

Stock Market Analysis

Shivam Patel

200070077

Mentor : Harshil Misra



Contents

1. Introduction to Stock Markets	1
2. Technical Analysis	6
3. Fundamental Analysis	8
4. Futures Trading	9
5. Options Theory	10
6. Markets and Taxation	14
7. Currencies	15
8. Commodities	17
9. A Case Study	23



1. Introduction to Stock Markets

The main motto of investing anywhere in any sphere of the financial world is to grow money. There can be many objectives of investing, such as ensuring a secured retired life, saving money for education, or buying a home etc. There are many places where people can invest money, where the risks, rewards, security of investment are different, and suited for people differently. The main types of investments are-

- **Fixed income instruments** – There are fully secured investment instruments, where monetary remuneration is earned in the form of fixed interest paid on the invested amount. They basically include fixed deposits by banks, bonds issued by the government and corporates etc. The reward ratios are generally about 7-10%.
- **Equity** – Investment in equity involves buying shares of a listed company in the BSE or NSE. By buying shares, you effectively earn a part of the company, and have the rights to company profits as dividends and company decisions.
- **Real Estate** – Investing in real estate involves buying property as finished residences, lands, etc. and the money is mainly earned from capital appreciation and rental income.
- **Commodity / Bullion** – Investments in commodities means investing in a physical and tangible instrument, such as gold, silver, other metals as well as natural resources like coal, fossil fuels or agricultural produce.

The main objective of this project is Stock Markets. Stock markets haven't always been the way we see them today. In the initial days, they were unregulated, and the result was the insecurity and defaulting tendency of investors, both buyers and sellers alike. But now, stocks are traded through government institutions like the **Bombay Stock Exchange(BSE)** and the **NSE(National Stock Exchange)** in India. These markets are regulated by the **SEBI (Securities Exchange Board of India)** which ensures that the markets work in a fair manner.

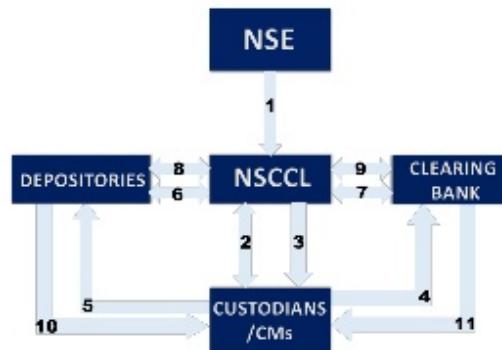
There are various intermediaries that are involved when you buy/sell a stock. First of all, you must have opened a DEMAT account with a DP(depository participant) and a trading account linked with a bank account with your trader. These are generally handled by the same broker, and the traders do not need to worry for them individually.

NSCCL – National Security Clearing Corporation Ltd and Indian Clearing Corporation are wholly owned subsidiaries of National Stock Exchange and Bombay Stock Exchange. They ensure that the trades and transactions are done centrally, leaving no room for

seller/buyer defaulting. They identify buyer seller pairs for a particular trade, making a trade possible.

Settlement process of NSE

1. Trade Details from Exchange to NSCCL
2. NSCCL notifies the consummated trade details to CMs/custodians who affirm back. Based on the affirmation, NSCCL applies multilateral netting and determines obligations
3. Download of obligation and pay-in advice of funds/securities
4. Instructions to clearing banks to make funds available by pay-in time
5. Instructions to depositories to make securities available by pay-in-time
6. Pay-in of securities (NSCCL advises depository to debit pool account of custodians/CMs and credit its account and depository does it).



Why do the Stock Markets exist?

All the markets in the world exist because of different viewpoints/ forecasts/ directions of different people on the same subject. In stock markets, stocks are traded because people have different thoughts on the direction of the stock prices in future. If person A thinks the stock price will go up, and person B thinks the stock prices will go down, then A and B can initiate a trade, in which only one of them makes profits from their own perspective, as the prices can go either up or down. B can sell stocks to A, as he thinks the prices might fall down and he might make a loss. Similarly A can buy stocks from B hoping that prices will go up and he will make profits.

Why do stock prices change?

Stock prices react to a variety of things, such as news regarding a sector or any specific company, or international events that might affect companies all around the world etc. Stock prices increase when people have a positive sentiment about the stock, and expect the company to make profits. Similarly stock prices decrease when there is a negative sentiment about the stock prices, impacting the company's returns. Stock prices increase when there are more buyers than sellers, making the demand- supply ratio in favour of the

seller, increasing the prices. Similarly, the stock prices decrease when there are more sellers than buyers.

How are profits calculated?

The most common way of calculating profits is comparing them to the investments made. Most often, the compounding earnings/profit formula is used on investments. The CAGR, or Compounded Annual Growth Rate is a convenient measure of this. It represents the yearly profits of the initial investment at the start of the year. It assumes that the profits made in any year are invested again with the original principle, to increase the earning even more next year, by the virtue of the effect of compounding.

$$\text{CAGR} = \left(\frac{V_{\text{final}}}{V_{\text{begin}}} \right)^{1/t} - 1$$

Classification of Traders by their trading activity

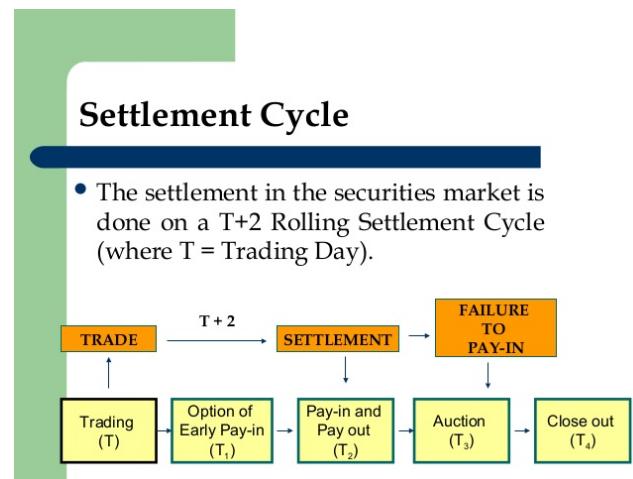
- **Day Trader** – A day trader initiates and closes the position during the day. He does not carry forward his positions. He is risk averse and does not indulge in taking overnight risks.
- **Scalper** – A scalper is a type of a day trader, but he holds his position for not more than 5–15 mins in a day. He usually trades large volumes of stocks, and makes his profit on even a small price change of the underlying.
- **Swing trader** – a swing trader is a type of trader who usually keeps his position over and above the daily trading session. He holds stocks and equities for a duration of days to weeks. He usually takes delivery of shares in his DEMAT account unlike the others mentioned above.

Stock Market Indices

Stock market indices give traders an overall image or a perspective about the directional motion of the market at any particular trading session. They are maintained by the stock exchanges in collaboration with credit rating service providers like CRISIL and S&P. The main indices in the Indian Stock Markets are – NIFTY 50, Sensex etc. These represent the overall movement in the market, which is calculated by taking into consideration the movements of particular stocks. Specific weightage is given to the stocks as per their sectoral and market share. Sector specific indices also exist.

