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TRADING THROUGH TECHNICAL ANALYSIS: AN EMPIRICAL STUDY FROM INDIAN STOCK MARKET

***Sudheer, V.**

Department of Management Studies, Lords Institute of Engineering and Technology, Himayathsagar, Hyderabad

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ABSTRACT

Technical analysis is an art or science of planting the stock information like price movements, trading volume and market scenario in the form of charts for the purpose of forecasting the future price trends. It can aid the investors to anticipate what is 'possible' to happen to prices over the short-run time. And also helps in understanding the intrinsic value of shares and knowing whether the scripts are undervalued or over valued by scrutinizing the turning points of the market. This research study attempts to apply technical analysis tool s& techniques on selective scripts to assist precise investment decision in Indian equity/stock market. This analytical study is purely based on secondary data which had been collected from National Stock Exchange (NSE) website, journals and magazines. For the purpose of analysis Moving Average Convergence Divergence (MACD) technique is used to identify the scripts are technically strong or not. It facilitates investors' to recognize the current trend and risks associated with the scrip at par with the market. This paper aims at carrying out Technical analysis of the securities of selected companies and to assist investment decisions in the Indian stock market. And technical analysis provides unbiased solutions in a biased world.

INTRODUCTION

Prices of scrip's in the stock market oscillate daily on the account of continuous trading (Buying and Selling). Technical analysis applied to the scrip's to identify the current trends and risks associated with the scrip at par with the market. "Technical analyses believe that the historical performance of scripts & markets are indicators of future performance." Mainly the movement of technical analysis examines the four dimensions, namely price, volume, time and breadth. Changes in price reflect changes in investor attitude. And price, the first dimension, indicates the attitude level of investors. It is helpful to observe price indicators such as price advances versus declines and price pattern of shares compared to the market index. Volume, the second dimension, reflects the intensity of changes in investor attitudes. The level of enthusiasm is implied by a price rise on low volumes and vice versa. Time, the third dimension, measures the length of cycles in investor psychology. Change in confidence goes through distinct cycles, some long and some short, as investors' swing from excessive optimism towards deep pessimism.

****Corresponding author: Sudheer, V.***
Department of Management Studies, Lords Institute of Engineering and Technology, Himayathsagar, Hyderabad

The fourth dimension, breath, measures the extent of the emotion. This is important for as long as a large number of shares are advancing on the price changes, the trend indicates favorable emotion as investors have disbursed their investments in number of shares and have a widely favorable attitude towards the share market. Market indicators are the technical tools, which was designed to help an investor gauge changes in all shares within the stock market and other markets (futures, forex and commodities markets). It adds significant depth to technical analysis, because they contain much more information than price and volume. A typical approach is to use market indicators to determine where the overall market is headed and then use price/volume indicators to determine when to buy or sell an individual share. Technical analysts consider that prices of the securities are determined largely by forces of demand and supply. It is a tool of speculation which is the skill of analyzing data and taking positions of various markets situations to profits from favorable price movement.

Review of Literature

Stock charts gained popularity in the late 19th Century from the writings of Charles H. Dow in the Wall Street Journal. His comments, later known as "Dow Theory", alleged that markets

move in all kinds of measurable trends and that these trends could be deciphered and predicted in the price movement seen on all charts. Pring (2002), a leading analyst, provided a more specific definition that the trends are determined by changing attitudes of investors towards the different economic, monetary, political, and psychological factors. However, sometimes, the share price of the company is subject to be changed by investor sentiments. Epps and Epps (1976); Rogalski (1978); Tauchen and Pitts (1983); Karpoff (1987) and Smirlock and Starks and Kennedy (1977), have also test the predictability of price change patterns and conclude that market price is partly explained by the past behavior of prices. French, and Gibbons and Hess have identified specific day effects on share prices. Moore (1975); Smith (1972); Ayres (1967); and Arnott and Copeland (1985) have investigated into the business cycle effects on share returns. Dewey (1971), Bressent (1991); Dewey and Dakin (1947); and Jacobs and Levy (1989) have elaborated investment cycles. Granville (1960); and Hurst (1970) have researched the timing of stock market transactions.

