

A Study on Technical Analysis of Selected Equity Stocks Listed on NSE

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This study focuses on the application of technical analysis in understanding stock price movements of selected equity stocks listed on the National Stock Exchange (NSE). The research is based on secondary data collected from reliable financial sources and applies various technical tools such as candlestick charts, Relative Strength Index (RSI), Rate of Change (ROC), and Moving Averages. The findings reveal that stock prices exhibit significant volatility influenced by market conditions, investor sentiment, and external economic factors. Technical indicators help in identifying trends, momentum, and possible reversal points, enabling better investment decisions. The study concludes that technical analysis is an effective tool for analyzing market behavior and managing investment risks.

Keywords: Technical Analysis, NSE, Stock Market, RSI, ROC, Moving Average, Candlestick, Volatility

I. INTRODUCTION

Financial markets play a vital role in economic development by channelizing savings into productive investments. Among them, the stock market is a key component that reflects economic performance and corporate growth. Stock prices fluctuate due to various factors such as economic conditions, policies, and investor expectations.

Technical analysis is widely used to study price movements based on historical data. It helps investors identify trends and make informed decisions. This study aims to analyze selected NSE-listed stocks using technical tools to understand market behavior and trends.

II. REVIEW OF LITERATURE

Sharma and Gupta (2025) found that indicators like RSI, ROC, and Moving Averages help in identifying trends and improving prediction accuracy. Reddy (2025) concluded that RSI and MACD are useful in understanding market momentum and reducing emotional decisions. Kumar and Singh (2024) stated that technical analysis tools are widely used for analyzing stock price behavior in NSE-listed stocks.

Patel (2023) highlighted that Moving Averages are effective in identifying trends and generating signals. Mehta and Shah (2022) observed that RSI and MACD help in identifying overbought and oversold conditions. Verma (2021) emphasized the importance of candlestick patterns in predicting trend reversals.

Iyer and Nair (2020) found that technical analysis helps manage risk during volatile market conditions. Joshi (2019) concluded that indicators like RSI and Moving Averages are useful for short-term decisions. Khan and Ali (2018) stated that chart patterns help predict price movements, while Rao (2017) emphasized the role of technical analysis in improving investment decisions.

OBJECTIVES OF THE STUDY

Primary Objective

- To study technical analysis of selected NSE-listed stocks

Secondary Objectives

- To analyze price movements using candlestick patterns
- To evaluate momentum using ROC
- To identify overbought/oversold conditions using RSI
- To study trends using Moving Averages

III. RESEARCH METHODOLOGY

• The research methodology for this study adopts a systematic approach to examine the impact of rotational scheduling and extra time commitment on employee health and productivity of Oji Interpack India.

Research Design

Research design is the structured plan that guides the collection, analysis, and interpretation of data in a study.

It ensures that the research objectives are achieved with accuracy, validity, and reliability.

Sampling Method and Sample Size

A non-probability convenience sampling method was used to select 154 employees from Oji interpack India, with the sample size determined through a pilot study and statistical methods. This ensures adequate population representation and provides reliable insights into work shift and their impact on health and productivity.

Data Collection Methods

This study made use of both primary and secondary data:

- Primary Data: Gathered by giving employees a standardized questionnaire.
- Secondary Data: Gathered from books, journals, business documents, and pertinent websites.

Pilot Study

Thirty respondents participated in a pilot study to evaluate the questionnaire's dependability and intelligibility. Before the final data collection, any necessary adjustments were made.

Tools and Techniques

There were some closed-ended questions on the survey, such as:

- Yes/No dichotomous
- Strongly Agree to Strongly Disagree on a Likert scale
- Semantic differential scale

Statistical Tools Used

The gathered information was examined using:

- Candlestick Charts
- Rate of Change (ROC)
- Relative Strength Index (RSI)
- Moving Average

S. No	Tool	Description	Formula
1	Candlestick Chart Analysis	Shows price movements using open, high, low, and close values. Helps identify trends and reversal patterns.	$\text{Real Body} = \text{Close} - \text{Open} $
2	Rate of Change (ROC)	Measures the percentage change in price over time. Indicates momentum and speed of price movement.	$\text{ROC} = ((\text{Current Price} - \text{Previous Price}) / \text{Previous Price}) \times 100$
3	Relative Strength Index (RSI)	Identifies overbought and oversold conditions. Helps in predicting possible trend reversals.	$\text{RSI} = 100 - [100 / (1 + \text{RS})]$

4	Moving Average (MA)	Smooths price fluctuations to show the overall trend direction (upward or downward).	MA = Sum of Prices ÷ Number of Periods
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IV. RESULTS & DISCUSSION

Table 1: TCS – Rate of Change (ROC)

