Technical Analysis on Selected Stocks of Indian Banking Sector

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Abstract

Technical Analysis is a basic tool used widely by investors to understand the intrinsic value of shares as well as to know whether it is undervalued or overvalued in the stock market. Investors can understand the major turning points of the stock market through various indicators. The tools of technical analysis will help the investors in their decision making. Most of the investors in India are risk averse investors. Even while investing in equities, they prefer to invest in very safer securities like banking industries. This study is an attempt to understand the market behavior of selected securities in banking sector and to interpret the investors whether to buy, sell or hold the securities. The objective of this project will give us a clear picture about the current trend and risk involved with the selected scrip on par with the market. This study completely depends on the secondary data available in various websites. The technical tools used for the analysis are Beta, Relative Strength Index and Simple Moving Average to understand whether the scrip is technically strong or weak.

Keywords:
Technical analysis, Investment, Risk, Return, Stock market

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1. Introduction

On account of continuous buying and selling of securities in the stock market by the investors, the securities prices keeps fluctuating. Every investor wants to take maximum return from these price changes. Since the stock prices are never stable, the investor is in need to study the behavior of these price movements. Such study will help the investors to minimize their risk and to earn maximum return from their investments. The two major analyses done by investors for making investment decision in stock market are Fundamental analysis and Technical analysis. Fundamental analysis helps the investor to understand the actual worth (intrinsic value) of the stock based on the earning capacity of the company and to compare it with the market price to find out whether it is undervalued or overvalued in the stock market. Technical analysis helps the investor to identify the buying or selling opportunities by analyzing the price trends of the stocks with statistical tools. The demand and supply of stocks is forced by lot of factors such as business, economical, political and social informations which influences the psychological and emotional factors of the investors. Fundamental analysis gives the actual worth of securities purely based on the company’s financial and

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operational efficiency. Whereas technical analysis predicts the future movement of the securities price based on the past and historical price movements happened in the stock market.

[1] A.Jayakumar, K.Sumathi (2013), in their study analysed the internal and external factors affecting the price of the shares of banking companies and identified that the Indian economy is growing after recession, hence it’s a right time for investments in banking company shares. [2] C. Boobalan (2014), the study aimed at understanding the behavior of the share price by using technical tools. It helps to understand the major signal and turning points of the stock price in the market which aided investment decisions. [3] Mrs. J. Nithya, Dr. G. Thamizhchelvan (2014) This study projected how valuable technical analysis is for investors in forecasting and making investment decisions. [4] Dr. I. Satyanarayana, N. B. C. Sindhu, Karpurapa Prashanthi (2017) this study tells the importance of information for and efficient market

2. Research Method

This study is undertaken to analyze the equity price trends of banks in India with help of technical tools and to provide suggestions to the investors’ whether to buy, sell or hold these stocks.

2.1 Objectives of the Study

The objectives of the study are listed below:

- To find out the volatility involved with the scrip on par with market using Beta.
- To analyze price movement using relative strength index.
- To understand trends and patterns in share price movement using moving average.
- To suggest investors on investments with these scrips.

2.2 Methods of Data Collection

The data required for the study have been obtained from NSE's official website. The closing prices of share prices for past five years from March 2015 till March 2019 were taken and the future price movement was analyzed using various tools. For the purpose of beta calculation, closing prices of the companies in NSE and the closing value of NIFTY were taken. All the listed banks in the National Stock Exchange constitute the population for the study. Seven banks which are actively traded in NSE were taken on for the study. The selected banks are:

- Axis Bank
- HDFC Bank
- ICICI Bank
- IndusInd Bank
- Kotak Mahindra Bank
- State Bank of India
- Yes Bank

2.3 Tools used for Analysis

There are notable statistical tools used in this study.

1. Beta
2. Variance
3. Standard Deviation

Technical Analysis Tools

1. Moving Average Convergence Divergence (MACD)
2. Relative Strength Index (RSI)

Tables and Figures are presented.

3. Results and Analysis

Table 4.1 Standard deviation and Beta calculation of Axis Bank

<table>
<thead>
<tr>
<th>Stock Prize</th>
<th>NIFTY</th>
<th>stock return</th>
<th>Market return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard deviation</td>
<td>1.53075</td>
<td>Sum</td>
<td>5.60855</td>
</tr>
</tbody>
</table>

Beta | 0.57713 |
Fig 4.1 Standard deviation and Beta calculation of Axis Bank

Interpretation:
As from the above analysis it can be seen that total risk associated with the stock, Standard deviation for Axis bank is 1.53075, whereas the beta value is 0.57713. Here the beta value is less than one it shows low volatility of the price of the stock in comparison with market return.

Table 4.2 Standard deviation and Beta calculation of HDFC Bank

<table>
<thead>
<tr>
<th>Stock prize</th>
<th>NIFTY</th>
<th>Stock return</th>
<th>Market return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard deviation</td>
<td>0.74905</td>
<td>Sum</td>
<td>1.48112</td>
</tr>
<tr>
<td>Beta</td>
<td></td>
<td></td>
<td>0.47407</td>
</tr>
</tbody>
</table>

Fig. 4.2 Standard deviation and Beta calculation of HDFC Bank

Interpretation:
As from the above analysis it can be seen that total risk associated with the stock (Standard deviation) HDFC bank is 0.74905, whereas the beta value is 0.47407. Here the beta value is less than one it shows low volatility of the price of the stock in comparison with market return.

