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## **A Study of Price Movements of IT Companies with Respect to Nifty**

*<sup>1</sup>Prof. V. Y Badave, <sup>2</sup>Prof. H. S. Dayma*

<sup>1,2</sup>(DKTE Textile and Engineering Institute, Ichalkaranji.)

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### **1.1 INTRODUCTION**

“India is a developing country. Now days many people are interested to invest in financial markets especially on equities to get high returns, and to save tax in honest way. Equities are playing major role in contribution of capital to the business from the beginning. Since the introduction of shares concept, large number of investors are showing interest to invest in stock market. In an industry plagued with skepticism and a stock market increasingly difficult to predict and contend with, if one looks hard enough there may still be a genuine aid for the day trader and short-term investor. The price of a security represents a consensus. It is the price at which person agrees to buy another agrees to sell. The price at which an investor is willing to buy or sell depends primarily on his expectations. If he expects the security’s price to rise, he will buy it; if the investor expects the price to fall, he will sell it. These simple statements are the cause of a major challenge in forecasting security prices, because they refer to human expectations.”

People can make money in equity market by investing or trading or both. However, to avoid disappointment of losing money, customers should make very prudent and informed decisions.

“Investor” put their money into stocks for a long term. This is under principle that over time, the underlying investment will increase in value, and the investment will be profitable. On the other hand

“Traders” take a proactive approach to their investing. They follow or predict a trend in the stock and use strategies like buy-low, sell-high and make profits.

Though there is really no right or wrong type of stock trading, it is necessary for investors to identify which type of trading is right for them. They can make a great amount of money either way however, they must consider their time frame, risk, and how much work you want to put into it.

While traders can make more money much faster, they are required to do more work and monitoring than the typical investor. Determine what type of trader you want to be, and then make sure that the people you take guidance from have the same goals as you.

### **1.2 OBJECTIVES OF THE STUDY**

The objective of this project is to deeply analyze our Indian IT sector for investment purpose by monitoring the growth rate and performance on the basis of historical data. The main objectives of the Project study are:

1. To study and examine the relevance of fundamental analysis in investment decisions making process.
2. To analyze the financial health of selected IT companies’ stock.
3. To analyze the share price behavior of the selected companies of IT sector w.r.t. Nifty.
4. To study the price trend and analyze the same of selected companies.

### **1.3 EQUITY MARKET**

A market that gives companies a way to raise needed capital and gives investors an opportunity for gain by allowing those companies’ stock shares to be traded also called as stock market.

### **1.4 DEFINITION**

The market in which shares are issued and traded, either through exchanges or over-the-counter markets. Also known as the stock market, it is one of the most vital areas of a market economy because it gives companies access to capital and investors a slice of ownership in a company with the potential to realize gains based on its future performance.

### **1.5 NSE**

The National Stock Exchange of India Limited (NSE) is the leading stock exchange of India, located in Mumbai. NSE was established in 1992 as the first demutualized electronic exchange in the country. NSE was the first exchange in the country to provide a modern, fully automated screen-based electronic trading system which offered easy trading facility to the investors spread across the length and breadth of the country.

National Stock Exchange has a total market capitalization of more than US\$1.41 trillion, making it the world's 12th-largest stock exchange as of March 2016. NSE's flagship index, the NIFTY 50, the 51-stock index (50 companies with 51 securities inclusive of DVR), is used extensively by investors in India and around the world as a barometer of the Indian capital markets. However, only about 4% of the Indian economy / GDP are actually derived from the stock exchanges in India.

### **1.6 NIFTY**

The NIFTY 50 index is National Stock Exchange of India's benchmark stock market index for Indian equity market. Nifty is owned and managed by India Index Services and Products (IISL), which is a wholly owned subsidiary of the NSE Strategic Investment Corporation Limited. IISL had a marketing and licensing agreement with Standard & Poor's for co-branding equity indices until 2013.

NIFTY 50 Index has shaped up as a largest single financial product in India, with an ecosystem comprising: exchange traded funds (onshore and offshore), exchange-traded futures and options (at NSE in India and at SGX and CME abroad), other index funds and OTC derivatives (mostly offshore). NIFTY 50 is the world's most actively traded contract. WFE, IOMA and FIA surveys endorse NSE's leadership position.

The NIFTY 50 covers 13 sectors of the Indian economy and offers investment managers exposure to the Indian market in one portfolio. During 2008-12, NIFTY 50 Index share of NSE market capitalization fell from 65% to 29% due to the rise of sectoral indices like NIFTY Bank, NIFTY IT, NIFTY Next 50, etc. The NIFTY 50 Index gives 29.70% weightage to financial services, 0.73% weightage to industrial manufacturing and nil weightage to agricultural sector.

