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PREDICTION OF BANKING SECTOR STOCK BY USING TECHNICAL ANALYSIS

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ABSTRACT

The research paper explores the insights of the banking sector stocks by using scientific analysis. The technical analysis shows how the charts and pattern supports to the investors by different turning points, which predicts when to buy or sell the stocks. This paper helps to know which bank performs better than other bank and compared with market indices of National Stock Exchange (NSE) based on price variation by using technical analysis. The analysis shows that the shares of Yes Bank and Punjab National Bank have high degree optimistic correlation when compare to other banks.

Keywords: Technical Analysis, Relative Strength Index (RSI), Correlation with market indices.

I. INTRODUCTION

In India The banking system plays an important role in promoting economic growth not only by channelling savings into investments but also by improving a locative efficiency of resources. The recent empirical evidence, in fact, suggests that banking system contributes to economic growth more by improving the locative efficiency of resources than by channelling of resources from savers to investors. An efficient banking system is now regarded as a necessary pre-condition for growth.

Technical Analysis

We can define Technical Analysis as a study of stock market considering factors related to supply and demand of stock. Technical analysis doesn't look at underlying earning potential of a company while evaluating stocks (unlike Fundamental Analysis). It uses charts and computer programs to study the stock trading volume and price movement in the hope of identifying a trend.

II. LITERATURE REVIEW

- **Dr. Pallavi, (2000),** in her research create that, as distant as the Indian banking is disturbed it can be categorized in unlike modes such as government owned, private banking and precise banking institution. In India Reserve bank of India is the arrange today which works above to all Indian banks. Since from 1969 the public sectors banks has conceal the decades to create the Indian banking sector due to the entail of customer value and customer base.
- **(Jayakumar & Sumathi, 2013)** in their research found that the Indian Banking Sector is one of the wide-ranging sectors in the country and the various factors which affect the share prices of Banking Companies. In this consequence a broad analysis of the trend in share price movement.

III. OBJECTIVE OF THE STUDY

- To study buy or sell signal by different methods.
- To analyze price movements using Relative Strength Index.
- To investigate & understand trends and patterns in stock price movement by using Rate of change & Moving Average.

IV.   RESEARCH METHODOLOGY

Research is a logical and methodical search for new and constructive information on a exacting topic. Research Methodology is a methodical way to solve a problem. This study aims at analyzing the price moments of particular banks scrip's. This study is a descriptive research. The descriptive method is used to study the price trend of stocks using technique of technical analysis. The sampling method used in this research is simple random sampling. The probably sampling method is used by the researcher.

4.1 Sampling unit
The following banks were taken as sample unit for our research.
1. State Bank of India
2. Punjab National Bank
3. Union Bank
4. Axis Bank
5. HDFC Bank
6. Yes Bank

4.2 Methods of data collection
The data required for the study has been obtained from the NSE's and Banks official websites.

4.3 Tools for the analysis
i) Relative Strength Index (RSI)

V.   DATA ANALYSIS

5.1 Calculation of correlation

RSI of NSE on different dates

NATIONAL STOCK EXCHANGE		
DATE	**PERIOD**	**RSI**
4/15/2019	14	64.46027
4/12/2019	14	62.3318
4/11/2019	14	66.11365
4/10/2019	14	59.52726
4/9/2019	14	65.88867
4/8/2019	14	63.06795
4/5/2019	14	67.81206
4/4/2019	14	65.11807
4/3/2019	14	68.73152
4/2/2019	14	74.50693
4/1/2019	14	73.17614
3/29/2019	14	71.76718
3/28/2019	14	70.02774
3/27/2019	14	65.44289

RSI of SBI bank on different dates

STATE BANK OF INDIA		
DATE	PERIOD	RSI
4/15/2019	14	59.74232
4/12/2019	14	59.45501
4/11/2019	14	59.18452
4/10/2019	14	56.07484
4/9/2019	14	60.1722
4/8/2019	14	58.75477
4/5/2019	14	63.31501
4/4/2019	14	68.86182
4/3/2019	14	86.15278
4/2/2019	14	79.08665
4/1/2019	14	76.51403
3/29/2019	14	75.62299
3/28/2019	14	74.84765
3/27/2019	14	69.61754

Sub Hypotheses Testing:
H0a: There is no significant relation of NSE RSI on the SBI RSI.
H1a: There is significant relation of NSE RSI on the SBI RSI.

