Basics of Financial Markets

In this PDF, we'd be covering the basic prerequisites and jargons (special words) you need to know to move forward with the internship and also to give you a brief introduction to the Share/Stock market.

Contents -

Introduction and Basic Definitions

Public v/s Private Company - A Public company is one which can its shares to the general public on the stock exchange (share market)
Eg- Reliance, ICICI Bank , Yes Bank
whereas
A private company is one which holds its shares to a few, big money investors.
Eg- Paytm, Dell

Shares - As the name suggests, a share is a ‘part’ of a company which you can buy or sell, IF the company is publicly listed i.e. on a stock exchange.

Eg- Now, let’s say a company X has a worth of Rs 1,000 right now and it has 100 shares in total. In this case, the price of 1 share will be - Rs 1,000/ 100 = Rs 10 per share. Also, one share would be 1% of the total company.
If the company had 200 shares , then one share would be 0.5% of the total company (1/200) and so on .
Conversely, the total number of shares of a company multiplied by the price of a share at a given time is the **Market Capitalization (Market Cap)** of the company at a given time.

Stocks v/s Shares - The 2 words are used interchangeably, though there is a slight difference between the two.
A stock can refer to any arbitrary company, but the word ‘share’ is used when we are referring to a specific company.
Eg - You can buy stocks of 20 different companies, but you can buy the shares of Reliance (a specific company)
Share market and the Stock market are one and the same thing.

NSE (National Stock Exchange) and **BSE** (Bombay Stock Exchange) are basically the ‘markets’ where one can buy and sell shares of a company. Unlike the conventional markets, these markets are electronic and not physical. All transactions take place electronically.

Portfolio - If I have invested in more stocks than 1, let’s say 10 different stocks, then this collection of investment is known as a Portfolio.

Stock Market and its working

What really is the stock market

As we discussed, the stock market is an electronic market place. Buyers and sellers meet and trade their point of view.

For example, consider the situation of Yes Bank in 2018-19. At the time of writing this, Yes Bank is facing a succession issue, and most of its senior level management personnel are quitting the company for internal reasons. It seems like the leadership vacuum is weighing down the company's reputation heavily. As a result, the stock price dropped to Rs.110 all the way from Rs. 250. Whenever there are new reports regarding Yes Bank management change, the stock prices react to it.

Assume there are two traders – T1 and T2.

T1's point of view on Yes Bank – The stock price is likely to go down further because the company will find it challenging to find a new CEO.

If T1 trades as per his point of view, he should be a seller of the Yes Bank stock.

T2, however views the same situation in a different light and therefore has a different point of view – According to him, the stock price of Yes Bank has overreacted to the succession issue and soon the company will find a great leader, after whose appointment the stock price will move upwards.

If T2 trades as per his point of view, he should be a buyer of the Yes Bank stock.

So, at Rs 110 T1 will be a seller, and T2 will be a buyer in Yes Bank.

Now both T1 and T2 will place orders to sell and buy the stocks.

The stock exchange has to ensure that these two orders are matched, and the trade gets executed. This is the primary job of the stock market – to create a marketplace for the buyer and seller.

The stock market is a place where market participants can access any publicly listed company and trade from their point of view, as long as there are other participants who have an opposing point of view. After all, different opinions are what make a market.

What moves the stock?

Let us continue with the Yes Bank example to understand how stocks really move. Imagine you are a market participant tracking Yes Bank.

It is 10:00 AM on 18th June 2019 ,and the price of Yes Bank is 110. The management makes a statement to the press that they have managed to find a new CEO who is expected to steer the company to greater heights. They are confident on his capabilities and they are sure that the new CEO will deliver much more than what is expected out of him.

Two questions –

1. How will the stock price of Yes Bank react to this news?
2. If you were to place a trade on Yes Bank, what would it be? Would be a buy or a sell?

The answer to the first question is quite simple, the stock price will move up.

Yes Bank had a leadership issue, and the company has fixed it. When positive announcements are made market participants tend to buy the stock at any given price and this cascades into a stock price rally.

Let me illustrate this further :

Sl No	**Time**	**Last Traded Price**	**What price the seller wants**	**What does the buyer do?**	**New Last Trade Price**
01	10:00	110	112	He buys	112
02	10:01	112	116	He buys	116
03	10:03	116	121	He buys	121
04	10:05	121	126	He buys	126

Notice, whatever price the seller wants the buyer is willing to pay for it. This buyer-seller reaction tends to push the share price higher.