The NIFTY 50 index is a free float market capitalization weighted index. The index was initially calculated on full market capitalization methodology. From June 26, 2009, the computation was changed to free float methodology. The base period for the CNX Nifty index is November 3, 1995, which marked the completion of one year of operations of National Stock Exchange Equity Market Segment. The base value of the index has been set at 1000, and a base capital of Rs 2.06 trillion.

### **1.7 STOCK ANALYSIS**

Stock analysis is a term that refers to the evaluation of a particular trading instrument, an investment sector or the market as a whole. Stock analysts attempt to determine the future activity of an instrument, sector or market. There are two basic types of stock analysis: fundamental analysis and technical analysis. Fundamental analysis concentrates on data from sources including financial records, economic reports, company assets and market share. Technical analysis focuses on the study of past market action to predict future price movement.

### **1.8 BREAKING DOWN 'STOCK ANALYSIS**

Stock analysis is a method for investors and traders to make buying and selling decisions. By studying and evaluating past and current data, investors and traders attempt to gain an edge in the markets by making informed decisions. Many people who subscribe to fundamental analysis don't hold much faith in technical analysis, and vice versa.

### **1.9 THE TWO ANALYTICAL MODELS:**

When the objective of the analysis is to determine what stock to buy and at what price, there are two basic methodologies investors rely upon:

1. Fundamental analysis maintains that markets may misprice a security in the short run but that the "correct" price will eventually be reached. Profits can be made by purchasing the mispriced security and then waiting for the market to recognize its "mistake" and reprise the security.
2. Technical analysis maintains that all information is reflected already in the price of a security. Technical analysts analyze trends and believe that sentiment changes predate and predict trend changes. Investors' emotional responses to price movements lead to recognizable price chart patterns. Technical analysts also analyze historical trends to predict future price movement. Investors can use one or both of these different but complementary methods for stock picking. For example, many fundamental investors use technical for deciding entry and exit points.

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## **2.0 (A) TECHNICAL ANALYSIS:**

The methods used to analyze securities and make investment decisions fall into two very broad categories: fundamental analysis and [technical analysis](#). Fundamental analysis involves analyzing the characteristics of a company in order to estimate its value. Technical analysis takes a completely different

approach; it doesn't care one bit about the "value" of a company or a commodity. Technicians (sometimes called [chartists](#)) are only interested in the price movements in the market.

Despite all the fancy and exotic tools, it employs, technical analysis really just studies supply and demand in a market in an attempt to determine what direction, or trend, will continue in the future. In other words, technical analysis attempts to understand the emotions in the market by studying the market itself, as opposed to its components. If you understand the benefits and limitations of technical analysis, it can give you a new set of tools or skills that will enable you to be a better trader or investor. In this tutorial, we'll introduce you to the subject of technical analysis. It's a broad topic, so we'll just cover the basics, providing you with the foundation you'll need to understand more advanced concepts down the road.

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## 2.0 (B) FUNDAMENTAL ANALYSIS:

Fundamental analysis, in accounting and finance, is the analysis of a business's [financial statements](#) (usually to analyze the business's [assets](#), [liabilities](#), and earnings); health;<sup>[1]</sup> and its competitors and markets. When applied to futures and forex, it focuses on the overall state of the economy, and considers factors including interest rates, production, earnings, employment, GDP, housing, manufacturing and management. When analyzing a stock, futures contract, or currency using fundamental analysis there are two basic approaches one can use: bottom up analysis and top down analysis. The terms are used to distinguish such analysis from other types of investment analysis, such as quantitative and technical.

Fundamental analysis is performed on historical and present data, but with the goal of making financial forecasts. There are several possible objectives:

- To conduct a company stock valuation and predict its probable price evolution;
- To make a projection on its business performance;
- To evaluate its management and make internal business decisions
- To calculate its credit risk.
- To find out the intrinsic value of the share.

Fundamental analysis includes:

- Economic analysis
  - Industry analysis
- Company analysis

### 2.1 FUNDAMENTALS: QUANTITATIVE AND QUALITATIVE

You could define fundamental analysis as "researching the fundamentals", but that doesn't tell you a whole lot unless you know what fundamentals are. As we mentioned in the introduction, the big problem with defining fundamentals is that it can include anything related to the economic well-being of a company. Obvious items include things like revenue and profit, but fundamentals also include everything from a company's market share to the quality of its management.

The various fundamental factors can be grouped into two categories: quantitative and qualitative. The financial meaning of these terms isn't all that different from their regular definitions. Here is how the MSN Encarta dictionary defines the terms:

**2.1(A) Quantitative** - capable of being measured or expressed in numerical terms.

**2.1(B) Qualitative** - related to or based on the quality or character of something, often as opposed to its size or quantity.

In our context, quantitative fundamentals are numeric, measurable characteristics about a business. It's easy to see how the biggest source of quantitative data is the financial statements. You can measure revenue, profit, assets and more with great precision. Turning to qualitative fundamentals, these are the less tangible factors surrounding a business - things such as the quality of a company's board members and key executives, its brand-name recognition, patents or proprietary technology.