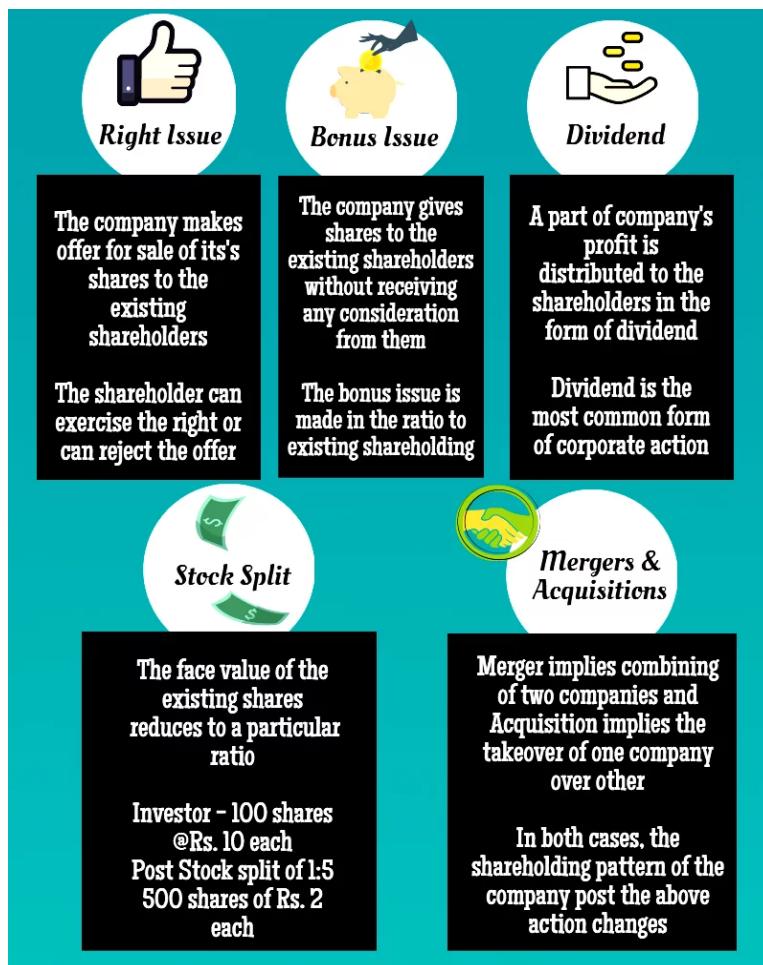
Settlement Process : T+2 format

In Indian stock markets, the T+2 settlement process is followed, as described below.



Corporate Actions -

There are 5 corporate actions pertaining to the stock markets -



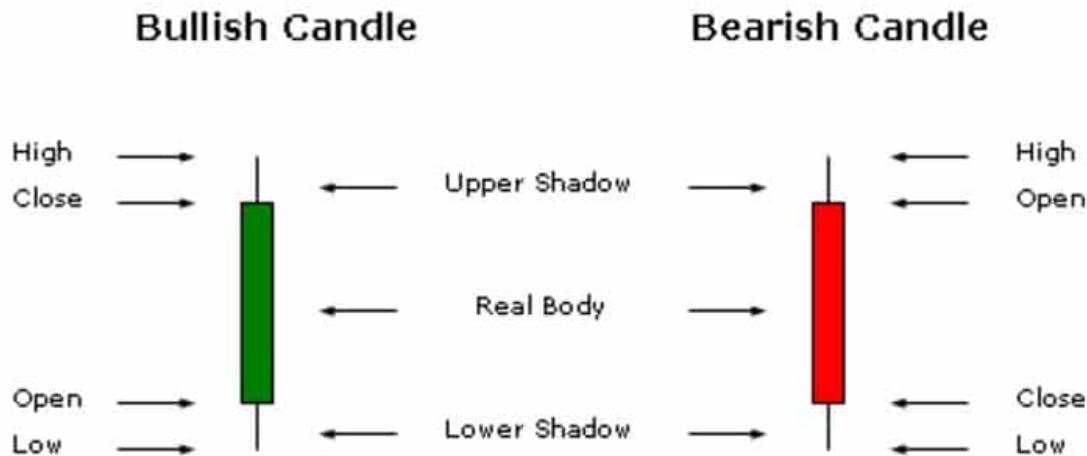
2. Technical Analysis

Technical analysis is the mathematically intense field of stock market prediction, where mathematical tools such as charts, averages, variance and covariance, convergence, derivatives, exponents etc. are used for setting trades. It helps traders in identifying entry and exit points. It is solely based on mathematics and historical data and performance of the stock. Patterns formed from charts are used to identify trading techniques and some assumptions regarding the behaviour of stock markets are kept in mind while doing so. It is best used to identify short term trades.

The assumptions that need to be kept in mind while doing TA are as follows –

- Stock prices reflect the conviction in the market
- Movement of prices is more important than the underlying cause
- Prices move in trend
- Stocks behave in a similar manner if put in similar conditions as have occurred previously

There are various types of charts, such as line charts, bar charts, candlestick charts etc. Most of the TA is focused on the Japanese Candlestick patterns.



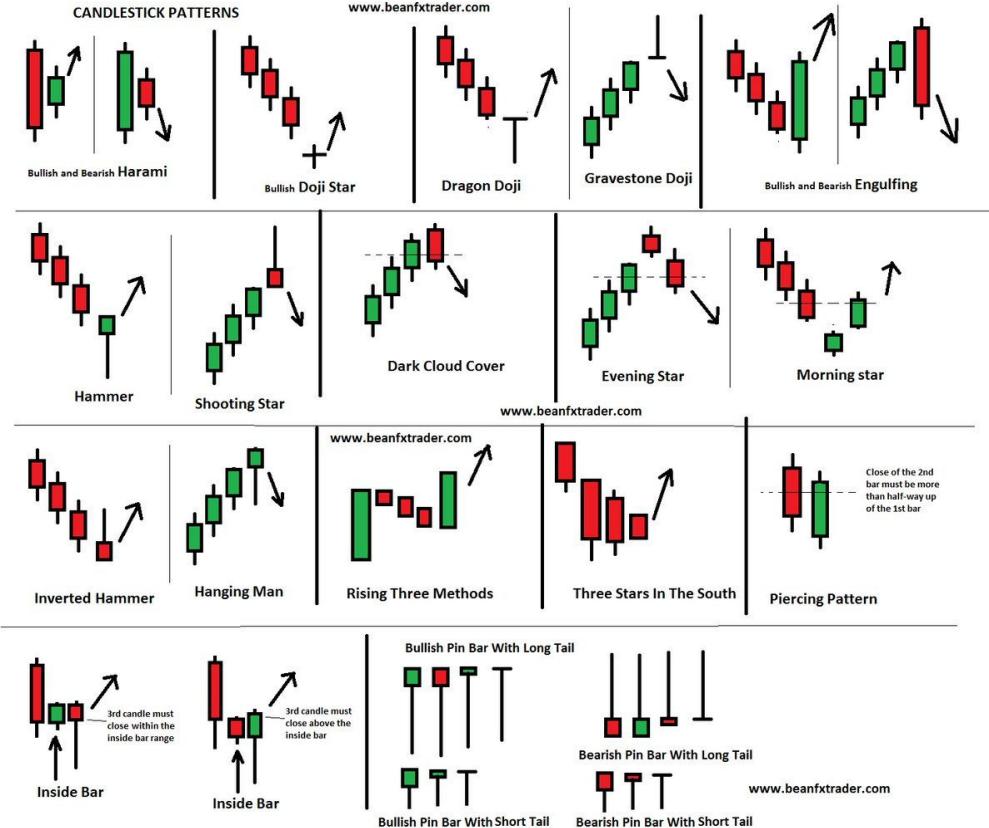
This is an example of a single candlestick, which is based on the OHLC(open, high, low, close) data of any trading session duration of interest. Multiple candlesticks over many trading sessions form a candlestick chart, through which various patterns can be identified, which can be a vital foresight for a trader for the upcoming trading sessions. The patterns can be single candlestick patterns, or multiple candlestick patterns. The accuracy of the prediction increases as the number of trading sessions over which the pattern is formed increases. The names and formations of such patterns are as follows –

The arrows indicate the predicted trends in the price of the stock under consideration.

Support and Resistance

These are price points on the price chart. These are time tested numbers which represent the direction in which stocks moved when they reached these values.

They are formed by drawing a horizontal line connecting at least three price action zones. Stock movement near the resistance shows selling interest, depicting that the prices might not grow more than the resistance. Similarly, support prices represent buying sentiment in market participants. A stock is likely to increase in value after hitting a support.