Table 4.3 Standard deviation and Beta calculation of ICICI Bank

<table>
<thead>
<tr>
<th>Stock prize</th>
<th>NIFTY</th>
<th>Stock return</th>
<th>Market return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard deviation</td>
<td>0.94321</td>
<td>Sum</td>
<td>0.96462</td>
</tr>
<tr>
<td>Beta</td>
<td></td>
<td></td>
<td>0.33365</td>
</tr>
</tbody>
</table>
Fig 4.3 Standard deviation and Beta calculation of ICICI Bank

Interpretation:
As from the above analysis it can be seen that total risk associated with the stock (Standard deviation) ICICI bank is 0.94321, whereas the beta value is 0.33365. Here the beta value is less than one, it shows low volatility of the price of the stock in comparison with market return.

Table 4.4 Standard deviation and Beta calculation of IndusInd Bank

<table>
<thead>
<tr>
<th>Stock price</th>
<th>NIFTY</th>
<th>stock return</th>
<th>Market return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>open</td>
<td>Close</td>
<td>open</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>0.9620</td>
<td>Sum</td>
<td>Beta</td>
</tr>
</tbody>
</table>

Fig. 4.4 Standard deviation and Beta calculation of IndusInd Bank

Interpretation
As from the above analysis it can be seen that total risk associated with the stock (Standard deviation) IndusInd bank is 0.9620, whereas the beta value is 0.1635. Here the beta value is less than one, it shows low volatility of the price of the stock in comparison with market return.

Table 4.5 Standard deviation and Beta calculation of Kotak Mahindra Bank

<table>
<thead>
<tr>
<th>Stock price</th>
<th>NIFTY</th>
<th>stock return</th>
<th>Market return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>open</td>
<td>Close</td>
<td>open</td>
</tr>
<tr>
<td>Std. deviation</td>
<td>0.83861</td>
<td>Sum</td>
<td>Beta</td>
</tr>
</tbody>
</table>
Interpretation:
As from the above analysis it can be seen that total risk associated with the stock (Standard deviation) Kotak Mahindra bank is 0.83861, whereas the beta value is 0.64154. Here the beta value is less than one, it shows low volatility of the price of the stock in comparison with market return.

Table 4.6 Standard deviation and Beta calculation of State Bank of India

<table>
<thead>
<tr>
<th>Stock price</th>
<th>NIFTY</th>
<th>stock return</th>
<th>Market return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>open</td>
<td>close</td>
<td>open</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>1.12845</td>
<td>Sum</td>
<td>-3.3118</td>
</tr>
<tr>
<td>Beta</td>
<td>0.71036</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interpretation:
As from the above analysis it can be seen that total risk associated with the stock (Standard deviation) SBI is 1.12845, whereas the beta value is 0.71036. Here the beta value is less than one, it shows low volatility of the price of the stock in comparison with market return.

Table 4.7 Standard deviation and Beta calculation of Yes Bank

<table>
<thead>
<tr>
<th>Stock price</th>
<th>NIFTY</th>
<th>stock return</th>
<th>Market return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>open</td>
<td>close</td>
<td>open</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>2.7410</td>
<td>Sum</td>
<td>-5.20332</td>
</tr>
<tr>
<td>Beta</td>
<td>3.202</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Interpretation

As from the above analysis it can be seen that total risk associated with the stock (Standard deviation) Yes bank is 2.74105, whereas the beta value is 3.202. Here the beta value is greater than one and it shows high volatility of the price of the stock in comparison with market return.

Interpretation:

As the above analysis it can be seen that total risk associated with the stock (Standard deviation) Yes bank is 2.74105, whereas the beta value is 3.202. Here the beta value is greater than one and it shows high volatility of the price of the stock in comparison with market return.
Fig. 4.10 Moving average convergence divergence of HDFC Bank

Interpretation:
It indicates the HDFC bank, for the period April 2018 to April 2019. It can be observed that the moving average line has 18 crosses over during the past one year. Its price range for that one year is Rs.1950 to Rs.2265. After the end of 5th and 12th cross over signal line diverges from MACD line, it indicates the end of current trend.

Fig. 4.11 Relative strength index of HDFC Bank

Interpretation:
From the above chart, the RSI indicator follows the 30:70 rule and it shows the stocks of HDFC bank touches the resistance level during the months June, 2 times in Aug and September 2018 and January and April 2019. This indicates the upward market trends associated with investor confidence so stocks are oversold. This is generally interpreted as a sign of the stock is becoming over valued and indication of bullish market. It also inferred the stock touches support level two times during November. This indicates the downward market trends so stocks are overbought.

