A STUDY ON TECHNICAL ANALYSIS OF STOCKS LISTED IN NSE WITH REFERENCE TO PHARMACEUTICAL INDUSTRIES

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ABSTRACT

Technical Analysis is a study of the stock market with respect to factors affecting the supply and demand of stocks helps to understand the intrinsic value of shares and to know whether the shares are undervalued or overvalued. The stock market indicators would help the investor to identify major market turning points. This is a significant technical analysis of selected companies which helps to understand the price behaviour of the shares, the signals given by them and the major turning points of the market price. Any investor or trader must certainly consider technical analysis as a tool whether to buy the stock at a particular point of time though it is fundamentally strong. The objective of this paper is to make a study on the technical analysis of selected stocks of Pharmaceutical sector and interpret whether to buy or sell them by using techniques. This in turn would help investors to identify the current trend and risks involved with the scrip on par with market. This study is purely based on data provided on stocks listed in National Stock Exchange (NSE). For the purpose of analysis, techniques like Beta, Relative Strength Index and Simple Moving average are used and the strength of stock is inferred.

Keywords: Technical Analysis, Beta, Relative Strength Index, Simple Moving Average.

INTRODUCTION

Technical analysis helps in determining the future levels by examining the past price movements and trading volumes of stocks and indices. Naturally, all investors would like their investments to appreciate rapidly in price, but stocks, which may satisfy this wish, tend to be
accompanied by a substantially greater amount of risk. Then how many investors are normally willing to accept. However, it is important to understand that investors can be very conscious when it comes to stock ownership. Companies from Pharmaceutical sector is selected on Stratified sampling technique is significant as it helps in understanding the intrinsic value of shares and to know whether the shares are undervalued or overvalued or correctly priced. It becomes essential to know the performance of the company so that the investment will be duly giving returns and ensure safety of the investment. Further it helps in understanding the price behaviour of the shares, the signals given by them and the major turning points of the market price.

REVIEW OF LITERATURE

Dietze, Oliver and Macro (2009) conducted a research to evaluate the risk-adjusted performance of European investment grade corporate bond mutual funds. Sample of 19 investment-grade corporate bond funds valid for the period of 5 years (July 2000 – June 2005). Funds were evaluated on the basis of single-index model and several multi-index and asset-class-factor models. Both maturity-based indices and rating based indices were used to account for the risk and return characteristics of investment grade corporate bond funds. The results indicated that the corporate bond funds, on average, underperformed the benchmark portfolios and there was not a single fund exhibiting a significant positive performance. Results also indicated that the risk-adjusted performance of larger and older funds, and funds charging lower fees was higher.

Gehrig and Menkhoffe (2006) argue that technical analysis is as important as fundamental analysis to currency managers.

Arugaslan and Ajay examined the risk-adjusted performance of us-based international equity funds from 1994-2003. The analysis was done for five-year period 1999-2003 and ten-year period 1994-2003. For this a sample of 50 large US-based international equity funds was taken and a new method of measurement modigliani and modigliani (m squared) was applied. The performance was compared with both domestic and international benchmark indices. The results showed that the risk has great impact on the attractiveness of funds. Higher return funds may lose their attractiveness due to higher risk while the lower return funds may be attractive to investors due to the lower risk.

Rajagopala Nair and Elsamma Joseph (2000) revealed the various risks experienced by investors in corporate securities and the measures adopted for reducing risks. They opined that calculated risk might reduce the intensity of loss of investing in corporate securities.

Taylor and Allen (1992) analyses that 90% of the respondents to their survey report used some form of technical analysis to inform their trading decisions.

OBJECTIVES OF STUDY

- To identify the trend of the stock prices of selected companies which are listed in NSE by using Technical Analysis
- To analyze price movements using Relative Strength Index & Moving Average.
- To examine the trend & pattern of NSE from 1st April 2014 to 30th June 2014.

METHODOLOGY

The researcher explains the ways and importance of movement of stock price of selected companies from NSE. Data has been taken from secondary sources. The sample unit covers three
Indian Pharmaceutical companies, the stock prices of which are taken from the list of NSE for analysis.

The study covers a period of three months from 1st April 2014 to 30th June 2014. Tools are used for the study is Beta, Relative Strength Index (RSI) and Simple Moving Average (SMA). From the total population of 50 companies in NSE, the top 3 companies in the Indian Pharmaceutical industry were assessed on the basis of market capitalization.

Stocks selected for analysis includes:

- Dr. Reddy’s Laboratory
- Lupin
- Sun Pharma

LIMITATIONS

- Since the sample unit comprises only top 3 Pharmaceutical companies there is likelihood for differences in the stock price movement trends in other companies. The inferences may not be generalized.
- This study is limited to a period of 3 months only (1st April 2014 to 30th June 2014) and hence the results of the study may not be true for the period before and after the study.
- Volatility in stock market is always subject to change.

