



Trend Analysis of Nifty in 2015: A Technical View

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KEYWORDS :

Introduction

Investment in stock market has become passion for many of the investors in the recent decades, they have got their own analysis and predictions towards the market. There are different views on the price movements in the market, which can be broadly divided into three ways, Fundamental view, Technical view and Efficient market assumptions. Fundamental analysts believe that the market prices move according to the fundamental factors of the companies, While Technical analysts believe that the market prices will move according to the past price movements and which forms certain chart patterns. Efficient market assumptions question both the beliefs of Fundamentalists and Technical view people.

Technical Analysis works with different assumptions such as Market prices are determined by supply and demand of shares in the market. Certain assumptions of Technical analysis are prices follow a particular movement over a period of time, which is dependent of demand and supply of shares. The demand and supply of shares will be influenced by rational and irrational behavior of market participants. The behavior of the participants will in-turn influenced by price sensitive information obtained in the market. The prices follow a particular path continuously, which gets repeated again and again; this repetition provides a chance to take investment/disinvestment decision. The price pattern can be studied with the help of different categories of charts. The charts provide a clue for future movement of the shares.

Need for the study

Investment in stock market is associated with high risk. The right timing is necessary to take investment and disinvestment decision. Many aspirants attempted to study the price movements in the stock

market and one of the finest attempts is Technical Analysis, which believes that the stock prices will move with certain pattern and if we could able to read for certain period, the future could be predicted. Hence an attempt is made to study how far the Technical Analysis is practical in nature by taking the prices of Nifty for a period of 6 months in 2015.

Scope of the study

The scope of the study is limited to Nifty values with for a time period of 6 months, and time period selected for the study is first half year of 2015 i.e. 1Jan 2015 to 30 Jun2015.

Objectives of the study

To study the movements of Nifty in the first half year of 2015 with the help of various Technical Analysis tools.

Research Methodology

(i) **Data Collection** : The data used for the purpose of study is completely secondary data. The data has been collected from official websites of National Stock Exchange.

(ii) **Analytical tools applied** : The data collected has been analyzed with the help of different statistic tools such as **Moving Averages, Moving Averages Converges Diverges, Rate of Change indicator, and Relative Strength Index. Dow theory** also has been applied for the purpose of analysis of Nifty. The study has been conducted with the Technical Analysis indicators.

**Analysis and interpretation
Moving Averages****Table 1.1 Calculation of simple moving average of NIFTY**

Date	MA(7 D)	Date	MA	Date	MA	Date	MA	Date	MA	Date	MA
1-Jan-15		2-Feb-15	8854.35	2-Mar-15	8810.19	1-Apr-15	8475.26	4-May-15	8279.45	1-Jun-15	8384.17
2-Jan-15		3-Feb-15	8853.66	3-Mar-15	8844.66	6-Apr-15	8491.97	5-May-15	8268.95	2-Jun-15	8352.39
5-Jan-15		4-Feb-15	8837.67	4-Mar-15	8867.60	7-Apr-15	8510.47	6-May-15	8239.20	3-Jun-15	8318.79
6-Jan-15		5-Feb-15	8809.27	5-Mar-15	8891.96	8-Apr-15	8563.65	7-May-15	8216.84	4-Jun-15	8288.98
7-Jan-15		6-Feb-15	8773.09	9-Mar-15	8902.37	9-Apr-15	8626.06	8-May-15	8203.40	5-Jun-15	8257.56
8-Jan-15		9-Feb-15	8712.24	10-Mar-15	8883.44	10-Apr-15	8667.21	11-May-15	8215.61	8-Jun-15	8218.30
9-Jan-15	8258.06	10-Feb-15	8677.47	11-Mar-15	8854.59	13-Apr-15	8716.21	12-May-15	8207.82	9-Jun-15	8159.55
12-Jan-15	8263.63	11-Feb-15	8653.19	12-Mar-15	8828.77	15-Apr-15	8739.64	13-May-15	8194.04	10-Jun-15	8115.41
13-Jan-15	8249.91	12-Feb-15	8646.76	13-Mar-15	8778.99	16-Apr-15	8746.32	14-May-15	8179.66	11-Jun-15	8076.69
14-Jan-15	8235.50	13-Feb-15	8658.44	16-Mar-15	8737.63	17-Apr-15	8738.56	15-May-15	8203.29	12-Jun-15	8054.94
15-Jan-15	8287.90	16-Feb-15	8672.39	17-Mar-15	8706.99	20-Apr-15	8700.52	18-May-15	8248.48	15-Jun-15	8038.26
16-Jan-15	8346.71	18-Feb-15	8702.11	18-Mar-15	8696.87	21-Apr-15	8643.30	19-May-15	8273.36	16-Jun-15	8028.64
19-Jan-15	8391.87	19-Feb-15	8754.82	19-Mar-15	8685.81	22-Apr-15	8593.21	20-May-15	8287.36	17-Jun-15	8035.41
20-Jan-15	8450.60	20-Feb-15	8793.11	20-Mar-15	8667.38	23-Apr-15	8530.96	21-May-15	8329.36	18-Jun-15	8057.15

