

THE STUDY OF FUNDAMENTAL & TECHNICAL ANALYSIS

KUMARI PRIYANKA

**School of Business
Galgotias University**



ABSTRACT

Fundamentalists and chartists have historically always argued about how stocks and markets should be studied. Chartists, also known as technical analysts, estimate market patterns based on historical data, whereas fundamental analysts assess economic, financial, qualitative, and quantitative factors of a security in order to analyze the future of such security they also focus on all the other factors that influence stock prices.

The study of Technical analysis begins with charts, but fundamental analysis begins with the financial statements of the organization. In fundamental analysis, you must look at a company's income statement, balance sheet, and cash flow statement to establish its intrinsic worth. Whereas in technical one put more focus on the past trend and the patterns of a particular stock which might help in forecasting the future of that particular stock or security.

The main objective of this thesis is to study the important concepts of fundamental analysis and forecast the future trends of certain companies which becomes the part of findings of this study.

A stock's intrinsic value can be calculated by discounting future projected cash flows to the net present value. You can buy the stock if it is trading below the company's intrinsic value. Technical analysts, on the other hand, feel that the price of stock already reflects everything that has or could affect a company. Hence the study of fundamental and technical analysis can help others in trading and investing in the best stocks to have maximum return i.e higher amounts of profit by forecasting the future values of a particular stock.

The objectives of this Master Thesis are to study the fundamental analysis and analyze the Stock markets while Trading, based on the Japanese Candlestick pattern which clearly helps to identify at what time we should place Buy and Sell calls with a complete Technical and Logical things applied. Both Primary and Secondary Data are used to prepare this report.

INTRODUCTION

UNDERSTANDING THE BASIS CONCEPT OF FUNDAMENTAL & TECHNICAL ANALYSIS

- **Fundamental analysis**, unlike technical analysis, focuses on a security's inherent worth that is the Fair Value of the company which is determined by elements like the company's financial statements, the overall economy and market circumstances, as well as liabilities and assets.
- When we talk about Analysis of Financial Statement, we mean analysis of Profit and Loss Account, Balance Sheet and the cash flow statement .
- Fundamental analysis is often both qualitative and quantitative in that it examines both numbers and larger factors that might affect the investment's value, such as interest rates, competition, and the overall economy.
- Analysis of Financial Statement refers to classification of the various items given in Financial Statement and further its interpretation. It is the powerful mechanism of ascertaining the financial strengths and weaknesses of a firm.
- The importance of making analysis of Financial Statement may be better understood from this fact that Financial Statement, though itself reflects the net results for a particular period and state of affairs of the company on that date, but still we have to
- go for analysis of the same for more specific and deeper understanding of strengths and weaknesses.
- For example, NTPC Ltd., though a very good profit making company, but often it faces fund problem because of purchasing inputs from Coal India Ltd., GAIL etc on cash basis while selling electricity to various State Electricity Board on credit basis.
- Fundamental analysis is concerned with determining the intrinsic value or the true value of a security.
- So to calculate intrinsic value to know the true value of the share.
- The intrinsic value is compared with the security current market price
- Intrinsic value is also called the fair value or True value of the company
- Market price >intrinsic value =security is overpriced
- Market price <intrinsic value = security is under priced.

- Both methods are used for researching and forecasting future trends in stock prices.
- Fundamental analysts consider a company's financial positions and performance
- The market in which it operates, competitors and the economy. The most important source of data for fundamental analysis is the company's financial statements.
- Traders analyze trends and patterns in the stock's price and volume in technical analysis, which differs from fundamental research.
- Both strategies are used to investigate and anticipate future stock price patterns.
- The economy, rivals, and the market in which it operates. The financial statements of the firm are the most essential source of data for fundamental research.
- These include the income statement, balance sheet and cash flow **statements**.

What is an income statement?

