

“FUNDAMENTAL & TECHNICAL ANALYSIS ON SELECTED SECTORS”

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ABSTRACT

The annual inflation rate was 6.18% in 2020 from a downwardly revised 3.72% in the previous year. With the inflation rate higher than the average interest rate offered by the Indian Banks on the savings account being on an average 3.5 to 4%, Indians have started investing their money in equity or mutual funds. With more number of people aware about the equity market, and with constant encouragement by SEBI and GOI for educating people about the different avenues of investment, people have started considering investing in the stock market. The traditional investors today still focus more on Fixed Deposits and PPFs. But gradually, people have started being more aware about the stock market. To minimize the effect of risk various models and theories have been formulated. The two primary methods used to analyze the risk and the volatility of the market are: Fundamental & Technical Analysis. Secondary data from Money Control and many other sites is used for fundamental & technical analysis of 10 companies from 5 different sectors (IT, Banking, Automobile, Health and Infrastructure). From research view point, the importance of fundamental & technical analysis in investment decisions can be observed and the sectors can be ranked according to their performance as well as investor preference.

Keywords: Equity market, Fundamental Analysis, Technical Analysis

1. INTRODUCTION

The purpose is to study the overall performance of the 10 companies pertaining to five different sectors that contribute to the Indian economy: IT, Banking, Automobile, Health and Infrastructure Sector. The two important concepts are used: Fundamental and Technical Analysis for the period of past few years compared together. The research was carried out with an objective to know the best performing stock through the fundamental and technical analysis and to predict the share price range of selected companies for future short term period.

For Fundamental analysis -various ratios like Return on Equity (ROE), EPS & Quick Ratio have been calculated. Further to determine the future pattern of stock prices, Technical analysis is performed by Moving average method.

➤ **Fundamental Analysis:**

Fundamental analysis not only focuses on Quantitative Analysis, but also Qualitative, Economic and Financial Analysis. It takes into consideration the macroeconomic factors such as economy and industry conditions, and the microeconomic factors such as financial conditions and company management. It is used to predict the intrinsic value of the company. The intrinsic value is found by Qualitative Analysis that considers the company's quality of management, corporate governance standards, etc. Relative Value Approach is used for ascertaining the stocks real value. For analysis purpose five sectors are taken into considerations that are responsible for the growth of a country: Infrastructure, Information Technology (IT), Banking, and Automobile&Health Sector.

➤ **Technical Analysis:**

Technical Analysis is a method of forecasting the future price of the shares based on the historical or past data available related to price and volume. It uses charts and other tools to identify the patterns that can be used to make various investment decisions and it does not take into consideration the intrinsic value. Hence, Technical Analysis is also the statistical analysis of the price change. Technical Analysis is used for making predictions for a short period of time. It assumes that the market is efficient and the price has already taken into consideration the other factors related to company and industry. The four basic pillars are:

Price: Price is the most important of these areas; the profits and losses are measured in price differences between buys and sells. It deserves most focus by analysts and predictors, but if all four can be employed together, the odds

of making successful decisions can be dramatically increased. With the change in price there is a change in the investor's attitude.

Volume: Volume includes concepts such as accumulation and distribution, market breadth, open interest, and trade count.

Time: Time includes cycles, seasonality, and relationships between patterns and trends from duration point of view.

Sentiment: Sentiment is more of a subjective area that defines the emotions or biasness of investors towards realizing gains and avoiding losses. People tend to go with the crowd which is the normal sentiment but it pays-off big to the one who takes the risk of standing against the crowd in the market.

➤ **Technical conditions that prevail in the market are:**

a) **Market Volume:** Volume is measured in terms of the supply and demand in the market. It is helpful in knowing the strength and weakness of the market based on the volume and market condition.

b) **Market Breadth:** Breadth is the advance and decline ratio of the market. If the numbers of shares in advances are more than decline than the market will rise and this is an indication of a strong market.

c) **Short Interest:** It means the number of borrowed stocks sold short in the market at any given time.

d) **Odd Lot trading:** It signals that might be bull or bear market is ending soon. When odd lot purchases are more than odd lot sales than there is a bull condition prevailing in the market.

As mentioned above technical analysis is expressed in the form of charts and graphs. There are different kinds of charts; the common among these is the bar chart represented by bars to represent the opening, high, low and closing prices for the day. The bar chart is more illustrative. Another common chart used for technical analysis is the candlestick chart which is represented by rectangular boxes showing the opening and closing prices of a stock with the highs and lows during the day. If the closing price of the stock is higher than the opening price, the rectangle is Green in color; if the opening price is higher than the closing price then it is Red in color.

2. LITERATURE REVIEW

- Berry & Sulochna, (2017) suggested investors in the paper "Study on Use of Technical Analysis in Forecasting Price Moments of Selected Companies of NSE & BSE" to invest their money in the scripts like Britannia, Cadile Healthcare, Canara Bank and Tata Coffee because these shares were giving good amount of returns in terms of ROC and Average.