21-Jan-15	8508.67	23-Feb-15	8811.34	23-Mar-15	8635.22	24-Apr-15	8467.40	22-May-15	8361.29	19-Jun-15	8071.51
22-Jan-15	8574.67	24-Feb-15	8818.56	24-Mar-15	8620.25	27-Apr-15	8396.99	25-May-15	8382.16	22-Jun-15	8126.90
23-Jan-15	8654.39	25-Feb-15	8813.09	25-Mar-15	8605.63	28-Apr-15	8351.21	26-May-15	8393.16	23-Jun-15	8183.85
27-Jan-15	8713.87	26-Feb-15	8795.16	26-Mar-15	8551.18	29-Apr-15	8321.45	27-May-15	8387.58	24-Jun-15	8233.41
28-Jan-15	8771.09	27-Feb-15	8791.66	27-Mar-15	8501.96	30-Apr-15	8293.41	28-May-15	8380.91	25-Jun-15	8283.51
29-Jan-15	8828.46	28-Feb-15	8792.60	30-Mar-15	8481.63	****	****	29-May-15	8382.40	26-Jun-15	8324.88
30-Jan-15	8844.65	****	****	31-Mar-15	8470.21	****	****	****	****	29-Jun-15	8345.42
****	****	****	****	****	****	****	****	****	****	30-Jun-15	8365.93

Interpretation

From the analysis of moving averages, it is observed that the Nifty started at 8284 and in the first half of the January month of 2015, it has got some fluctuations, but in the second half of the month, it has shown an increasing trend.

In the month of February, initially it has shown the tendency of corrections of first month by decreasing and recovered in the second half of the month and ended up in green.

In the month of March, it has started rigorously but started showing tendency of bear market. The market has shown correction wave in this month on a whole.

In the month of April, Nifty moved almost stable in the first week, i.e. until 7Apr2015, later it has gained momentum and showed bullish symptoms until 16April. Then it has started coming down until the month end.

In May, Nifty has started with a slow pace, and continued the decreasing trend from the month of April until 14May, later the recovery has started. Finally it has ended up with positive returns.

But in the month of June, the correction wave influenced the Nifty and it has continued to come down until 16June and later it has shown the tendency of bullishness in the market until the month end.

