

A study on security price movement of Tata Motor and TVS Motor by using Relative Strength Index with reference to Trustline Securities Pvt Ltd.



Management

KEYWORDS :

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ABSTRACT

Recent developments made in the Indian economy that induce investors to interest in the market. Investors want to know the efficiency of the stock market. The small and medium investors can be motivated to save and invest in the stock market only if their securities in the market are appropriately priced. The information content of events and its dissemination determine the efficiency of the stock market. That is how quickly and correctly security prices reflect these information show the efficiency of the stock market. In India, very few studies have been conducted to test the efficiency of the stock market with respect to FPO (Follow on Public Issue) announcements, even after these studies have been conducted with different industries with different period. Hence present study is an attempt to test the efficiency of the Indian stock market with respect information content of NSE announcement in auto mobile industry. An investor ultimate feeling while investing through a share will be "FRUITFUL RETURN" & in the other hand picking the right share from the numerous different types of shares. My study comes in significance in selecting the share and making the selection worthy. This study facilitates the allocation of financial resources towards most profitable investment opportunities in taking the account of "Behaviour" of the share. Finally, my study is needed for investors to get & project the future fluctuations that are likely to occur before investing.

Introduction:

Share Price:-

A share price is the price of a single share of a number of saleable stocks of a company. Once the stock is purchased, the owner becomes a shareholder of the company that issued the share. In economics and financial theory, analysts use random walk techniques to model behaviour of asset prices, in particular share prices on stock markets, currency exchange rates and commodity prices. This practice has its basis in the presumption that investors act rationally and without bias, and that at any moment they estimate the value of an asset based on future expectations. Under these conditions, all existing information affects the price, which changes only when new information comes out. By definition, new information appears randomly and influences the asset price randomly.

Empirical studies have demonstrated that prices do not completely follow random walks. Low serial correlations (around 0.05) exist in the short term, and slightly stronger correlations over the longer term. Their sign and the strength depend on a variety of factors.

Researchers have found that some of the biggest price deviations from random walks result from seasonal and temporal patterns. In particular, returns in January significantly exceed those in other months (January effects) and on Monday's stock prices go down more than on any other day. Observers have noted these effects in many different markets for more than half a century, but without succeeding in giving a completely satisfactory explanation for their persistence.

Technical analysis uses most of the anomalies to extract information on future price movements from historical data. But some economists, for example Eugene Fama, argue that most of these patterns occur accidentally, rather than as a result of irrational or inefficient behaviour of investors: the huge amount of data available to researchers for analysis allegedly causes the fluctuations.

When viewed over long periods, the share price is directly related to the earnings and dividends of the firm. Over short periods, especially for younger or smaller firms, the relationship between share price and dividends can be quite unmatched shares.

Company Profile:-

Trustline Securities Pvt Ltd., is a stock broking company. It is one of the fastest growing financial services organizations, es-

tablished in the year 1989. The code of this organization "ISO 9001:2008" Trustline has effective membership in several sectors like (equity & F and O, NSE, NSEF, BSE, BSEF, DSE) equity shares and preference shares, commodities (MCX, NCDEX, NMCEIL), currency (NSE, MCX-SX currency), depository (CDSL, NSDL).

The grate personalities Dr. Mukesh Kansal and Mrs. Sarika Kansal are the promoters of the Trustline and Dr. Mukesh Kansal is the chairman and managing director of the Trustline

And another personality Mrs. Sarika Kansal is the director of the Trustline.

Trustline head office is located in Noida, New Delhi.

In 24 years they have 80 own branches, 460 business associates, 540 total locations, 1000 human assets, 1250 trading terminals, 90000 clients, and 110000 d' mat accounts through out in our India.

Review of Literature:-

Diagler Robert T et.al., have conducted a study on the development and testing of trading rules on the New York stock Exchange which are based on the discriminate Function. The study analysis the ability of daily technical indicators to predict future changes and signifies that the Technical indicators possess predictive ability to the extent that investor's possess predictive ability to the extent that investors believe they contain information on Future Market development.

Siegels notes the improvement of a beta based on forward-looking option data, and proceeds to propose the creation of a new derivative, called an exchange option, which would allow for the calculation of what he refers to as "implicit" betas.

Barberis, shleifer and Vishny, presented a model of investor sentiment that displays under-reaction of stock prices to news such as earnings announcements and overreaction of stock prices to a series of good or bad news. They claimed that people who observe a random walk are likely to fluctuate between beliefs in the gambler's fallacy (in which any trends are quickly reversed) and beliefs in the hot hand (in which trends continue); depending on how many reversals in price they have seen in recent periods. They then proved that such beliefs can account for both short-term price momentum and long-term price reversal

Odean demonstrated that overall trading volume in equity

markets is excessive, and one possible explanation is overconfidence. He tested and found evidence of the disposition effect which leads to sell winning investments too soon and hold losing investments for too long. Overconfidence was found to be more acute in the analysts rather than in the small investors. Griffin (1992) found that experts tend to be more overconfident than inexperienced individuals. According to Wood (1996) if analysts believe with eighty percent confidence that a share is going to go up, they are right only for approximately forty percent of the time.

Coval and Shumway provided some evidence on the affect of behavioral biases of agents on prices through trading activity by arguing that proprietary traders on the Chicago Board of Trade exchange (which mainly trades derivatives) take more risk late in the day (as measured by number of trades and trade sizes) to cover their losses in the beginning of the day. This implies loss-averse behavior. Prices are affected by this behavior in that they are willing to buy contracts at higher prices and vice versa than those that prevailed earlier.

