Equity Research Using Technical Analysis

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Abstract:- **Technical analysis is a financial market technique that claim the ability to forecast the future direction of stock through the study past market data, price movement patterns, price and volume correlation; these data are widely used by traders. Technical analysis also considers the actual price and volume behaviour of the market or instruments on the assumption that price and volume are two most relevant factors in determining the future direction and behaviour of a particular stock or market. The investor will have the question in mind that in trading period which stock should be buy, how much to be buy and when to sell or to hold for future date to gain the maximum profit. So this research helps in making appropriate discussion for short term traders. This study aims to analyse the trends of stock price movement of twelve companies from three different sectors during the year 2018-19.**

Key Words: **Technical analysis, relative strength index, rate of change, simple moving average**

I. INTRODUCTION

The method of studying is to analyse securities and investment decision will follows two categories: Fundamental analysis and technical analysis. In fundamental analysis it analysis the company value theoretically for the purpose of long term investment and also analysis the economy, industry and company based information in detail. But in technical analysis it will only studies the demand and supply in a market. The main aim is study the technical indicator by was various database. It focuses on short term investment as intraday trading where the trading should be done within a day. Technical analysis will use various tool to predict market activity and by the support of chart it will represent the data to identify the pattern of future activity. Technical analysis will help the investor to evaluate strength and weakness of the securities.

Need of the Study:

This study involves technical analysis method to analyze the stock, with the help of technical tool are simple moving average like 7days and 12days and also ROC, RSI it will help to analysis the day trader and short term investor to make right decision to invest the money in stock which is comparing the price movement with the help of above technique. These tools are used to check daily price movement in stock market.

Technical Analysis:

Technical analysis helps to analysis the historical price movement in stock market to predict the future share price movement. Stock price changes in stock market depends on the demand and supply in stock market. In this various tools are used to calculate technical analysis and technique are available to analysis the stock price which can help the investor to make right decision regarding to buy or sell the stock in stock exchange at right time to earn maximum return.

There are two method of analyzing stock in the security market are fundamental analysis and technical analysis. The fundamental information are in financial and nonfinancial aspect of the business and focuses on actual price movement may use. The technical analyst assumes that 90%of psychological and 10% logical to predict. Technical analysis is a method of evaluating the market activity such as past price and volume.

The study of technical analysis of selected companies will help to predict the future by understanding the intrinsic value of share. Further it will help in understanding the price behaviour of the shares. The signal represents the major turning point to the market price.

II. LITERATURE REVIEW

Dr. Pallavi, 2000: The study is concern to know the different systems are government, private and banking institution. The RBI controlling body of banking sector in India. It has changes the banking business after 1969 and the demand got increased on the customer value and customer based.

Christopher Neely and Paul Weller 2002: The study is analysed or estimates the profitability through trading in exchange rate market. To identify the profitability has used the statistical tool for predict the issues regarding stock. These help the investor to analysis the price of share in market.

Aronson, David R 2006: The study on approach of simple testing to determine the historical price of the industry and also their strategy to adapt to measuring their forecasting of statistics. The analysis is take by specialists should focus on unbiased of price pattern and strategies that can be tested.

Lukas Menkhoff, Mark P Taylor 2006: This study are set up on the facts which used to analysis both Indian and foreign exchange market for the constant period of time for estimate positive returns on their stocks.

Lo Andrew W, Mamaysky, Harry 2007: The study on empirical distribution which has been used different method is conditional and nonconditional analysis of indication for

period of 31 years of sample taken to the measure of their statistics by technical pointer provide information about the specific value which can help to increase the profit.

Deepti Narwhal 2007: The study is concerned about both fundamental and technical analysis of the stock price. Both the fundamental and technical analysis provides details about the sell and buy signal to calculate profitability decision in trade market. In technical analysis has focus on the short term investment.

Suresh A.S 2010: The study that researcher are finding the way of identify stock which are suitable for investment decision. This research used different type of analysis which is required to make investment. It will analysis the pattern of volume and the strategy of the investor to gain more return.

Matthew C. Roberts 2010: It research that supports the usefulness of technical analysis and the stock market that spread across the Indian markets. They are mechanically generated from simple arithmetic operators; they are free of the data snooping bias common in technical analysis research. It may capable of strong and weak significant analysis of market through the economic analysis of investor.

AsifUllah Khan and Dr.Bhupesh 2011: Selections of stocks that are suitable for investment are always a complex task. The main aim of every investor is to identify a stock that has potential to go up so that the investor can maximize possible returns on investment. There are many conventional techniques being used and these include technical and fundamental analysis. The main issue with any approach is the proper weighting of criteria to obtain a list of stocks that are suitable for investments.

