What is the stock market?

The stock market is an electronic marketplace. Buyers and sellers meet and trade their point of view.

For example, consider the situation of Maruti. News came in that Maruti is discontinuing diesel engines due to bs6 compliance. As a result, the stock price dropped to Rs.5590 all the way from Rs.7200. Whenever there are new reports regarding Maruti plant maintenance or closure or dispute, the stock prices react to it.

Assume there are two traders – T1 and T2.

T1's point of view on Maruti - The stock price is likely to go down further because the company will find it challenging to only rely on petrol vehicles.

If T1 trades as per his point of view, he should be a seller of the Maruti 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 Maruti has overreacted to the diesel engine closure issue and soon the company will find momentum again as move towards green technology is in swing , the stock price will move up- wards.

If T2 trades as per his point of view, he should be a buyer of the Maruti stock. So at, Rs. 5590 T1 will be a seller, and T2 will be a buyer in Maruti.

Now both T1 and T2 will place orders to sell and buy the stocks respectively through their respective stockbrokers. The stock broker, obviously routes it to the stock exchange.

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 Maruti example to understand how stocks really move. Imagine you are a market participant tracking Maruti.

It is 11:00 AM on 2nd August 2019, and the price of Maruti is 5536. The management makes a statement to the press that they have managed to build a new plant and increase staff as demand for petrol vehicles is increasing. They are confident on his capabilities and they are sure that the newfound demand will increase their market share.

Two questions –

a. How will the stock price of Maruti react to this news?

b. If you were to place a trade on Maruti, 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.

Maruti had a Plant closure 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.

How does the stock get traded?

You have decided to buy 200 shares of Maruti at 5590 and hold on to it for 1 year. How does it work? What is the exact process to buy it? What happens after you buy it?

There are systems in place which are well integrated.

With your decision to buy Maruti, you need to login to your trading account (provided by your stockbroker) and place an order to buy Maruti. Once you place an order, an order ticket gets generated containing the following details:

a. Details of your trading account through which you intend to buy Maruti shares – there- fore your identity is revealed.

b. The price at which you intend to buy Maruti.

c. 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 Maruti at 5590.

Now the seller could be 1 person willing to sell the entire 200 shares at 5590 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 Maruti at 5590 and you have placed an order for the same. The stock exchange ensures the shares are available to you if there are sellers in the market.

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 Maruti then you own 0.0000043% of Maruti.

By virtue of owning the shares you are entitled to few corporate benefits like dividends, stock split, bonus, rights issue, voting rights etc.

Type of Market Players?

Each market participant has his or her own unique style to participate in the market. Their style evolves as and when they progress and witness market cycles. Their style is also defined by the kind of risk they are willing to take in the market. Irrespective of what they do, they can be categorized as either a trader or an investor.

A trader is a person who spots an opportunity and initiates the trade with an expectation of profitably exiting the trade at the earliest given opportunity. A trader usually has a short-term view on markets. A trader is alert and on his toes during market hours constantly evaluating opportunities based on risk and reward. He is unbiased toward going long or going short. We will discuss what going long or short means at a later stage.

There are different types of traders:

a. **Day Trader** – A day trader initiates and closes the position during the day. He does not carry for- ward his positions. He is risk averse and does not like taking overnight risk. For example – He would buy 100 shares of hdfc bank at 1455 at 9:15AM and sell it at 1471 at 3:20 PM making a profit of Rs. 1600/- in this trade. A day trader usually trades 5 to 6 stocks per day.

b. **Scalper** – A type of a day trader. He usually trades very large quantities of shares and holds the stock for very less time with an intention to make a small but quick profit. For example – He would buy 1000 shares of TCS as 1455 at 9:15 and sell it 1457.2 at 9.19 . He ends up making Rs 2200 in 4 minutes.

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.

2200/- profit in this trade. In a typical day, he would have placed many such trades. As you may have noticed a scalp trader is highly risk averse.

c. **Swing Trader** – A swing trader holds on to his trade for slightly longer time duration, the duration can run into anywhere between few days to weeks. He is typically more open to taking risks. For example – He would buy 100 shares of Hdfc Bank at 1455 on 20th Nov 2020 and sell it 1510 on 26th Nov 2020.

Some of the really successful traders the world has seen are – George Soros, Ed Seykota, Paul Tudor, Micheal Steinhardt, Van K Tharp, Stanley Druckenmiller etc

An investor is a person who buys a stock expecting a significant appreciation in the stock. He is willing to wait for his investment to evolve. The typical holding period of investors usually runs into a few years. There are two popular types of investors.

a. **Growth Investors** – The objective here is to identify companies which are expected to grow significantly because of emerging industry and macro trends. A classic example in the Indian con- text would be buying Hindustan Unilever, Maruti, Gillette India back in 1990s. These companies witnessed huge growth because of the change in the industry landscape thereby creating massive wealth for its shareholders.

b. **Value Investors** – The objective here is to identify good companies irrespective of whether they are in growth phase or mature phase but beaten down significantly due to the short-term market sentiment thereby making a great value buy. An example of this in recent times is L&T. Due to short term negative sentiment; L&T was beaten down significantly around August/ September of 2013. The stock price collapsed to 690 all the way from 1200. At 690 (given its fundamentals around Aug 2013), a company like L&T is perceived as cheap, and therefore a great value pick. Eventually it did pay off, as the stock price scaled back to 1440 around May 2014.