Rate of Change

Table 1.2 Calculation of Rate of Change of NIFTY

Date	ROC	Date	ROC	Date	ROC	Date	ROC	Date	ROC	Date	ROC
1-Jan-15		2-Feb-15	1.004	2-Mar-15	1.023	1-Apr-15	1.005	4-May-15	0.992	1-Jun-15	0.997
2-Jan-15		3-Feb-15	0.991	3-Mar-15	1.027	6-Apr-15	1.015	5-May-15	1.002	2-Jun-15	0.984
5-Jan-15		4-Feb-15	0.979	4-Mar-15	1.018	7-Apr-15	1.038	6-May-15	0.986	3-Jun-15	0.976
6-Jan-15		5-Feb-15	0.977	5-Mar-15	1.029	8-Apr-15	1.045	7-May-15	0.972	4-Jun-15	0.976
7-Jan-15		6-Feb-15	0.967	9-Mar-15	0.990	9-Apr-15	1.034	8-May-15	0.994	5-Jun-15	0.975
8-Jan-15		9-Feb-15	0.968	10-Mar-15	0.979	10-Apr-15	1.034	11-May-15	1.018	8-Jun-15	0.954
9-Jan-15	1.000	10-Feb-15	0.974	11-Mar-15	0.971	13-Apr-15	1.029	12-May-15	0.975	9-Jun-15	0.951
12-Jan-15	0.991	11-Feb-15	0.985	12-Mar-15	0.976	15-Apr-15	1.010	13-May-15	0.989	10-Jun-15	0.986
13-Jan-15	0.991	12-Feb-15	0.999	13-Mar-15	0.969	16-Apr-15	1.005	14-May-15	1.016	11-Jun-15	0.979
14-Jan-15	1.018	13-Feb-15	1.011	16-Mar-15	0.966	17-Apr-15	0.988	15-May-15	1.025	12-Jun-15	0.982
15-Jan-15	1.048	16-Feb-15	1.017	17-Mar-15	0.996	20-Apr-15	0.962	18-May-15	1.022	15-Jun-15	0.988
16-Jan-15	1.034	18-Feb-15	1.040	18-Mar-15	0.997	21-Apr-15	0.954	19-May-15	1.005	16-Jun-15	1.000
19-Jan-15	1.032	19-Feb-15	1.038	19-Mar-15	0.992	22-Apr-15	0.954	20-May-15	1.036	17-Jun-15	1.009
20-Jan-15	1.045	20-Feb-15	1.024	20-Mar-15	0.977	23-Apr-15	0.960	21-May-15	1.023	18-Jun-15	1.006
21-Jan-15	1.052	23-Feb-15	1.005	23-Mar-15	0.989	24-Apr-15	0.954	22-May-15	1.029	19-Jun-15	1.033
22-Jan-15	1.058	24-Feb-15	0.995	24-Mar-15	0.990	27-Apr-15	0.954	25-May-15	1.013	22-Jun-15	1.046
23-Jan-15	1.040	25-Feb-15	0.995	25-Mar-15	0.978	28-Apr-15	0.981	26-May-15	0.996	23-Jun-15	1.046
27-Jan-15	1.047	26-Feb-15	0.979	26-Mar-15	0.960	29-Apr-15	0.984	27-May-15	0.996	24-Jun-15	1.039
28-Jan-15	1.043	27-Feb-15	0.994	27-Mar-15	0.966	30-Apr-15	0.971	28-May-15	0.988	25-Jun-15	1.038
29-Jan-15	1.030	28-Feb-15	1.008	30-Mar-15	0.991	****	****	29-May-15	1.002	26-Jun-15	1.025
30-Jan-15	1.009	****	****	31-Mar-15	0.993	****	****	****	****	29-Jun-15	1.011
****	****	****	****	****	****	****	****	****	****	30-Jun-15	1.002

On the following instances, ROC line touches its peak whole of the year; these were the points of overbought and the index will decline ahead-

15Jan2015 22Jan2015 27Jan2015 18Feb2015 5Mar2015 24Mar2015
8Apr2015 29Apr2015 5May2015 11May2015 15May2015 20May2015
29May2015 22Jun2015

On the following instances, ROC line touches its bottom during whole of the year. So these were the points of oversold market for the index will be increasing

13Jan2015 19Jan2015 6Feb2015 26Feb2015 16Mar2015 20Mar2015
26Mar2015 21Apr2015 30Apr2015 7May2015 12May2015 19May2015
28May2015 9Jun2015 30Jun2015