R Chitra2011: The study of research are made on analysis the technical basis of stock market which help to understand value of share which shows the undervalue and overvalue indicator. The investor will able to analyse the turning point in which stage it be invest.

Venkatesh&Tyagi 2011: The study is based on both technical and fundamental analysis which helps the investor to predict the stock market in future forecasting and changes happens in market on the price at particular time where future price movement are shown.

Dr. Ayyappan& Mr. Sakthivadivel, 2012: The study is on the private investment sector are increasing their service area and product into different part of country and there are actual competition to public sector bank. The study analysed that development and movement of certain financial parameter of public and private bank sector.

Sudheer V, 2012:The technical analysis is study of forecasting the price of securities for the future the main objective of technical analysis is to produce incomes by letting person decide when to enter and exit the security market. When bottom line represent buying signal and high peak line represent selling and considerable amount of profit.

Varathan N &Tamilenthi, 2012: the study is concerned about the analysis of past present and future price of market condition through technical analysis. It shows clear picture about the future gain and losses effect closer to make control on the trading activities. The main aim to reduce the risk in long term investment which can make more profit and return.

Archana Mishra2012: It would be depend on both fundamental and technical analysis which indicates the trading and other one indicate the technique adapted to analysis of their trading stocks. It has used diverse method of techniques to measure the value in this research paper.

MohdNaved 2012: The study has been used to analyse the technical analysis to evaluate the market nifty stock of India, they are used to examine the average moving of stocks in nifty market to know profit from their trading. The measures which have been used in this study are Moving Averages, Moving Averages cross rules and Moving Averages Convergence/Divergence. Later this study also includes the usage and application of Moving Average on Nifty stocks.

Hemalatha, 2013: the study is conducted about the equity holding in canara bank. To know the price movement in market they were used future analysis trend which may collect data from secondary information. The research analysis the price movement of company and compare between the market price in future.

Jayakumar&Sumathi, 2013: In this research the banking company are spread across the country to make their affects the share market. It will analysis the share price through trend analysis for price movement and also gives information about the trend.

19. RajatSingla 2014: In this study the researcher was use two different tools are relative strength index and exponential moving average and then there was take decision regarding market stocks. Conclusion of the study claims that the markets can be predicted if proper and timely decisions are taken by using EMA and RSI. Key Words: - RSI, EMA, Brock t statistics, Alpha ratio, Sharpe ratio.

Sahana Jaen, Afghan Jabeen 2017: The main objective of this paper is to identify the performance of pharmaceutical"s stock which is listed in National Stock Exchange (NSE) and risk involvement has been predicted on account of applied technical indicators. It would be researcher who make analysis of day to day earn if their potential investor which the price factors are fluctuate day to day in the market. This attempt to know each stock in NSE and their average moving price per day.

III. OBJECTIVES OF THE STUDY

- To identify the trend of the stock prices of selected companies which are listed in NSE by using Technical Analysis.

- To analyse price movements of 1years data in 3 different sectors by using Relative Strength Index, Simple Moving Average, Rate of changes.
- To study the importance of technical analysis in Indian stock market.
- To assist the investors in making investment decision based on the line chart indicator.

IV. ANALYSIS AND INTERPRETATION

Information Technology: In Indian the IT Sector plays a major role in growth of economy. This sector contributes 7.7% of GDP to the economy. IT industry policy has changed the standard of living for the common people. Most of IT companies are set up in urban areas.

The top IT companies are considered for analysis, they are:

1. TCS
2. WIPRO
3. INFOSYS
4. TECHMAHINDRA

1. Tata Consultancy Services (TCS):

| Date	closing price	SMA 7DAY	SMA 12DAYS	ROC	RSI
01-01-18	1469.96	1345.73	1348.96	0.03	78.61
01-02-18	1502.28	1488.34	1416.67	-0.01	63.24
01-03-18	1441.04	1497.41	1472.24	-0.02	48.34
01-04-18	1640.27	1482.64	1510.00	0.04	72.41
01-05-18	1751.21	1684.80	1591.78	0.00	76.52
01-06-18	1811.18	1760.91	1700.04	0.02	71.95
01-07-18	1222.77	1202.06	1215.67	0.01	54.14
01-08-18	2031.81	1977.46	1915.00	0.01	78.23
01-09-18	6585.53	2039.23	2376.72	2.25	79.28
01-10-18	1929.29	5290.93	3526.89	-0.20	46.07
01-11-18	1894.15	1904.37	3478.42	0.01	46.12
01-12-18	1930.73	1918.04	2527.73	-0.01	46.27