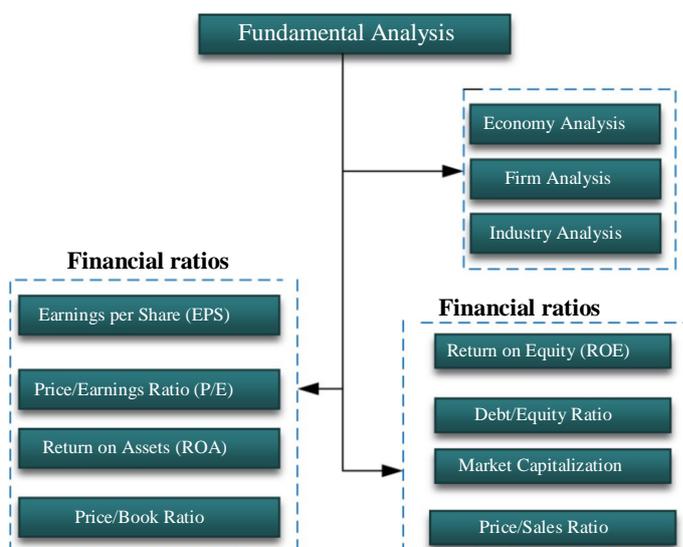
The income statement shows how a company's financial performance has changed over time. Performance is assessed by summarizing how the business incurs its revenues, expenses and net profit or loss incurred over the period. It's also called the P&L statement.

What is a balance sheet?

A balance sheet mainly focuses on company's assets, liabilities and shareholders' equity at a given point in time. It's a snapshot of a company's assets and liabilities, as well as the amount of money invested by shareholders. $Assets = Liabilities + Shareholders' equity$ is the balancing principle.

What is a cash-flow statement?

A cash-flow statement is a report on a company's cash management that summarises all cash inflows from operations and investment sources, as well as cash outflows from business activities and investments, if any.



Few of these important ratios discussed include:

Earning Per Share(EPS):

$$\text{Earning per Share} = \frac{\text{Net Profit available to Equity shareholders}}{\text{Number of Equity Shares}}$$

General Interpretation:

- The frequently used EPS ratio is a measure of profitability from the perspective of the owners.
- Higher the ratio, investors will be more attracted.
- Here Net Profit refers to Net Profit after taxes and preference dividend.

Dividend Per Share(DPS):

$$\text{Dividend per Share} = \frac{\text{Net Distributed Profit to Equity shareholders}}{\text{Number of Equity Shares}}$$

General Interpretation:

- It is nothing but the dividend paid to the ordinary shareholders, calculated per share basis.
- Higher the ratio, investors will be more attracted.
- It is a better indicator than Earnings per Share since it reveals the actual amount of profit that the owners get.

Price Earning Ratio P/E Ratio

$$\text{Price Earning Ratio: } \frac{\text{Market Price of share}}{\text{EPS}}$$

General Interpretation:

- This ratio represents that for every rupee of earning per share, how much the price being paid by the market.
- This ratio is reviewed over the years to reflect the trend towards appreciation in the value of shares per every rupee of EPS.
- This ratio is of much use in calculating the Intrinsic Value of share. Intrinsic value is very relevant for deciding whether to purchase a company's share or not.

Return On Asset(ROA) :- It indicates how profitable a bank is in relation to its total assets.

- Formula :- (Net Income /Total Assets)*100
- Analysis :- The higher ROA is better.

Debt Equity Ratio: Reveals the power of the available capital as opposed to the capital engaged. A low value of D/E means the credit accessible was not used. D/E is computed as

$$\text{Debt Equity Ratio} = \frac{\text{Outsiders' Funds}}{\text{Insiders' Funds}} \text{ or } \frac{\text{External Equities}}{\text{Internal Equities}}$$

$$= \frac{\text{Total Debt}}{\text{Shareholders' Funds}}$$

$$= \frac{\text{Long Term Loan + Current Liabilities}}{\text{Share Capital (Equity+Pref.)+ Reserve \& Surplus- Accumulated loss + Long Term Loan}}$$

or = -----

**Share Capital (Equity+Pref.)+ Reserve
&Surplus- Accumulated loss**

General Interpretation :

- This ratio show the ownership position in the company. Excess liabilities can lead to insolvency and a lack of operating capital..
- There is standard of 2:1, which says that debts should not exceed twice of the Shareholders’ funds.(Subject to further investigation)
- A greater ratio indicates that the firm's creditors fund a big portion of its finance, while a low percentage indicates the reverse.
- A debt equity ratio of 1:2 indicates that the company has two rupees of owner's capital for every rupee of outside money. In other words, creditors have a 50% share in the company. As a result, creditors will be protected.
- If the debt equity ratio is large, the owners have liquidated their interest, and the creditors will suffer if the project fails. It also forms an image that the owners do not believe in their firm.