Fig. 4.12 Moving average convergence divergence of ICICI Bank

Interpretation:
It indicates the ICICI bank, for the period April 2018 to April 2019. It can be observed that the moving average line has 17 crosses over during the past one year. Its price range for that one year is Rs.285 to Rs.400. After the end of 3rd and 11th cross over signal line diverges from MACD line, it indicates the end of current trend.
Interpretation:

From the above chart, the RSI indicator follows the 30:70 rule and it shows the stocks of ICICI bank touches the resistance level during the months April, May, October, December of 2018 and February, April of 2019. This indicates the upward market trends associated with investor confidence so stocks are oversold. This is generally interpreted as a sign of the stock is becoming over valued and indication of bullish market. It also inferred the stock touches support level two times during june2018 and February 2019. This indicates the downward market trends.

Interpretation:

It indicates the IndusInd bank, for the period April 2018 to April 2019. It can be observed that the moving average line has 14 crosses over during the past one year. Its price range for that one year is Rs.1753 to Rs.1858. After the end of 7th and 12th cross over signal line diverges from MACD line, it indicates the end of current trend.

Interpretation:

From the above chart, the RSI indicator follows the 30:70 rules and it shows the stocks of IndusInd bank touches the resistance level during the months June, July of 2018 and April 2019. This indicates the upward market trends associated with investor confidence so stocks are oversold. This is generally interpreted as a sign of the stock is becoming over valued and indication of bullish market. It also inferred the stock touches support level two times during dec2018 and feb2019. This indicates the downward market trends.
Fig. 4.16 Moving average convergence divergence of Kotak Mahindra bank

Interpretation:
It indicates the Kotak bank, for the period April 2018 to April 2019. It can be observed that the moving average line has 21 crosses over during the past one year. Its price range for that one year is Rs.1150 to Rs.1375. After the end of 8th cross over signal line diverges from MACD line, it indicates the end of current trend.

Fig 4.17 Relative strength index of Kotak Mahindra bank

Interpretation:
From the above chart, the RSI indicator follows the 30:70 rules and it shows the stocks of Kotak Mahindra bank touches the resistance level during months June, August of 2018 and April of 2019. This indicates the upward market trends associated with investor confidence so stocks are oversold. This is generally interpreted as a sign of the stock is becoming over valued and indication of bullish market. It also inferred the stock touches support level two times during November 2019. This indicates the downward market trends.

Fig. 4.18 Moving average convergence Divergence State Bank of India

Interpretation:
It indicates SBI, for the period April 2018 to April 2019. It can be observed that the moving average line has 18 crosses over during the past one year. Its price range for that one year is Rs.250 to Rs.320. After the end of 8th cross over signal line diverges from MACD line, it indicates the end of current trend.
Interpretation:
From the above chart, the RSI indicator follows the 30:70 rules and it shows the stock of State bank of India touches the resistance level during months April, August, October of 2018 and April of 2019. This indicates the upward market trends associated with investor confidence so stocks are oversold. This is generally interpreted as a sign of the stock is becoming over valued and indication of bullish market. It also inferred the stock touches support level two times during March 2019. This indicates the downward market trends.

Interpretation:
It indicates Yes bank, for the period April 2018 to April 2019. It can be observed that the moving average line has 17 crosses over during the past one year. Its price range for that one year is Rs.300 to Rs.265. After the end of 6th cross over signal line diverges from MACD line, it indicates the end of current trend. After 6th cross over it falls drastically.

Interpretation:
From the above chart, the RSI indicator follows the 30:70 rules and it shows the stock of Yes bank touches the resistance level during months May, August, October of 2018 and April of 2019. This indicates the upward market trends associated with investor confidence. This is generally interpreted as a sign of the
stock is becoming over valued and indication of bullish market. It also inferred the stock touches support level during June, July, and November 2018. This indicates the downward market trend.

5. SUGGESTIONS OF THE STUDY
i. It is good to invest in ICICI since it is not that much fluctuated when comparing with other banks.
ii. Yes bank is now in upward trend so long term investment in this scrip is profitable.
iii. Keeping ICICI, SBI and IndusInd bank in their portfolio is good for the investor.
iv. Banking sectors share volatility depends on RBI decision so the investor has to continuously monitor RBI’s performance and announcements.

5. Conclusion
The price of a share will go up or down if people change their minds about how well the company is performing or about the economic condition it operates in. If share price reduces then the value of your investment reduces as well. If the company grows and become more valuable, the share is worth more so investment is worth more too. Investor should have knowledge regarding the market terms so that they can take maximum return from investment. Half knowledge about the market is very dangerous.

Technical analysis is a meaning full tool in serving investment decision. It gives investor a better understanding of the stock and also gives right direction to go on further to buy, sell or hold the stocks. Share volatility of banking sector differs from other sector because banking share volatility depends upon RBI decision.

The analysis of price movements of seven selected banks predicts the possible future swings of price in the market. It is concluded that technical indicator can play useful role in the timing of stock market entry and exit. By applying technical indicator investor enjoy substantial profit. Therefore, the small investor and traders should not blindly make an investment rather they should analyze various tools to check if the scrip is technically strong or not.

References