Table: 4.1
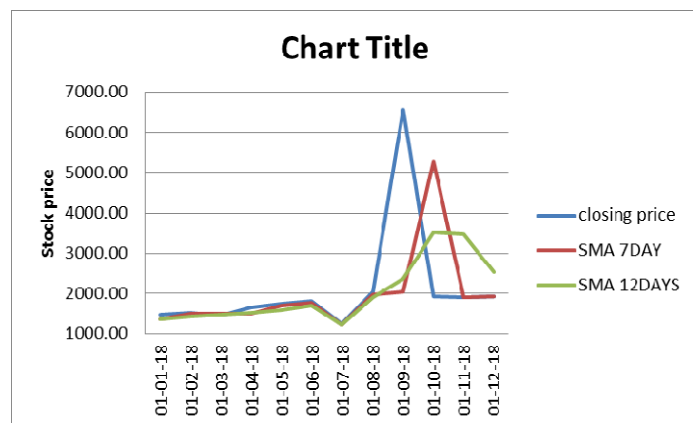
Graph: 4.1.1

Analysis and Interpretation:

- In the above chart the closing price, SMA for 7days and SMA for 12days trend have been moved in same direction till 7months.
- 7 days SMA crosses above the 12days SMA from September, November and December which shows the buying signal.
- In above chart 7days SMA has crossed below the 12days SMA during October which shows the selling signal.
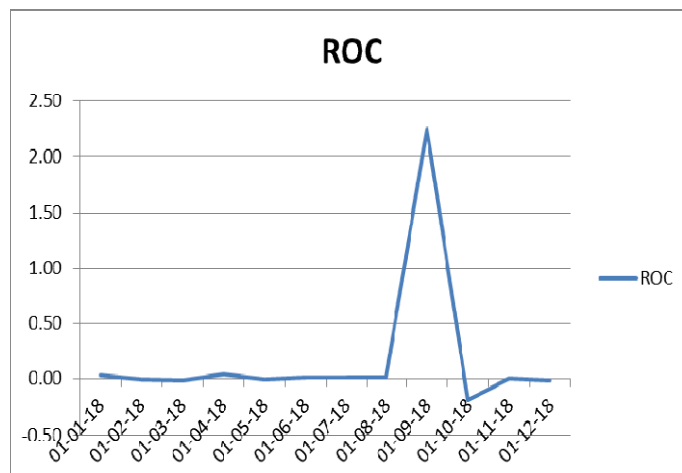
Graph: 4.1.2

Analysis and Interpretation:

- ROC indicates the overbought and oversold region.
- In above chart ROC indicate August month it is overbought and October month is in oversold region.
- Head shoulders are from August and reverse head and shoulder on October time.
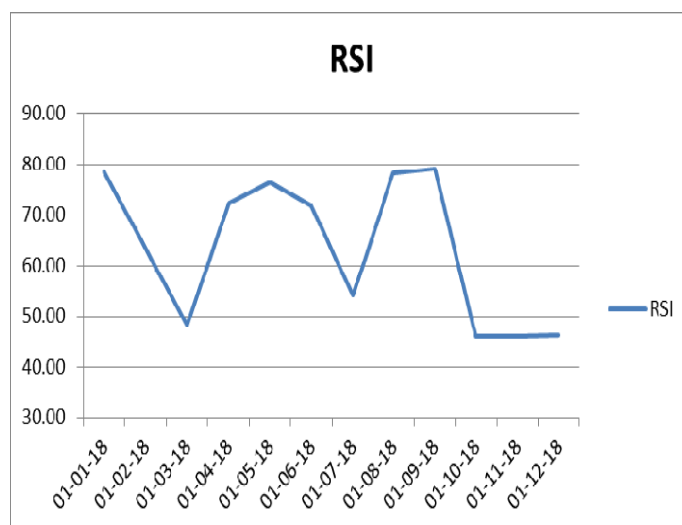
Graph: 4.1.3

Analysis and Interpretation:

- In RSI research have board rule that if RSI is below 30 to buy and if RSI is above 70 to sell the securities.
- During January, May, August and September the RSI across above the 70 its time tosell.
- During October, November and December the RSI is less it is the time to buy.