Moving Averages Converges Diverges

Table 1.3 Calculation of MACD of NIFTY

Date	MACD	Date	MACD	Date	MACD	Date	MACD	Date	MACD	Date	MACD
1-Jan-15		2-Feb-15	-1.47	2-Mar-15	90.87	1-Apr-15	47.92	4-May-15	-28.38	1-Jun-15	11.18
2-Jan-15		3-Feb-15	-66.04	3-Mar-15	106.95	6-Apr-15	87.08	5-May-15	10.47	2-Jun-15	15.45
5-Jan-15		4-Feb-15	-78.45	4-Mar-15	90.95	7-Apr-15	125.01	6-May-15	12.05	3-Jun-15	-50.48
6-Jan-15		5-Feb-15	-78.62	5-Mar-15	60.26	8-Apr-15	114.55	7-May-15	-57.14	4-Jun-15	-121.58
7-Jan-15		6-Feb-15	-74.28	9-Mar-15	-29.99	9-Apr-15	91.60	8-May-15	-88.13	5-Jun-15	-130.75
8-Jan-15		9-Feb-15	-79.20	10-Mar-15	-81.25	10-Apr-15	90.47	11-May-15	-24.26	8-Jun-15	-121.80
9-Jan-15	-50.99	10-Feb-15	-93.15	11-Mar-15	-131.68	13-Apr-15	81.34	12-May-15	6.75	9-Jun-15	-99.13
12-Jan-15	17.07	11-Feb-15	-80.09	12-Mar-15	-99.44	15-Apr-15	48.55	13-May-15	35.18	10-Jun-15	-51.75
13-Jan-15	52.39	12-Feb-15	-11.92	13-Mar-15	-71.09	16-Apr-15	17.31	14-May-15	15.87	11-Jun-15	-39.29
14-Jan-15	64.48	13-Feb-15	56.37	16-Mar-15	-52.00	17-Apr-15	-50.93	15-May-15	37.38	12-Jun-15	-30.71
15-Jan-15	69.13	16-Feb-15	103.07	17-Mar-15	-38.93	20-Apr-15	-113.59	18-May-15	38.25	15-Jun-15	-50.88
16-Jan-15	81.79	18-Feb-15	125.87	18-Mar-15	-16.09	21-Apr-15	-166.02	19-May-15	60.53	16-Jun-15	-13.94
19-Jan-15	127.68	19-Feb-15	103.10	19-Mar-15	-4.53	22-Apr-15	-174.69	20-May-15	100.16	17-Jun-15	15.51
20-Jan-15	136.10	20-Feb-15	72.89	20-Mar-15	-36.90	23-Apr-15	-129.05	21-May-15	73.94	18-Jun-15	47.33
21-Jan-15	149.93	23-Feb-15	16.61	23-Mar-15	-49.74	24-Apr-15	-89.65	22-May-15	73.11	19-Jun-15	92.19
22-Jan-15	154.16	24-Feb-15	-35.01	24-Mar-15	-65.33	27-Apr-15	-91.20	25-May-15	34.58	22-Jun-15	123.98
23-Jan-15	121.11	25-Feb-15	-51.66	25-Mar-15	-64.08	28-Apr-15	-83.00	26-May-15	-3.64	23-Jun-15	136.02
27-Jan-15	121.96	26-Feb-15	-57.43	26-Mar-15	-79.21	29-Apr-15	-75.07	27-May-15	-39.51	24-Jun-15	131.75
28-Jan-15	115.71	27-Feb-15	-26.43	27-Mar-15	-97.18	30-Apr-15	-57.80	28-May-15	-49.93	25-Jun-15	96.62
29-Jan-15	97.25	28-Feb-15	17.50	30-Mar-15	-89.68	****	****	29-May-15	-19.98	26-Jun-15	55.10
30-Jan-15	47.20	****	****	31-Mar-15	-28.65	****	****	****	****	29-Jun-15	20.41
****	****	****	****	****	****	****	****	****	****	30-Jun-15	-9.93

When MACD line is above Zero-mark line, having upward trend, it indicates the signal of bullish market for the scrip and the prices will be increasing ahead-

12Jan2015 to 22Jan2015 12Feb2015 to 19Feb2015
27Feb2015 to 4Mar2015

2Apr2015 to 8Apr2015 13May2015 to 21May2015
18Jun2015 to 23Jun2015

When MACD line is above Zero-mark line, having downward trend, it indicates the signal of bullish market for the scrip and the prices will be increasing ahead-

23Jan2015 to 3Feb2015 19Feb2015 to 24Feb2015
4Mar2015 to 8Mar2015

8Apr2015 to 16Apr2015 21May2015 to 27May2015
23Jun2015 to 29Jun2015

When MACD line is below zero-mark line, but rising, it gives signals of a bullish market ahead-