### 2.2 TREND ANALYSIS:

Trend analysis is a technical analysis of the movement of a stock based on past performance.

#### 2.2(A) Example:

A trend analysis is a method of analysis that allows traders to predict what will happen with a stock in the future. Trend analysis is based on historical data about the stock's performance given the overall trends of the market and particular indicators within the market.

Trend analysis takes into account historical data points for a stock and, controlling for other factors like the general changes in the sector, market conditions, competition for similar stocks, it allows traders to forecast short, intermediate, and long-term possibilities for the stock.

### **2.2(B) Why it matters:**

By watching the general trends of the markets, a trader may be able to match purchases and sales of particular stocks, maximizing his or her potential for profits. At the same time, it is important to look at historical data in a larger context of conditions for the underlying company to understand if there are factors that may affect a stock's value irrespective of general market conditions or past performance. For example, a trader should look inside the financial conditions of the company, understand the market and technologies, and anticipate competitive pressures on the company within its sector.

### **2.3 What Does Trend Analysis Include?**

Outsource2india's Trend Analysis helps business decision makers focus on the trends that can have an impact on their organization, and facilitate continued success of their enterprise. Trend Analysis allows you to plot aggregated response data over time. This is especially valuable, if you are conducting a long running survey and would like to measure differences in perception and responses over time. Thus, Trend Analysis provides an insight into the following:

Changes and trends in customer needs and behavior, and shifts in the customers perception of values. Trend in price change and cost drivers for the industry and/or specific segments. Change and evolution of the industry in terms of new entrants, and competition, threat of substitutes and relationship with buyers and suppliers. Upcoming business models and changing industry best practices and related emerging sectors. In depth analysis of long-term industry, domestic and global economic cycles and trends Trend Analysis solutions include the following:

**2.4(A) Market Basket Analysis** - It is a data mining technique that provides insight into the services and product purchasing trends and patterns.

**2.4(B) Market Segmentation** - It aims at analyzing common characteristics of a consumer base Customer Churn - Identifying consumers, who are most likely to discontinue your service or product, or switch to another company

**2.4(C) Fraud Detection** - Predetermining those transactions that are most likely to be fraudulent, taking into account previous trend analysis

**2.4(D) Direct and Interactive (web-based) Marketing** - predicting in advance the products or services a person is most likely to use based on past and present trends

### **2.5 What are the Benefits of Trend Analysis?**

The ability to accurately gauge customers' responses, to changes in business and other environmental parameters is a powerful competitive advantage. Furthermore, O2I's Trend Analysis includes the process of studying data to gain insights into long-term trends such as failure patterns that can be applied to incident and problem management, as well as capacity management. Internal and external users can also apply Trend Analysis to determine weaknesses and strengths. While internal users can use Trend Analysis to enhance administration efficiency of the company, external users can form valuation models of the company based on how well the company is managed.

#### **2.5(A) Other Trend Analysis advantages:**

Detailed Trend Analysis helps in predicting the threat from new entrants, and allows management in -developing competitive strategies to upheld their industry position and leadership. It provides security of strategic investments and protection of assets, it facilitates crucial decisions on mergers and acquisitions, and in developing alliances and partner relationships. Trend Analysis data can be further used for various cost/benefit analyses. Also, it can be extremely valuable as an early warning indicator of probable issues with the product line and service level changes.

How the indicator works-

□ RSI is considered overbought when above 70 and oversold when below 30. These traditional levels can also be adjusted if necessary, to better fit the security. For example, if a security is repeatedly reaching the overbought level of 70 you may want to adjust this level to 80.

Note: During strong trends, the RSI may remain in overbought or oversold for extended periods.

□ RSI also often forms chart patterns that may not show on the underlying price chart, such as double tops and bottoms and trend lines. Also, look for support or resistance on the RSI.

□ In an uptrend or bull market, the RSI tends to remain in the 40 to 90 range with the 40-50 zones acting as support. During a downtrend or bear market the RSI tends to stay between the 10 to 60 ranges with the 50-60 zones acting as resistance. These ranges will vary depending on the RSI settings and the strength of the security's or market's underlying trend.

□ If underlying prices make a new high or low that isn't confirmed by the RSI, this divergence can signal a price reversal. If the RSI makes a lower high and then follows with a downside move below a previous low, a Top Swing Failure has occurred. If the RSI makes a higher low and then follows with an upside move above a previous high, a Bottom Swing Failure has occurred.

## 2.6 'Simple Moving Average - SMA'

A simple moving average is formed by computing the average price of a security over a specific number of periods. Most moving averages are based on closing prices. A 5-day simple moving average is the five-day sum of closing prices divided by five. As its name implies, a moving average is an average that moves. Old data is dropped as new data comes available. This causes the average to move along the time scale. Below is an example of a 5-day moving average evolving over three days.