Ashta et al., identified herd behavior as a possible factor in corporate financing and report that the listing and delisting decisions of a firm were influenced largely because many other firms happened to be listing or delisting at that time. Similarly, the internet bubble points to herd behavior in accepting expectations based on such measures as hit rate. The essential point is that expectations of people may not be grounded on the past but may be based on the expectations of others. They assumed that others have done their homework and looked at the past. Or, as in the case of internet, they hope that, even if there is no economic justification for the herd behavior, they would be able to get out before the bubble bursts by selling off their investments.

Micko Tanaka Yamawaki et al., said that Adaptive use of Technical Indicators for predicting the Intra-Day price movements. The researcher has proposed a system to select the best combination of technical indicators and their parameter values adaptively by learning the patterns from the tick-wise financial data. In this paper, the researcher has shown that this system gives good predictions on the directors of motion with the hitting rate at 10 ticks ahead of the decision point as high as 70% for foreign exchange rates (FX) in five years from 1996 to 2000 and 8 different stock prices in NYSE market in 1993 The study concludes that the tick-wise price time series carry a long memory of the order of at least a few minutes, which is equivalent to 10 ticks.

Objectives of the study:-

- To make a comparative analysis on “share price movement” of TATA MOTOR LTD & TVS MOTOR LTD.
- To predict day-to-day fluctuations of these shares of the companies using the relative strength Index
- To provide a detailed opinion statement of these companies share price behaviour.

Research Methodology: -

Secondary data was used for the analysis. A publication, books, financial summaries, journals, company websites & other websites has been used for the collection of data. The data also obtained from the National Stock Exchange website (indiansc.com- stock quotes Resources and Information). For the purpose of this study the daily closing price of 2 companies in National Stock Exchange were taken and their price movements are computed and studied. Tools used

- a) Simple Moving Average
- b) Relative Strength Index

present study is confined to Trustline securities certain companies shares of NSE through Trustline Securities Pvt Ltd., Tool opted for the analysis is TECHNICAL ANALYSIS, so the shares falling in the period of 6 months are considered for the study.

Simple Moving Average:-

In technical analysis the moving average is one of key trend lines

that are plot on a chart reflecting the closing prices over weeks. They smooth a data series and make it easier to spot trends, something that is especially helpful in volatile markets. They also form the building blocks for many other technical indicators and overlays. When the moving average moves above or below the daily chart, it may generate a buy or sell signal. A moving average is an indicator that shows the average value a security's price over a period of time. When calculating a moving average, a mathematical analysis of the security's average value over a pre-determined time period is made. As the security's price changes, its average price moves up or down. We can interpret a moving average by comparing the relationship between the moving averages of the security's price with the security's price itself.

Relative Strength Index:-

The Relative strength Index (RSI) is and extremely useful and popular momentum oscillator. The RSI compares the magnitude of a stock's recent gains to the magnitude of its recent losses and returns that information into a number that ranges from 0 to 100. It takes a single parameter, the number of time periods to use in the calculation.

$$\text{Average gain} = \text{Total of gains during the past 14 periods} / 14$$

$$\text{Average Loss} = \text{Total of Losses during the past 14 periods} / 14$$

$$RS = \frac{\text{Average Gain}}{\text{Average Loss}}$$

$$RSI = 100 - (100 / (1 + RS))$$

Data Analysis:-

Table showing monthly average of simple moving averages and average of relative strength index of Tata Motors:

Month	Average of Simple Moving Averages	Average of Relative Strength Index
November	270.15	41.55
December	292.34	79.98
January	317.86	45.36
February	295.73	55.05
March	298.72	29.43
April	274.04	68.85

Interpretation:- The average of simple moving averages is showing fluctuating trend, in January it is high. Hence there is raise in prices. The relative strength index is showing huge fluctuation which makes traders more confusions in trading the securities.

Table showing monthly average of simple moving averages and average of relative strength index of TVS Motors:

Month	Average of Simple Moving Averages	Average of Relative Strength Index
November	38.06	39.56
December	40.32	68.30
January	45.75	39.18
February	40.75	43.28
March	36.21	14.75
April	36.11	63.53

Interpretation:- The average of moving averages is showing little fluctuations and the average of relative strength index has been raised in December and april due to raise of price increase in buying behavior of the investors

Findings:-

- In Simple Moving Average analysis, during the months of November, January and March, the moving average line of Tata Motors shows down trend movement.
- The average of simple moving averages is showing fluctuating trend, in January it is high. Hence there is raise in prices. The relative strength index is showing huge fluctuation which makes traders more confusions in trading the securi-

ties.

- The average of moving averages is showing little fluctuations and the average of relative strength index has been raised in December and April due to raise of price increase in buying behavior of the investors
- In Relative Strength Index analysis, Tata Motors shares Uptrend in movement during the months of December and April due to increase in trading.
- In the month of April an announcement that there will be increase in revenues of the TATA MOTORS Company. It shows positive impact on its stocks.
- In Simple Moving Average analysis, it shows the better performance in the share market of TATA MOTORS than the TVS MOTORS.
- In analysis of Relative Strength Index, it shows sales of TVS MOTORS shares more than the TATA MOTORS shares. It indicates there is fall in the future price of the TVS MOTORS shares.

Suggestions:-

- Based on the technical analysis the TATA MOTORS moving average curve shows the Uptrend movement and low risky. So it is suggested to buy the shares.
- The Simple Moving Average curve shows the TVS MOTORS shares downtrend movement and also having the risk. So it is suggested to sell the shares.
- The TVS MOTORS shares are benefited to the short term investors or intraday traders.
- The TATA MOTORS shares are suitable to the long term traders or long term investors.
- Investors must also take into account various factors like Government Budget, Company performance, Political and Social events, Climatic Conditions etc.,

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