FINAL REPORT
STOCK MARKET ANALYSIS

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INDEX

BASICS OF STOCK MARKET

WHY INVEST IN STOCK MARKET?

In order to have a better monetary future, one cannot just let depend on his savings saved in home as cash or getting some small interest in bank in a saving account as it wouldn't even beat the present inflation. The returns from the above won't be enough any day to have a secure retirement plan. From here we realize the importance of having some good investment.

There are multiple sectors where a person could invest: -

- Fixed income instruments
- Equity
- Real estate
- Commodities (precious metals)

Investing in equity stands out as one of the best options as the average return according to index is 12-13% and a long-term investment in a good Indian company can give return up to 20%. However in case of fixed income instruments and commodities the return is not more than 10% though the risk involved is much lower than in equity. Real estate requires a significant amount of initial investment making it less accessible.

By adopting proper risk management strategies, such as diversifying investments and conducting thorough research, individuals can maximize their chances of obtaining better returns through equity investments. It is important to consider one's risk tolerance and investment goals while determining the most suitable investment strategy.

WHAT MAKES INVESTING IN STOCK MARKET SAFE?

Market participants are not only retail investors, these are NRI investors, domestic institutes, Domestic Asset Management Companies and foreign institutional investors. The main motive of any participant is to earn profit. In order to avoid any swindling regulatory body is set up.

This body is called **The Securities and Exchange Board of India**, often referred to as SEBI. SEBI aims to promote the development of stock exchanges, protect the interest of retail investors, and regulate market participants' and financial intermediaries' activities.

It became an autonomous body on 30 January 1992 and was accorded statutory powers with the passing of the SEBI Act 1992 by the Parliament of India. SEBI has its headquarters at the business district of Bandra Kurla Complex in Mumbai and has Northern, Eastern, Southern and Western Regional Offices in New Delhi, Kolkata, Chennai, and Ahmedabad respectively. It has opened local offices at Jaipur and Bangalore and has also opened offices at Guwahati, Bhubaneshwar, Patna, Kochi and Chandigarh in Financial Year 2013–2014.

MARKET INTERMEDIATES

The major stock market in India are Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). Both these institutions follow the guidelines set by SEBI. To have smooth and effortless experience for transactions in stock market there are certain bodies responsible for it called the market intermediate or financial intermediates.

The market intermediates involved in stock market are:

- The Stock Broker

  A stockbroker is your gateway to the stock markets to make investments in stocks, bonds, ETFs, and Mutual funds. A stockbroker is a corporate entity registered as a trading member with the stock exchange and holds a stockbroking license. SEBI grants the license through due diligence, and the broker is expected to comply with the rules prescribed by SEBI. Stockbroker can be website or an application. A broker charges a brokerage and provides features such as market analysis, fund transfer, issues contact notes etc.

- Depository Body

  Earlier stock were like paper property which is a document entitling you as the owner of the shares in a company. Now stock are contained in digital format and these paper documents are converted into digital formal. This process is called dematerialization often abbreviated as DEMAT. Hence the storage place for the digital share certificate is called the ‘DEMAT Account’.

A Depository is a financial intermediary that offers the Demat account service. At present, only two depositaries offer DEMAT account services. The National Securities Depository Limited (NSDL) and Central Depository Services (India) Limited.

- Banks

  Banks play a straightforward role in the market ecosystem. They help facilitate the fund transfer from your bank account to your trading account. Both the trading account and bank account are linked. Broker’s link these accounts after verifying your bank account.

- Clearing Authority

  The job of the clearing corporation is to ensure guaranteed settlement of your trades/transactions. NSE Clearing Limited and Indian Clearing Corporation (ICCL) are wholly owned subsidiaries of the National Stock Exchange and Bombay Stock Exchange, respectively. Clearing corporations are also involved in the margining process, which is critical while trading complex instruments like futures and options.

One need to know these institutions are also heavily regulated and work towards a smooth settlement and efficient clearing activity.

WHAT IS AN IPO?

By definition, An initial public offering (IPO) refers to the process of offering shares of a private corporation to the public in a new stock issuance for the first time. When a company launches its IPO, it is said to go public. But why does a company go for an IPO.

The main aim of an IPO is to raise funds for Capex. Capital expenditures (Capex) are funds used by a company to acquire, upgrade, and maintain physical assets such as property, plants, buildings, technology, or equipment. An IPO is a clever way to raise funds without acquiring any debt. Also this helps the company to increase its visibility and also rewards its employees in form of stocks.

How an IPO is launched?

- Appointment of merchant banker- Often called a Book Running Lead Managers (BRLM)/Lead Managers (LM). A merchant banker is supposed to perform multiple duties. He is supposed to prepare listing document such as Draft Red Herring Prospectus (DRHP). He also agrees for underwriting shares which is if the shares are under – subscribed the banker would buy the remaining shares.
- Declaring price band – The price band is the range in which shares are transacted. There is an upper limit and a lower limit to newly announced shares.
- Marketing – This is publicity for the shares to get the maximum number of subscribers. Sometimes publicity goes so well that the shares gets over-subscribed.
- Listing Day – This is the day when the company gets listed on the stock exchange. The listing price is the price decided based on market demand and supply on that day and the stock is listed at a premium, par, or discount of the cut-off price.

There also a concept of FPO (Further Public Offering) which is also to raise capex for similar goals like for IPO.

What if an IPO is over-subscribed?

A company can use the green shoe option in which a company issues a document to authorize additional shares generally 15%.

Best performing IPOs of 2022

Adani Wilmar, which was listed in January, remained the top-performing IPO for the year 2022, with a return of more than 128% since the listing. Other than Adani Wilmar, Hariom Pipe Industries (116%), Venus Pipes & Tubes (115%), Veranda

Learning Solutions (76%) and Vedant Fashion (51%) were the other top performing IPO of 2022.

STOCK INDEX

There are approximately 5000 company listed at BSE and 2000 company at NSE. In order to understand the mood of the market it is impossible to keep a watch on all the listed company. In this situation Index helps us to keep a close watch on the market by keeping track on few companies to keep a broad overview of the trade of the given time interval.

The S&P BSE Sensex represents the Bombay stock exchange, and the Nifty 50 represents the National Stock exchange. Apart from these two, there is the Nifty Bank Index (Bank Nifty), which is quite popular. Bank Nifty represents the banking sector as a whole.

S&P stands for Standard and Poor's, a global credit rating agency. S&P has the technical expertise in constructing the index they have licensed to the BSE. Hence the index also carries the S&P tag. NSE itself maintains the indices via a related company called NSE Indices Limited.

Nifty 50 consists of the most frequently traded stocks on the National Stock Exchange; we will soon discuss the methodology basis on which these indices are constructed. An ideal index gives us an updated, accurate representation of the market sentiment. The movements in the Index reflect the changing expectations of the market participants. When the index goes up, it is because the market participants think the future will be better. The index drops if the market participants perceive the future pessimistically.

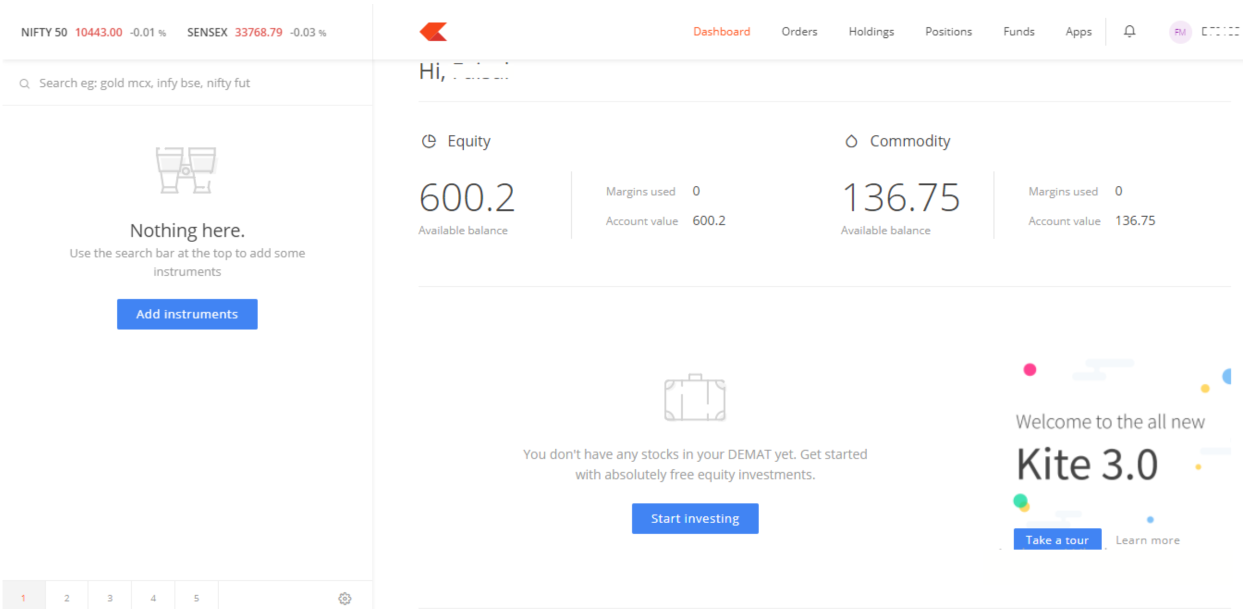
How an index is constructed?

Certain criteria are decided for a company to be considered for index. If a company qualifies for these set criteria, the company is assigned the weightage and according to this weightage the company influences the index and thus show the overall sentiment of the market.

