



## Stock Price Movement through Technical Analysis: Empirical Evidence from the Fast Moving Consumer Goods (FMCG) Sector

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### ABSTRACT

*Technical analysis is the study of historic price movements of securities, trading volumes and market action, primarily through the uses of charts for the purpose of forecasting future price trends. Through technical indicators, investors can analyze the short-term price movement of the stock, the most important market turning points and project the price movement. This research paper attempts to apply technical analysis tools and techniques on three selective stocks of the FMCG sector. The study is purely based on secondary data which had been collected from NSE website, journals and magazines. The technical indicators have been analyzed by using twelve months share prices of the companies, which was for the period of December 2011 – December 2012. The most prefer techniques such as Bollinger Bands and Simple Moving Average were used to take a decision on whether to buy or sell the stocks of the FMCG sector.*

**Keywords: Bollinger Bands, FMCG Sector, Simple Moving Average, Technical indicators**

### INTRODUCTION

A stock market is a public market for the trading of a company's stocks and derivatives at an agreed price; these are securities listed on a stock exchange as well as those only traded privately. Investment analysts often examine historical price and volume data and other market related indicators to identify past trends and patterns in price movements. The objective is to forecast the future prices. More emphasis is laid on charts, graphs and indicators, rather than on fundamental related to earnings of the firm. Technical analysis helps to predict the direction of share price movement through the study of past market data, primarily price and volume. Technical analysts consider that prices of the securities are determined largely by forces of demand and supply.

### REVIEW OF LITERATURE

Chitra (2011) observed that investors must also take into account various factors like Union Budget, company performance, political and social events, climatic conditions, etc, before taking a decision of investing in stocks. The scrip should also be fundamentally good. Therefore, it's advisable for a trader or investor to make technical analysis of stocks for better return of investments.

Ravindra and Wang (2006) examined the relationship of trading volume to stock indices in Asian markets, Stock market indices from six developing markets in Asia were analyzed over a 34 months period ending in October 2005. In the South Korean market, the causality extends from the stock indices to trading volume, while the causality was the opposite in the Taiwanese market.

### OBJECTIVES OF THE STUDY

To analyse the price movement of shares of Fast Moving Consumer Goods (FMCG) sector companies and to interpret the correction and trends by using technical analysis tools and to forecast the future trends and provide suitable suggestions to the investor.

### RESEARCH METHODOLOGY

The research design is analytical in nature. The researcher

has used facts or information already available to make a critical evaluation of the material.

**1. SOURCES OF DATA:** The Data is collected from National Stock Exchange website.

**2. METHOD OF DATA COLLECTION:** Secondary data.

**3. TOOLS USED FOR THE STUDY:** Bollinger Bands and Moving Average.

### BOLLINGER BAND

Developed in the early 1980's by John Bollinger, Bollinger bands were one of the first adaptive volatility envelope tools. Rather than fixed percentage envelopes being drawn above and below the moving average, Bollinger bands are calculated based on the standard deviation of an instrument's closing price.

Bollinger bands use standard deviation and a simple moving average to help traders determine buy and sell events, or to help confirm other patterns. A price chart that uses Bollinger bands displays four lines; price, the upper and lower Bollinger bands, and the moving average.

The upper and lower Bollinger bands typically appear 2 standard deviations above and below the 20-day moving average. Recognizant supports these typical settings.

For shorter-term trends, some technical analysts prefer 1.5 standard deviations with a 10-day moving average. For longer-term trends, a 2.5 standard 50-day moving average may better suit their purposes.

### MOVING AVERAGE

In statistics, a moving average, also called rolling average, rolling mean or running average, is a type of finite impulse response filter used to analyze a set of data points by creating a series of averages of different subsets of the full data set.

Given a series of numbers and a fixed subset size, the first element of the moving average is obtained by taking the average of the initial fixed subset of the number series. Then the subset is modified by "shifting forward", that is excluding the first number of the series and including the next number following the original subset in the series. This creates a new subset of numbers, which is averaged. This process is repeated over the entire data series. The plot line connecting all the (fixed) averages is the moving average. A moving average is a set of numbers, each of which is the average of the corresponding subset of a larger set of datum points. A moving average may also use unequal weights for each datum value in the subset to emphasize particular values in the subset.

**4. PERIOD OF ANALYSIS:** The analysis of FMCG companies stocks was done between 16.12. 2011 to 17.12. 2012.

**5. SAMPLE SIZE:** Three FMCG companies were considered from the FMCG sector to analyze the short-term price movement of the companies, the name of the companies are given below:

Hindustan Unilever Limited (HUL), Britannia and Godrej.

**ANALYSIS AND INTERPRETATION  
BOLLINGER BAND  
HIDUSTAN UNILEVER LIMITED  
CHART NO: 1.1**



Source: Computation based on NSE data

**BRITANNIA  
CHART NO: 1.2**



Source: Computation based on NSE data

**GODREJ  
CHART NO: 1.3**



Source: Computation based on NSE data

**INTERPRETATION**

Bollinger bands are similar to moving envelopes. Bollinger bands are plotted at standard deviation levels above and below moving averages.

