# Stock Markert Analysis

# End Term Report

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# 23B1025

# 26 July 2024

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# 1 Introduction to Stock Market

#### 1.1 Need to invest

In today's dynamic and ever-evolving economic landscape, the need to invest has never been more crucial. Investing is not just a pathway to growing one's wealth but a fundamental strategy for securing financial stability and achieving long-term financial goals.

There are various asset classes which people can choose to invest in:

#### • Fixed income instruments:

They include fixed deposits (FD), Bonds issued by the Government of India (also called G Sec bonds and T Bills), Bonds issued by Government related agencies such as GAIL, HUDCO, NHAI, etc & Bonds issued by corporate's (Tata, Bajaj, Reliance, Adani)

## • Equity:

It consists of buying shares of publicly listed companies. The shares are traded on the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE).

• Real Estate: Real Estate Investment involves transacting (buying and selling) commercial and non-commercial land. Typical examples include transacting in vacant plots, apartments, and commercial buildings. There are two income sources from real estate investments: Rental income and Capital appreciation of the investment amount.

#### • Commodity – Bullion:

Gold and silver are considered one of the most popular investment options.

Investment involves risk and return. While investing in fixed income seems less risky but returns are less when compared with investing in equities. Real

estate on the other hand requires great capital to invest and is not quite liquid.

One must have a diversified portfolio of asset classes according to his risk and return appetite.

# 1.2 What is Stock Market: Structure and Functions

#### 1.2.1 Defination:

The stock market is a marketplace where buyers and sellers engage in the trading of company shares, which represent ownership in public corporations. It serves as a platform for companies to raise capital by issuing stocks and for investors to buy and sell these stocks, aiming to generate returns on their investments. The stock market operates through a network of exchanges—such as the National Stock Exchange(NSE) and Bombay Stock Exchange(BSE)—where transactions are executed electronically or on trading floors. It plays a crucial role in the economy by facilitating the allocation of capital, providing liquidity, enabling price discovery, and reflecting the overall health of the economy through stock price movements.

#### 1.2.2 Market participants:

The stock market attracts individuals and corporations from diverse backgrounds. Anyone who transacts in the stock market is called a market participant. The market participant can be classified into various categories

- Domestic Retail Participants These are general public transacting in markets
- NRI's and OCI These are people of Indian origin but based outside India
- Domestic Institutions These are corporate entities in India Domestic Asset Management Companies (AMC) – Mutual fund companies like SBI Mutual Fund, HDFC AMC, Edelweiss, ICICI Pru, etc.

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Foreign Institutional Investors – Non-Indian corporate entities. These
could be foreign asset management companies, hedge funds, and other
investors.

## 1.2.3 Regulatory Body - SEBI:

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

#### 1.2.4 Market Intermediaries:

These are bodies which work to facilitate the transactions in market under the guidelines issued by **SEBI**.

#### • Stock Broker:

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.

It acts as an intermediary between investors and the stock market, facilitating the buying and selling of stocks and other securities. They provide critical services such as executing trades on behalf of clients, offering investment advice, and managing investment portfolios. Stock brokers also provide access to research reports, market data, and analytical tools to help investors make informed decisions. By ensuring that trades are conducted efficiently and accurately, stock brokers play a vital role in maintaining market liquidity and helping investors achieve their financial goals.

#### • Depository and Depository Participants:

When a person buys a stock, a digital certificate is issued in his name as the owner of the stock. This certificate is stored in the person's DE-MAT account. The body which provides DEMAT account services is called as **depository**. In India DMEAT account services are provided by The National Securities Depository Limited (NSDL) and Central Depository Services (India) Limited.

A depository participant (DP) acts as link between depository and

the person. It helps to set a DEMAT account with the depository. For eg. Zerodha is a DP.

## • NSE clearing Limited and ICCL:

NSE Clearing Limited and Indian Clearing Corporation (ICCL) are wholly owned subsidiaries of the National Stock Exchange and Bombay Stock Exchange, respectively.

The job of the clearing corporation is to ensure guaranteed settlement of your trades/transactions.

# 1.3 Trading a Stock

When a person wants to buy a stock he can login on his trading terminal and place a buy order. When a potential seller matches his demand a trade gets executed. The result of the trade is reflected on the DEMAT account of both the buyer and the seller.

The **holding period** is the period you intend to hold the stock. On the basis of holding period 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.
- 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.
- 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.

#### 1.4 Stock Market Index

A stock market index is a statistical measure that tracks the performance of a specific group of stocks representing a particular segment of the market. It provides a snapshot of market trends and overall economic health by reflecting the collective price movements of the selected stocks.