Conrad and Kull (1988) found that weekly returns were positively auto correlated, particularly for portfolios of small stocks. Frankel and Froot (1990) noted that market professionals tend to include technical analysis in forecasting the market. Chitra (2011) observed that investors must also take into account various factors like union budget, company performance, political and social events, climatic condition etc., before taking a decision of investing in stocks. The scrip should also be fundamentally good. Therefore, it's advisable for a trader to make technical analysis of stocks for better returns of investment. This paper aims at carrying out Technical analysis of the scripts of selected companies in Indian stock market.

Objectives of the study

- To study the relevance of technical analysis in Indian stock market.
- To analyze the recitation of selected scripts in Indian stock market and to predict the future trends in the share prices through technical analysis.
- To suggesting the investors' in making investment decisions (whether to buy /sell) in selected scripts.

MATERIALS AND METHODS

The research design was based on analytical research. In this research, the researcher has to use facts or information already available, and analyze these to make a critical evaluation.

Methods of data collection: The research is fully based upon secondary data, and hence, the data has been collected from NSE India and various books, magazines and websites.

Time period analysis: The data was collected for the period of October 2013 to September 2014.

Sample size: All the listed companies in the National Stock Exchange, 10 companies which are actively traded in NSE were taken on stratified sampling basis for the study. The selected companies are ICICI bank, CIPLA, Asian paint, Tata steel, Coal India, NMDC, Maruti, Ambuja cement, ITC, and Hindustan Unilever.

Statistical tools used for study: The analysis of data is carried out by Moving Average Convergence Divergence (MACD) technique.

Moving Average Convergence Divergence (MACD)

Developed by Gerald Appel in the last seventies, moving average convergence divergence (MACD) is one of the simplest and most effective momentum indicators available. The MACD indicator is one of the most popular technical analysis tools. MACD fluctuates above and below the zero line as the moving averages convergence, Cross and divergence. Standard MACD is 12-day exponential moving average (EMA) less the 26-day EMA. A 9-day EMA of MACD is plotted alongside between MACD and its 9-day EMA, the signal line.

- Convergence occurs when the moving averages move towards each other.
- Divergence occurs when the moving averages move away from each other.

Calculation

MACD line = (12-day EMA – 26-day EMA)
Signal line = 9-day EMA of MACD line
MACD histogram = MACD line – Signal line.

Limitations

- This study can be used only for short run decision making.
- Technical analysis only for one year is undertaken.
- For doing this analysis the researcher has taken into consider only limiter factors.

Chart analysis and Interpretation

Interactive financial charts have been developed to analysis for the selected companies with regard to their price fluctuations and their connotation to the investors.

ICICI BANK

The Chart 5.1 represents EMA& MACD histogram of the ICICI BANK scrip. It have been transacted 7 times in a year with total returns of 73.24% and an average transaction return of 10.46% by the Average holding period of is 40.14 days and longest holding period was 103 days. The largest gains of 15.6% were achieved during a period of 34 days.

CIPLA

The Chart 5.2 represents EMA& MACD histogram of the CIPLA scrip. It have been transacted 7 times in a year with total returns of 73.24% and an average transaction return of 10.46% by the Average holding period of is 40.14 days and longest holding period was 103 days. The largest gains of 15.6% were achieved during a period of 34 days.

Source: Computation based on NSE data.

Chart No: 5.1. Stock Price movement of ICICI Bank

Source: Computation based on NSE data.

Chart No: 5.2. Stock Price movement of CIPLA

Source: Computation based on NSE data.

Chart No: 5.3. Stock Price movement of ASIAN PAINT

ASIAN PAINT

The Chart 5.3 represents EMA& MACD histogram of the ICICI BANK scrip. It have been transacted 15 times in a year with total returns of 66.92% and an average transaction return of 4.46% by the Average holding period of is 21.13 days and longest holding period was 48 days. The largest gains of 14.31% were achieved during a period of 21 days.