Return on equity (ROE) This ratio offers an overview of how well the shareholder’s funds were used and the gain made out of its investment. When ROE is low, it means that the funds of the shareholders were not adequately utilised.

The formula computes ROE:

$$\text{ROE} = \frac{\text{NET INCOME}}{\text{SHAREHOLDER'S EQUITY}}$$

Market capitalization (MC) The total number of stocks traded in the market is measured by Market Capitalization. Stocks can be categorised into three groups, namely: small-cap, mediumcap, and large-cap. The formula can compute MC:

$$\text{MC} = \text{Totalshares} \times \text{Price per share}$$

STOCK MARKET

STOCK MARKET is a place where shares of public listed companies are traded. The primary market is where companies float shares to the general public in an initial public offering (IPO) to raise capital.

Once new securities have been sold in the primary market, they are traded in the secondary market—

where one investor buys shares from another investor at the prevailing market price or at whatever price both the buyer and seller agree upon. The secondary market or the stock exchanges are regulated by the regulatory authority. In India, the secondary and primary markets are governed by the Security and Exchange Board of India (SEBI).

A stock exchange facilitates stock brokers to trade company stocks and other securities. A stock may be bought or sold only if it is listed on an exchange. Thus, it is the meeting place of the stock buyers and sellers. India's premier stock exchanges are the Bombay Stock Exchange and the National Stock Exchange.

Technical analysis is concerned with predicting future price trends from historical price and volume data. The underlying axiom of technical analysis is that all fundamentals (including expectations) are factored into the market and are reflected in exchange rates

Technical analysis can be conditionally divided into some main parts such as:

- Types of charts
- Graphical methods
- Analytical methods
- Technical indicators

Few core assumptions.

- Markets discount everything
- The how is more important than why
- Price moves in trends
- History tends to repeat itself

Chart Patterns and Analysis

Chart patterns are a subjective form of technical analysis where technicians attempt to identify areas of support and resistance on a chart by looking at specific patterns. These patterns, underpinned by psychological factors, are designed to predict where prices are headed, following a breakout or breakdown from a specific price point and time. For example, an ascending triangle chart pattern is a bullish chart pattern that shows a key area of resistance. A breakout from this resistance could lead to a significant, high-volume move higher.

Technical indicators are a statistical form of technical analysis where technicians apply various mathematical formulas to prices and volumes. The most common technical indicators are moving averages, which smooth price data to help make it easier to spot trends. More complex technical indicators include

the moving average convergence divergence (MACD), which looks at the interplay between several moving averages. Many trading systems are based on technical indicators since they can be quantitatively calculated. Below are some of the chart types:

- 1. Line chart
- 2. Bar Chart
- 3. Japanese Candlestick

- Technical analysis is a lot broader concept

- All chartists use price charts – usually either line charts, bar charts or candlestick charts
- Some analysts use indicators like moving averages exponentials .
- Others use price patterns, and complex analysis .
- Trend followers use other tools to identify price trends of a particular stock

NEED OF THE STUDY

1. To understand the concept of Fundamental and technical analysis.
2. Understanding the importance financial statement of the company for the following reasons:
 - a) Firm need to know how many products it was able to **sell** till date or within a particular period of time.
 - b) How much did it cost the firm to make such a product meaning what was the **cost of production**?
 - c) How much money does the company have in the **bank** in order to maintain the day to activity or to run the business or for a financial emergency?
 - d) How much it can **grow** in the current time period as compared to the previous time period?
 - e) Enable the company to **communicate** its business performance to the outsiders like
 - The shareholder
 - Bank
 - Regulators
 - Investors
3. To analyze few companies using the candlestick pattern in Technical analysis.