Moving Averages

As the name suggests, MA represents the averaged movement of the underlying in a span of multiple trading sessions. This time can be 9, 15, 21, 50, 200 days as per the analysis required. Simple MA represents the average of prices with equal weightage to all trading session prices in consideration, while the Exponential MA represents the weighted average with higher weightage given to more recent trading sessions. When the current market price is greater than the EMA, then there is a bullish outlook in the market, and vice versa.

There are various indicators derived from the moving averages discussed above, such as Moving Average Convergence Divergence(MACD) etc. Some other indicators such as the Relative Strength Index, Bollinger Bands, MACD crossovers etc. are also used by seasoned traders for establishing a trade.

3. Fundamental Analysis

Fundamental analysis is used for making long term investments. Smart investments backed by statistical reasoning provides a sound method for long term wealth creation. Any stock market participant can be classified as an investor or a trader. An investor's objective from market participation is to create long term profits. There are two types of FA, which are namely qualitative and quantitative. The annual report of any company is the best and the most reliable source for all the information that is required for FA. The AR not only represents the numbers and data, but also represents the reliability, accountability and the competence of the management running the company. The AR contains three financial statements –

- Balance Sheet
- Profit and Loss Statement
- Cash Flow Statement

There are various quantities in the AR, such as

- Profit Before/After Tax (PBT/PAT)
- Earnings Per Share – PAT / total number of outstanding shares
- Balance Sheet Equation – Assets = Liabilities + Shareholder's equity
- Current and noncurrent assets and liabilities

The main activities of a company are classified into three parts – Operating , Financial , and Investing Activities. The cash flow represents an accurate and detailed report of all the cash flowing in and out of the company whenever monetary activities are considered. There are some very useful ratios that determine the economic sustainability of the company in comparison to its market competitors. They are of four types –

- Profitability Ratios – EBIDTA Margin, PAT margin, Return on Equity/ Assets/ Capital Employed(ROE/ROA/ROCE)
- Leverage Ratios – Interest Coverage Ratio, Debt Coverage Ratio, Debt to Asset Ratio, Financial Leverage Ratio
- Operating Ratios – Fixed Assets Turnover Ratio, Working Capital Turnover Ratio, Total Assets Turnover Ratio, Inventory Turnover Ratio, Inventory Number of Days, Receivable Turnover Ratio, Days Sales Outstanding
- Valuation Ratio – Price to Sales Ratio (P/S), Price to Book Value Ratio(P/BV) and Price to Earning Ratio(P/E)

All these are mostly used in drawing comparisons between competing industries in the same sector. But the Discounted Cash Flow(DCF) method is used for actually determining the fair value of any stock, by taking into consideration the projected revenues of the company on the basis of previous results and returns.

4. Futures Trading

The futures trading contract is the regulated version of the forwards contract. The F&O markets are called no wealth creation markets as they do not generate wealth, but rather involve exchange of money between people having opposite perspectives of the market. The amount of profit made by some participants is exactly equal to the loss suffered by other participants.

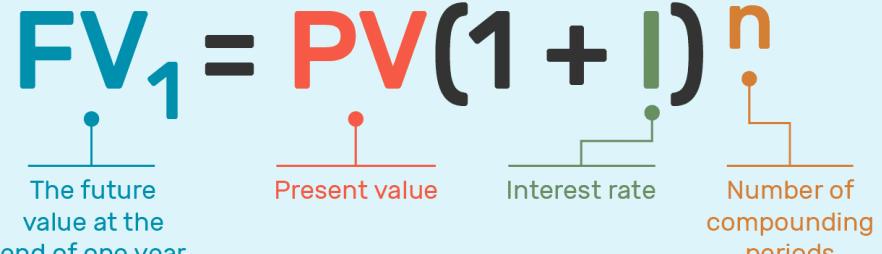
The futures market is **regulated by SEBI in India**. Initially there was cash settlement of contracts, but after 2018 a compulsory physical settlement format of F&O trading was introduced to prevent price manipulation by traders towards the expiry of the contract.

The futures do not trade in single shares, but rather in lots of the underlying stock. Buyers and sellers are expected to have a minimum amount of **Margin (SPAN+Exposure)** in their trading account to initiate a trade. **Open Interest** represents the total number of outstanding futures contracts in the market, representing the trading volume in some ways. The number of OI is not limited by the exchange, but is solely dependent on the trades(buy/sell) initiated by participants, unlike the equity markets. Futures trade over different time frames of 1, 2 or 3 months.

F&O trades are leveraged, meaning that buyers do not need the entire amount of the lot size value to buy it. Rather they only need a small margin demarcated in their trading account for doing so. This reduces the costs of trading, but affects the P&L greatly. Any small price fluctuation of the underlying can lead to huge percentage profits/losses in futures contracts. Indices can also be traded in the futures market, unlike the spot market.

The fair value of a futures contract is decided by a simple pricing formula, given as -

Calculating the Future Value of an Investment

$$FV_1 = PV(1 + I)^n$$


The diagram shows the components of the future value formula. It includes four colored dots (blue, red, green, orange) connected by lines to labels below them. The blue dot is labeled 'The future value at the end of one year'. The red dot is labeled 'Present value'. The green bar is labeled 'Interest rate'. The orange bar is labeled 'Number of compounding periods'.

If the futures prices are trading above the calculated value, then the contract is said to be trading **Premium or Contango**. Similarly, if the futures contract is trading below the fair value, it is said to be trading in a **Backwardation** situation.

5. Options Theory

Options are very similar to futures contracts in terms of the market outlook and trading benefits, except the entirely different trade setup. Options is a tool used to protect your position in the markets and minimize the risks. Options are of two types-

- Call option
- Put option

The buyer of the call option has the right to exercise the trade and the seller of the call options is obligated to do so. At the time of making an agreement, a certain amount of money is given to the seller of the contract as '**Premium**', which binds the seller to selling the underlying at a lower price than the CMP. The call option buyer benefits only if the price of the underlying increases above the **current price + premium**. Otherwise the trade is cancelled on the expiry date and the seller of the call option makes a profit equal to the premium paid. Statistically, the **options seller has more chances of making a profit**, but it is limited to the premium paid. Similarly , a put option buyer buys the option only if he thinks the prices are about to fall, binding the put option seller to buy the underlying at a higher price than the CMP if the buyer executes the trade.

There are some jargons associated with options which are as follows –

- **Strike Price** – It is the price at which the buyer and seller make an agreement
- **Exercising an option** is the act of claiming your right to buy/sell the underlying as per the agreement
- **Premiums** are paid to the contract seller to bind him to the trade.

