.80	7457.44	7285.44	0.00	46.36

Table No.11

## Analysis and Interpretation:-

- Using the 7-day and 12-day moving averages, SMA analyses the purchasing and selling signals.
- When a 7-day moving average rises above a 12-day moving average from July or August, a buy indication is indicated.
- The 12-day moving average surpasses the 7-day moving average from September through December. Selling indication is denoted by SMA.
- Overbought and overpriced areas are indicated by the ROC.
- Overbought and oversold regions are represented by high and low values, respectively.
- ROC area is overbought in the months of March, May, and June.
- ROC area is oversold in September.
- If the RSI is below 30, purchase the securities; if it is above 70, sell the securities, according to RSI research board policy.

- The RSI reading of 70 in august indicates that it is time to trade.

#### 4. Hero Motocorp:

Date	closing price	SMA 7 DAYS	SAM 12 DAYS	ROC	RSI
01-01-20	3643.28	3666.56	3655.98	-0.01	45.53
01-02-20	3527.98	3596.69	3621.72	0.00	37.91
01-03-20	3522.25	3538.34	3589.28	0.00	42.04
01-04-20	3724.26	3614.01	3586.28	0.01	59.74
01-05-20	3614.63	3676.13	3626.91	0.00	47.34
01-06-20	3610.00	3629.26	3654.37	-0.01	47.95
01-07-20	3384.89	3538.28	3580.36	-0.01	36.32
01-08-20	3256.95	3325.86	3443.98	0.00	35.31
01-09-20	3156.11	3237.78	3310.78	-0.02	34.50
01-10-20	2789.88	2992.05	3103.39	0.00	28.55
01-11-20	2972.89	2855.66	2964.36	0.01	48.09
01-12-20	3163.21	3053.69	2961.15	0.00	58.55

Table No.12

#### Analysis and Interpretation:-

- The SMA analyses the purchasing and selling signals using the 7-day and 12-day moving averages.
- When the 7-day moving average is above the 12-day moving average from April to June, a buy indication is given.
- The 12-day moving average is higher than the 7-day from July to December. SMA stands for the sell indication.
- The area that is overbought and oversold is indicated by ROC.
- High values indicate overbought regions, while low values indicate bearish regions.
- The ROC is an overbought area from February to May, August, and November.
- The area in ROC is oversold between August and October.
- In RSI research, there is a board guideline that states that securities should be purchased if the RSI is below 30, and sold if it is above 70.
- The RSI number in April is 70, which is a sell signal.
- The RSI value in October is 30, indicating that it is time to purchase.

## 5. CONCLUSION

The technical approach to investing is basically a reflection of the idea that price movements are influenced by investors' challenging attitudes towards a variety of economic and monetary forces. On the present market, future market, and stock market, technical analysis is most effective. On stock markets rather than currency markets, chart trends are more effective. The research is focused on the indicators and characteristics of technical analysis. Technical analysis is a very effective tool for analysing the behaviour of share prices and is generally accepted on a global scale. Resourceful investors who can master the study of technical analysis will find the stock market to be more demanding, fulfilling, and profitable. Trading in a market that fluctuates presents risks because a stock's price may drop or rise at any moment. Making a decision about when to buy and sell a stake can be challenging at times.

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