PROBLEM STATEMENT

- The research will aid in determining what tactics an investor can use while investing in stock market with the help of fundamental analysis.
- Fundamental Analysis is the upcoming tool and helps the investor to know how the company is fundamentally strong and who want to invest in a systematic manner in the competitive world, the study reveals the importance for the investment decision which acts as guidance and helps them in decision making and predicts the figure price of the scrips

LITERATURE REVIEW

Review of Literature (JEVONSLEE, 1987) done fundamental analysis of securities .The fundamental analysis approach assumes that each security has an intrinsic value that can be decided on the basis of such information like accounting earnings, dividends, growth factors, and debt/equity ratios etc.. Technical expert determines the intrinsic value on the basis of these fundamentals and compares this value with the current market price to determine if the security is underpriced or overpriced. (Preeti, 2009) examines whether fundamental analysis involving two types of approaches like traditional and growth. Fundamentally powerful firms earn excess mean returns in comparison to fundamentally weak firms.

It helps in differentiating between the overvalued firms and firms with growth potential. (Mishra, 2016) stated the extent to which trading profitability using technical analysis indicators explains the ‘risk premium’ or ‘risk compensation’ for investing in equity markets as against assets that are relatively risk-free using multiple regression analysis. It is advised that traders, retail investors and fund managers, while evaluating portfolios, can rely on technical indicators-based trading strategies other than fundamental analysis. (Pandya, 2013) conducted study for Information Technology sector companies and technical analysis is done for them. He carried out detail research for Technical Analysis of the securities of the selected companies from the Information Technology sector and to assist portfolio decisions in this sector, since Information Technology sector is one of the most upcoming and booming sectors in the Indian Market. It has proven to be one of the most important and fastest growing sectors of the Indian Economy. (Boobalan, 2014) carried out Technical Analysis of the securities of the selected companies from Industry and to assist investment decisions in the Indian Market. Technical analysis through this study does not result in absolute predictions about the future with regard to forecasting. (Roy,2015) done Fundamental analysis and stated that one should examine the economic environment, industry performance and company performance before making an investment decision. One of the livelier and long-lasting debates in securities research is the relative merits of fundamental research and technical research. (Mutswenje, 2014) tested the tenets of the behavioral finance theory on the factors that influence investment decisions under conditions of uncertainty. (Venkatesh, 2011) reports the results of a questionnaire survey in June/July 2010 on the use of Fundamental and Technical analysis by brokers/fund managers in Indian stock market to form their forecasts of share price movements. Fundamental analysis is method of finding out the future price of a stock which an investor desires 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 under priced. (Peachavanish, 2016) proposes a method using cluster analysis to identify a group of stocks that has the best trend and momentum characteristics at a given time, and therefore are most likely to outperform the market during a short time period. (Bhupesh, 2013) proposes a method for stock picking and finding access point of investment in stocks using a hybrid method consisting of self-organizing maps and selected technical indicators. (Hon-Snir, 2011) Studied that investors use financial statements and support and resistance lines together as a primary tool for their investment behavior. For many years investors used various tools to support their buying and selling stocks decisions. Two sets of tools are commonly used by investors: fundamental and technical analysis.

RESEARCH METHODOLOGY

There are various methods which I used to understand the fundament analysis interpreting different ratios and analyse company's future using technical analysis .

Those Methods are Listed Below:

- (i) Analyse financial statement
 - (ii) Analyse financial ratios
 - (iii)Resistance and Support Indicator
 - (iv)Moving Average Convergence Divergence (MACD)
 - (v) Bullish engulfing pattern
 - (vi)Bearish engulfing pattern
 - (vii) Hammer candlestick
 - (viii) Shooting Star Candlestick
- The primary sources of collection of the data would be from chartink. Com
 - National Stock Exchange (NSE) and tradingveiw.com
 - Aim was to Determine the current state of the market at a glance by Just by looking at the color and length of a candlestick
 - Study the market trend quickly and able to make a buy or sell decision

FINDINGS AND DATA ANALYSIS

COMPANY PRICE TREND ANALYSIS USING CANDLESTICK PATTERN

FEW EXAMPLES OF MOST POPULAR CANDLE STICK PATTERN WITH THE HELP OF COMPANY ANALYSIS:

REAL LIFE EXAMPLES :

1.SHOOTING STAR CANDLESTICK PATTERN

The Shooting Star candlestick formation is viewed as a bearish reversal candlestick pattern .