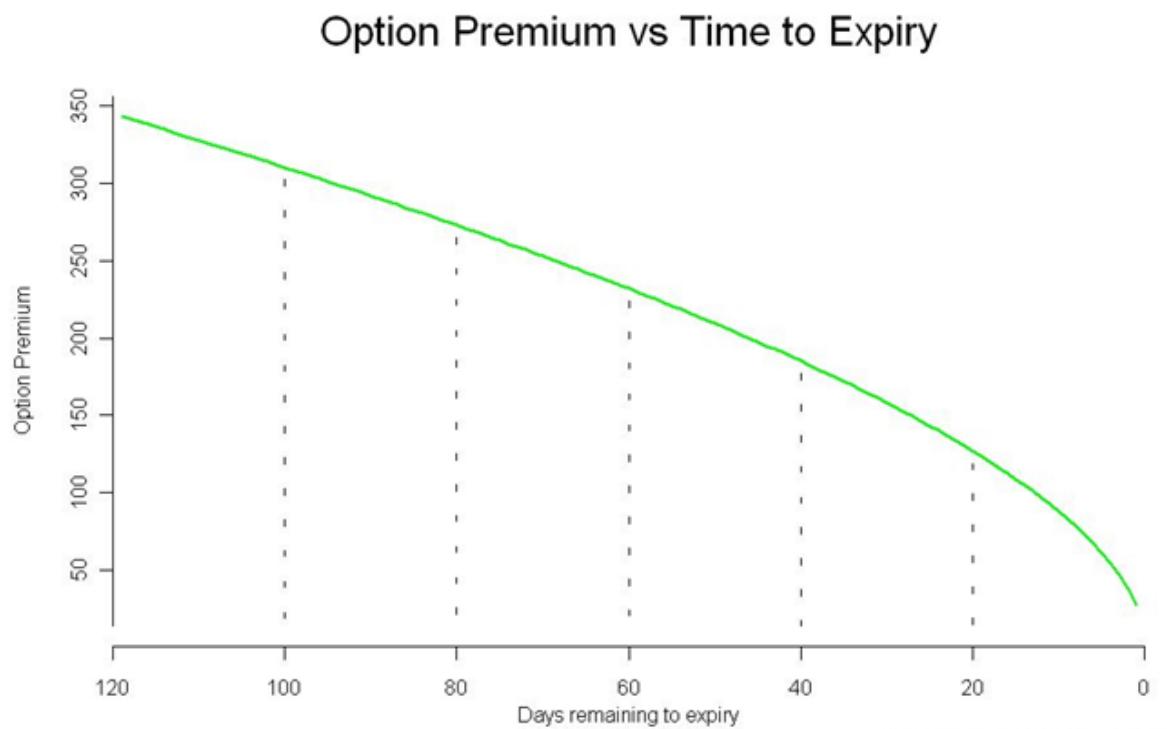
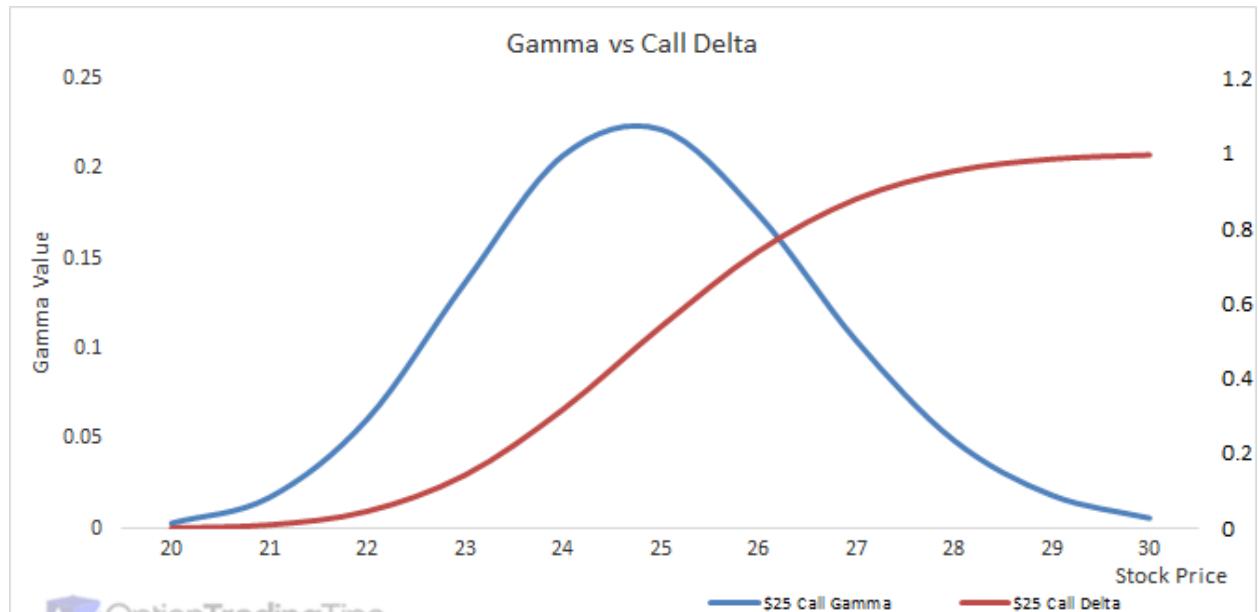
Just like the futures, options also trade in timeframes of 1, 2 and 3 months. Options traded in the exchanges have Options in India are **European Call/Put options (CE/PE)**. European call options can be exercised only on the expiry day of the contract. **American contracts** on the contrary can be exercised anytime before the expiry date also.

Intrinsic value of the option is defined as the difference of (spot value – strike value) for a call option, and its negative for a put option. Depending on the intrinsic value, options are classified as ITM, ATM, OTM(In/ At/ Out of The Money).

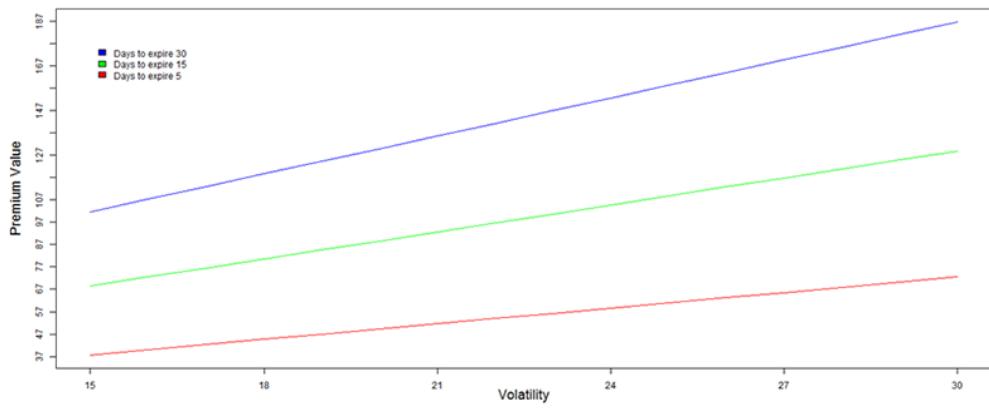
Option Greeks are various mathematical parameters that affect the price of an options contract. There are four greeks that represent various parameters of an option in the market –

- **Delta** – Delta measures the rate of change of premiums with changes in the value of the underlying
- **Gamma** – It is the rate of change of Delta itself with respect to the underlying price

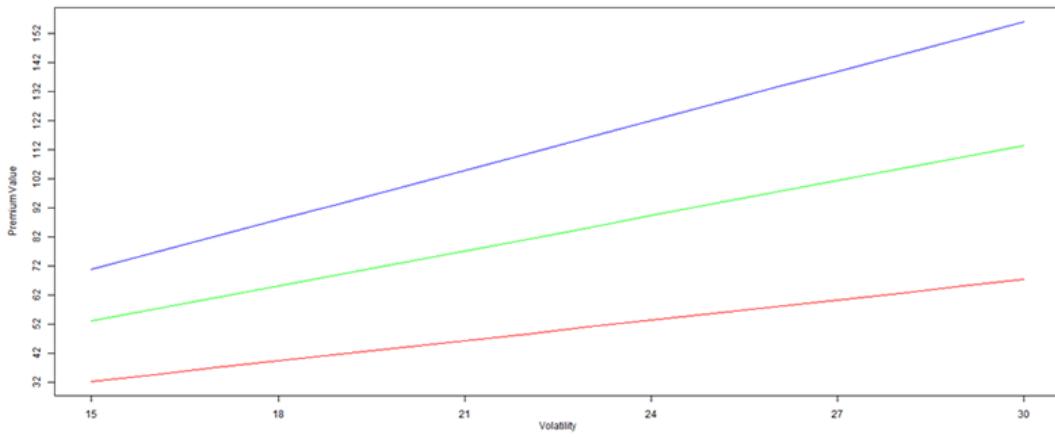
- **Vega** - Vega represents the rate of change of premiums based on volatility in the markets
- **Theta** - Theta determines the impact on premium based on the time to expiry