27Feb2015 12Mar2015 to 19Mar2015
30Mar2015 to 31Mar2015

24Apr2015 28Apr2015 to 7May2015
11May2015

28May2015 to 29May2015 8Jun2015 to 12Jun2015
16Jun2015

When MACD line is below zero-mark line, having downward trend, price will be decreasing ahead-

24Feb2015 to 26Feb2015 9Mar2015 to 11Mar2015
20Mar2015 to 27Mar2015

17Apr2015 to 27Apr2015 27Apr2015
7May2015 to 8May2015

26May2015 to 27May2015 3Jun2015 to 5Jun2015
15Jun2015

30Jun2015

When MACD line forms a peak at the top, it gives signals that the market will soon turn bearish i.e. it represents over bought situation

22Jan2015

When MACD line reaches its bottom, it signifies oversold situation, i.e., the market will start becoming bullish

22Apr2015

Relative Strength Index

Table 1.4 Calculation of Relative Strength Index of NIFTY

Date	RSI	Date	RSI	Date	RSI	Date	RSI	Date	RSI	Date	RSI
1-Jan-15		2-Feb-15	55.204	2-Mar-15	77.374	1-Apr-15	54.822	4-May-15	43.506	1-Jun-15	44.987
2-Jan-15		3-Feb-15	37.354	3-Mar-15	79.199	6-Apr-15	62.644	5-May-15	52.300	2-Jun-15	31.575
5-Jan-15		4-Feb-15	15.471	4-Mar-15	66.553	7-Apr-15	99.364	6-May-15	39.596	3-Jun-15	26.444
6-Jan-15		5-Feb-15	13.653	5-Mar-15	81.650	8-Apr-15	99.654	7-May-15	28.430	4-Jun-15	26.463
7-Jan-15		6-Feb-15	0.000	9-Mar-15	39.575	9-Apr-15	99.550	8-May-15	46.093	5-Jun-15	26.441
8-Jan-15	45.403	9-Feb-15	0.000	10-Mar-15	26.786	10-Apr-15	0.000	11-May-15	60.371	8-Jun-15	0.000
9-Jan-15	50.043	10-Feb-15	12.635	11-Mar-15	14.918	13-Apr-15	0.000	12-May-15	36.165	9-Jun-15	0.000
12-Jan-15	42.956	11-Feb-15	30.506	12-Mar-15	22.643	15-Apr-15	67.507	13-May-15	44.696	10-Jun-15	32.284
13-Jan-15	42.416	12-Feb-15	48.412	13-Mar-15	19.937	16-Apr-15	57.708	14-May-15	60.165	11-Jun-15	27.297
14-Jan-15	75.754	13-Feb-15	60.097	16-Mar-15	16.652	17-Apr-15	34.407	15-May-15	66.426	12-Jun-15	30.908
15-Jan-15	90.589	16-Feb-15	67.752	17-Mar-15	45.428	20-Apr-15	12.613	18-May-15	65.148	15-Jun-15	37.463
16-Jan-15	87.720	18-Feb-15	0.000	18-Mar-15	46.353	21-Apr-15	10.522	19-May-15	54.248	16-Jun-15	50.432
19-Jan-15	87.272	19-Feb-15	0.000	19-Mar-15	41.790	22-Apr-15	10.222	20-May-15	94.250	17-Jun-15	58.926
20-Jan-15	90.194	20-Feb-15	81.280	20-Mar-15	23.391	23-Apr-15	11.398	21-May-15	90.593	18-Jun-15	56.807
21-Jan-15	95.388	23-Feb-15	56.695	23-Mar-15	32.528	24-Apr-15	10.280	22-May-15	95.984	19-Jun-15	0.000
22-Jan-15	0.000	24-Feb-15	40.855	24-Mar-15	33.327	27-Apr-15	10.472	25-May-15	67.642	22-Jun-15	0.000
23-Jan-15	0.000	25-Feb-15	41.178	25-Mar-15	0.000	28-Apr-15	30.183	26-May-15	42.391	23-Jun-15	0.000
27-Jan-15	0.000	26-Feb-15	14.681	26-Mar-15	0.000	29-Apr-15	32.101	27-May-15	43.011	24-Jun-15	94.168
28-Jan-15	0.000	27-Feb-15	43.611	27-Mar-15	0.000	30-Apr-15	18.326	28-May-15	21.066	25-Jun-15	94.049
29-Jan-15	0.000	28-Feb-15	58.698	30-Mar-15	39.669	****	****	29-May-15	52.162	26-Jun-15	86.652
30-Jan-15	60.838	****	****	31-Mar-15	41.720	****	****	****	****	29-Jun-15	65.890
****	****	****	****	****	****	****	****	****	****	30-Jun-15	53.565