TATA STEEL

The Chart 5.4 represents EMA & MACD histogram of the TATA STEEL scrip. It have been transacted 10 times in a year with total returns of 121.48% and an average transaction return of 12.14% by the Average holding period of is 33.6 days and longest holding period was 72 days. The largest gains of 28.7% were achieved during a period of 53 days.

COAL INDIA

The Chart 5.5 represents EMA & MACD histogram of the COAL INDIA scrip. It have been transacted 7 times in a year with total returns of 78.45% and an average transaction return of 11.12% by the Average holding period of is 44.14 days and longest holding period was 112 days. The largest gains of 39.74% were achieved during a period of 112 days.

NMDC

The Chart 5.6 represents EMA& MACD histogram of the NMDC scrip. It have been transacted 9 times in a year with total returns of 63.41% and an average transaction return of 7.04% by the Average holding period of is 26.33 days and longest holding period was 39 days. The largest gains of 14.58% were achieved during a period of 28 days.

MARUTI

The Chart 5.7 represents EMA& MACD histogram of the MARUTI scrip. It have been transacted 12 times in a year with total returns of 85.32% and an average transaction return of 7.1% by the Average holding period of is 24.75 days and longest holding period was 51 days. The largest gains of 19.44% were achieved during a period of 30 days.

AMBUJA CEMENT

The Chart 5.8 represents EMA& MACD histogram of the AMBUJA CEMENT scrip. It have been transacted 10times in a year with total returns of 69.17% and an average transaction return of 6.91% by the Average holding period of is 30.4 days and longest holding period was 68 days. The largest gains of 27.58% were achieved during a period of 68 days.

ITC

The Chart 5.9 represents EMA& MACD histogram of the ITC scrip. It have been transacted 12 times in a year with total returns of 85.32% and an average transaction return of 7.11% by the Average holding period of is 24.75 days and longest holding period was 51 days. The largest gains of 19.44% were achieved during a period of 30 days.

Source: Computation based on NSE data.

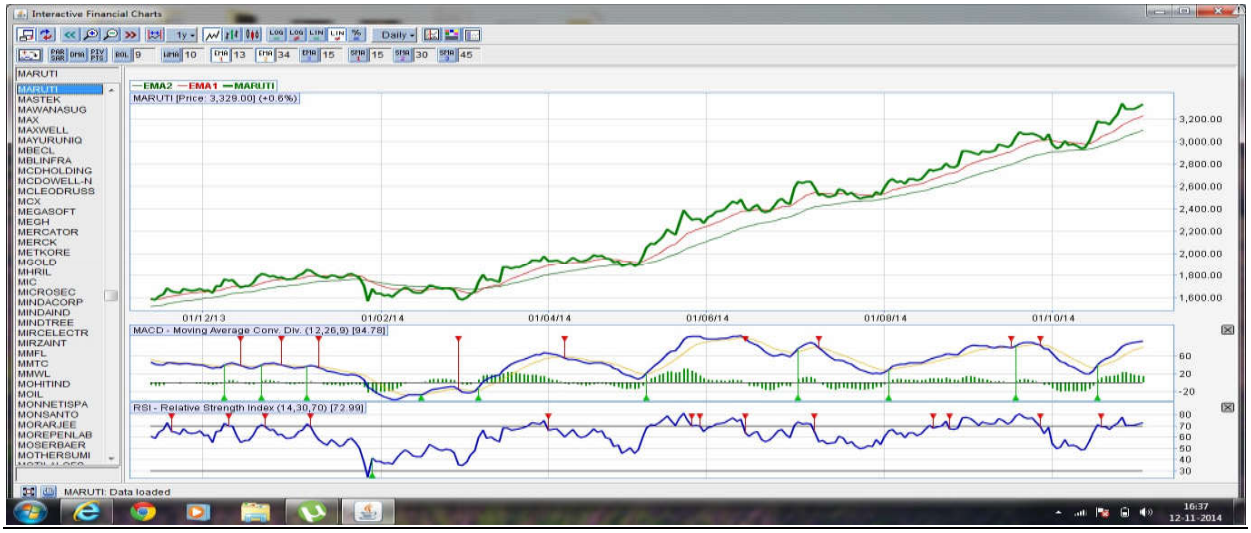
Chart No: 5.4. Stock Price movement of TATA STEEL

Source: Computation based on NSE data.