S. No	Date	Price (10 Days Ago)	Current Price	ROC (%)
1	02-05-2025	1906.70	1925.00	0.96
2	15-05-2025	1925.00	1933.80	0.46
3	29-05-2025	1933.80	1927.50	-0.33
4	12-06-2025	1927.50	1943.40	0.82
5	26-06-2025	1943.40	2021.80	4.03
6	10-07-2025	2021.80	2006.20	-0.77
7	24-07-2025	2006.20	2014.20	0.40
8	07-08-2025	2014.20	1995.40	-0.93
9	21-08-2025	1995.40	1991.20	-0.21
10	04-09-2025	1991.20	961.25	-51.73
11	18-09-2025	961.25	976.90	1.63
12	03-10-2025	976.90	965.15	-1.20
13	17-10-2025	965.15	1002.55	3.88
14	31-10-2025	1002.55	987.30	-1.52
15	14-11-2025	987.30	989.60	0.23
16	28-11-2025	989.60	1007.60	1.82
17	12-12-2025	1007.60	1001.50	-0.61
18	26-12-2025	1001.50	992.10	-0.94
19	09-01-2026	992.10	939.00	-5.35
20	23-01-2026	939.00	916.10	-2.44
21	06-02-2026	916.10	941.10	2.73
22	20-02-2026	941.10	911.85	-3.11
23	06-03-2026	911.85	857.05	-6.01
24	20-03-2026	857.05	780.45	-8.94
25	03-04-2026	780.45	750.90	-3.79
26	16-04-2026	750.90	795.45	5.94

The ROC analysis of TCS shows frequent fluctuations, indicating changing market momentum. A sharp decline is observed in September 2025, followed by a recovery phase, showing market reaction. Negative ROC values in early 2026 indicate a downward trend, while recent positive values suggest recovery. Overall, the stock exhibits high volatility with periods of decline and improvement.

Table 2: HDFC Bank – ROC Table

S. No	Date	Price (10 Days Ago)	Current Price	ROC (%)
1	02-05-2025	3298.90	3444.70	4.42
2	15-05-2025	3444.70	3579.90	3.93
3	29-05-2025	3579.90	3498.10	-2.29
4	12-06-2025	3498.10	3434.20	-1.83
5	26-06-2025	3434.20	3441.80	0.22
6	10-07-2025	3441.80	3382.00	-1.74
7	24-07-2025	3382.00	3148.00	-6.92
8	07-08-2025	3148.00	3047.00	-3.21
9	21-08-2025	3047.00	3102.60	1.82
10	04-09-2025	3102.60	3095.70	-0.22
11	18-09-2025	3095.70	3176.70	2.62
12	03-10-2025	3176.70	2901.90	-8.65
13	17-10-2025	2901.90	2962.20	2.08
14	31-10-2025	2962.20	3058.00	3.23
15	14-11-2025	3058.00	3106.00	1.57
16	28-11-2025	3106.00	3137.50	1.01
17	12-12-2025	3137.50	3220.50	2.65
18	26-12-2025	3220.50	3280.00	1.85
19	09-01-2026	3280.00	3207.80	-2.20
20	23-01-2026	3207.80	3162.50	-1.41
21	06-02-2026	3162.50	2941.60	-6.99
22	20-02-2026	2941.60	2686.20	-8.68
23	06-03-2026	2686.20	2557.60	-4.79
24	20-03-2026	2557.60	2390.60	-6.53
25	03-04-2026	2390.60	2450.70	2.51
26	16-04-2026	2450.70	2576.90	5.15

The ROC analysis of HDFC Bank shows moderate fluctuations, indicating changing market momentum. A significant decline is observed during October 2025 and early 2026, reflecting a downward trend. However, the stock shows recovery in April 2026 with positive ROC values. Overall, the stock exhibits periods of decline followed by gradual improvement.

V. SUGGESTIONS

- Investors should not rely on a single technical indicator; instead, they should use a combination of tools like RSI, ROC, and Moving Averages for better accuracy.
- It is important to regularly monitor stock price movements to identify trends and make timely decisions.
- Investors should use stop-loss techniques to reduce potential losses during market fluctuations.
- Technical analysis should be supported with fundamental analysis for more reliable investment decisions.
- Emotional decision-making should be avoided; instead, a disciplined and systematic approach should be followed.

VI. CONCLUSION

The study concludes that technical analysis is an effective method for analyzing stock price movements and identifying market trends. Tools like RSI, ROC, candlestick charts, and Moving Averages help investors understand market behavior and make informed decisions. The analysis of selected stocks shows that prices are highly volatile with periods of rise and fall. Using multiple indicators together improves accuracy and reduces risk. Overall, technical analysis plays a significant role in supporting better investment decisions in the stock market.

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