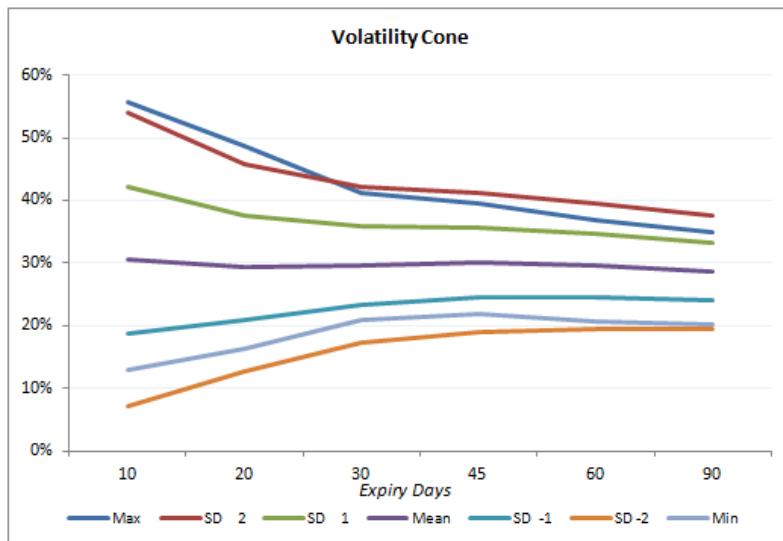
Call Option Premium vs Volatility

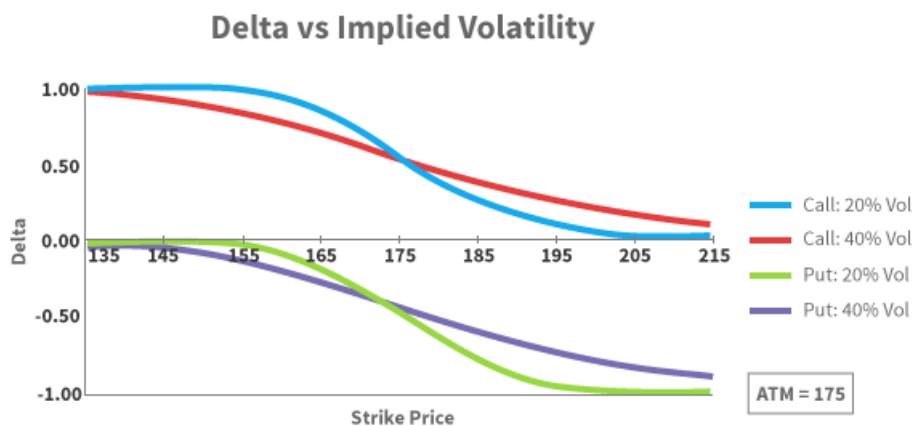
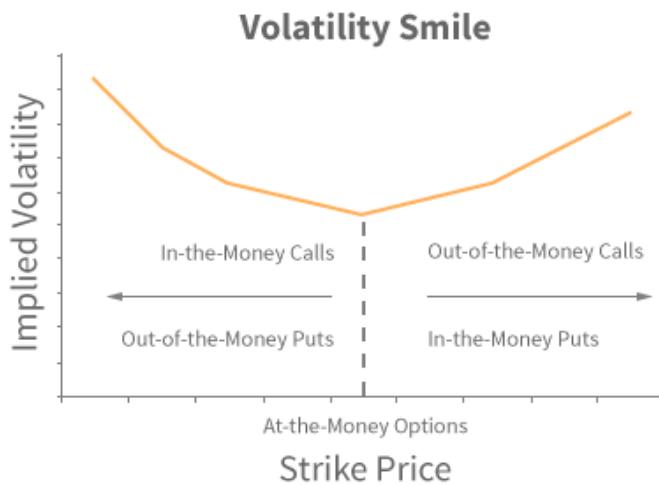


Put Option Premium vs Volatility

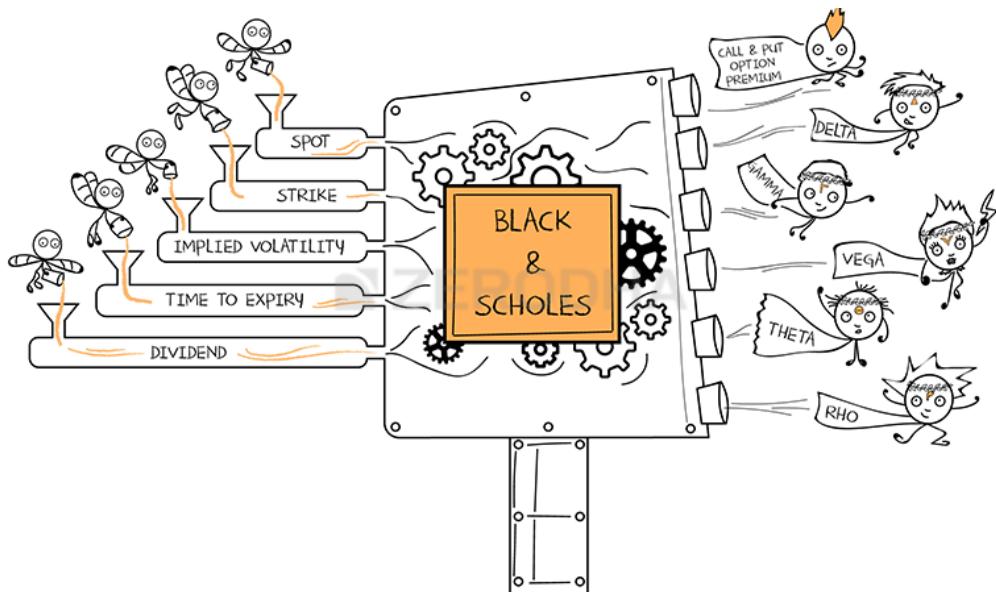


Various greeks are interdependent on each other also, best depicted by the following graphs-





The options greeks are calculated by the most widely accepted **Black and Scholes pricing formula**. It estimates the option's theoretical price with option greeks.



6. Markets and Taxation

Market participants are classified as trader or investor as per their business objectives and trading frequency. The various activities are classified into four tax slabs-

- Long Term Capital Gain (LTGC)
- Short Term Capital Gain(STGC)
- Speculative Business Income
- Non Speculative Business Income

SL No.	Slab	Taxable Amount	Tax Rate	Tax Amount
1	0 to Rs.250,000	2,50,000	0%	Nil
2	250,000 to 500,000	2,50,000	5%	12500
3	500,000 to 1,000,000	5,00,000	20%	1,00,000
4	10,00,000 to 25,00,000	15,00,000	30%	4,50,000

Head of income under which Loss is incurred	Whether loss can be set-off within the same year		Whether Losses can be carried forward and set-off in subsequent years		Time limit for carry forward and set-off of losses
	Under the same head	Under any other Head	Under the same head	Under any other Head	
Losses of F&O as a Trader	Yes	Yes	Yes	No	8 years
Speculation Business	Yes	No	Yes	No	4 years
Capital Gain (Short-Term)	Yes	No	Yes	No	8 years

Trading F&O is considered to be a non speculative business. On the other hand, trading equity intraday is considered speculative business. Equity holdings for more than one year are taxed as LTCG. And equity holdings for any time duration between a day or a year is taxed as STCG.

7. Currencies

A Brief History

The chronicles of an exchange system throughout history culminated into three eras, with the modern currency system being the fourth. The first era is widely considered to be the barter system. Goods were exchanged in return of goods or services of other kinds. For obvious reasons, this was a very cumbersome, irrelevant, and non-reliable exchange system, susceptible to all types of swings and changes, both in favour of and against any person.

Then came the Metal Era, where precious metals like gold, silver and semi precious metals like copper and lead, and alloys like bronze were used as a standard exchange instrument, with the benefit of a better shelf life against the previously existing barter system. These were widely accepted all over the world, with gold and silver being the most preferred, due to their higher value density. The Gold Standard Era succeeded, where the various currencies were valued with gold. But with geopolitical changes, wars and various global phenomena like the Great Depression of 1939, there was a need for a reliable currency which traders could use all over the world. This problem was solved by the Bretton Woods System, where USD was pegged at a fixed amount of gold (\$35 per ounce of gold) and all other currencies were compared with the USD. This system had some obvious flaws, and hence it became outdated.