- BV, Sumithra, & Hegde, (2017) this paper focused on technical analysis of selected companies under Nifty 50 based on different sectors for a period from January 2011 to December 2016. The paper concluded that most of the stocks analyzed revealed technically strong position.

- Ensary & Atuea, (2017) - "Testing the Effect of Technical Analysis Strategies on Achieving Abnormal Return: Evidence from Egyptian Stock Market" concluded that market timing with technical analysis yields more return and reduces risk in general. Also, short term investing was not recommended at all, as it is less profitable even than bear market period while in long term and during bull market technical analysis was more profitable than short term.

- Moghaddama, Moghaddamb, & Esfandyaric, (2016) investigated the ability of artificial neural network (ANN) in forecasting the daily NASDAQ stock exchange rate. Several feed forward ANNs that were trained by the back propagation algorithm were assessed. Networks for NAS-DAQ index prediction for two type of input dataset (four prior days and nine prior days) were developed and validated.

- Petrusheva & Jordanoski, (2016) concluded that the two main schools of thought and strategies in financial markets are Fundamental and technical analysis.

- Sakthi & C., (2016) stated that a financial analyst first makes forecasts for the economy, then for industries and finally for companies. The industry forecasts are based on the forecasts for the economy and in turn, the company forecasts are based on the forecasts for both the industry and the economy.

- A.V., Ashokkumar, & C.K., (2016) stated that the fundamental analysis is a method of finding out the future price of a stock which an investor wishes to buy. It relates to the examination of the intrinsic worth of a company to find out whether the current market price is fair or not, whether it is overpriced or underpriced.

- V, S. (2015) stated that 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.

- Bonga, (2015) stated that investment opportunities are plenty, but not all are profitable. This paper seeks to clarify the need to make a proper fundamental analysis when investing in various securities.

• Srivastava, (2015) concluded that technical analysis helps in understanding the price movement and pattern of the shares, the signals given by them are the major turning points of the market price.

3. PROBLEM STATEMENT

• Lack of knowledge which would result in selecting a wrong script that leads to loss, and hence it is very important to study the fundamental and technical analysis to avoid the risk of losing money.

4. SCOPE OF THE STUDY

- The study is analytical in nature and is based on secondary data.
- The research uses limited technical analysis tools. The fundamental analysis is based on Ratio Analysis.
- Out of these 5 sectors, top 2 companies based on the market capitalization are selected.
- To analyze and predict stock performance based on the analysis.

5. OBJECTIVES OF STUDY

- To analyze the share price movement of selected companies of different sectors and to find out expected returns using Technical and Fundamental Analysis.
- To suggest the investors' in making investment decisions (whether to buy / sell) in selected sectors.
- To analyze and predict based on the data.
- Knowing the trends of different sectors based on both the Technical and Fundamental Analysis.
- To rank the sectors according to their performance.

6. LIMITATIONS OF STUDY

- The sample size focuses only on the five major sectors driving the economic growth of the country, and of those five sectors only 2 companies each are selected based on the market capitalization. Hence, the sample size is limited to total 10 companies.
- Further, the analysis is done using limited technical tools.

7. RESEARCH METHODOLOGY

- **Research Design:** The research is descriptive and analytical in nature.
- **Data Collection Sources:**

i. **Secondary Data-** Only secondary data will be used for research and will mainly be collected from Yahoo finance, NSE India, BSE, Money Control & Company reports.

- **Sampling Size and Technique:** 5 Sectors have been selected based on the sectors driving the growth in India and 2 companies from each sector have been selected based on the market capitalization.

Table 1: Table showing the sectors and companies considered for the analysis

Sr. No.	Sector	Companies based on Market Capitalization.
1.	Infrastructure Sector	Larsen & Toubro Siemens
2.	IT Sector (Software)	TCS Infosys
3.	Health Sector	Apollo Hospital Fortis Health
4.	Banking Sector (Private)	HDFC Bank ICICI Bank
5.	Automobile Sector (Cars and Jeeps)	Maruti Suzuki Tata Motors

8. DATA ANALYSIS & INTERPRETATION

FUNDAMENTAL ANALYSIS: 3 Ratios for each company are derived to compare the liquidity, profitability and valuation of the company.

Table 2: Ratio Analysis (March 2021)

Sector	Company	Basic EPS	ROE	Quick Ratio
Infrastructure	L & T	80.74	18.76	1.42
	Siemens	30.97	10.66	1.71
IT	TCS	104.34	49.48	2.48
	Infosys	50.49	30.63	2.1
Health	Apollo	7.5	2.01	1.86
	Fortis	0.06	0.04	0.8
Banking	HDFC	66.8	15.39	17.58
	ICICI	33.66	13.68	14.52
Automobile	Maruti Suzuki	140.02	8.23	0.96
	TATA Motors	-6.59	-12.57	0.43

(Source: moneycontrol.com)