Chart No: 5.5. Stock Price movement of COAL INDIA

Source: Computation based on NSE data.

Chart No: 5.6. Stock Price movement of NMDC



Source: Computation based on NSE data.

Chart No: 5.7. Stock Price movement of MARUTI

Source: Computation based on NSE data.

Chart No: 5.8. Stock Price movement of AMBUJA CEMENT

Source: Computation based on NSE data.

Chart No: 5.9. Stock Price movement of ITC

Source: Computation based on NSE data.

Chart No: 5.10. Stock Price movement of HINDUSTAN UNILEVER

HINDUSTAN UNILEVER

The Chart 5.10 represents EMA & MACD histogram of the HINDUSTAN UNILEVER scrip. It have been transacted 13 times in a year with total returns of 50.25% and an average transaction return of 3.86% by the Average holding period of is 23.53 days and longest holding period was 60 days. The largest gains of 11.92% were achieved during a period of 26 days.

Findings

MACD shows that

- MARUTI & HINDUSTAN UNILEVER scripts have more upward momentum when compared with others.
- AMBUJA CEMENT & NMDC scripts move quite flatly. It was also found that there is a huge volatility scripts.
- ICICI BANK, TATA STEEL & CIPLA scripts had been coming down consistently. Investors can look forward to invest on these scripts.

Suggestions

- The investors should be trained to use the technical analysis tools since it will help them in their day to day investment to get more returns.
- The company should orient the investors to mainly watch the business, economic, social& political factors that affect the supply & demand for scripts.
- The investors should analyze market data in real time; plan their own market timing strategy to make money regardless of upward & downward trending markets.
- "The trend is Investors friend". So, investors' have to monitor the trend of scripts before an investment.

Conclusions

Trading (Buying /selling) of script is not an easy task if the investor wants to make money from doing it. Millions of investors have lost the money in the past by trying/guessing stock price movements. In today's world, if the investors' purely depends on fundamental analysis, broker's advice, news paper articles or business channels for investing/ trading decisions, at which investor get painful experience in the stock market. So, this research study on technical analysis will help the investors' in analyzing the scrip based on technical oscillators to earn fruitful investments. Technical Analysis is all about learning the Art of Making Profits in all market conditions whether rising or falling. Knowledge of the stock markets is key ingredient to the success and emphasis should be on managing trading risk while technical analysis can help

the investors' to control. And it provides unbiased solutions in a biased world. "There is only one side to the stock market and it is not the bull side or bear side but the right side technical analysis can be used, when to buy and when to sell the scrip."

REFERENCES

Chitra, R. 2011. "Effectiveness of technical analysis using candle chart for selection of equity stock in Indian capital market", *International Journal of Management& Business Studies,* Vol. 1, No5, pp47-51.

Vasantha, S., Dhanraj, V. and Varadharajan, R. 2012. "Stock price movement through 6technical analysis: Empirical evidence from the I.T sector", *Indian Journal of Finance*, Vol. 6, No. 10, pp 4-17.

Sabari Rajan, G. B. and Dr. S. Parimala, 2013. "Stock price movement through 6technical analysis: Empirical evidence from the FMCG sector", *Indian Journal of Research*, Vol.2, Issue2, pp 143-145.

Jayakumar, A. and K. Sumathi, 2014. "Technical analysis of union bank with special reference to NSE", *International Journal of Advance Research in Computer Science and Mangement Studies*, Vol.2, Issue1, pp356-360.

www.stockcharts.com/school/doku.php?id=chart_school:technical_in

Ranganatham, M. and R. Madhumathi, 2009. "Investment Analysis and Portfolio Management", Person education, New Delhi, India.

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