The above charts show Bollinger band technique of Hindustan Unilever Limited (HUL), Britannia and Godrej for the period of December 2011 to December 2012. Here in all charts at all levels we had profits where we will be buying at the lower band and the target will be the middle band and selling at upper band and the target will be middle band. All the band levels may be different from time to time.

**MOVING AVERAGE  
HIDUSTAN UNILEVER LIMITED  
CHART NO: 1.4**



Source: Computation based on NSE data

**INTERPRETATION**

The above chart shows that Moving average technique of HUL for the period of December 2011 to December 2012. In this study we have chosen 200 day moving average in to consideration because the average number of working days in a year is 200. Here we cannot fix the target for the levels and when the market closes below the average line and when it touches the line after closing we will go for short and when it is in vice versa we will prefer long.

### BRITANNIA CHART NO: 1.5



Source: Computation based on NSE data

#### INTERPRETATION

The above chart shows that Moving average technique of Britannia for the period of December 2011 to December 2012. In our study we have chosen 200 day moving average in to consideration because the average number of working days in a year is 200. Here we cannot fix the target for the levels and when the market closes below the average line and when it touches the line after closing we will go for short and when it is in vice versa we will prefer long. Here in maximum of cases we got correction but from February to April there was no trade initiated in the market.

### GODREJ CHART NO: 1.6



Source: Computation based on NSE data

#### INTERPRETATION

The above chart shows that Moving average technique of Godrej for the period of December 2011 to December 2012. In our study we have chosen 200 day moving average in to consideration because the average number of working days in a year is 200. Here we cannot fix the target for the levels and when the market closes below the average line and when it touches the line after closing we will go for short and when

it is in vice versa we will prefer long. Here only one trade is been initiated throughout the year and there was a huge correction for the technique.

#### FINDINGS

##### BOLLINGER BAND

1. HUL target price moves from Rs.390 to Rs.546 in a year. During the period February 2012 both long and short position involves huge loss. During the period October 2012 there was an opportunity to sell. Also, the volume went up on 16th October, 2012.
2. Britannia share price narrowed down from 4th August, 2012 to 29th August, 2012. The narrowing of the band indicated a chance for breakthrough. A trader could trade between high and low points of the Bollinger band.
3. Godrej share price movement gives a clear indication on target price positive movement.

##### MOVING AVERAGE

1. It was found from Moving Average that HUL selling levels and buying levels hits lot of fluctuations during December 2011 to July 2012.
2. Britannia scripts moved in a random manner during June 2012 to November 2012.
3. It was found from Moving Average that Godrej shares moving average continuously rising without any interruption from December 2011 to December 2012.

##### SUGGESTIONS

1. 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.
2. Fundamental analysis can also be suggested to the investors together with the technical analysis in order to analyze the financial strength of corporate, growth of earnings and profitability.
3. The investment decisions of the investors are mostly based on the risk appetite of the investors. Hence, the investments made should fetch considerable returns. During technical analysis, investors use various indicators to understand and forecast the future price movement of the selected stocks.
4. Investors need to calculate the risk and return ratio before taking any trade.
5. Investors should learn the art of technical analysis as it's very difficult to get the insiders' information of the company.

##### CONCLUSION

BSE and NSE, these two regional stock exchanges are major players in Indian stock market operations. Out of 100 nearly 87 scripts traded through with them only. NSE was established only 19 years ago, but growth in terms of value traded in NSE has increased by leaps and bounds.

The script prices of a company are subject to be influenced by several factors one of the important factor is investors' sentiments. Hence, the investors are required to consider the various factors which may affect the psychology of the investors while conducting Technical Analysis.

#### REFERENCES

1. Banz, Rolf W. (1981). "The Relationship between Return and Market Value of Common Stock." *Journal of Financial Economics*, Vol. 9, No.3, pp. 3 – 18. | 2. Chitra. R. (2011). "Effectiveness of Technical Analysis Using Candlestick Chart for Selection Of Equity Stock In Indian Capital Market." *International Journal of Management & Business Studies*, Vol.1, No.4, pp.42-45. | 3. Donald E.Fischer and Ronald J Jordan, *Security Analysis and Portfolio Management*, Prentice hall of india pvt Ltd, New Delhi, 6th Edition 2002 | 4. Mehta Kiran and Chander Ramesh (2010). "Examination of January, December and November Effects On The Indian Stock Market." *Indian Journal of Finance*, Vol.4, No.9, pp.25-33. | 5. Ravindra, K., Y.Wang (2006). "The Causality Between Stock Index Returns And Volumes In the Asian Equity Markets". *Journal of International Business Research*, Vol.5, No.1, pp.63-74. | 6. Venkatalashmi M., Sindhu C.M. (2010). "A Study On Technical Analysis Of Equity Shares Of Equity Shares Of Tata Motors For The Period From November 2008 To April 2009." *Indian Journal of finance*, Volume 4, Issue 5, pp. 18-31.