Example- Reliance Industries Ltd has the highest weightage of 11% in nifty index. This means the Nifty index is most sensitive to price changes in Reliance.

Trading terminal

A typical trading terminal may look like this.



The trading terminal can be accessed through:

- Call your stocks broker (usually on the central support number), and request to buy or sell a stock; this is called “Call & Trade.”
- Use a web application
- Use a mobile application

A trading terminal other giving the access to deal in shares also give you additional features which help you in smooth transaction and easy trading.

These features includes:

- Market watch

  This feature helps you to keep a track on all the stocks you are interested in. One can easily add and subtract stock according to his choices. It displays the OHLC, last traded price, change percentage, volume etc. related to the stock.

- Order Book

It keeps the track record of all the stock one has transacted in. It helps the trader to keep the track of his orders, confirm the details of this order and even sometimes allows to modify the order if possible.

- Order Book

  Order book is similar to trade book but it contain the list of shares whose order are executed.

A trading terminal is literally the gateway to the market. It provides a platform for the trader to buy, bid and sell shares.

TYPES OF TRADERS

A stock trader is a person who attempts to profit from the purchase and sale of securities such as stock shares. Stock traders can be professionals trading on behalf of a financial company or individuals trading on behalf of themselves.

There are different types of traders:

Day Trader – A day trader initiates and closes the position during the day. He does not carry forward trading positions overnight. A day trader is risk-averse and does not like taking an overnight risk. For example – Buy 100 shares of TCS at 2212 at 9:15 AM and sell it at 2220 at 3:20 PM, making a profit of Rs.800/- in this trade. A day trader usually trades 5 to 6 stocks per day, sometimes even more.

Scalper – A type of day trader. A scalper usually trades very large shares and holds the stock for less time to make a small but quick profit. For example – a scalper buys 10,000 shares of TCS as 2212 at 9:15 and sells it 2212.1 at 9.16, ending up making 1000/- profit in this trade. On any given day, the scalper trades multiple times during the day. As you may have noticed, a scalp trader is highly risk-averse.

Swing Trader – A swing trader holds on to the trade for a slightly longer; the duration can run anywhere between a few days to weeks. For example – Buy 100 shares of TCS at 2212 on 12th June and sell it at 2214 on 19th June.

There are two popular types of investors: growth investors and value investors.

Growth Investors focus on identifying companies that are expected to experience significant growth due to emerging industry trends or macroeconomic factors. These investors seek out companies that have the potential to generate substantial returns over the long term. For example, in the Indian context, buying stocks like Hindustan Unilever, Infosys, and Gillette India in the 1990s would have been considered a growth investment. These companies experienced tremendous growth as a result of changes in the industry landscape, leading to substantial wealth creation for their shareholders.

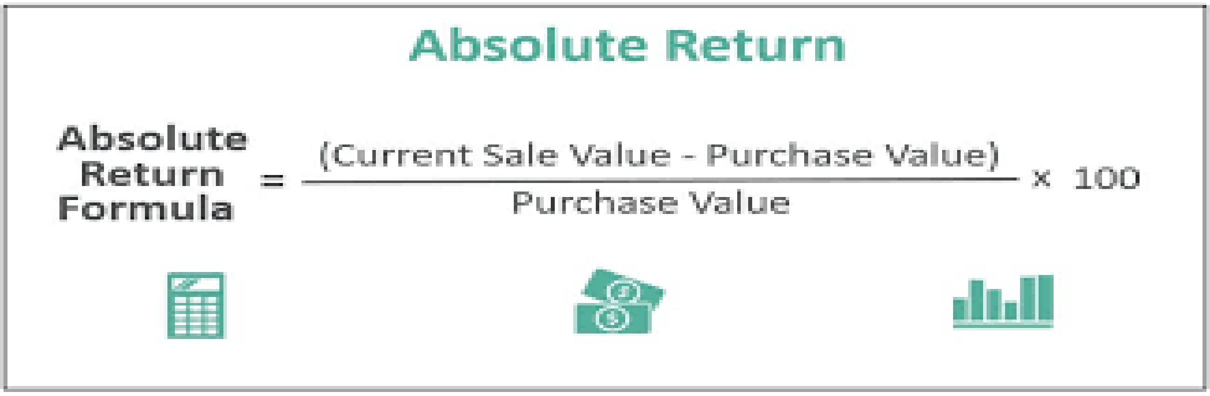
On the other hand, Value Investors look for companies that are undervalued in the market, regardless of whether they are in the growth phase or mature phase. These investors search for opportunities where market sentiment has caused a significant decline in stock prices, presenting a favorable buying opportunity. A recent example of this is the stock market crash in March 2020 due to the COVID-19 pandemic. Many fundamentally strong stocks were beaten down during that period, only to rebound strongly in the subsequent months. Value investors aim to capitalize on such short-term market fluctuations by purchasing stocks at attractive prices and holding them until their value is recognized by the market.

Both growth investing and value investing strategies have their merits, and different investors may prefer one approach over the other based on their investment goals, risk tolerance, and market outlook.

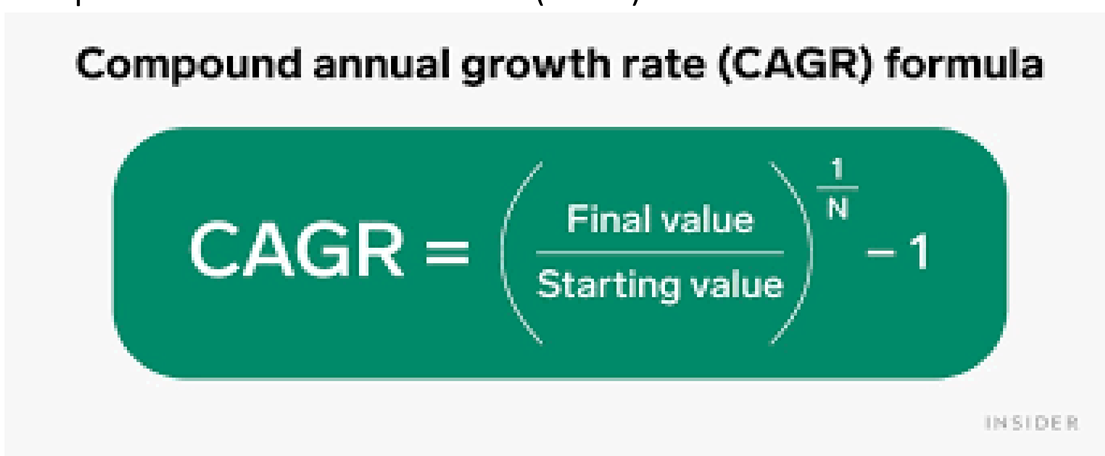
RETURNS CALCULATION

There are two general methods used to calculate the return obtained on a particular stock

1. Absolute Return



2. Compounded Annual Growth Rate (CAGR)-



COMMONLY USED TERMS

- Bull Market - A bull market is the condition of a financial market in which prices are rising or are expected to rise. Because prices of securities rise and fall essentially continuously during trading, the term "bull market" is typically reserved for extended periods in which a large portion of security prices are rising. Bull markets tend to last for months or even years.
- Bear Market - A bear market is when a market experiences prolonged price declines. It typically describes a condition in which securities prices fall 20%

or more from recent highs amid widespread pessimism and negative investor sentiment.

- Face value of a stock – The face value (FV) or par value indicates the nominal value of a share. The face value is important from a corporate action perspective. Usually, when dividends, stock splits, or bonuses are announced, they are issued, keeping the face value in perspective.
- 52-week high/low – 52-week high is the highest price point at which a stock has traded during the last 52 weeks (which also marks a full calendar year); likewise, a 52-week low marks the lowest price point at which the stock has traded during the last 52 weeks. The 52-week high and low gives a sense of the range within which the stock trades during the year.
- Upper and Lower Circuit – The exchange sets up a price band within which the stock can be traded on a given trading day. The highest price the stock can reach on the day is the upper circuit limit, and the lowest price is the lower circuit limit. The limit for a stock is set to 2%, 5%, 10%, or 20% based on the exchange's selection criteria.
- Intraday position – This is a trading position you initiate with an expectation to square off the position within the same day. For example, all short positions in stocks are intraday positions.
- OHLC – OHLC in stock prices refers to open, high, low, and close. We will understand more about this in the technical analysis module. For now, open is the price at which the stock opens for the day, high is the highest price at which the stock trade during the day, low is the lowest price at which the stock trades during the day, and close is the closing price of the stock.

KEY EVENT AFFECTING MARKETS

Not only company – specific information are required for being a good trader, outside events impact stocks and market in general. One need to keep up with these events and understand them to profit out from market. Some of these events are:

- Monetary policy- RBI uses the monetary policy to control the cash flow throughout the country. RBI controls the interest rate thus keeping inflation and growth in check. The monetary policy committee members meet regularly to review economic situation and then take major decisions regarding interest rate thus affecting stocks of various sectors. The major RBI rates are:

1. Repo Rate: The Repo Rate is the rate at which banks can borrow funds from the Reserve Bank of India (RBI). A higher Repo Rate means the cost of borrowing is high, which can lead to slower economic growth. Markets are generally not in favor of RBI increasing the Repo Rate as it can dampen economic activity.

2. Reverse Repo Rate: The Reverse Repo Rate is the rate at which RBI borrows money from banks. When banks park their funds with RBI at a lower rate, it reduces the money supply in the banking system. An increase in the Reverse Repo Rate tightens the money supply in the economy, and it is not considered beneficial for economic growth.