TOOLS APPLIED

The tools used in this analysis are

BETA

The Beta factor describes the movement in a stock’s returns in relation to that of the market return. The main purpose of using Beta is to predict the change in the market. Beta is a measure of the market or non-divisible risk associated with any given security in the market. The formula for predicting Beta is as follows:

\[
\text{Market Value of Beta} = \frac{P1-P0}{P0*100}
\]

Where,

\(P1\) - Today’s Close. \(P0\) – Previous Close.

\[
\text{Beta} = \frac{\text{Cov (x,y)}}{\text{Var (x)}}
\]

Where,

\(x\) - Market Value of Nifty \(y\) - Market Value of the Scrip

The analysis is done based on the following rule:

- If the beta is 1 The share’s movement will be along with the market.
- If the beta is >1 The share’s movement will be more volatile than the market.
- If the beta is <1 The share’s movement will be less volatile than the market.
RELATIVE STRENGTH INDEX (RSI)

For a 14-period RSI, the Average Gain equals the sum total all gains divided by 14. Even if there are only 5 gains (losses), the total of those 5 gains (losses) is divided by the total number of RSI periods in the calculation (14 in this case). The Average Loss is computed in a similar manner. When the Average Gain is greater than the Average Loss, the RSI rises because RS will be greater than 1. Conversely, when the average loss is greater than the average gain, the RSI declines because RS will be less than 1. The last part of the formula ensures that the indicator oscillates between 0 and 100. Note: If the Average Loss ever becomes zero, RSI becomes 100 by definition.

\[
RSI = 100 - \frac{100}{1+RS} \\
\text{Average Gain} = \frac{\text{Total Gains}}{n} \\
\text{Average Loss} = \frac{\text{Total Losses}}{n} \\
\text{First RS} = \frac{\text{Average Gain}}{\text{Average Loss}}
\]

n = number of RSI periods

MOVING AVERAGES

Most chart patterns show a lot of variation in price movement. This can make it difficult for traders to get an idea of a security’s overall trend. One simple method traders use to combat this is to apply moving averages. A moving average is the average price of a security over a set amount of time. By plotting a security’s average price, the price movement is smoothed out. Once the day-to-day fluctuations are removed, traders are better able to identify the true trend and increase the probability that it will work in their favor.

FINDINGS

Dr. REDDY LABORATORY

The Beta value is 0.00028 which is less than 1, the share’s movement will be less volatile than the market. It is less risky to invest in this share. In RSI analysis, the company’s price closes in oversold region so it shows the positive note that the price of the share may increase. In moving Average analysis the price line is above the moving average so it shows the buy signal.

LUPIN

The Beta value is 0.00197 which is less than 1, the share’s movement will be less volatile than the market. It is less risky to invest in this share. In RSI analysis, the company’s price closes in oversold region so it shows the positive note that the price of the share may increase. In moving Average analysis the price line is above the moving average so it shows the buy signal.

SUN PHARMA

The Beta value is 0.00330 which is less than 1, the share’s movement will be less volatile than the market. It is less risky to invest in this share. In RSI analysis, the company’s price closes in oversold region so it shows the positive note that the price of the share may increase. In moving Average analysis the price line is above the moving average so it shows the buy signal.
SUGGESTIONS

- Investors can buy the shares of Dr. Reddy’s Laboratories, Lupin and Sun Pharma as it shows a positive growth and buying signal.
- From the above three companies’ beta value, investors can give first priority in investing in Dr. Reddy’s Laboratories, Lupin, Sun Pharma respectively.
- From a market size of US$ 12.6 billion in 2009, the Indian pharmaceutical market will grow to US$ 55 billion by 2020. So it is advisable for the investors to hold and buy the shares of these companies.
- To get good returns, investors must invest considering the time horizon of at least two to three years. This will help them in getting good returns.
- Before investing on any shares, investors can use Technical Analysis for safe investment and for better returns.

CONCLUSION

Today India is one of the top emerging markets in the global pharmaceutical scene. India’s pharmaceutical sector will touch US$ 45 billion by 2020, according to a major study by global management and consulting firm, McKinsey & Company. In the period 2002-2012, the country’s healthcare sector grew three times in size, touching US$ 70 billion from US$ 23 billion. India’s pharmaceutical market experienced a similar boom, reaching US$ 18 billion in 2012 from US$ 6 billion in 2005. The report further states that the Indian pharmaceutical market will be the sixth largest in the world by 2020. Technical analysis studies the behaviour of the prices of the stock to determine the future price of the stock. It also allows the investors to understand about the trend of market and risk of the prices before they invest. This helps them to get knowledge about the financial market and to avoid facing a high risk.

APPENDICES

Dr. REDDY’S LABORATORY BETA VALUE  LUPIN BETA VALUE

REFERENCES