So as you can see, the stock price jumped 16 Rupees in a matter of 5 minutes. Though this is a fictional situation, it is a very realistic, and typical behavior of stocks. The stocks price tends to go up when the news is good or expected to be good.

In this particular case, the stock moves up because of two reasons. One, the leadership issue has been fixed, and two, there is also an expectation that the new CEO will steer the company to greater heights.

The answer to the second question is now quite simple; you buy Yes Bank stocks considering the fact that there is good news surrounding the stock.

How does the stock get traded?

You have decided to buy 200 shares of Yes Bank at 120, and hold on to it for 1 year. How does it actually work? What is the exact process to buy it? What happens after you buy it? Luckily there are systems in place which are fairly well integrated.
With your decision to buy Yes Bank, you need to login to your trading account (provided by your stock broker) and place an order to buy Yes Bank. Once you place an order, an order ticket gets generated containing the following details:

1. Details of your trading account through which you intend to buy Yes Bank shares – therefore your identity is revealed.
2. The price at which you intend to buy Yes Bank
3. The number of shares you intend to buy

Before your broker transmits this order to the exchange he needs to ensure you have sufficient money to buy these shares. If yes, then this order ticket hits the stock exchange. Once the order hits the market the stock exchange (through their order matching algorithm) tries to find a seller who is willing to sell you 200 shares of Yes Bank at 120.

Now the seller could be 1 person willing to sell the entire 200 shares at 120 or it could be 10 people selling 20 shares each or it could be 2 people selling 1 and 199 shares respectively. The permutation and combination does not really matter. From your perspective, all you need is 200 shares of Yes Bank at 120 and you have placed an order for the same. The stock exchange ensures the shares are available to you as long as there are sellers in the market.
Once the trade is executed, the shares will be electronically credited to your DEMAT account. Likewise the shares will be electronically debited from the sellers DEMAT account.

What happens after you own a stock?

After you buy the shares, the shares will now reside in your DEMAT account. You are now a part owner of the company, to the extent of your shareholding. To give you a perspective, if you own 200 shares of Yes Bank then you own 0.00068% of Yes Bank.
By virtue of owning the shares you are entitled to a few corporate benefits like dividends, stock splits, bonus, rights issue, voting rights etc. We will explore all these shareholder privileges at a later stage.

Equities and Commodities

From an investment point of view, we always want maximum returns on our investments, with minimum risk.
One of the most common ways is to open a **Fixed Deposit** account in a bank. Although the risk is minimum, so are the returns, close to 6% returns per annum.
This asset class which consists of Fixed Deposits and other instruments is known as **Debt or Fixed Income instruments.**

A different way to invest would be to invest in different asset classes.
We'll only be discussing about the 2 most common asset classes which we come across on a daily basis -

1. **Equities (Stocks and Shares)**
   Shares and its derivatives collectively are known as equity.
   Investment in stocks involves buying shares of publicly listed companies. The shares are traded both on the Bombay Stock Exchange (BSE), and the National Stock Exchange (NSE).
   When an investor invests in equity, unlike a fixed deposit, there is no capital guarantee. However, as a trade-off, the returns from equity investment can be extremely attractive. Indian Equities have generated returns close to 14% – 15% CAGR (compound annual growth rate) over the past 15 years.
   Investing in some of the best and well run Indian companies has yielded over 20% CAGR in the long-term. Identifying such investments opportunities requires skill, hard work and patience, and of late, some really good Data Science skills which we are going to use in this internship !

2. **Commodities**
   Investments in gold and silver are considered one of the most popular investment avenues. Gold and silver over a long-term period has appreciated in value.
   Investments in these metals have yielded an annual return of approximately 8% over the last 20 years !
   Crude Oil is another commodity which keeps on varying with time and if one is able to analyse the trend correctly, one can make a fortune in this product.

   Eg- If an investor would've correctly analysed the trend of oil price movement between October 2018 and December 2018, he/she would've made 36.7% profits in just 2 months !

Market Index - Nifty50

It is very likely that you have come across the words **Sensex & Nifty** at some point of time. You may even be knowing the levels where they are trading right now , Sensex around 39,000 and Nifty at 11,800 . But what exactly is Nifty and Sensex ?

Nifty50 (or Nifty) and Sensex are **Market Indices** of the NSE and BSE respectively.
Now another question arises- What is a market index ?
<u>Consider the following situation -</u>

If I were to ask you how the stock market is moving today, how would you answer my question? There are approximately 5,000 listed companies in the Bombay Stock Exchange and about 2,000 listed companies in the National Stock Exchange. It would be clumsy to check each and every company, figure out if they are up or down for the day and then give a detailed answer.