3. Cash Reserve Ratio (CRR): CRR is the portion of funds that banks are required to maintain with RBI. If the CRR increases, more money is held back from the mainstream economy, which can have negative implications for economic growth.

- Inflation- According to IMF (International Monetary Fund), Inflation is the rate of increase in prices over a given period of time. Inflation decides the cost of living in a country. There are two inflation indices – The Wholesale Price Index (WPI) and Consumer Price Index (CPI).

- Index of Industrial Production (IIP)- The Index of Industrial Production (IIP) is a short-term indicator of the country’s industrial sector’s progress. The data is released every month (along with inflation data) by the Ministry of Statistics and Programme Implementation (MOSPI). As the name suggests, the IIP measures the Indian industrial sectors’ production, keeping a fixed reference point. If the IIP increases, it indicates a vibrant industrial environment (as the production is going up) and hence a positive sign for the economy and markets. A decreasing IIP indicates a sluggish production environment, hence a negative sign for the economy and markets.

- Purchasing Managers Index (PMI)- The Purchasing managers' index (PMI) is an economic indicator that tries to capture business activity across the country's manufacturing and service sectors. This is a survey-based indicator where the respondents – usually the purchasing managers- indicate their business perception change concerning the previous month. A separate survey is conducted for the service and manufacturing sectors. The data from the survey are consolidated on a single index. Typical areas covered in the survey include new orders, output, business expectations, and employment.

  The PMI number usually oscillates around 50.

- Budget - A Budget is an event during which the Ministry of Finance discusses the country's finance in detail. The Finance Minister, on behalf of the ministry, makes a budget presentation to the entire country. During the budget, major policy announcements and economic reforms are announced, which impacts various industries across the markets. Therefore the budget plays a vital role in the economy.

Technical Analysis

Technical Analysis is a research technique to identify trading opportunities in the market based on market participants' actions. The actions of market participants can be visualized in stock charts. Over time, patterns form in these charts, and each pattern conveys a certain message. The job of a technical analyst is to identify these patterns and develop a point of view

Technical analysis is generally used by short term traders. Long term investors cannot use technical analysis as it becomes unreliable. People who use technical analysis are called technical analysts and are often abbreviated as TA. These Ta are always short-term traders. They have very short holding period going to maximum to weeks. Even the return per trade is often low as the holding period is short.

As the technical analysis is based on pattern and charts of the stock the trader does not need to have any knowledge of the commodity the stock deals with. A TA can deal in agricultural company and IT firm at same time by looking at their trading chart.

Assumptions for technical analysis

A person doing technical analysis does the trade just by observing the trade pattern over time. For doing technical analysis, a trader takes the following assumption:

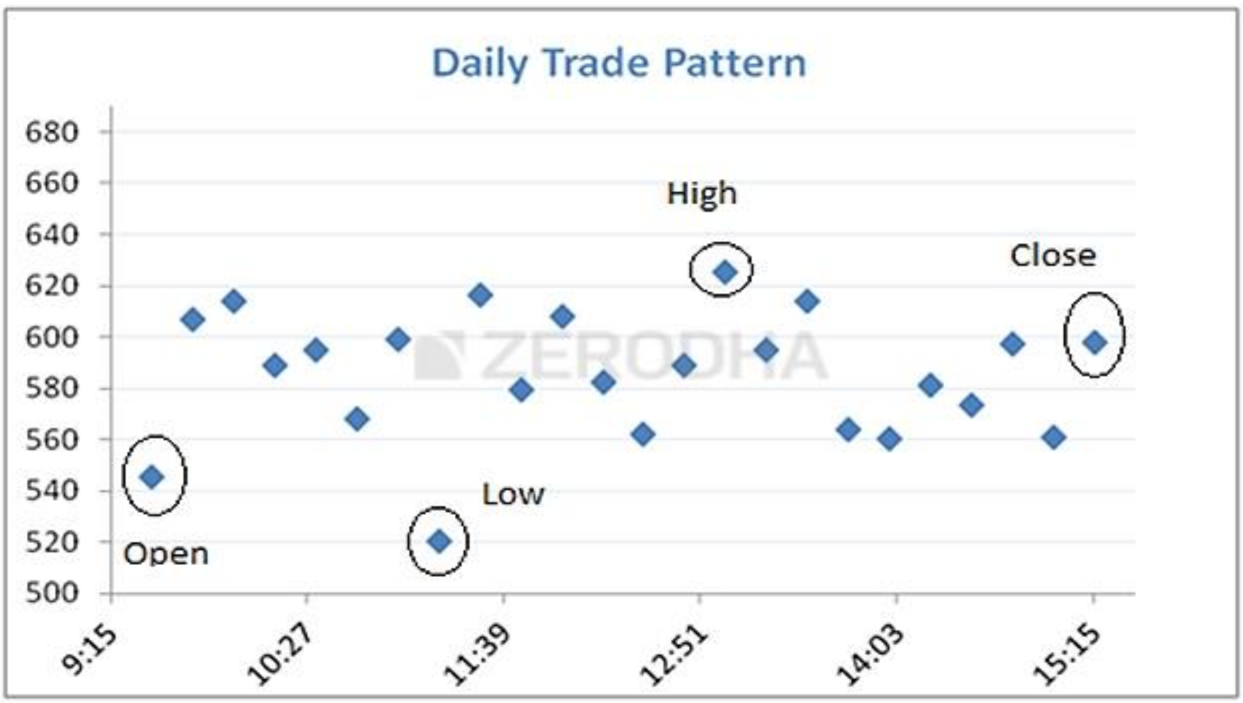
1. Markets Discount Everything: This assumption states that all relevant information, whether publicly available or not, is already reflected in the current market price of a security. Technical analysts do not concern themselves with the reasons behind price movements but focus on analyzing price patterns and trends.
2. The 'How' is More Important than the 'Why': Technical analysts are primarily interested in understanding how prices have moved and are currently moving, rather than trying to understand the fundamental reasons behind these price movements. They believe that price patterns and trends contain valuable information to make trading decisions.
3. Price Moves in Trends: Technical analysis is built on the idea that price movements tend to follow trends. A trend is a sustained and general direction in which the price of a security is moving. Once a trend is established, it is more likely to continue than to reverse.
4. History Tends to Repeat Itself: This assumption suggests that past price patterns and behaviors tend to repeat in the future. Human psychology and behavior drive market participants to react similarly to certain price movements, creating recognizable patterns that technical analysts use to predict future price movements.

Understanding OHLC in detail and candlestick

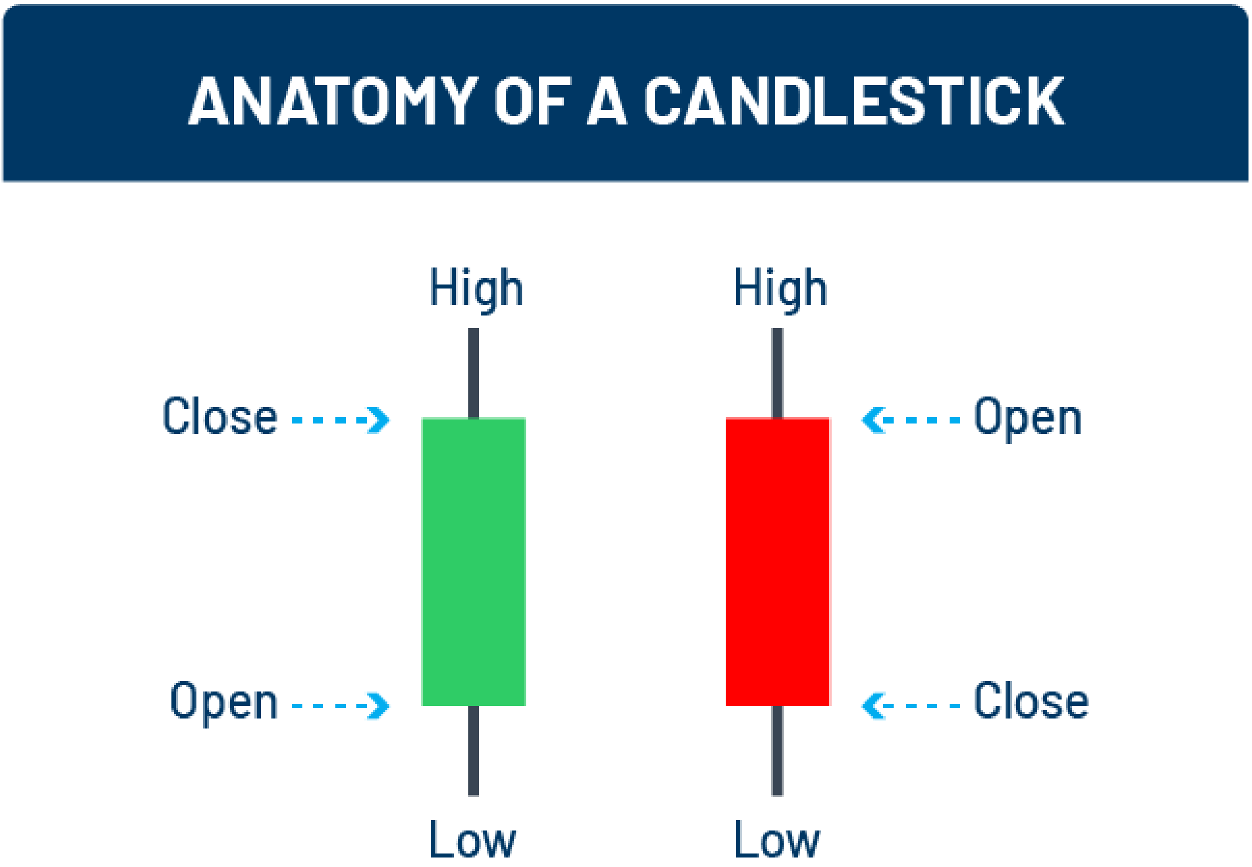
The Indian stock market is open from 9:15 AM to 03:30 PM. During the 6 hours 15-minute market session, millions of trades occur. Think about an individual stock

– every minute, a trade gets executed on the exchange. So in order to keep the track of whole trade one can look at OHLC.