This candle indicates that market may go down

Key points :

- Market should be in up trends
- Shadow must be 2 to 3 times mores than that of body
- Volume must be raising
- Target price might expected to be 2% or more
- If there is a shooting star the volume will be high
- In this case stock prices will go down



COAL INDIA LIMITED



SUN PHARMACEUTICALS LIMITED



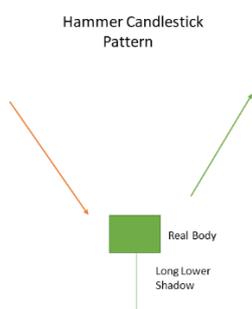
2.HAMMER CANDLESTCK PATTERN

- Hammer is a single candlestick pattern that is formed at the end of a downtrend and signals bullish reversal.
- The real body of this candle is small and is located at the top with a lower shadow which should be more than twice the real body. This candlestick chart pattern has no or little upper shadow.
- The psychology behind this candle formation is that the prices opened and sellers pushed down the prices.

- Suddenly the buyers came into the market and pushed the prices up and closed the trading session more than the opening price.
- This resulted in the formation of bullish pattern and signifies that buyers are back in the market and downtrend may end.
- Traders can enter a long position if next day a bullish candle is formed and can place a stop-loss at the low of Hammer.

Key points :

- Pricetrend should be downward
- Shadow must be 2 times more than that of body of the candle
- Volume must be rising
- Target price : 2% or more than that of closing price



BAJAJ FINANCE LIMITED



BATA INDIA LIMITED



INFOSYS LIMITED



3. Bullish Engulfing Pattern

- The bullish engulfing pattern is formed of two candlesticks.
- The first candle is a short red body that is completely engulfed by a larger green candle.
- Market trend should be downward
- Volume must be rising
- If the above conditions are fulfilled one must make a buying decision .



HINDUSTAN UNILIVER LIMITED

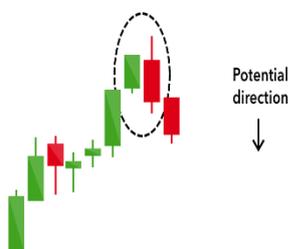


PVR LIMITED



4. Bearish Engulfing pattern

- A bearish engulfing pattern occurs at the end of an uptrend.
- The first candle has a small green body that is engulfed by a subsequent long red candle.
- Market trend should be upwards
- Volume must be rising
- If the above conditions are fulfilled one must take selling decision



KOTAK MAHINDRA



HDFC ASSET MANAGEMENT COMPANY



THE FEDERAL BANK LIMITED



INDIABULLS HOUSING FINANCE LIMITED



CONCLUSION

- Traders and investors use candlestick charts to determine or predict a possible price movement based on prior patterns.
- This type of pattern is beneficial in trading since it displays four price points (open, close, high, and low) across the time period specified by the trader.
- Candlesticks are formed by price changes that go up and down. While price fluctuations can look random at times, they can also establish patterns that traders can utilise for study or trading.
- It will take time and patience to master the technique of reading candle patterns, but once you do, it will be quite beneficial. There are hundreds of different candlestick patterns, but you can't possibly find them all on one chart.

RECOMMENDATION

- Management should start/launch a virtual Platform for the Interns for learning derivatives so that they can gain a good confidence before starting the Real Trading/Live Trading.
- Management should ask the Interns to get their Clients or invest small amt. (after practicing) so that they can manage their funds as well as they can do their work as equals to the advisory for the same for which the Interns have been hired for. This benefits the company as well.
- Internship time period should be increased so the execution time for the Interns can be extended.

REFERENCES

- <https://www.bdc.ca/en/articles-tools/entrepreneur-toolkit/templates-business-guides/glossary/operating-sg-and-a-expenses#:~:text=Operating%20expenses%E2%80%94also%20called%20selling,computer%20equipment%20and%20employee%20benefits.>
- <https://www.investopedia.com/terms/f/financial-statements.asp#:~:text=The%20three%20most%20important%20financial,%2C%20investing%2C%20and%20financing%20activities>
- <https://www.accountingtools.com/articles/financial-statement-preparation.html>
- <https://in.tradingview.com/>
- <https://chartink.com/>
- <https://www.nseindia.com/>
- <https://www.tickertape.in/>
- https://www.researchgate.net/publication/349948112_A_STUDY_ON_FUNDAMENTAL_AND_TECHNICAL_ANALYSIS/citation/download

S