During the following periods, RSI line moved downwards in the 70-30 zone and gave the clear sell signals i.e. price will decrease sale now and buy later.

- 9Jan2015 to 13Jan2015 30Jan2015 to Feb2015
- 23Feb2015 to 24Feb2015
- 18Mar2015 to 19Mar2015 15Apr2015 to 17Apr2015
- 5May2015 to 6May2015
- 15May2015 to 19May2015 25May2015 to 26May2015
- 29May2015 to 2Jun2015
- 17Jun2015 to 18Jun2015 29Jun2015 to 30Jun2015

During the following periods, RSI line moved upward in the 30-70 and gave clear signals of buying:

- 11Feb2015 to 15Feb2015 24Feb2015 to 25Feb2015
- 27Feb2015 to 28Feb2015
- 17Mar2015 to 18Mar2015 30Mar2015 to 6Apr2015
- 28Apr2015 to 29Apr2015
- 4May2015 to 5May2015 8May2015 to 9May2015
- 12May2015 to 15May2015
- 26May2015 to 27May2015 12Jun2015 to 17Jun2015

Dow theory

Charles H. Dow Jones has identified three kinds of movements in the scrips as well as indices. Three kinds of trends such as Bullish trend, Bearish trend and Flat trend which follows three movements such as Primary movements, secondary movements (corrections) and daily movements. From the analysis with the present study, it is observed that the Nifty in the first half of 2015 has followed Flat trend, in which

we can observe 5 impulse waves and 4 correction waves.

Conclusion

With the above analysis, we could able to conclude that the Nifty has followed a Flat Trend in the first half of 2015, Nifty has started at 8284, and reached the maximum value of 8996.25 on Mar3, 2015 due to the speculations related to budget and reached minimum val-

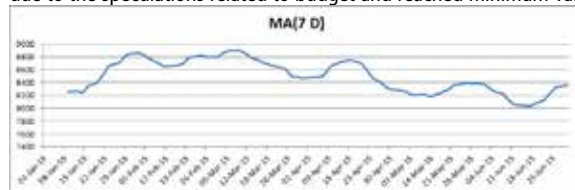


Chart 1.2 Rate of Change of Nifty

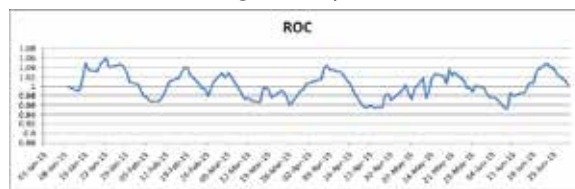


Chart 1.3 Moving Averages Conveges Diverges of Nifty

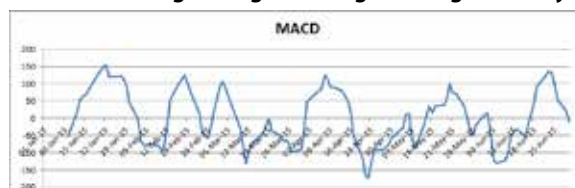
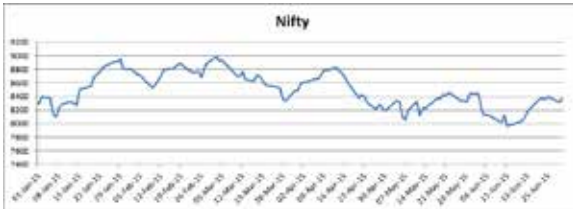


Chart 1.4 Relative Strength Index of Nifty



Chart 1.5 Nifty-Dow theory application



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