- Open Price – When the markets open for trading, the first price a trade executes is called the opening price.
- The High Price – This represents the highest price at which a trade occurred for the given day.
- The Low Price – This represents the lowest price at which a trade occurred for the given day.
- The Close Price – This is the most important price because it is the final price at which the market closes for the day.



A candlestick is a type of price chart used in technical analysis that displays the high, low, open, and closing prices of a security for a specific period. It originated from Japanese rice merchants and traders to track market prices and daily momentum hundreds of years before becoming popularized in the United States.



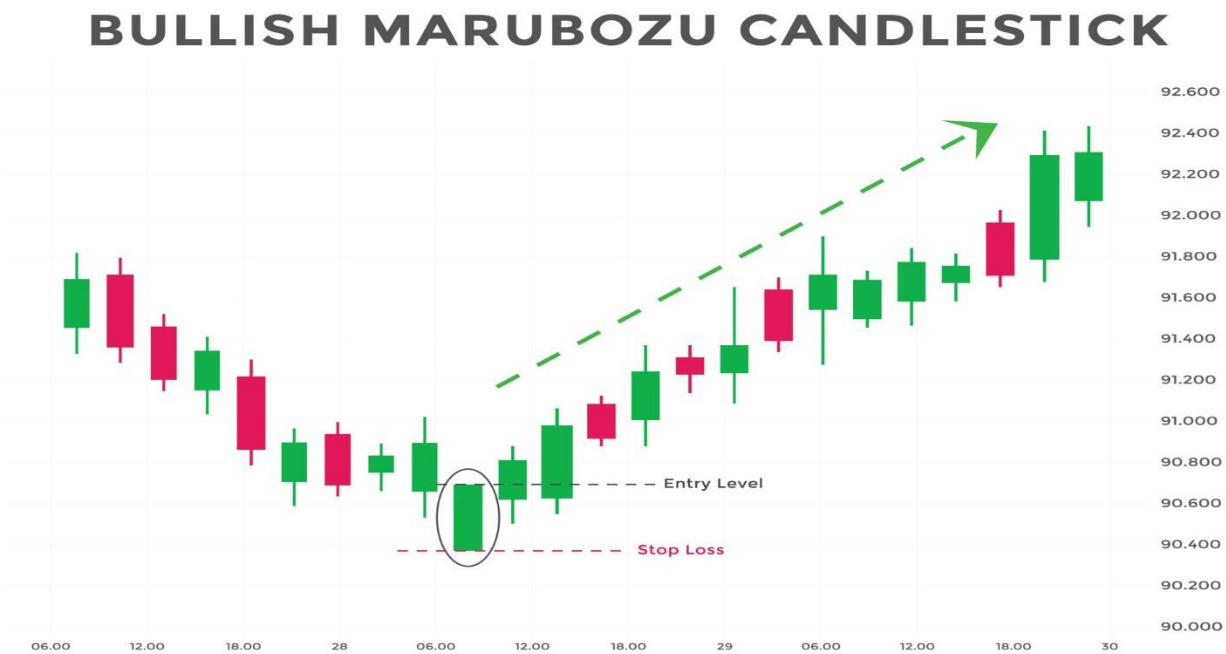
Green candle represents that the closing price was higher than opening price whereas red candle represents that opening price was higher than closing price.

The candlesticks are used to identify trading patterns. Patterns, in turn, help the technical analyst to set up a trade. The patterns are formed by grouping two or more candles in a certain sequence.