The current system followed all over the world is a market driven approach, with dynamic changes taking place in currency ratios, depending on their demands in the international markets.

The Forex Markets

Currency pairs are traded 24hrs, 6 days a week in the international foreign exchange markets(ForEx). Currency pairs are represented as –

$$\text{Base Currency/Quotation Currency} = \text{Value}$$

The base currency is said to have strengthened when it can buy more units of quotation currency, and vice-versa. These markets are futures markets, and there is no equivalent of the spot markets(as in equity). The reference rates of USD/INR are set by the RBI by conducting a poll with participating banks. There are various factors that affect the currency pairs –

- Trade Deficit
- Import/Export Data
- Interest Rates
- Hawkish and Dovish stance of the RBI as per Indian Economy

One important thing to note is that different interest rates in different countries play a major role in deciding the currency rates. Lower interest rates in stable economies like the USA and higher interest rates in developing countries like India give a fairy trade incentive to traders, meaning that they can borrow money at low interest rates in the USA and invest in India, where interest rates are higher, and hence earn a clean profit. But such arbitrages don't exist, and hence the currency rates adjust accordingly to account for the difference in the interest rates in different countries. This is known as Forward Premium in the finance world.

Currency pairs are quoted upto the fourth decimal place, as even a small change in the pair value will make a huge P&L effect on the F&O contracts.

Here are specific details of the USD/INR pair, as decided by the government -

Contracts specification in currency derivatives				
Underlying	USD/INR	EUR/INR	GBP/INR	JPY/INR
Exchange	NSE and MCX-SX			
Trading Hours	Monday to Friday , 09:00 AM – 05:00 PM			
Contract Lot Size	Minimum lot Size = USD 1000	Minimum lot Size = EUR 1000	Minimum lot Size = GBP 1000	Minimum lot Size = YEN 100000
Tick Size (Minimum Price Fluctuation)	₹ 0.0025 or 0.25 paisa			
Last Trading Day	Two working days prior to the last business day of the expiry month at 12:15pm.			
Final settlement day	Last working day (excluding Saturdays) of the expiry month. The last working day will be the same as that for Interbank Settlements in Mumbai.			
Symbol / Price Quotation	USDINR/Rs. per USD	EURINR/Rs. per EUR	GBPINR/Rs. per GBP	JPYINR/Rs. per YEN
Tenor of Contract	Maximum of 12 months			
Available Contracts	Monthly			
Settlement	Daily settlement : T + 1 Final settlement : T + 2			
Settlement Mechanisms	Cash Settled in INR			
Daily Settlement Price	Calculated on the basis of the last half an hour weighted average price			

Just like the equity markets, currency markets also have options. There are multiple currency pairs traded, like the EUR, GBP, JPY alongwith USD.

8. Commodities

There are two commodity exchanges in India – MCX(Multi Commodity Exchange) and NCDEX(National Commodities and Derivative Exchange). MCX is particularly popular for metals and NCDEX for agri commodities. The various commodities and the different contracts existing are –

Sr. No.	List of Commodities Available for Trading on MCX	List of Commodity Contracts Available for Trading on MCX
1	ALUMINIUM	ALUMINIUM MINI ALUMINIUM
2	CARDAMOM	CARDAMOM
3	COPPER	COPPER COPPER MINI
4	COTTON	COTTON
5	CRUDE OIL	BRENT CRUDE OIL CRUDE OIL CRUDE OIL MINI
6	CRUDE PALM OIL	CRUDE PALM OIL
7	GOLD	GOLD GOLD GLOBAL GOLD GUINEA GOLD MINI GOLD PETAL GOLD PETAL DELHI
8	KAPAS	KAPAS
9	LEAD	LEAD LEAD MINI
10	MENTHA OIL	MENTHA OIL
11	NATURAL GAS	NATURAL GAS
12	NICKEL	NICEL NICEL MINI
13	SILVER	SILVER SILVER 1000 SILVER MINI SILVER MICRO
14	ZINC	ZINC ZINC MINI

Commodities are traded in F&O markets, with the underlying prices to be futures prices, unlike spot prices in equity F&O.

Gold Contract

There are four gold contracts available in the Indian Markets -

- Big Gold
- Gold Mini
- Gold Guinea
- Gold Petal

They belong to the same underlying, i.e. gold, but have different lot sizes, and hence different margins. The particulars for Big Gold are -

Particular	Value
Price Quotation	Rupee per 10 grams inclusive of all taxes and levies relating to import duty
Lot Size	1 kilogram
Tick Size	1 rupee
P&L per tick	Rs. 100
Expiry Date	5 th day of the contract month
Delivery Logic	Compulsory
Delivery Unit	1 kilogram

There are six futures contracts available on gold, which expire on the fifth day of the month of the contract. The Big Gold and Gold Mini are the most traded gold contracts.

The price of gold is fixed at two sessions in any trading day in London, where designated banks participate and place bids for buying gold, and hence a price is reached upto. This is much in line with traditions, but has little effect on the markets, as the bank bids are influenced by the market sentiments on gold.

Dollar and Gold share a very interesting inverse relation, due to the fact that USA is a Gold Exporting Country. So any drop in USD results in increased buying of gold, which in turn increases the demand supply ratio, pushing the gold prices up. Similar happens when USD increases in value, resulting in lower buying of gold, and hence falling prices.

Silver and gold together are called 'bullion', and constitute a large part of precious metal commodity trading. Silver and gold are somewhat correlated in terms of price trends, and are often thought of as a good 'Trading Pair'. Technical Analysis is widely used by traders to set trades in bullion, with a normal holding period of a few days.

Gold is considered to be a safe investment, and this is justified by its constant growth in times of market depression, such as the Oil Crisis, 2008 Depression etc.

Crude Oil

Crude oil is undoubtedly the most actively traded commodity worldwide. Historically, oil rich countries like the Saudi Arabia, Kuwait, UAE, Qatar had dominated the oil sector, and thus had maintained a steady price per barrel of about \$130 for a long time. But in 2013, the Brent Crude came plummeting down due to various reasons –

- American Shale – The discovery of shale oil in USA led to a big fall in crude oil demand, adding to the cause was the cheap cost of shale oil
- Lack of coordination between the oil producing countries led to an uncontrolled approach towards cutting production, to increase cost per barrel, which eventually led to crude oil prices crashing
- The slowed down pace of growth in China further aggravated the situation, with demands not meeting up with expected supplies



The mapping of companies working at various levels of the crude oil ecosystem is done in three subparts–

- Upstream Companies – These companies are involved in the extraction of crude oil. These are asset-intense companies, requiring a lot of working capital and assets. They do exploration work, finding oil rich geographical areas on land or on the sea bed. They are directly affected by the prices of crude oil – higher the oil price, more are the profits for the upstream companies.
- Downstream companies – These companies refine and purify crude oil. This involves breaking down petroleum into its constituents, like petrol, diesel, wax, kerosene etc. and making various petrochemical products like plastic, fertilisers and other chemicals. A higher crude oil price is unfavourable for downstream industries.
- Midstream Companies – Midstream companies are responsible for the transport of crude oil from one place to the other. It also involves storage of oil. The relation between crude oil prices and profits is quite complicated, as midstream companies

deal with both upstream and downstream companies, which have inverse cost-profit relation.

UPSTREAM	MIDSTREAM	DOWNSTREAM
EXPLORATION & PRODUCTION	ENERGY INFRASTRUCTURE	END MARKET USERS
Discovery and production of oil and natural gas <ul style="list-style-type: none"> • Oil & Gas Exploration & Production • Coal & Consumable Fuels • Oil & Gas Drilling • Oil & Gas Services and Equipment 	Transportation of oil and gas via pipes and storage of excess <ul style="list-style-type: none"> • Crude Oil & Refined Products Pipeline & Storage • Diversified Midstream Pipeline & Storage • Marine Shipping & Transportation • Natural Gas Gathering & Processing • Natural Gas Pipeline & Storage • Oil Field Services 	Marketing and distribution of refined oil and gas to end users <ul style="list-style-type: none"> • Oil & Gas Refining • Oil & Gas Marketing & Distribution • Commercial / Residential • Industrial Gases • Diversified & Specialty Chemicals • Utilities & Power Generation

Crude oil shares an inverse relation with USD, owing to reasons similar to those of the inverse USD–Gold relation.