2. WIPRO:

Date	closing price	SMA	SAM 12 DAYS	ROC	RSI
01-01-18	313.97	305.50	300.32	-0.01	63.10
01-02-18	290.88	305.40	301.49	-0.01	41.92
01-03-18	286.65	291.43	300.90	-0.01	41.25
01-04-18	284.44	287.42	291.97	-0.01	44.02
01-05-18	266.69	278.39	283.09	-0.01	32.42
01-06-18	262.66	265.89	274.98	0.00	35.08
01-07-18	275.83	267.36	269.21	0.01	54.44
01-08-18	288.08	279.03	271.93	0.02	65.70
01-09-18	328.53	301.59	288.03	0.02	80.97
01-10-18	320.75	323.04	306.69	0.00	63.27
01-11-18	320.70	321.03	320.31	0.01	57.51
01-12-18	328.60	324.15	323.54	0.00	57.88

Table: 4.2

Analysis and Interpretation:

- SMA analysis the buying and selling signal by using the 7days moving average and 12days moving average.
- If 7 days moving average is across the above the 12 days it is buying signal and below means selling signal.
- In this 7days moving average is above 12days from January to June it is buying signal.
- From July to December the 12days moving average is above the 7days SMA means the selling signal.
- ROC shows the overbought and oversold region.
- In this year from June to September of ROC is overbought region.
- From February to May the ROC is oversold region
- In RSI research have board rule that if RSI is below 30 to buy and if RSI is above 70 to sell the securities.
- In September the RSI is time to sell it are greater than70.
- In May is the less price of the RSI to buy the securities.

3. INFOSYS:

Date	closing price	SMA 7DAYS	SAM 12 DAYS	ROC	RSI
01-01-18	550.90	520.59	504.13	0.02	72.34
01-02-18	564.73	557.07	535.90	0.00	65.66
01-03-18	574.79	570.55	559.87	-0.01	65.91
01-04-18	578.94	574.76	571.78	0.01	62.29
01-05-18	596.91	584.61	580.24	0.01	69.55
01-06-18	635.81	608.58	595.75	0.02	76.87
01-07-18	668.73	644.83	624.97	0.01	74.74
01-08-18	629.40	639.31	636.63	0.10	47.20
01-09-18	725.46	678.62	666.81	0.00	58.20
01-10-18	676.56	707.39	685.27	-0.02	48.53
01-11-18	649.64	665.46	688.24	0.00	44.89
01-12-18	668.46	660.32	667.91	0.00	50.47

Analysis and Interpretation:

- Blue line is closing price, brown line is 7days SMA and green line is 12days SMA.
- In this 7days SMA is across above the 12days SMA from January to October which represent buying signal.
- In November and December the 7days SMA is across below the 12days SMA which represent selling signals.
- ROC indicates the overbought and oversold region.
- The high value represent overbought and low value represent oversold region.
- During January and August ROC is over bought.
- During March and October ROC is oversold.
- In RSI research have board rule that if RSI is below 30 to buy and if RSI is above 70 to sell the securities.
- RSI is above 70 in the month of January, June, and July to sell the securities.

RSI has fewer prices in November can buy the securities.

4. TECHMAHINDRA:

Date	closing price	SMA 7 DAYS	SAM 12 DAYS	ROC	RSI
01-01-18	569.40	520.69	505.01	0.04	81.67
01-02-18	603.24	581.40	547.88	0.00	71.35
01-03-18	628.99	612.86	589.21	0.01	71.84
01-04-18	664.68	640.98	625.66	0.01	67.43
01-05-18	690.83	674.13	654.89	0.01	68.38
01-06-18	690.20	691.78	679.51	-0.02	61.33
01-07-18	648.65	670.23	677.56	0.00	42.54
01-08-18	704.50	663.12	672.17	0.04	62.41
01-09-18	754.05	721.01	691.75	-0.01	68.43
01-10-18	688.66	726.97	714.68	-0.01	42.32
01-11-18	707.99	696.29	717.01	0.01	52.01
01-12-18	699.46	701.97	699.98	-0.01	48.91

Table: 4.4

Analysis and Interpretation:

- SMA analysis the buying and selling signal by using the 7days moving average and 12days moving average.
- 7days SMA is above the 12days SMA from January to June and in October which show the buying signal.
- From July, August and November are indicating selling signal.
- ROC indicates the overbought and oversold region.
- The high value represent overbought and low value represent oversold region.
- During May and August of ROC is overbought region.
- During June, September and November of ROC is oversold region.
- In RSI research have board rule that if RSI is below 30 to buy and if RSI is above 70 to sell the securities.
- From January to April the RSI is above 70 it time to sell.

Banking Sector:

It is a financial institution which provide services to company. It will devote the economy by holding financial asset for other. It is also one of the major sectors in stock market. The most of the investor are investing on bank share.