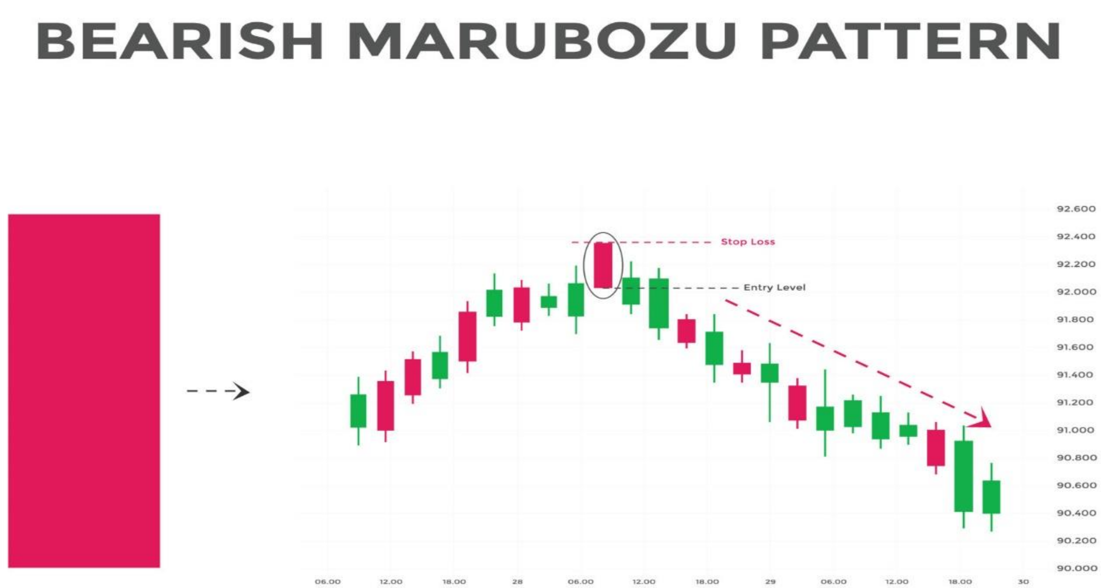
Single candlestick Pattern

1. Marubozu

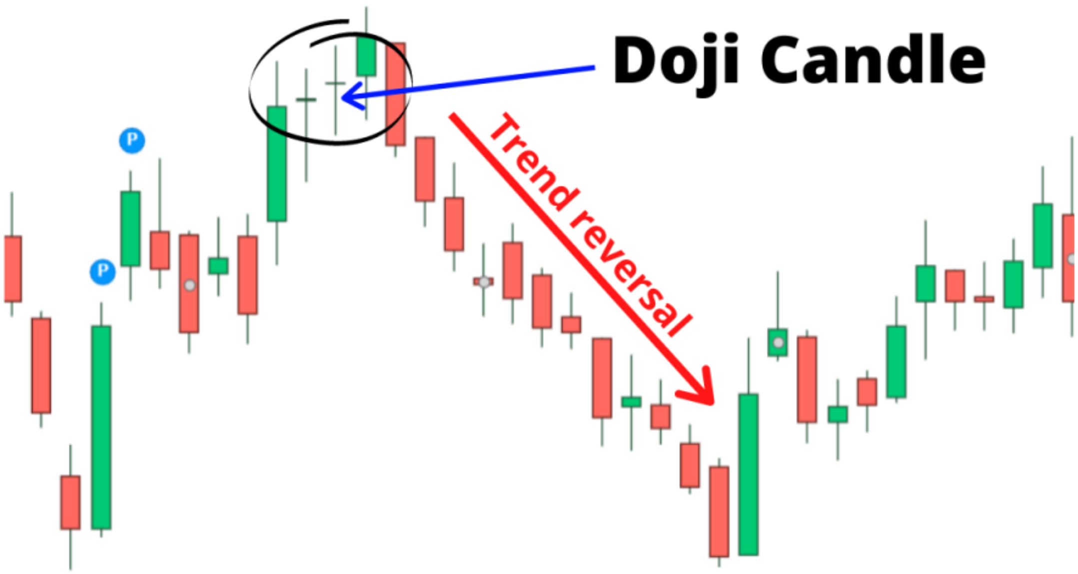
1) Bullish Marubozu



2) Bearish Marubozu



1) Doji



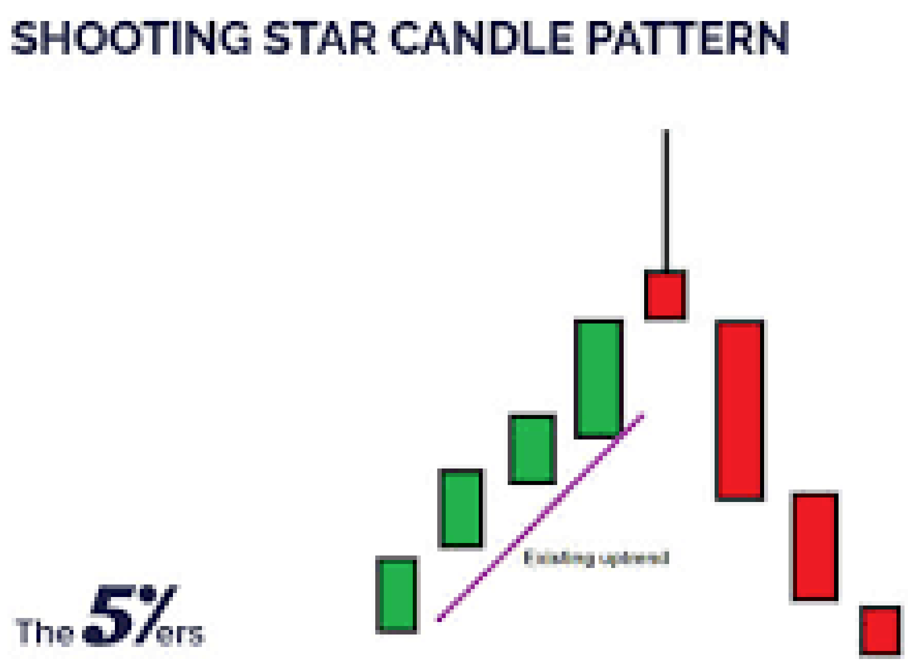
2) Spinning top

3) Paper umbrella

1) Hammer

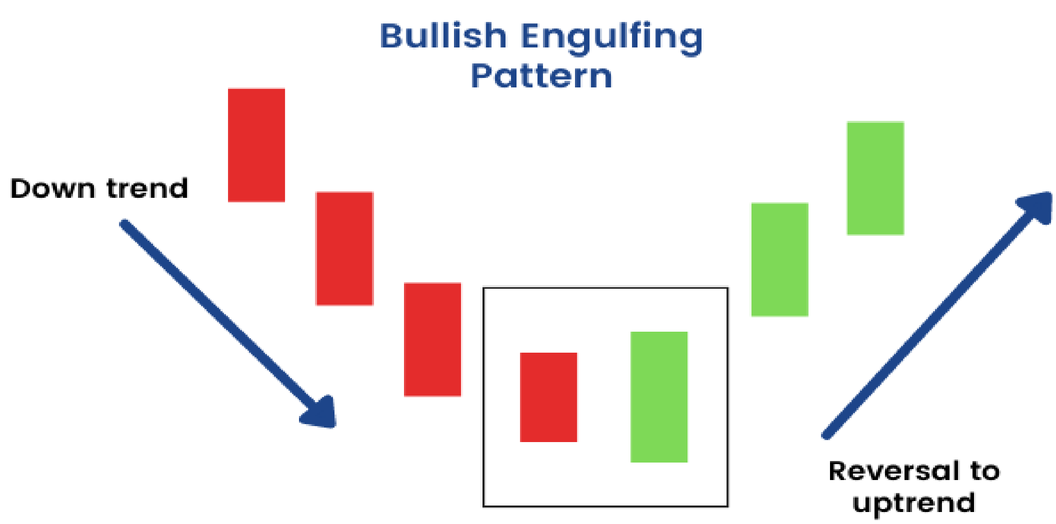
2) Hanging man

4) Shooting star

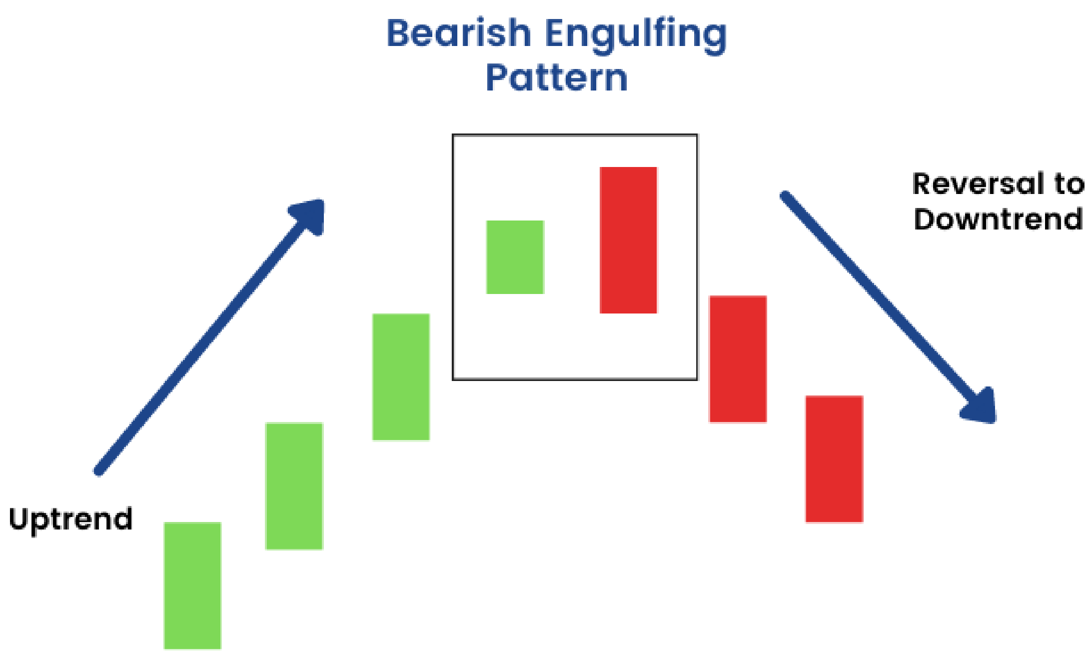


Multiple Candlestick patterns

1) Engulfing pattern
   a) Bullish Engulfing

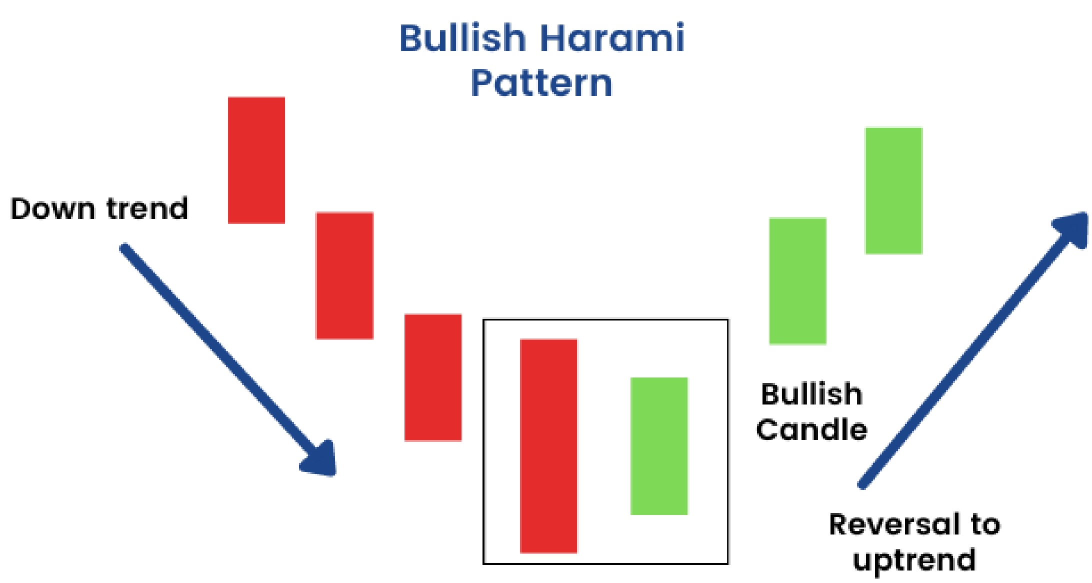


b) Bearish Engulfing pattern

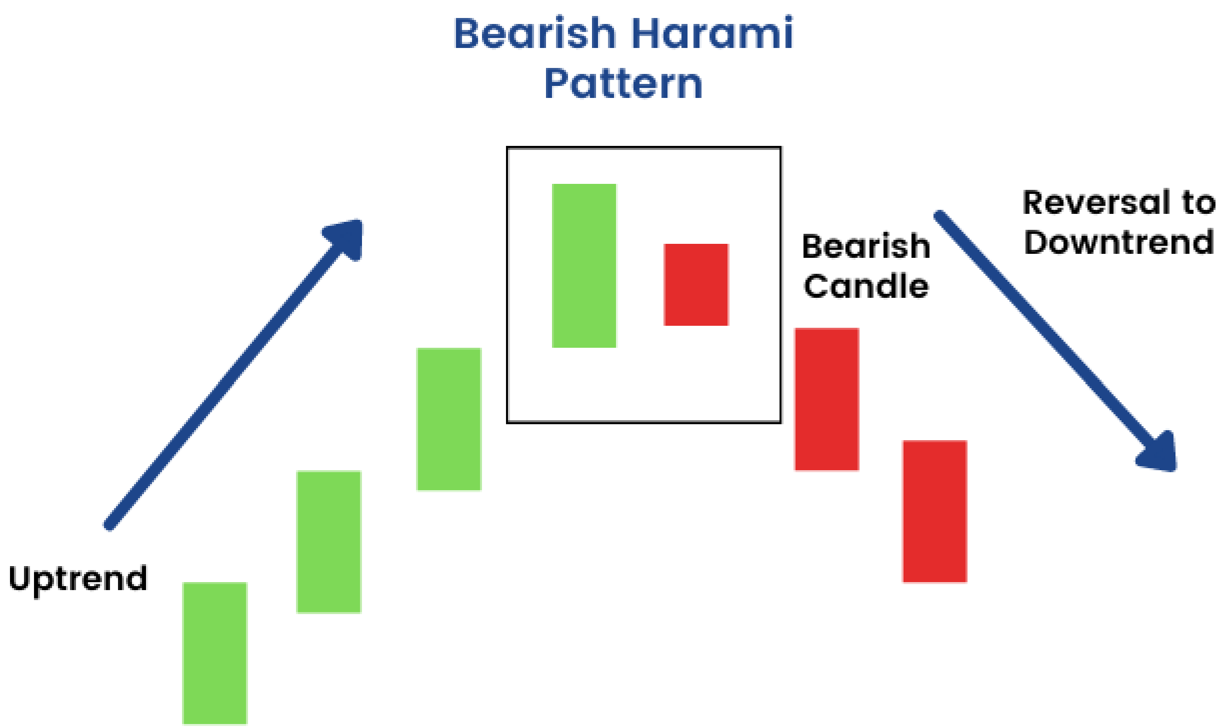


2) Harami

a) Bullish harami



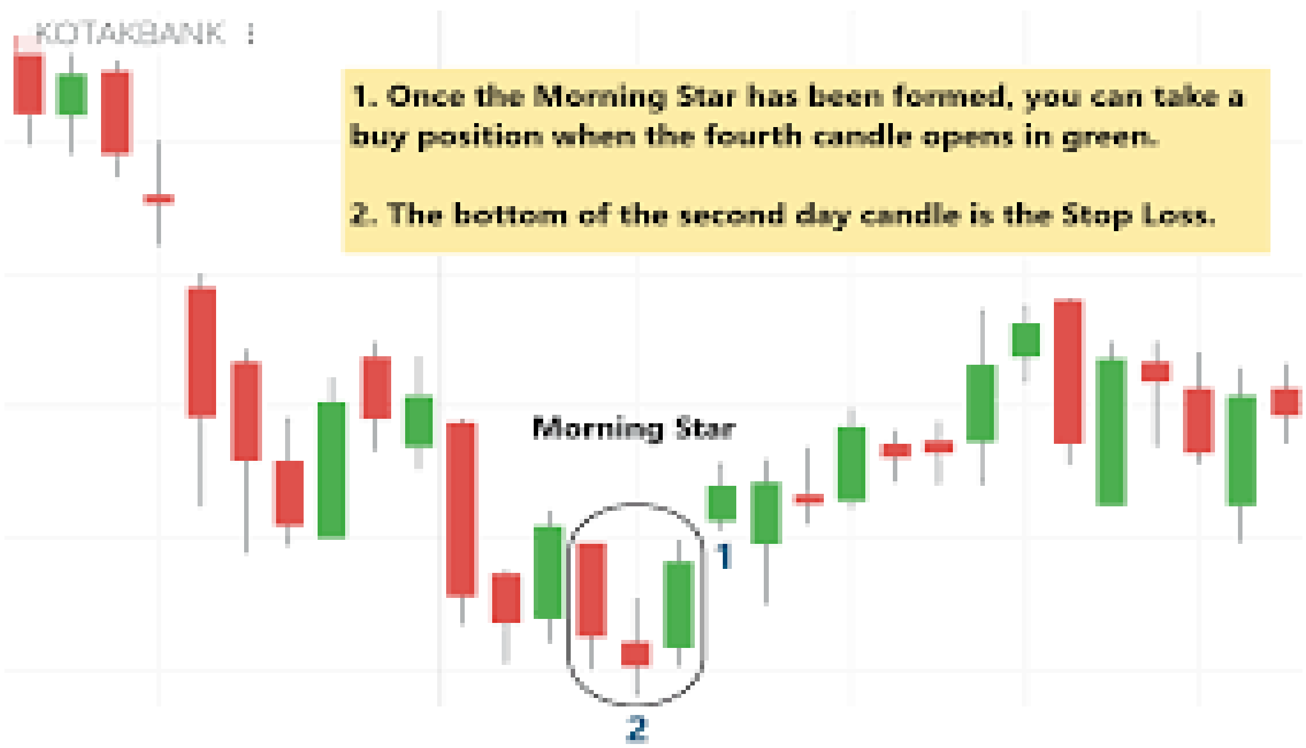
b) Bearish Harami



3) Piercing pattern

4) Dark cloud cover

5) Morning star



6) Evening star

Candlesticks portray the traders thought process. One should nurture this thought process as he dwells deeper into the candlestick study.

Indicators

Indicators are statistics used to measure current conditions as well as to forecast financial or economic trends.

In the world of investing, indicators typically refer to technical chart patterns deriving from the price, volume, or open interest of a given security.

In the context of technical analysis, an indicator is a mathematical calculation based on a security's price or volume, with the results used to predict future prices.

Indicator are divided into two parts:

1)Leading - A leading indicator leads the price, meaning it usually signals the occurrence of a reversal or a new trend in advance. While this sounds interesting, you should note, not all leading indicators are accurate. Leading indicators are notorious for giving false signals. Therefore, the trader should be highly alert while using leading indicators. In fact, the efficiency of using leading indicators increases with trading experience. Majority of leading indicators are called oscillators as they oscillate within a bounded range. Typically an oscillator oscillates between two extreme values.

2)Lagging-A lagging indicator lags the price; meaning it usually signals the occurrence of a reversal or a new trend after it has occurred. One of the most popular lagging indicators is the moving averages.

Moving Average

The moving average (MA) is a simple technical analysis tool that smooths out price data by creating a constantly updated average price. The average is taken over a specific period of time, like 10 days, 20 minutes, 30 weeks, or any time period the trader chooses. There are advantages to using a moving average in your trading, as well as options on what type of moving average to use.

A moving average helps cut down the amount of noise on a price chart. Look at the direction of the moving average to get a basic idea of which way the price is moving. If it is angled up, the price is moving up (or was recently) overall; angled down, and the price is moving down overall; moving sideways, and the price is likely in a range.