- For Fundamental Analysis, we have used 3 types of ratios:
 - (i) Valuation Ratio – Basic EPS
 - (ii) Profitability Ratio – Return on Equity (ROE)
 - (iii) Liquidity Ratio – Quick Ratio
- Among all 10 companies, Maruti Suzuki is having the highest Basic EPS of Rs.140.02, followed by TCS with EPS of Rs.104.34. Health Sector shows very low EPS for both the companies; Rs.7.5 for Apollo and Rs.0.06 for Fortis. The lowest EPS is reported by TATA motors (-6.59) which signifies negative returns.
- For analysis of profitability, the highest ROE reported is 49.48% by TCS followed by Infosys with ROE of 30.63%; so whole IT sector is at top in terms of profitability. Health sector has very low ROE as both the companies have very low returns. The least ROE is reported by TATA motors (-12.57%) which again signifies negative returns.
- Liquidity is analyzed using quick ratios for all the companies. The highest liquidity reported by HDFC bank has quick ratio of 17.58 followed by ICICI bank with quick ratio of 14.52. Both the top liquid firms are of banking sector which is quite common. The least liquidity is reported by TATA motors 0.43; and Maruti Suzuki 0.43; so it can be concluded that overall automobile sector is having lower liquidity.
- All these conclusions can be used to finally rate the companies for investment recommendation. The Ratings can be found in FINDINGS section.

TECHNICAL ANALYSIS:

- Moving average is one of the most widely used method in Technical Analysis. It calculates the average value of the stock market for a given number of years. The two most important types of moving average methods are: Simple Moving Average (SMA) & Exponential Moving Average (EMA).
- Simple Moving Average is formed by computing the average or mean price of a security over a specified number of years. For e.g. A one year moving average is calculated by adding the closing prices of past one year for the given scripts and then dividing them by the number of days.
- The most common application of moving average is to identify the trend direction. Moving average uses the historical data to identify the trend of the stocks for a given period of time. Moving average lag current price action because they are based on past prices; the longer the period of moving average, the greater the lag. The length of the moving average depends on the trading objectives, shorter moving average is used for short term trading and longer moving average is used for long term trading. Moving average simplifies price data by smoothing it out and creating one flow line.
- Moving average results can be random as they are calculated based on historical data and nothing about the calculation is predictive in nature about the data. The results of the Moving average analysis done for the selected 10 companies are as under:

Table 3: Moving Average Analysis (in Rs.) (as on 31 March, 2021)

Company	50 Days	150 Days	Condition	Trend	Decision
L & T	1460.48	1329.41	ST>LT	Bullish	Sell
Siemens	1819.28	1665.13	ST>LT	Bullish	Sell
TCS	3116.35	2977.13	ST>LT	Bullish	Sell
Infosys	1315.94	1253.89	ST>LT	Bullish	Sell
Apollo	2872.35	2620.13	ST>LT	Bullish	Sell
Fortis	174.95	162.8	ST>LT	Bullish	Sell
HDFC	1529.63	1466.38	ST>LT	Bullish	Sell
ICICI	600.21	552.67	ST>LT	Bullish	Sell
Marutisuzuki	7355.27	7398.88	ST<LT	Bearish	Buy
TATA motors	309.87	245.1	ST>LT	Bullish	Sell

(Source: moneycontrol.com)

- This table is completely self-explanatory and easy to understand. The moving average vales are taken from Money Control website and recommendations are made based on the analysis.

9. FINDINGS

- The current trends and investment decisions on all the 10 companies are obtained through Technical Analysis. With this the recommendations to the investors can also be made.
- Findings from Ratio analysis compares the peer companies of same sector and direct comparison of sectors.
- The ratings of the companies using fundamental analysis is mentioned below.

Table 4: Companies rated according to their performances using ratio analysis

Rating	Company	Reason
1	TCS	Second Highest EPS, Highest ROE with decent quick ratio.
2	HDFC	Highest Quick ratio, good EPS and high ROE.
3	ICICI	High Quick ratio, Good EPS and ROE as well.
4	Infosys	High ROE, High EPS and average quick ratio.
5	L & T	High EPS, good ROE, average quick ratio.
6	Siemens	Good EPS, decent ROE, average quick ratio.
7	Maruti Suzuki	Highest EPS, low ROE, low quick ratio.
8	Apollo	Low EPS, Low ROE, good quick ratio.
9	Fortis	Low EPS, negligible ROE, low quick ratio.
10	TATA Motors	Negative earnings, Negative profits, Lowest quick ratio.

10. CONCLUSIONS

The following conclusions can be drawn after performing the Fundamental and Technical Analysis on selected sectors:

Considering the Ratio analysis, TCS is the best performer followed by HDFC Bank. Moreover, the Moving average analysis states that Maruti Suzuki is currently Bearish in nature and it is the best time to buy the shares of this particular company. In the Banking Sector, it is observed that HDFC Bank is performing well, but the long term moving average is lower than the short term moving average which means that the shares should be sold.

In the Infrastructure sector, Moving average analysis states that Larsen & Toubro is Bullish in nature and it should be sold considering the Long term. However, there has been a consistency in high EPS in the recent years. In the Automobile Sector, Maruti Suzuki in bearish in nature and should be bought in Long term with some volatility observed in the recent years.

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