### Simple Moving Average Formula

The simple moving average (SMA) is the most basic of the moving averages used for trading. The simple moving average formula is calculated by taking the average closing price of a stock over the last "x" periods. Let's take a look at a simple moving average example with MSFT. The last five closing prices for MSFT are:

$$28.93+28.48+28.44+28.91+28.48 = 143.24$$

To calculate the simple moving average formula, you divide the total of the closing prices and divide it by the number of periods. 5-day SMA =  $143.24/5 = 28.65$

Chart.1: NIFTY

Following chart shows equity share prices of NIFTY from January 2019 to June 2019.



-From the above chart it is interpreted that equity prices of all listed companies on NIFTY were mostly above 20 days simple moving average. Further slope of 20 days moving average is going initially downside then it is going upside. RSI has been observed to be moving close to 50 most of the times.

Based on interpretation both indicators Simple moving average and R.S.I, there is fluctuating situation in prices of shares during June 2019. Based on interpretation of R.S.I indicator, there is overbought of equity shares in the month of January. By the study of both indicators, it is concluded that Nifty during June 2019 is in uptrend.

Chart.2: TCS

Following chart shows equity share prices of TCS from January 2019 to June 2019.



From the above chart it is interpreted that equity prices of TCS were mostly above 20 days simple moving average and slope of 20 days moving average is going upside. RSI for the most of time was moving between 30 to 70.

Based on interpretation of both indicators Simple moving average and RSI, the prices of shares are uptrend. From the definition of bullish pattern, it is concluded that prices of shares during March to May 2019 are increased. By the RSI indicator, it is observed that in February and May shares are overbought, which shows the prices of shares are in uptrend position.

#### Chart.3: Wipro

Following chart shows equity share prices of WIPRO from January 2019 to June 2019.



From the above chart it is interpreted that equity prices of Wipro were mostly above 20 days simple moving average and slope of 20 days moving average is not steady one direction, it shows initially upside then in the end it is downside. RSI for the most of time was moving between 30 to 70.

Based on interpretation of both indicators it is concluded that prices of shares are in downtrend. It is seen that the slope of Simple moving average is decreasing which stated that prices of shares during February to March are increased and March to April of 2019 are decreased. Both RSI and Simple moving average are stating that Wipro stock is in uptrend and downtrend position.

#### Chart.4: Infosys Ltd.

Following chart shows equity share prices of INFOSYS LTD from January 2019 to June 2019.



From the above chart it is interpreted that equity prices of Infosys Ltd. were mostly above 20 days simple moving average and slope of 20 days moving average is not steady one direction, it shows initially upside then in the end it is downside. RSI for the most of time was close 30 to 70.

Based on interpretation of both indicators, Simple moving average and RSI show that prices of shares are uptrend and downtrend. It is concluded that prices of shares during January to June of 2019 are increased and decreased. From the RSI indicator it is concluded that in the months of January to February there was overbought position of shares.

#### Chart.5: HCL Technologies Ltd.

Following chart shows equity share prices of HCL TECHNOLOGIES from January 2019 to June 2019.



From the above chart it is interpreted that equity prices of HCL Technologies Ltd. were mostly above 20 days simple moving average and slope of 20 days moving average is not steady in one direction, it shows initially upside then in the end it is downside. RSI for the most of time was moving between 50 to 70.

Based on the interpretation of both indicators Simple Moving Averages and RSI, the prices of shares are initially in uptrend and downtrend. RSI shows there is overbought position in the months February to March of 2019.

## 2.7 FINDINGS AND CONCLUSION

1. The securities market is highly volatile in nature. In spite of its volatility the investor has chances to make comfortable profits with the help of moving average trend line and the relative strength Index trend lines.
2. This trend line helps the investors to decide on either to hold or to buy or to sell the scripts at the determined period of time.
3. The scripts of NIIT, Infosys and TCS have wide possibilities to grow in the near future. The investor can continue to invest or hold the scripts for some more time.

4. The RSI trend line for most of the selected scripts show a possibility to earn profits though there is a fall in its current share prices. The RSI trend line of Infosys indicates a positive and negative sign to earn profits though the moving average trend line shows a sell signal.
5. They often result from an imbalance of trade orders in one direction, wide price fluctuations are a daily occurrence on the world's stock markets as investors react to economic business and political events.

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## 2.8 CONCLUSION:

With the help of the study "A STUDY OF PRICE MOVEMENTS OF IT COMPANIES WITH RESPECT TO NIFTY." it gives an insight as to how to invest in particular share, which share provide better return as compared to other and what type of risk involved in that particular share. It can be concluded from the project that future of IT sector has a wide scope for investors to invest in up trending stocks.

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## WEBSITE

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