In statistics, an average is a measure that represents the central value or typical value of a set of numbers. It is calculated by adding all the values in a dataset and then dividing that sum by the total number of data points. The formula for calculating the average (also known as the mean) is:

Average = (Sum of all values) / (Total number of values)

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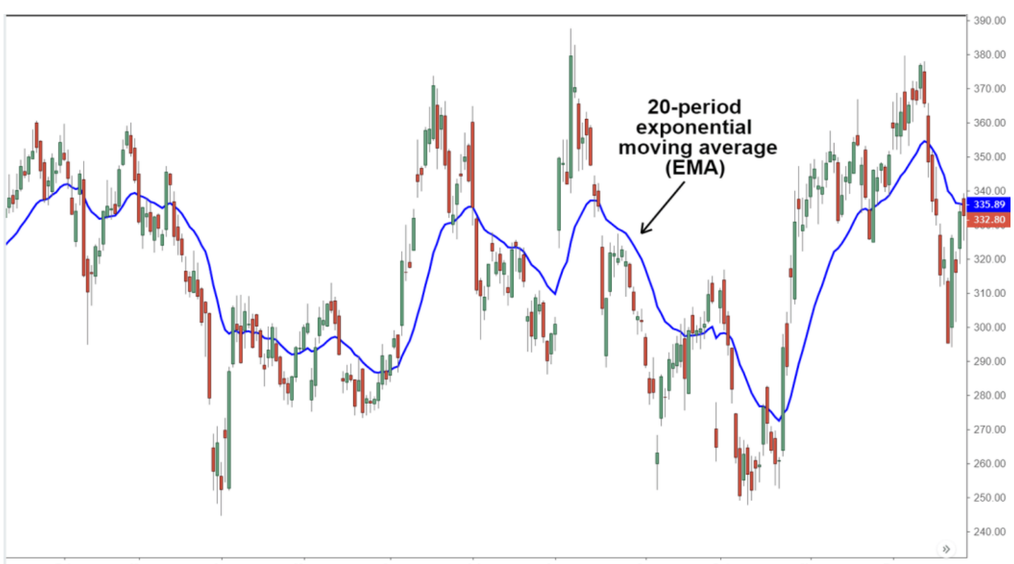
Average = (Sum of all values) / (Total number of values)

1. Simple Moving Average (SMA): The SMA is the average of a specified number of data points over a fixed time period. For example, a 10-day

SMA would be the average of the last 10 closing prices of a stock. As new data points are added, the oldest data points are dropped, and the window moves forward.

2. Exponential Moving Average (EMA): The EMA gives more weight to recent data points, making it more responsive to recent price changes. It assigns exponentially decreasing weights to previous data points, with the most recent data points having the highest weight. This results in the EMA being more sensitive to recent price movements compared to the SMA.



The moving average can be used to identify buying and selling opportunities with its own merit. When the stock price trades above its average price, it means the traders are willing to buy the stock at a price higher than its average price. This means the traders are optimistic about the stock price going higher. Therefore one should look at buying opportunities.

Likewise, when the stock price trades below its average price, it means the traders are willing to sell the stock at a price lesser than its average price. This means the traders are pessimistic about the stock price movement. Therefore one should look at selling opportunities.

Relative Strength Index

The Relative Strength Index (RSI) is a widely used technical indicator developed by J. Welles Wilder to assess the momentum of price movements in a financial asset. The RSI oscillates between a scale of 0 to 100, providing insights into the asset's overbought and oversold conditions. The RSI is calculated based on the average of price gains and losses over a specified period, typically 14 days.

Here's how the RSI works:

1. Range and Interpretation: The RSI ranges from 0 to 100. A reading above 70 is traditionally considered overbought, implying that the asset's price has risen too quickly and may be due for a correction. Conversely, a reading below 30 is considered oversold, suggesting that the asset's price has declined rapidly and may be poised for a potential rebound.