The few banks are taken as follows:

1. ICICIBANK
2. HDFCBANK
3. SBI
4. PUNJAB NATIONALBANK

1. ICICI Bank:

Date	closing price	SMA 7DAYS	SAM 12 DAYS	ROC	RSI
01-01-18	336.02	319.38	316.58	0.01	24.31
01-02-18	318.88	332.55	323.67	-0.02	1.16
01-03-18	289.76	311.68	320.31	-0.02	3.04
01-04-18	283.46	288.03	302.63	0.01	8.82
01-05-18	293.89	287.13	289.11	0.01	17.40
01-06-18	290.18	291.60	288.12	0.00	9.05
01-07-18	274.44	282.84	286.67	0.00	8.76
01-08-18	325.94	292.31	290.33	0.03	27.47
01-09-18	330.79	325.42	305.45	-0.01	8.38
01-10-18	312.67	321.64	319.50	0.00	6.46
01-11-18	357.73	329.56	328.73	0.03	27.88
01-12-18	354.84	352.71	338.75	0.00	10.12

Table: 4.5

Analysis and Interpretation:

- SMA analysis the buying and selling signal by using

the 7days moving average and 12days moving average.
- During August to December the 7days SMA is above the 12days SMA it is buying signal.
- ROC indicates the overbought and oversold region.
- The high value represent overbought and low value represent oversold region.
- During May, August, October and December of ROC is overbought region.
- During March, April and September of ROC is oversold region.
- In RSI research have board rule that if RSI is below 30 to buy and if RSI is above 70 to sell the securities
- The value are below the 30 there can only buy and hold for future to sell.

2. HDFC Bank:

Date	closing price	SMA 7DAYS	SAM 12 DAYS	ROC	RSI
01-01-18	1920.81	1881.19	1861.41	0.01	72.27
01-02-18	1870.75	1905.91	1888.43	-0.01	47.36
01-03-18	1857.93	1874.49	1888.30	0.00	44.73
01-04-18	1943.24	1892.93	1891.50	0.01	65.87
01-05-18	2035.67	1971.05	1928.75	0.02	76.15
01-06-18	2067.69	2036.45	1993.48	0.00	65.73
01-07-18	2161.78	2109.92	2070.27	0.00	73.52
01-08-18	2080.71	2136.56	2112.28	-0.01	46.37
01-09-18	2015.71	2067.34	2103.65	-0.01	34.07
01-10-18	1965.11	1996.91	2038.36	-0.01	32.17
01-11-18	2020.91	1976.06	1992.14	0.02	52.28
01-12-18	2110.97	2057.17	2020.56	0.00	67.86

Table: 4.6

Analysis and Interpretation:

- SMA analysis the buying and selling signal by using the 7days moving average and 12days moving average.
- In this 7days moving average is above 12days from May to August it is buying signal.
- From September to November the 12days moving average is above the 7days SMA means the selling signal.
- ROC indicates the overbought and oversold region.
- The high value represent overbought and low value represent oversold region.
- During, March, May and November of ROC is overbought region.
- During February, September and October of ROC is oversold region.
- In RSI research have board rule that if RSI is below 30 to buy and if RSI is above 70 to sell the securities
- RSI high the value above 70 from May, June and September it indicate to sell.

3. State Bank of India:

Date	closing price	SMA 7 DAYS	SAM 12 DAYS	ROC	RSI
01-01-18	305.67	311.06	315.92	-0.01	48.93
01-02-18	276.56	297.26	304.03	-0.03	30.51
01-03-18	247.56	268.78	284.61	-0.01	22.82
01-04-18	247.28	249.88	262.78	-0.01	35.41
01-05-18	255.71	247.99	249.42	0.03	48.58
01-06-18	270.72	260.62	255.04	-0.01	58.36
01-07-18	272.49	267.59	261.75	0.03	57.01
01-08-18	304.15	284.70	277.99	0.01	75.16
01-09-18	279.60	296.16	285.34	-0.04	45.03
01-10-18	263.33	272.84	283.58	0.02	37.56
01-11-18	285.38	271.69	275.50	0.00	57.10
01-12-18	289.79	284.73	276.81	0.01	58.48

Table: 4.7

Analysis and Interpretation:

- SMA analysis the buying and selling signal by using the 7days moving average and 12days moving average.
- In this 7days moving average is above 12days from June to August it is buying signal.
- From January to April the 12days moving average is above the 7days SMA means the selling signal.
- ROC indicates the overbought and oversold region.
- The high value represent overbought and low value represent oversold region.
- During May to August, October and December of ROC is overbought region.
- During March and September of ROC is oversold region.
- In RSI research have board rule that if RSI is below 30 to buy and if RSI is above 70 to sell the securities
- In august the RSI value is 70 which indicate to sell.
- In March the RSI value is 30 which indicate to buy.