Crude oil comes in different specifications(or varieties, to say), depending on parameters like density, sulphur content etc. Based on such criteria, the crude oil commodity is divided into multiple types, with Brent Crude and West Texas Intermediate(WTI) being the most common ones.

There are two crude oil contracts available in the Indian Markets, namely Crude Oil and Crude Oil Mini, with lot sizes 100 and 10 barrels respectively. New contracts are released every month, with an expiry of 6 months. They expire on the 19th day of each month.

Metal and Agri Commodities

Most commonly traded metal commodities are copper, aluminium, lead and nickel. These metals find a variety of large scale industrial applications, such as –

- Copper – Electrical and electronic equipment, motors, building construction, plumbing, distilleries, telecom etc.
- Aluminium – Aerospace parts, power transmission cables, utensils, heavy machinery, making alloys etc.
- Lead – Batteries, Shipbuilding, plumbing, as a radiation screen, pigments, compounds, chemicals etc.
- Nickel – power generation, cell phones, kitchen utensils, alloys, medical equipment etc.



Just like gold and silver, the above metals also have contracts and their specifications. They have different lot sizes, margins and tick sizes.

India is an agrarian country, where majority of the people are employed in the primary sector. Rainfall in India determines the agri commodities market to a great extent. Hence it is very important to understand the monsoon in India and its effect on various agri commodities. There are two main types of crops grown in India –

- Kharif crops are sown and harvested in the SouthWest monsoon. Eg: rice, millets, pulses, cotton, moong dal, urad dal etc.
- Rabi Crops are sown and harvested in the NorthEast monsoon. Eg: gram, mustard, coriander, oats, wheat etc.

Cardamom is a spice which grows in Karnataka and Kerala. It is used in traditional foods, and also in Ayurveda as a therapeutic ingredient. It is traded in the Indian Commodity markets with 12 contracts simultaneously, each contract being introduced every month with an expiry of 6 months.



Similarly mentha oil is distilled from the leaves of mentha family herbs, and is also used in Indian cooking. It's aromatic and soothing nature finds a multitude of applications in pharma, perfumery, and flavouring industries.



9. A Case Study

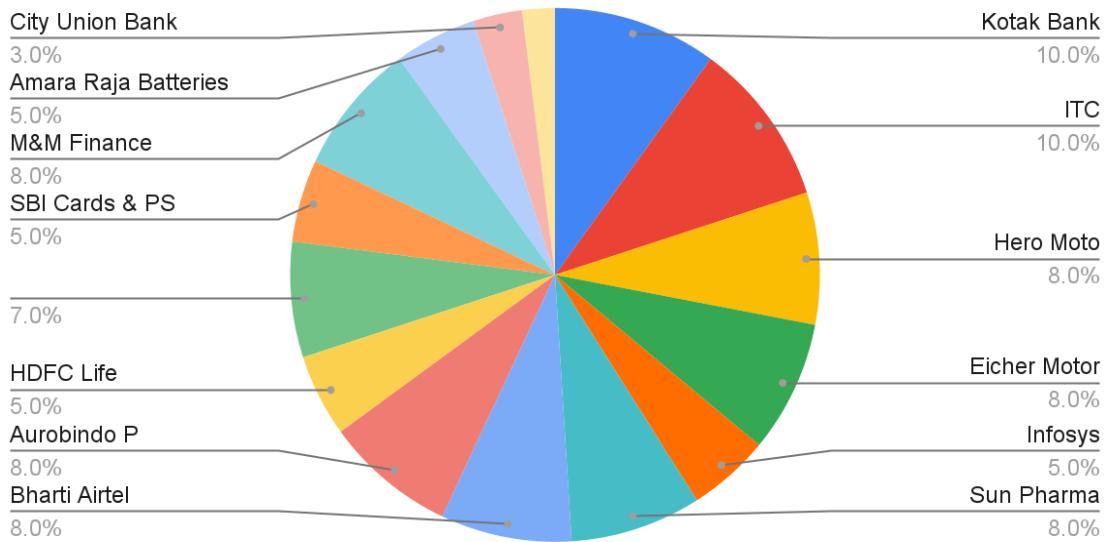
Problem Statement- If given 1 million rupees right now, where would you invest it? A minimum timeframe of 6 months is expected. Allowed Investment Opportunities are Equity Markets (Individual Stocks) and Gold ETF only.

TIMEFRAME CHOSEN - 1 YR

(Prices taken on 7-9th June'21)

Sr. No	Company	Sector	Market Cap (Cr.)	Segment	Weightage (of investment)
(1)	Kotak Bank	Banking	3,55,500	Nifty	10%
(2)	ITC	FMCG	2,63,000	Nifty	10%
(3)	Hero Moto	Automobile	61,000	Nifty	8%
(4)	Eicher Motor	Automobile	75,500	Nifty	8%
(5)	Infosys	IT	6,02,000	Nifty	5%
(6)	Sun Pharma	Pharma	1,63,000	Nifty	8%
(7)	Bharti Airtel	Telecom	3,00,000	Nifty	8%
(8)	Aurobindo P	Pharma	57,000	Nifty Next	8%
(9)	HDFC Life	Insurance	1,40,000	Nifty	5%
(10)	IGL(Indraprashta)	Oil and Gas	37,000	Nifty Next	7%
(11)	SBI Cards & PS	Financial	99,500	Nifty Next	5%
(12)	M&M Finance	NBFC	21,000	Midcap	8%
(13)	Amara Raja Batteries	Auto	13,000	Midcap	5%
(14)	City Union Bank	Banking	12,500	Midcap	3%
(15)	Granules India	Pharma	8,200	Small Cap	2%

Weightage (of total investment)



1. KOTAK BANK - CMP 1790 TP 2040

CAGR 18-20%

- Multiple services - insurance/banking/Asset Management Company/broking available under one company, insulating from sub sector specific fluctuations
- Expense reduction by reduced staff retirement benefits
- One of the lowest NPA at 1 - 1.5%
- Suffered a 10% correction due to 2nd wave, highly possible candidate for a 10-15 % increase in 6 months

Kotak Mahindra Bank Ltd Fully Paid Ord. Shrs

1,792.00 INR

+1,041.30 (138.71%) ↑ past 5 years

8 Jun, 3:30 pm IST · Disclaimer

NSE: KOTAKBANK



ITC - CMP 214 TP 285

Only FMCG company at a backwardish rate as compared to the market
High Dividend yield(5%)

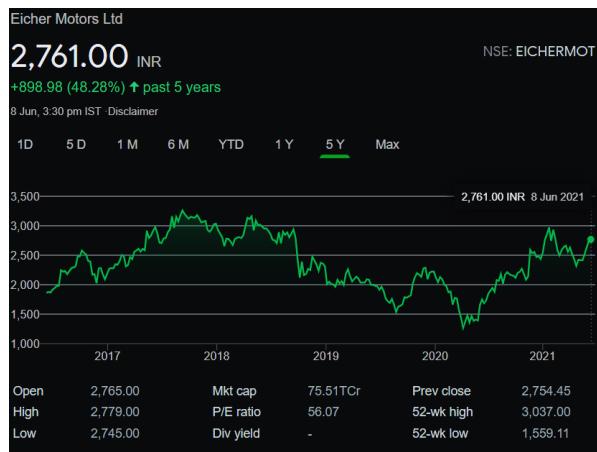
Trading at a very substantiated price, indicative of cyclical revival in the post covid market.