Correlation Results:

Correlation between SBI Bank NSE	2019 (14 days)
Karl Pearson coefficient of correlation	0.79797

Interpretation
Relate to Correlation results of State bank of India and NSE. RSI Karl Pearson coefficient of correlation for the duration 27-3-2019 to 15-4-2019 was used to test the Hypotheses-1 at 0.05 significant levels between State bank of India and NSE. RSI with $r = $ **0.79797** which shows high degree positive correlation.

RSI of PNB bank on different dates

PUNJAB NATIONAL BANK		
DATE	PERIOD	RSI
4/15/2019	14	60.8324
4/12/2019	14	59.6817
4/11/2019	14	58.19926
4/10/2019	14	60.25655

4/9/2019	14	63.46125
4/8/2019	14	61.05725
4/5/2019	14	61.05725
4/4/2019	14	62.62033
4/3/2019	14	64.86308
4/2/2019	14	77.22248
4/1/2019	14	76.35308
3/29/2019	14	74.0541
3/28/2019	14	73.87722
3/27/2019	14	71.53483

Sub Hypotheses Testing:
H0a: There is no significant relation NSE RSI on the PNB RSI.
H1a: There is significant relation of NSE RSI on the PNB RSI.

Correlation Results:

Correlation between PNB Bank and HDFC Bank	2019 (14 days)
Karl Pearson coefficient of correlation	0.826317

Interpretation
Relate to Correlation results of Punjab National Bank and NSE. RSI Karl Pearson coefficient of correlation for the duration 27-3-2019 to 15-4-2019 was used to test the Hypotheses-1 at 0.05 significant levels between PNB Bank and NSE. RSI with r = **0.826317** which shows high degree positive correlation.

RSI of UNION bank on different dates

UNION BANK		
DATE	PERIOD	RSI
4/15/2019	14	57.7211
4/12/2019	14	59.98734
4/11/2019	14	59.52623
4/10/2019	14	60.43158
4/9/2019	14	63.23852
4/8/2019	14	59.3318
4/5/2019	14	61.17996
4/4/2019	14	60.13341
4/3/2019	14	60.13341
4/2/2019	14	77.79728

4/1/2019	14	75.37784
3/29/2019	14	74.51837
3/28/2019	14	78.83013
3/27/2019	14	75.79572

Sub Hypotheses Testing:
H0a: There is no significant relation NSE RSI on the UNION BANK RSI.
H1a: There is significant relation of NSE RSI on the UNION BANK RSI.

Correlation Results:

Correlation between Union Bank and NSE	2019 (14 days)
Karl Pearson coefficient of correlation	0.72828

Interpretation
Relate to Correlation results of Union Bank and NSE. RSI Karl Pearson coefficient of correlation for the duration 27-3-2019 to 15-4-2019 was used to test the Hypotheses-1 at 0.05 significant levels between Union Bank and NSE. RSI with r = **0.72828** which shows high degree positive correlation.

RSI of AXIS bank on different dates

AXIS BANK		
DATE	**PERIOD**	**RSI**
4/15/2019	14	56.82757
4/12/2019	14	57.74756
4/11/2019	14	51.94423
4/10/2019	14	57.11257
4/9/2019	14	58.73094
4/8/2019	14	54.60934
4/5/2019	14	59.3639
4/4/2019	14	59.34328
4/3/2019	14	59.0794
4/2/2019	14	62.48449
4/1/2019	14	61.86176
3/29/2019	14	68.71679
3/28/2019	14	70.87651
3/27/2019	14	64.43899

Sub Hypotheses Testing:
H0a: There is no significant relation NSE RSI on the AXIS BANK RSI.
H1a: There is significant relation of NSE RSI on the AXIS BANK RSI.