There are a few important indices in India. The S&P BSE Sensex represents

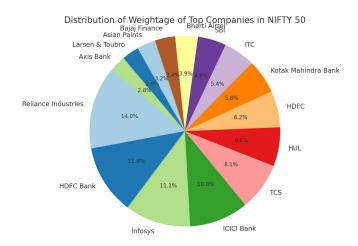
the Bombay stock exchange, and the Nifty 50 represents the National Stock exchange. Apart from these two, there is the Nifty Bank Index (Bank Nifty), which is quite popular. Bank Nifty represents the banking sector as a whole.

The indices are used for:

- Information- For eg. NIFTY was at 21884.50 points on 4rth June 2024 and as of 21st June it is at 23501.10.
- **Benchmarking-**A yardstick to measure the performance is required for all the trading or investing activity people do.
- **Trading-**Trading on the index is probably one of the most popular uses of the index. Majority of the traders in the market trade the index.
- Portfolio Hedging-While the stocks are held from a long-term perspective, they could foresee a prolonged adverse movement in the market (ex-2008), potentially eroding the capital in the portfolio. Investors can use the index to hedge the portfolio in such a situation.

The index construction methodology can be understood by following example.

The NIFTY 50 index is constructed using a free-float market capitalization-weighted methodology, selecting 50 of the largest and most liquid stocks listed on the National Stock Exchange (NSE) of India. The selection criteria include market capitalization, trading volume, and industry representation, ensuring a diverse and comprehensive reflection of the Indian market. The index is reviewed and rebalanced semi-annually to maintain its relevance, adding or removing stocks based on the latest data. This methodology ensures the NIFTY 50 accurately represents the performance of the Indian stock market's leading companies.



### 1.5 Some Technical Terms

The following terms are commonly used in Indian stock market:

- Bull Market (Bullish) If you expect the stock prices to go up, you are bullish on the stock price. From a broader perspective, if the stock market index is going up during a particular period, it is referred to as a bull market.
- Bear Market (Bearish) If you expect the stock prices to go down, you are bearish on the stock price. From a broader perspective, if the stock market index goes down during a particular period, it is referred to as a bear market.
- Long Position Long position or going long is a reference to the direction of your trade. For example, If you have bought the Nifty Index with an expectation that the index will trade higher, you have a long position on Nifty. You are considered bullish if you are long on a stock or an index.
- Short Position Shorting a stock involves selling borrowed shares with the expectation of buying them back later at a lower price. This strategy profits from a decline in the stock's value, as the difference between the sale price and the lower repurchase price results in a gain.

- Square Off Squaring off a trade refers to closing out an existing position in a financial instrument. It involves selling a previously bought asset or buying back a previously sold asset to offset the initial transaction, thereby locking in profits or cutting losses.
- 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. For eg. open 23,661.15; high 23,667.10; low 23,398.20; close 23501.10 of NIFTY 50 on 21st June .
- Volume- Volumes represent the total transactions (buy and sell put together) for a particular stock on a particular day .
- Limit Order- A limit order is an instruction to buy or sell a stock at a specific price or better. We can choose the price at which we want to trade.
- Market Order- A market order is an instruction to buy or sell a security immediately at the best available current price.
- Stop Loss Order- A stop-loss order is a risk management tool that automatically triggers a market order to sell a security if its price falls to a specified level, helping to limit potential losses.
- Cash and Carry(CNC)-Cash and carry refers to a trading strategy where an investor buys a stock in the cash (spot) market and simultaneously sells it in the futures market, aiming to profit from the price difference between the two markets over time.
- MIS-Margin Intraday Square-off, which is a trading segment in Indian stock markets where positions bought or sold during the day must be closed (squared off) before the market closes, typically to manage intraday risks and leverage.

# 2 Technical Analysis

Technical Analysis is a popular method to develop a point of view on markets. Besides, TA also helps in identifying entry and exit points. Technical Analysis visualizes the actions of market participants in the form of stock charts. Patterns are formed within the charts, and these patterns help a trader identify trading opportunities. TA works best when we keep a few core assumptions in perspective. TA is used best to identify short terms trades.

TA is based on a few core assumptions.

- 1. Markets discount everything
- 2. The how is more important than the why
- 3. Price moves in trends
- 4. History tends to repeat itself.

## 2.0.1 Types Of Charts

the Open (O), high (H), low (L), and close (C) serves as the best way to summarize the trading action for the given period. Conventional chart type cannot be used for technical analysis as we need to plot 4 data points simultaneously.

Below are some of the chart types:

1. **Line chart** - A line chart can be used to interpret trends, but no other information can be derived.



Figure 1: line chart

2. Bar Chart - Bar charts lack visual appeal, and one cannot identify patterns easily. For this reason, bar charts are not very popular.