4. Punjab National Bank:

Date	closing price	SMA 7 DAYS	SAM 12 DAYS	ROC	RSI
01-01-18	173.87	174.29	178.94	-0.01	52.68
01-02-18	123.96	159.01	165.21	-0.11	21.71
01-03-18	95.73	117.56	140.92	-0.01	16.61
01-04-18	96.40	97.55	112.26	-0.01	26.10
01-05-18	82.46	90.96	93.91	-0.02	24.04
01-06-18	84.59	84.94	89.59	-0.02	36.64
01-07-18	79.30	80.83	82.77	0.03	37.95
01-08-18	85.16	81.34	82.11	0.00	50.93
01-09-18	74.94	83.18	81.19	-0.09	35.92
01-10-18	66.31	71.25	76.79	0.03	34.51

01-11-18	71.61	68.26	71.30	0.00	47.59
01-12-18	74.95	71.65	69.60	0.03	55.94

Table: 4.8

Analysis and Interpretation:

- SMA analysis the buying and selling signal by using the 7days moving average and 12days moving average.
- From January to December the 12days moving average is above the 7days SMA means the selling signal.
- ROC indicates the overbought and oversold region.
- The high value represent overbought and low value represent oversold region.
- During July and October a of ROC is overbought region.
- During February and September of ROC is oversold region.
- In RSI research have board rule that if RSI is below 30 to buy and if RSI is above 70 to sell the securities
- In March the RSI value is 30 which indicate to buy.

Automobile sector:

Indian Automobile industry is known as 4[th]largest which increasing sales at 9.5% in the world. By this foreign direct investment are been started investing in this sectors. It has contributed GDP growth rate of 7%. Automobiles industry is also supporting Indian economy and known as best manufacturing sector in the world.

The few companies are taken for analysis, they are:

1. TATA Motors
2. Mahindra and Mahindra
3. Maruti Suzuki
4. Hero Motocarp

1. Tata Motors:

Date	closing price	SMA 7 DAYS	SAM 12 DAYS	ROC	RSI
01-01-18	414.16	419.75	420.77	-0.02	46.94
01-02-18	367.61	396.18	405.29	-0.01	27.87
01-03-18	334.74	359.09	383.19	-0.03	21.95
01-04-18	345.69	343.96	355.22	0.01	40.67
01-05-18	304.19	331.00	336.30	-0.04	24.19
01-06-18	297.55	306.28	321.57	-0.01	35.13
01-07-18	262.89	281.72	294.68	-0.01	27.59
01-08-18	257.84	259.84	273.56	0.01	35.41
01-09-18	254.51	260.51	262.35	-0.04	39.51
01-10-18	186.70	226.49	240.49	-0.03	19.94
01-11-18	182.41	185.69	212.02	-0.02	31.57
01-12-18	169.48	175.66	181.97	0.00	32.75

Table: 4.9

Analysis and Interpretation:

- SMA analysis the buying and selling signal by using the 7days moving average and 12days moving average.
- From January to Dec ember the 12days moving average is above the 7days SMA means the selling signal.
- ROC indicates the overbought and oversold region.
- The high value represent overbought and low value represent oversold region.
- During April, August of ROC is overbought region.
- During March, May to July and September to December of ROC is oversold region.
- In RSI research have board rule that if RSI is below 30 to buy and if RSI is above 70 to sell the securities
- In January the RSI value is 70 which indicate to sell.
- In October the RSI value is 30 which indicate to buy.

2. Mahindra & Mahindra:

Date	closing price	SMA 7DAYS	SAM 12 DAYS	ROC	RSI
01-01-18	763.46	745.59	726.79	0.01	73.21
01-02-18	736.25	755.05	746.57	-0.01	48.50
01-03-18	735.26	738.19	747.55	0.00	49.43
01-04-18	815.61	762.50	754.47	0.03	77.11
01-05-18	866.10	832.82	794.44	0.01	73.58
01-06-18	906.75	880.32	847.87	0.00	75.70
01-07-18	914.38	908.12	889.95	0.01	68.65
01-08-18	960.26	928.53	919.06	0.01	79.92
01-09-18	936.61	953.59	936.70	-0.03	59.25
01-10-18	758.20	860.49	897.80	-0.02	19.88
01-11-18	774.96	767.29	830.04	0.00	37.36
01-12-18	757.73	764.20	768.99	-0.01	42.88

Table: 4.10

Analysis and Interpretation:

- SMA analysis the buying and selling signal by using the 7days moving average and 12days moving average.
- In this 7days moving average is above 12days from April to August it is buying signal.
- From September to December the 12days moving average is above the 7days SMA means the selling signal.
- ROC indicates the overbought and oversold region.
- The high value represent overbought and low value represent oversold region.
- During March, May, August, of ROC is overbought

region.

- During February, October and December of ROC is oversold region.
- In RSI research have board rule that if RSI is below 30 to buy and if RSI is above 70 to sell the securities
- In August the RSI value is 70 which indicate to sell.
- In October the RSI value is 30 which indicate to buy.