2. Divergences and Failure Swings: Traders often use RSI to identify divergences between the indicator and the price chart. A bullish divergence occurs when the RSI makes higher lows while the price makes lower lows, signaling a potential trend reversal to the upside. On the other hand, a bearish divergence occurs when the RSI makes lower highs while the price

makes higher highs, indicating a possible trend reversal to the downside. Failure swings, which are also used for potential trend reversals, occur when the RSI fails to reach overbought or oversold levels during a subsequent price swing.

3. General Trend Identification: The RSI can also be used to identify the general trend of the asset. When the RSI is consistently above 50, it suggests a prevailing uptrend, and when it remains below 50, it indicates a downtrend. This can help traders align their strategies with the overall market direction.

The RSI is a versatile indicator that can be applied to various timeframes and assets, including stocks, forex, commodities, and cryptocurrencies. However, it is essential to use the RSI in conjunction with other technical indicators and analysis methods for comprehensive market insights. Additionally, traders should exercise caution when interpreting RSI signals, as no indicator is foolproof, and market conditions can change rapidly.

Cons of technical analysis

While technical analysis is a widely used approach for analyzing financial markets, it has its share of drawbacks and limitations. Some of the cons of technical analysis include:

1. Subjectivity: Technical analysis heavily relies on chart patterns, trend lines, and other visual cues, which can be subjective and interpreted differently by different analysts. This subjectivity can lead to inconsistent conclusions and potential biases in decision-making.

2. Historical Data Focus: Technical analysis primarily uses historical price and volume data to predict future price movements. However, past performance may not always accurately predict future outcomes, especially in rapidly changing market conditions or during unexpected events.

3. No Consideration of Fundamental Factors: Technical analysis disregards fundamental factors such as a company's financial health, earnings, or macroeconomic conditions. Ignoring these critical factors can lead to incomplete market analysis.

4. Limited Forecasting Ability: While technical analysis can identify trends and potential entry or exit points it may not provide comprehensive forecasting or predictive capabilities. It may struggle to predict major market events or sudden changes in trends.

5. False Signals: Technical indicators, such as moving averages and oscillators, can generate false signals, leading to inaccurate trade decisions. Traders may enter or exit positions based on these signals, only to experience unexpected reversals.

6. Market Manipulation: Technical analysis assumes that market participants act rationally and without bias. However, markets can be influenced by various factors, including market manipulation, which can disrupt the effectiveness of technical indicators.

7. Time-Consuming: Performing technical analysis requires significant time and effort, especially for manual charting and analysis. For traders and investors with limited resources, this can be a challenging task.

8. Overfitting and Data Mining Bias: In the quest for finding profitable patterns, there is a risk of overfitting, where historical data is analyzed to find patterns that may not be significant in the future. This data mining bias can lead to ineffective trading strategies.

9. Emotion-Based Trading: Some traders may solely rely on technical indicators without considering their emotions or risk tolerance. Emotional decision-making can lead to impulsive trades and increased risk exposure.

In conclusion, while technical analysis can provide valuable insights into market trends and price movements, it is essential to use it in conjunction with other forms of analysis, such as fundamental analysis, and exercise caution when interpreting signals. Combining multiple approaches can help investors make more informed and well-rounded decisions in the financial markets.

Fundamental Analysis

As studied Technical analysis can be used only for short term traders, so when long term investors (3-5 years) use fundamental analysis. It is critical for an investor to separate the daily short-term noise in the stock prices and concentrate on the underlying business performance. Over the long term, a fundamentally strong company's stock prices tend to appreciate, thereby creating wealth for its investors.

Some company with high 5-Y CAGR (compounded annual growth return) are:

1. Linde India Ltd
2. J B Chemicals and Pharmaceuticals Ltd
3. Tata Elxsi Ltd
4. KPR Mill Ltd.
5. Bajaj Finance Ltd

As a fundamental analyst one need to understand that a company stock promising long term benefits may go down in relative short time but one need to focus on long term benefits ignoring the daily noise of market.

A fundamental analyst looks the market at a different mindset compared to a technical analyst. Fundamental analyst needs to go through deep research into a company and the environment around that sector to create profit through it. A fundamental analyst goes through the financial numbers and consider many metrics to come to a conclusion.

Some of such quantitative aspects are:

1. Profitability and its growth
2. Margins and its growth
3. Earnings and its growth
4. Matters related to expenses
5. Operating efficiency
6. Pricing power
7. Matters related to taxes
8. Dividends payout
9. Cash flow from various activities
10. Debt – both short term and long term

11. Working capital management
12. Asset growth
13. Investments
14. Financial Ratios

And the list goes on.

One has to go through some qualitative aspect which are non-numeric aspects to reach a better level understanding of a company and its future.

Qualitative Aspects

To get a good qualitative analysis of a company one has to dive into the management's background, ethical practices, corporate governance, treatment of minority shareholders, and various aspects related to the company's financial activities and affiliations. Let's summarize these factors:

1. Management's Background: This includes evaluating the qualifications, experience, and track record of the company's management team. Any criminal cases or unethical behavior associated with the promoters can raise red flags.

2. Business Ethics: Assessing whether the management is involved in any scams, bribery, or unfair business practices is essential to understand the ethical standards of the company.

3. Corporate Governance: Examining the company's governance practices, including the appointment of directors, organizational structure, and transparency in financial reporting, helps determine the company's commitment to fair and accountable management.

4. Treatment of Minority Shareholders: Understanding how minority shareholders are treated and whether their interests are considered while making corporate decisions is crucial for assessing the company's commitment to shareholder rights.

5. Share Transactions: Monitoring whether the management is involved in undisclosed share transactions or deals with promoter groups can provide insights into their confidence or lack thereof in the company's prospects.

6. Related Party Transactions: Investigating whether the company engages in related party transactions, where financial favors are extended to the promoters' relatives, friends, or vendors, at the expense of shareholder funds, is important for transparency and fairness.

7. Promoters' Salaries: Assessing the remuneration paid to promoters, especially if it appears disproportionate to the company's profits, can indicate whether the management prioritizes personal gains over the company's well-being.

8. Operator Activity in Stocks: Observing unusual price behavior in the company's stock, especially during periods of promoter transactions, can be an indicator of potential market manipulation.

9. Significant Shareholders: Identifying significant shareholders with ownership stakes above 1% provides insights into the company's ownership structure and potential influence.

10. Political Affiliation: Understanding the company's or promoters' political affiliations and dependencies is crucial, as it can impact the business's stability and operations.

11. Promoter Lifestyle: Assessing the promoters' lifestyle and their public display of wealth can provide insights into their financial discipline and dedication to the business.

These factors are part of the due diligence process that investors and analysts undertake when evaluating a company's fundamental attributes and overall investment potential. Proper consideration of these factors helps in making well-informed decisions and mitigating potential risks associated with investments in the company's securities.

Annual Report of a Company

As a part of quantitative analysis the annual report plays a crucial role in inspecting a company and keeping a check on its progress. The annual report (often abbreviated as AR) is published on the end of a financial year and is made available on the company's web site as a pdf file.

Potential investors and the present shareholders are the primary audiences for the annual report. Annual reports should provide the most pertinent information to an investor and communicate its primary message. For an investor, the annual report must be the default option to seek information about a company.

Annual report of a well-established company might be as long as 400 pages and make it quite tedious to be well thorough with whole AR so one go through some specific sectors to get the required idea.

- Management Discussion and Analysis-In the 'Management Statement' section, the chairman or top management typically addresses shareholders, stakeholders, and the broader audience. They often discuss the company's achievements, challenges faced, and strategies moving forward. Investors can gauge the management's communication style, transparency, and alignment with the company's performance and reality.
- The 'Management Discussion & Analysis' (MD&A) section delves deeper into the company's financial and operational performance, significant events, risks, opportunities, and future outlook. This section provides more detailed insights into the management's assessment of the company's performance and its vision for the future.

- The annual report includes a series of other reports such as – Human Resources report, R&D report, Technology report etc. Each of these reports is important in the context of the industry the company operates in. For example, if I am reading through a manufacturing company annual report, I would be particularly interested in the human resources report to understand if the company has any labor issues. If there are serious signs of labor issues, it could lead to the factory being shut down, which is not good for its shareholders.

Financial aspect of the annual report consists of the following reports:

1. The Profit and Loss statement-A profit and loss statement (P&L), or income statement or statement of operations, is a financial report that provides a summary of a company's revenues, expenses, and profits/losses over a given period of time. The P&L statement shows a company's ability to generate sales, manage expenses, and create profits. It is prepared based on accounting principles that include revenue recognition, matching, and accruals, which makes it different from the cash flow statement.

Company XYZ Ltd.
Profit and Loss Statement
For the Month Ending on 31st June, 2019

Particulars	Amount ($)	Amount ($)
Revenues		
Sales	$100,000.00	
Scrap Sales	$9,000.00	
Interest Income	$4,000.00	
Total Revenues (A)		**$113,000.00**
Expenses		
Cost of Goods Sold	$60,000.00	
Rent	$5,500.00	
Wages	$15,000.00	
Depreciation	$7,700.00	
Utilities	$9,000.00	
Total Expenses (B)		**$97,200.00**
Net Income (A-B)		**$15,800.00**

2. The Balance Sheet -The term balance sheet refers to a financial statement that reports a company's assets, liabilities, and shareholder equity at a specific point in time. Balance sheets provide the basis for computing rates of return for investors and evaluating a company's capital structure.