Correlation Results:

Correlation between AXIS Bank and NSE	2019 (14 days)
Karl Pearson coefficient of correlation	0.58359

Interpretation

Relate to Correlation results of Axis Bank and NSE. RSI Karl Pearson coefficient of correlation for the duration 27-3-2019 to 15-4-2019 was used to test the Hypotheses-1 at 0.05 significant levels between NSE and Axis Bank. RSI with r = **0.58359** which shows high degree positive correlation.

RSI of HDFC bank on different dates

HDFC BANK		
DATE	**PERIOD**	**RSI**
4/15/2019	14	58.69849
4/12/2019	14	54.11446
4/11/2019	14	52.50369
4/10/2019	14	48.10532
4/9/2019	14	61.12093
4/8/2019	14	61.78977
4/5/2019	14	66.9132
4/4/2019	14	63.1182
4/3/2019	14	65.97429
4/2/2019	14	66.64254
4/1/2019	14	72.11707
3/29/2019	14	74.49737
3/28/2019	14	72.59256
3/27/2019	14	72.19124

Sub Hypotheses Testing:
H0a: There is no significant relation NSE RSI on the HDFC BANK RSI.
H1a: There is significant relation of NSE RSI on the HDFC BANK RSI.

Correlation Results:

Correlation between HDFC Bank and NSE	2019 (14 days)
Karl Pearson coefficient of correlation	0.75535

Interpretation

Relate to Correlation results of HDFC Bank and NSE. RSI Karl Pearson coefficient of correlation for the duration 27-3-2019 to 15-4-2019 was used to test the Hypotheses-1 at 0.05 significant levels between NSE and HDFC Bank. RSI with r = **0.75535** which shows high degree positive correlation.

RSI of YES bank on different dates

Yes bank		
DATE	PERIOD	RSI
4/15/2019	14	58.039378
4/12/2019	14	60.50834
4/11/2019	14	61.67551
4/10/2019	14	61.19196
4/9/2019	14	63.37303
4/8/2019	14	56.98105
4/5/2019	14	63.62685
4/4/2019	14	64.86655
4/3/2019	14	70.90682
4/2/2019	14	78.87343
4/1/2019	14	72.2942
3/29/2019	14	77.00398
3/28/2019	14	78.16361
3/27/2019	14	75.54785

Sub Hypotheses Testing:
H0a: There is no significant relation NSE RSI on the Yes Bank RSI.
H1a: There is significant relation of NSE RSI on the Yes Bank RSI.

Correlation Results:

Correlation between NSE Bank and NSE	2019 (14 days)
Karl Pearson coefficient of correlation	0.913557

Interpretation
Relate to Correlation results of NSE and Yes Bank. RSI Karl Pearson coefficient of correlation for the duration 27-3-2019 to 15-4-2019 was used to test the Hypotheses-1 at 0.05 significant levels between NSE and Yes Bank. RSI with r = **0.913557** which shows high degree positive correlation.

VI.   FINDINGS

- The performance and health of stock exchange is exclusively dependent on the behaviour and outline of investments by the investor.
- Every investor wants high return at low risk and they buy and sell on the basis of their observation causing stock market taking indiscriminate walk.
- The capital market goes through quick changes; investors should look for right opportunity keeping in tune with the dynamics of market situation.
- An shareholder should be very careful in identify the primary trend
- Once he fined the most important trend any pull back in the rally is an opportunity for a re entrance provided the primary trend in intact.

VII.   CONCLUSION

Technical analysis is one of the superior techniques which are used to examine securities by analyse the securities by analysing the historical and other statistics which are generated by market activity. Technical Analysis is mainly based on three assumptions namely, Market discounts everything, Price moves in trends, History trends to replicate itself. Technical analysis states that all elementary of the company are cut-price by the market at any point of time, also they judge short term move towards to analyse the market than the long term analysis. Trend is one of the main concepts in technical analysis which truly refer to a direction in which a security is headed. This trend line is drawn by using the closing price of the stock. To show the series of prices over a period of time charts and graphical representation are used in technical analysis. Relative Strength index and Moving average are the principal oscillators in technical analysis. Technical analysis is an instrument to predict the future direction of individual stock or securities.

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