Instead you would just check few important companies across key industrial sectors. If the majority of these companies are moving up you would say markets are up, if the majority is down, you would say markets are down, and if there is a mixed trend, you would say markets are sideways !

So essentially identify a few companies to represent the broader markets. So every time someone asks you how the markets are doing, you would just check the general trend of these selected stocks and then give an answer. These companies that you have identified collectively make up the stock market index !

Now that we have that covered, we can now understand what Nifty and Sensex really are.

- Nifty is the market index which represents the **top 50** companies listed on the NSE

- Sensex is the market index which represents the **top 30** companies listed on the BSE

The obvious question arises –
How do we assign weights to the stock that make up the Index?

There are many ways to assign weights but the Indian stock exchange follows a method called **market capitalization.** The weights are assigned based on the market capitalization of the company, the larger the market capitalization, higher the weight.
Market capitalization is the product of total number of shares outstanding in the market, and the price of the stock.
For example company ABC has a total of 100 shares outstanding in the market, and the stock price is at 50 then the free float market cap of ABC is 100*50 = Rs.5,000.
So, Nifty is a collection of the top 50 companies on the NSE by market cap , and Sensex is a collection of the top 30 companies on the BSE by market cap.

Important Jargons

Bull Market (Bullish) – If you believe that the stock prices are likely to go up then you are said to be bullish on the stock price. From a broader perspective, if the stock market index is going up during a particular time period, then it is referred to as the bull market.

Bear Market (Bearish) – If you believe that the stock prices are likely to go down then you are said to be bearish on the stock price. From a broader perspective, if the stock market index is going down during a particular time period, then it is referred to as the bear market.

Trend – A term 'trend' usually refers to the general market direction, and its associated strength. For example, if the market is declining fast, the trend is said to be bearish. If the market is trading flat with no movement then the trend is said to be sideways.

52 week high/low – 52 week high is the highest point at which a stock has traded during the last 52 weeks (which also marks a year) and likewise 52 week low marks the lowest 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 has traded during the year. Many people believe that if a stock reaches 52 week high, then it indicates a bullish trend for the foreseeable future. Similarly if a stock hits 52 week low, some traders believe that it indicates a bearish trend for the foreseeable future.

All time high/low – This is similar to the 52 week high and low, with the only difference being the all time high price is the highest price the stock has ever traded from the time it has been listed. Similarly, the all time low price is the lowest price at which the stock has ever traded from the time it has been listed.

Long Position – Long position or going long is simply a reference to the direction of your trade. For example, if you have bought or intend to buy Biocon shares then you are said to be long on Biocon or planning to go long on Biocon respectively. If you have bought the Nifty Index with an expectation that the index will trade higher then essentially you have a long position on Nifty. If you are long on a stock or an index, you are said to be bullish.

Short Position – Going short or simply 'shorting' is a term used to describe a transaction carried out in a particular order. This is a slightly tricky concept.
If you have sold (shorted) the Nifty Index with an expectation that the index will trade lower then essentially you have a short position on Nifty. If you are short on a stock or an index, you are said to be bearish.
To summarize long and short positions…

Position	1st action	2nd action	Expectation	You make money when	You will lose money if
Long	Buy	Sell	Bullish	Stock goes up	Stock price drops
Short	Sell	Buy	Bearish	Stock goes down	Stock price goes up

Square off – Square off is a term used to indicate that you intend to close an existing position. If you are long on a stock squaring off the position means to sell the stock. Please remember, when you are selling the stock to close an existing long position you are not shorting the stock!
When you are short on the stock, squaring off position means to buy the stock back. Remember when you buy it back, you are just closing an existing position and you are not going long!

When you are	Square off position is
Long	Sell the stock
Short	Buy the stock

Intraday position – Is a trading position you initiate with an expectation to square off the position within the same day.

OHLC – OHLC stands for 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 the close is the closing price of the stock. For example, the OHLC of ACC on 17th June 2019 was 1486, 1511, 1467 and 1499.

Volume (Total Traded Quantity) – Volumes and its impact on the stock prices is an important concept . Volumes represent the total transactions (both buy and sell put together) for a particular stock on a particular day. For example, on 17th June 2019, the volume on ACC was 5, 33,819 shares.

Deliverable Quantity – All the shares which were not squared off on an intraday basis.

- **Turnover –** Product of total volume traded to the average price of a stock for the day.