3. Maruti Suzuki:

Date	closing price	SMA 7 DAYS	SAM 12 DAYS	ROC	RSI
01-01-18	9197.60	9375.76	9044.72	-0.01	59.77
01-02-18	8767.45	9035.55	9196.84	-0.01	40.63
01-03-18	8837.78	8777.19	8975.53	0.02	47.91
01-04-18	8872.16	8890.47	8858.53	-0.01	48.38
01-05-18	8700.10	8771.96	8804.25	0.01	44.93
01-06-18	8992.40	8795.33	8837.38	0.01	57.87
01-07-18	9295.13	9141.38	8965.57	0.00	63.78
01-08-18	9032.88	9213.24	9135.73	-0.01	46.21
01-09-18	7729.79	8681.60	8930.95	-0.06	13.65
01-10-18	7035.98	7457.29	8106.64	0.01	26.51
01-11-18	7431.96	7161.73	7427.91	0.00	44.41
01-12-18	7451.80	7457.44	7285.44	0.00	46.36

Table: 4.11

Analysis and Interpretation:

- SMA analysis the buying and selling signal by using the 7days moving average and 12days moving average.
- In this 7days moving average is above 12days from July and august it is buying signal.
- From September to December the 12days moving average is above the 7days SMA means the selling signal.
- ROC indicates the overbought and oversold region.
- The high value represent overbought and low value represent oversold region.
- During March, May, June of ROC is overbought region.
- During September of ROC is oversold region.
- In RSI research have board rule that if RSI is below 30 to buy and if RSI is above 70 to sell the securities
- In august the RSI value is 70 which indicate to sell.
- In September the RSI value is 30 which indicate to buy.

4. Hero Motocorp:

Date	closing price	SMA 7 DAYS	SAM 12 DAYS	ROC	RSI
01-01-18	3643.28	3666.56	3655.98	-0.01	45.53
01-02-18	3527.98	3596.69	3621.72	0.00	37.91
01-03-18	3522.25	3538.34	3589.28	0.00	42.04
01-04-18	3724.26	3614.01	3586.28	0.01	59.74
01-05-18	3614.63	3676.13	3626.91	0.00	47.34
01-06-18	3610.00	3629.26	3654.37	-0.01	47.95
01-07-18	3384.89	3538.28	3580.36	-0.01	36.32
01-08-18	3256.95	3325.86	3443.98	0.00	35.31
01-09-18	3156.11	3237.78	3310.78	-0.02	34.50
01-10-18	2789.88	2992.05	3103.39	0.00	28.55
01-11-18	2972.89	2855.66	2964.36	0.01	48.09
01-12-18	3163.21	3053.69	2961.15	0.00	58.55

Table: 4.12

Analysis and Interpretation:

- SMA analysis the buying and selling signal by using the 7days moving average and 12days moving average.
- In this 7days moving average is above 12days from April to June it is buying signal.
- From July to December the 12days moving average is above the 7days SMA means the selling signal.
- ROC indicates the overbought and oversold region.
- The high value represent overbought and low value represent oversold region.
- During February to May, August and November of ROC is overbought region.
- During August and October of ROC is oversold region.
- In RSI research have board rule that if RSI is below 30 to buy and if RSI is above 70 to sell the securities
- In April the RSI value is 70 which indicate to sell.
- In October the RSI value is 30 which indicate to buy.

V. FINDINGS

1. If share price shows upward trend, then it is advisable to buy the shares during a period
2. The IT sector, banking sector and Automobile sector is booming, and all average are in upward direction the investors are will to make investment.
3. In IT sector TCS and Tech Mahindra are showing upward trend to buy the share, it is good opportunity to do intraday and long term investing compare to Wipro and Infosys the share are less downward trend.
4. In banking sector HDFC bank and SBI are showing moving trends in rapid growth compare to other two banks the SMA indicate the buying signal of the share and share are overbought by the investors.
5. In Automobile sector Maruti Suzuki and Mahindra and Mahindra showing good opportunities to long term investor can gain more by holding the stock.
6. Technical analysis provide clear picture of stock movement by which trader can make the decision for earn profit.
7. By analysis of chart line investor can think about the short term and long term investment in market. 8. More buyer quantity reflect the high demand of stock and give signal that stock price will go up and similarly high quantity of seller will give signal that stock price will come down.