   In short, the balance sheet is a financial statement that provides a snapshot of what a company owns and owes, as well as the amount invested by shareholders. Balance sheets can be used with other important financial statements to conduct fundamental analysis or calculate financial ratios.

Grande Corporation Balance Sheet at 31 December 20YY	*Figures in $1,000's*	
ASSETS		
Current Assets	9,609	
Long-Term Investments & Funds	1,460	
Property, Plant & Equipment	9,716	
Intangible Assets	1,222	
Other Assets	68	
Total Assets		22,075
LIABILITIES		
Current Liabilities	3,464	
Long-Term Liabilities	5,474	
Total Liabilities		8,938
OWNERS EQUITY		
Contributed Capital	3,464	
Retained Earnings	5,474	
Total Owners Equity		13,137
Total Liabilities and Equities		22,075

3. The Cash flow statement-The cash flow statement (CFS), is a financial statement that summarizes the movement of cash and cash equivalents (CCE) that come in and go out of a company. The CFS measures how well a company manages its cash position, meaning how well the company generates cash to pay its debt obligations and fund its operating expenses. As one of the three main financial statements, the CFS complements the balance sheet and the income statement.

Cash Flow Statement Company XYZ
FY Ended 31 Dec 2017
All Figures in USD

Cash Flow From Operations		
Net Earnings		2,000,000
Additions to Cash		
Depreciations		10,000
Decrease in Accounts Receivable		15,000
Increase in Accounts Payable		15,000
Increase in Taxes Payable		2,000
Subtractions From Cash		
Increase in Inventory		(30,000)
Net Cash From Operations		2,012,000
Cash Flow From Investing		
Equipment		(500,000)
Cash Flow From Financing		
Notes Payable		10,000
Cash Flow for FY Ended 21 Dec 2017		**1,522,000**

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Financial Ratios

Ratio analysis is a quantitative method of gaining insight into a company's liquidity, operational efficiency, and profitability by studying its financial statements such as the balance sheet and income statement.

Investors and analysts employ ratio analysis to evaluate the financial health of companies by scrutinizing past and current financial statements. Comparative data can demonstrate how a company is performing over time and can be used to estimate likely future performance. This data can also compare a company's financial standing with industry averages while measuring how a company stacks up against others within the same sector.

Financial ratios can be ‘somewhat loosely’ classified into different categories, namely –

1. Profitability Ratios -The Profitability ratios help the analyst measure the profitability of the company. The ratios convey how well the company can perform in terms of generating profits. The profitability of a company also signals the competitiveness of the management. As the profits are needed for business expansion and to pay dividends to its shareholders, a company’s profitability is an important consideration.

   The following ratios are taken into consideration for profitability:

   1. EBITDA Margin (Operating Profit Margin)
      a. EBITDA Growth (CAGR)
   2. PAT Margin
      a. PAT Growth (CAGR)
   3. Return on Equity (ROE)
   4. Return on Asset (ROA)
   5. Return on Capital Employed (ROCE)

2. Leverage Ratios-The Leverage ratios also referred to as solvency ratios/ gearing ratios measures the company’s ability (in the long term) to sustain its day-to-day operations. Leverage ratios measure

the extent to which the company uses the debt to finance growth. Remember for the company to sustain its operations, it has to pay its bills and obligations. Solvency ratios help us understand the company's long-term sustainability, keeping its obligation in perspective.

We will be looking into the following leverage ratios:

1. Interest Coverage Ratio

Interest Coverage Ratio Formula

$$\text{Interest coverage ratio} = \frac{\text{Earnings before interest and tax}}{\text{Interest expense}}$$

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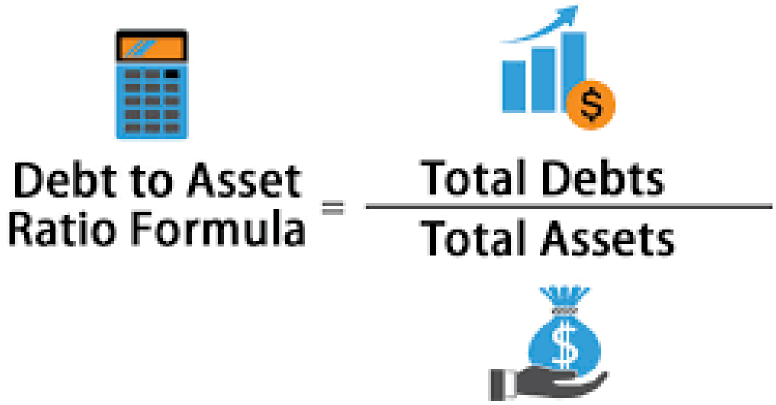
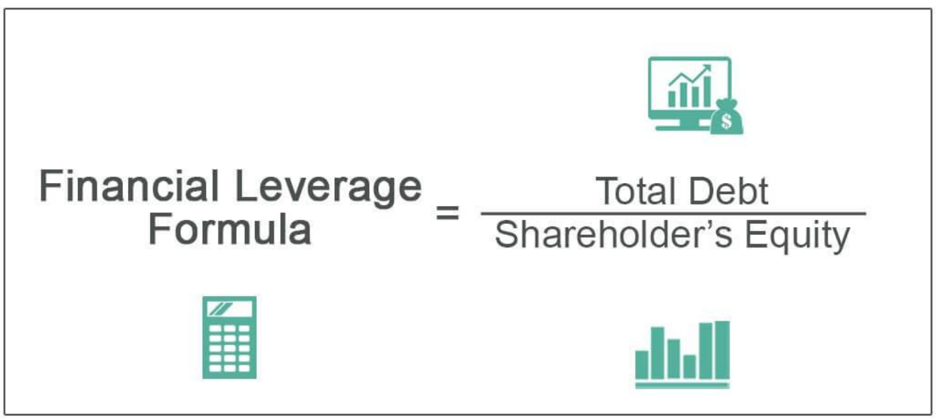
2. Debt to Equity Ratio

$$\text{Debt to Equity Ratio (D/E)} = \frac{\text{Total Debt}}{\text{Total Shareholders Equity}}$$

3. Debt to Asset Ratio



4. Financial Leverage Ratio

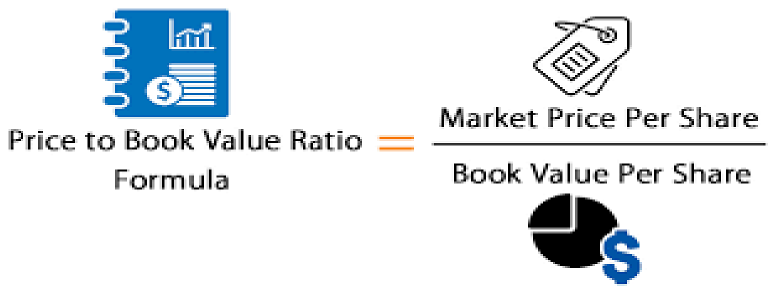


3. Valuation Ratios -The Valuation ratios compare the company's stock price with either the profitability of the company or the company's overall value to get a sense of how cheap, or expensive the stock is trading. Thus, this ratio helps us analyses whether the company's current share price is perceived as high or low. In simpler words, the valuation ratio compares the cost of security with the perks of owning the stock.

We will be looking at the following three important valuation ratios:

1. Price to Sales (P/S) Ratio

2. Price to Book Value (P/BV) Ratio



3. Price to Earnings (P/E) Ratio

4. Operating Ratios-The Operating Ratios also called the 'Activity Ratios' measures the efficiency at which a business can convert its assets (both current and noncurrent) into revenues. This ratio helps us understand how efficient the management of the company is. For this reason, Operating Ratios are sometimes called the 'Management Ratios'.

   Some of the popular Operating Ratios are:

1. Fixed Assets Turnover Ratio
2. Working Capital Turnover Ratio
3. Total Assets Turnover Ratio
4. Inventory Turnover Ratio
5. Inventory Number of Days
6. Receivable Turnover Ratio
7. Days Sales Outstanding (DSO)

Conclusion

In conclusion, combining both fundamental analysis and technical analysis can offer investors a comprehensive and robust approach to understanding financial markets and making informed investment decisions. Each strategy has particular advantages, and their combination enables a more complete evaluation of investment opportunities.

A thorough grasp of a company's financial situation, business prospects, competitive advantages, and industry dynamics is provided through fundamental analysis. Investors can use it to find assets that are cheap or overvalued, evaluate their potential for growth, and ascertain their long-term viability. Fundamental analysis aids in the rational and well-informed decision-making of investors by concentrating on the intrinsic worth of an asset.

Technical analysis, on the other hand, provides information on market sentiment, price trends, and possible short-term price fluctuations. It aids in the discovery of patterns, levels of support and resistance, and momentum indicators. Technical analysis assists in determining future trend reversals and entry and exit points by looking at past price and volume data.

Combining these two strategies enables investors to take advantage of each strategy's advantages while minimizing its flaws. Investors can get a deeper grasp of an asset's intrinsic worth by combining fundamental analysis, laying a strong foundation for long-term investing decisions. Technical analysis also aids in improving entry and exit points for better risk management while providing useful short-term signals.

It is crucial to understand that neither fundamental analysis nor technical analysis are perfect, and each methodology has its drawbacks. Making informed investment decisions therefore requires the use of both in addition to risk management techniques. By combining fundamental and technical research, investors may create an all-encompassing investing plan that takes into consideration both short- and long-term price fluctuations, promoting a more rational and well-informed decision-making process in the volatile world of financial markets.

Thank you