Immense fall of 20% in the 5 yr timeline, highly speculative of a healthy resurrection, given the market cap and monopoly in specific FMCGs

- Increase in life standards of rural India can be a big FMCG market for ITC

3. Hero Motocorp - CMP 3055 TP 3500

- Cost saving initiatives recently taken by the management, including revamping existing manufacturing plants for BSVI environment standards
- Increasing footprint in African countries
- Good expected monsoons may lead to an increase in rural incomes, leading to a greater market demand
- Premium market monopoly in small engine capacity two wheeler segment.



4. Eicher Motors - CMP 2763 TP 3200 10 yr CAGR 36%

Royal enfield forecasted to have the highest revenues results in the industry

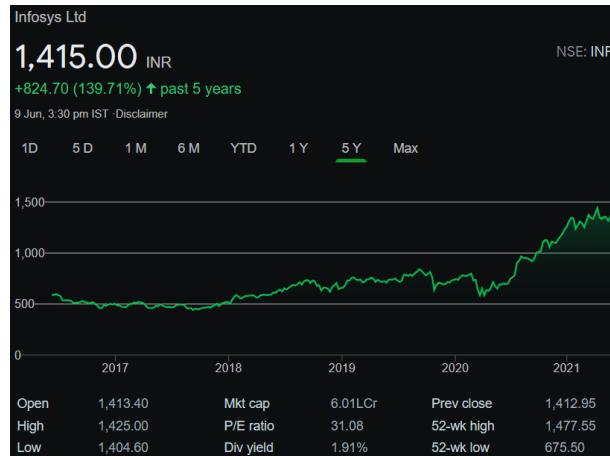
A constant 36% cagr cumulated with covid depression highly paves the way to a strong surge in the trusted stock

Stable EBIDTA in spite of high inflation

Stable than other stocks of the segment due to a low beta value

5. Infosys - CMP 1415 TP 1500

- 3rd buy back from open market is one of the biggest trigger
- USD income increasing YOY
- Sector is expected to deliver 15% CAGR as revenues boost by 15% and earnings by 10%
- Constant uptrend observed in CAGR - 5yr 19%, 3yr 30%, 1yr 93%



6. Sun Pharma - CMP 678 TP 790 CAGR

- EBITDA margin expanded, driven by favourable product mix
- Positive outlook with new drug launches like Remdesvir, Itilozumab and Favipiravir alongwith licensing agreements signed for Molnupiravir from American Pharma giant Eli Lilly
- Low financial and non-tangible expenditures
- Q4 revenue was largely in line with earnings guidance
- No major USFDA non compliance notices recently, which is an achievement keeping in mind the volley of notices in the last 4-5 years

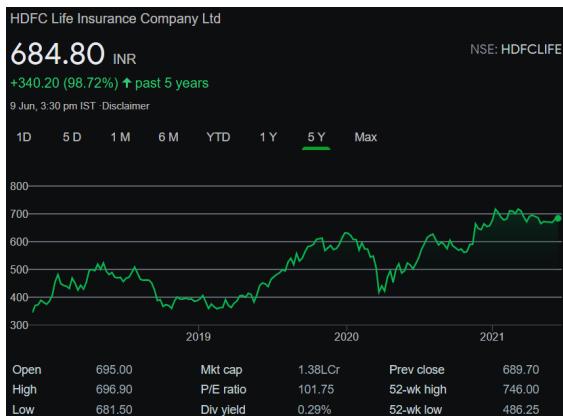
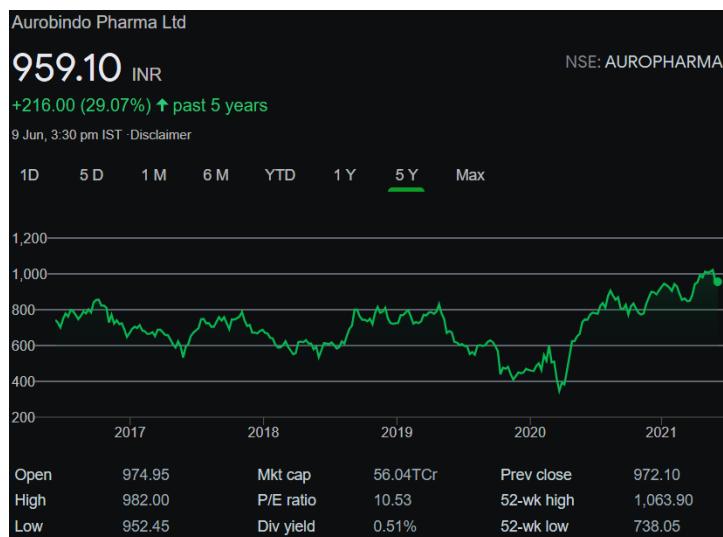


7. Bharti Airtel - CMP 540 TP 720

- 15% correction observed due to a marquee investor selling his stake in company
- 28% EBITDA increase observed in FY 21 expected to continue in FY 22
- Diversified approach towards investment is a good sign of insulation of stock against specific sub-sectoral trends

8. Aurobindo Pharma - CMP 975 TP 1150 10yr CAGR 27%

- High margin yielding oncology products released in US and EU
- EU EBITDA margin crosses the double digit figure
- Momentum in US and EU markets likely to sustain due to less competition in a stringent business environment



- Expected rise in injectable pharmaceuticals market
- Cyclical revival expected in foreign markets

9. HDFC Life - CMP 690 TP 780

- The stock has maintained position in the market even after the covid depression,

- CMP trading at a low price due to decrease in total income in last quarter, hence a bullish sentiment in upcoming time
- Company declared a double digit growth in premium collection
- India is still an under insured country, HDFC can gain future market share with strong brand backbone

10. Indraprastha Gas Limited - CMP 530 TP 650

- IGL would be able to maintain monopoly in gas distribution lease in Delhi NCR
- High margin likely to sustain due to its pricing power in CNG
- Permanent Commission on Air Pollution paves the way to a surge in CNG demand

SBI Cards and Payment Services Ltd

1,109.00 INR

NSE: SBICARD

+79.50 (7.72%) ↑ past 5 years

9 Jun, 3:30 pm IST · Disclaimer

1D 5 D 1 M 6 M YTD 1 Y 5 Y Max



11. SBI Card and Payment Services - CMP 1110 TP 1250

- Post covid scenario in high demand of online transactions services
- Entry barriers in near oligopoly ensure no rapid market capture by competitors

- Investors can eye on high premium returns
- Improved recoveries as a part of quality asset management
- SBI has the lowest card-customer ratio, if it can convert existing card customer ratio then it will become the largest card provider in India

Mahindra & Mahindra Fin. Services Ltd.



12. Mahindra & Mahindra finance - CMP 165 TP 215

The stock has had a major correction from 224, and trading at 165

If the stock re rates to pre pandemic level, then a 30% uprise can be expected in upcoming 2 yrs

Company has evolved into a multi product auto finance NBFC operating pan India, with deep roots in rural areas, promising a high returns on agricultural auto in the forecasted healthy rains this year

13. Amara Raja Batteries - CMP 760 TP 900

- Stock has suffered a 20% correction in 6 months, indicative of a healthy upswing
- Highly lucrative risk-reward ratio for going long
- Expected increase in revenues due to high forecasted sales of client companies like Mahindra, Suzuki etc.
- More than half of its cash flow is being paid out to shareholders as dividends
- The company has reported a Consolidated Total Income of Rs 2134.70 Crore, up 6.97 per cent from last quarter Total Income of Rs 1995.63 Crore and up 33.80 per cent from

City Union Bank Ltd



last year same quarter Total Income of Rs 1595.50 Crore.

14. City Union Bank - CMP 165 TP 210

Strong growth in ECLGS(Emergency Credit Loan Guarantee Scheme) and Gold loan Stock has corrected almost 20% in last 18 months, making it a great investment opportunity

Currently trading almost 52 week midway

15. Granules India - CMP 335 TP 475

- Granules India has a robust outlook in the industry, with finished dosages segment to be key growth driver
- Core molecules also expected to sustain growth backed by geographic expansion
- Company is aiming to diversify and shift supplier base from China to India