VI. SUGGESTION

1. If price shows a slight upward trend, then it is advisable to buy the share during that period and sell it later when it goes down.
2. There is high rate of fluctuation. Therefore it is advisable for the speculators to anticipate the price of the stock and invest, depending upon the risk and return.
3. It is advisable to invest in long term in order to reduce the risk in the volatile market.
4. The investor should buy different companies of stock if investor can set off losses, incurred on the particular share to the profit earned in the other shares.
5. Apart of technical analysis, the investor should also study the behaviour of stock in daily base and an issue relating to company"s and sector.
6. Through the study on technical by using ROC it seen the stock price perdition power and the investor are suggested to use the ROC for making profitable trades.
7. The technical indicators like RSI, 7 days and 12 days SMA generates superior buy or sell signal and indicating that the stock prices.

VII. CONCLUSION

The technical approach to invest is essentially a reflection of the idea the price moves which is determined by challenging attitude of investors towards a variety of economic, monetary forces. Technical analysis works best on current market, intermediate on future market and stock market. Chart patterns work better on stock markets than currency markets. The study is concerned with features of technical analysis and about its indicators. Technical analysis is widely accepted worldwide and a very useful tool for the analysis of share price behaviour. The share market is more challenging, fulfilling and rewarding to resourceful investors should able to learn the study of technical analysis. It is risky in trading in volatile market because any point of time the stock can be drop down and can go up. Sometimes there will be difficult to decide when to entering and exiting the share.

ARTICLES

[1]. Neely, C. J.,"Technical analysis and the profitability of U.S. foreign exchange intervention". Review - Federal Reserve Bank of St.Louis, 80(4), 3-17. (2002).

[2]. Menkhoff, L., & Taylor, M. P. The obstinate passion of foreign exchange professionals: Technical analysis. Journal of Economic Literature, 45(4), 936972. (2006).

[3]. Lo, A. W., Mamaysky, H., & Wang, J. Foundations of technical analysis: Computational algorithms, statistical inference, and empirical implementation. Cambridge: National Bureau of Economic Research,54(5),17-20 (2007).

[4]. Chitra, R. "Technical analysis on selected stocks of energy sector." International Journal of Management & Business Studies 1.1 42-46. (2011)

[5]. Dr.Pallavi, S. "Banking in India: An analytical study on trends and progress" ELK ASIA PACIFIC JOURNAL OF FINANCE Volume 9 Issue 2 (2000).

[6]. Dr.Ayyappan, S., &Mr.Sakthivadivel, M. (2012). Growth and Trend Analysis of Key Profitability Factors in Scheduled Commercial Banks. Asian Journal of Managerial Science ISSN 2249-6300 Vol. 2 No. 1, (2012),

[7]. Hemalatha, M. K. (2013). A study on technical analysis of Canara Bank Equity ISSN-2250-1991, volume 2, issue 4, April (2013)

[8]. Jayakumar, A., &Sumathi, K. "Technical Analysis of share price movement with special reference to Public Sector Bank". Review of Financial Studies , Vol.2, No.5, pp. 527-551. (2013).

[9]. Sudheer, V. "A study on technical analysis in selected companies in India". International Journal of Business and Administration Research Review, Vol.2, Issue.4(2012).

[10]. Venkatesh, C., &Tyagi, M. "Technical Analysis and its usage in Indian Capital Market". IJCSMC Volume 4 Issue 9(2011).

[11]. RajatSingla "technical analysis used to predicted the markets" IJCSMC, Vol. 5, Issue. 6, (2014).

[12]. MohdNaved "Profitability of Oscillators used in Technical Analysis for Financial Market" ISSN: 2394-1553; Volume 2, Number 9(2012).

[13]. Archana Mishra" Fundamental Vs Technical Analysis" (IJCBM), ISSN: 2319–2828Vol. 2, No.5, (2012)

[14]. AsifUllah Khan and Dr.Bhupesh "NIFTY and Selected Stocks identified by SOM using Technical Indicators" (IOSR-JCE) ISSN: 2278-8727Volume 14, Issue 2(2011).

[15]. Matthew C. Roberts "Technical analysis and testing a commodity portfolio" International Journal of Managerial Finance, 13, 4, (475), (2010).

[16]. Suresh A.S" Fundamental Analysis VS Technical analysis" UNIMAS Review of Accounting and Finance Vol. 1 No. 1(2010).

[17]. ShahanaJabeen, AfshanJabeen Technical Study of Pharmaceutical StocksListed In NSE (SSRG – IJEMS) – Volume 4 Issue 3(2017).

[18]. Deepti Narwhal "A fundamental and technical analysis of the stock price" (IOSR-JCE) Volume 10, Issue 4 (2007).

[19]. Aronson, David R"Data Analysis for Forecasting" (IJMER) progress Volume 9 Issue 2 (2006).

[20]. Varathan N &Tamilenthi," STOCK PRICE MOVEMENTS THROUGH TECHNICAL ANALYSIS" Volume 2, Issue 2(2012).