Figure 2: single bar



Figure 3: Bar Chart

3. **Japanese Candlestick** - There are two types of candlesticks – Bullish candle and Bearish candle. The structure of the candlestick, however, remains the same. When close greater than open = It is a Bullish candle. When close less than open = It is a Bearish candle.

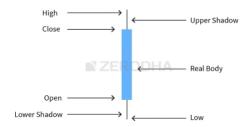


Figure 4: Single candle

### 2.0.2 Time Frame

.A time frame is defined as the time duration during which one chooses to study a particular chart. Some of the popular time frames that technical analysts use are:

- 1. Monthly Charts
- 2. Weekly charts
- 3. Daily or End of day charts
- 4. Intraday charts 30 Mins, 15 mins and 5 minutes

One can customize the time frame as per their requirement. For example, a high-frequency trader may want to use a 1-minute chart instead of any other time frame.

### 2.0.3 Candlestick Patterns

# Under the single candlestick pattern, following are important...

1. Marubozu - a candlestick with no upper and lower shadow

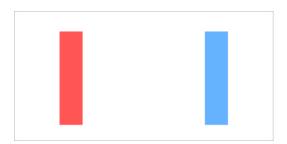


Figure 5: marabuzo

(a) Bullish Marubozu- buy arround closing price of bullish marabuzo while keeping it's low as stop loss.



Figure 6: bullish marabuzo



Figure 7: Bearish marabuzo

- (b) Bearish Marubozu- sell arround close of marabuzo while keeping high as stop loss.
- 2. Doji- conveys indecision in the market.

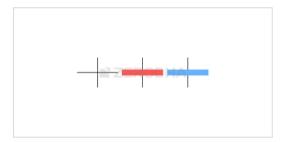


Figure 8: Doji

3. Spinning Tops- similar to doji it also convey indecision.



Figure 9: Spinning top

4. Paper umbrella-A paper umbrella has a long lower shadow and a small real body . They signify a trend reversal pattern.



Figure 10: Paper Umbrella

(a) Hammer-If the paper umbrella appears at the bottom end of a downward rally, it is called the 'Hammer'.



Figure 11: hammer

(b) Hanging man-If the paper umbrella appears at the top end of an uptrend rally, it is called the 'Hanging Man'.



Figure 12: Hanging man

5. Shooting star- It looks like upside down umbrella. The shooting star is a bearish pattern which appears at the top end of the trend. One should look at shorting opportunities when a shooting star appears.



Figure 13: Shooting Star

Multiple candlestick patterns are a combination of multiple candles. Under the multiple candlestick patterns, following are covered:

- 1. Engulfing pattern-It consists of two candles: a smaller candle followed by a larger one that completely engulfs the body of the smaller candle.
  - (a) Bullish Engulfing-In a bullish engulfing pattern, the larger candle is bullish, signaling a possible upward reversal after a downtrend.



Figure 14: Bullish engulfing

(b) Bearish Engulfing-in a bearish engulfing pattern, the larger candle is bearish, suggesting a potential downward reversal after an uptrend.



Figure 15: Bearish engulfing

2. Piercing Pattern-A piercing pattern is a bullish candlestick reversal pattern that appears after a downtrend. It consists of two candles: the first is a long bearish candle, followed by a long bullish candle that opens below the previous day's low but closes more than halfway up the body of the bearish candle. This pattern indicates a potential shift in market sentiment from bearish to bullish.



Figure 16: Piercing Pattern

3. Dark cloud cover-The dark cloud cover is a bearish candlestick reversal pattern that forms after an uptrend. It consists of two candles: the first is a long bullish candle, followed by a bearish candle that opens above the previous day's high but closes below the midpoint of the bullish candle. This pattern suggests a shift in market sentiment from bullish to bearish.



Figure 17: Dark cloud cover

4. Morning Star-A morning star is a bullish candlestick reversal pattern that typically emerges after a downtrend, indicating a potential shift to an upward trend. It consists of three candles: a long bearish candle, a small-bodied candle that gaps down, and a long bullish candle that opens above the small candle's body and closes well into the bearish candle's body. This pattern suggests diminishing selling pressure and increasing buyer interest, making it a significant signal for traders to consider entering long positions.



Figure 18: Morning star

5. Evening Star-An evening star is a bearish candlestick reversal pattern that signals a potential shift from an uptrend to a downtrend. It consists of three candles: a long bullish candle, a small-bodied candle that gaps up, and a long bearish candle that closes well into the bullish candle's body. This pattern indicates fading buying momentum and increasing selling pressure, making it a crucial signal for traders to consider entering short positions.



Figure 19: Evening Star

# 3 Update Plan of Action

My current standing of the topic is running behind the schedule with respect to my plan of action. However, I intend to catch up with the pending work in comming weeks. I have completed the introductory modules and focusing on doing personal finance first. I will be following the Zerodha varsity for reference.