Some of the famous investors the world has seen – Charlie Munger, Peter Lynch, Benjamin Graham, Thomas Rowe, Warren Buffett, John C Bogle, John Templeton etc.

The Index

The important companies are pre packaged, and continuously monitored to give you this information. This pre packaged market information tool is called the ‘Market Index’.

There are two main market indices in India. The **S&P BSE** Sensex representing the Bombay stock exchange and **CNX Nifty** representing the National Stock exchange.

S&P stands for Standard and Poor’s, a global credit rating agency. S&P has the technical expertise in constructing the index which they have licensed to the BSE. Hence the index also carries the S&P tag.

CNX Nifty consists of the largest and most frequently traded stocks within the National Stock Exchange. It is maintained by India Index Services & Products Limited (IISL) which is a joint venture of National Stock Exchange and CRISIL. In fact the term ‘CNX’ stands for CRISIL and NSE.

An ideal index gives us minute by minute reading about how the market participants perceive the future. 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.

Practical uses of the Index

Some of the practical uses of Index are discussed below.

Information – The index reflects the general market trend for a period. The index is a broad representation of the country’s state of economy. A stock market index that is up indicates people are optimistic about the future. Likewise, when the stock market index is down it indicates that people are pessimistic about the future.

For example, the Nifty value on 1st of January 2014 was 6301 and the value as of 24th June 2014 was 7580. This represents a change of 1279 points in the index of 20.3% increase. This simply means that during the time period under consideration, the markets have gone up quite significantly indicating a strong optimistic economic future.

The time frame for calculating the index can be for any length of time. For example, the Index at 9:30 AM on 25th June 2014 was at 7,583 but an hour later it moves to 7,565. A drop of 18 points during this period indicates that the market participants are not too enthusiastic.

Benchmarking – For all the trading or investing activity that one does, a yardstick to measure the performance is required. Assume over the last 1 year you invested Rs.100,000/- and generated Rs.20,000 return to make your total corpus Rs.120,000/-. How do you think you performed? Well on the face of it, a 20% return looks great.

However, what if during the same year Nifty moved to 7,800 points from 6,000 points generating a return on 30%?

Well suddenly it may seem to you, that you have underperformed the market! If not for the Index you cannot really figure out how you performed in the stock market. You need the index to bench- mark the performance of a trader or investor. Usually, the objective of market participants is to outperform the Index.

Trading - Trading on the index is probably one of most popular uses of the index. Majority of the traders in the market trade the index. They take a broader call on the economy or general situation and translate that into a trade.

For example, imagine this situation. At 10:30 AM the Finance Minister is expected to deliver his budget speech. An hour before the announcement Nifty index is at 6,600 points. You expect the budget to be favourable to the nation's economy. What do you think will happen to the index? Naturally, the index will move up. So, in order to trade your point of view, you may want to buy the index at 6,600. After all, the index is the representation of the broader economy.

So as per your expectation the budget is good, and the index moves to 6,900. You can now book your profits and exit the trade at a 300 points profit! Trades such as these are possible through what is known as 'Derivative' segment of the markets. We are probably a bit early to explore derivatives, but for now do remember that index trading is possible through the derivative markets.

Portfolio Hedging – Investors usually build a portfolio of securities. A typical portfolio contains 10 – 12 stocks which they would have bought from a long-term perspective. While the stocks are held from a long term perspective, they could foresee a pro- longed adverse movement in the market (2008) which could potentially erode the capital in the portfolio. In such a situation, investors

can use the index to hedge the portfolio. We will explore this topic in the risk management module.

Index construction methodology

It is important to know how the index is constructed /calculated especially if one wants to advance as an index trader. As we discussed, the Index is a composition of many stocks from different sectors which collectively represents the state of the economy. To include a stock in the index it should qualify certain criteria. Once qualified as an index stock, it should continue to qualify on the stated criteria. If it fails to maintain the criteria, the stock gets replaced by another stock which qualifies the prerequisites.

Based on the selection procedure the list of stocks is populated. Each stock in the index should be assigned a certain weightage. Weightage in simpler terms define how much importance a certain stock in the index gets compared to the others. For example, if ITC Limited has 7.6% weight- age on Nifty 50 index, then it is as good as saying the that the 7.6% of Nifty's movement can be at- tributed to ITC.

The obvious question is - 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 **free float market capitalization**. The weights are assigned based on the free float market capitalization of the company, larger the market capitalization, higher the weight.

Free float 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.

At the time of writing this chapter, the following as per Table are the 50 stocks in Nifty as per their weightage.

Portfolio Characteristics

Methodology	Free Float Market Capitalization
No. of Constituents	50
Launch Date	April 22, 1996
Base Date	November 03, 1995
Base Value	1000
Calculation Frequency	Real-Time Daily
Index Rebalancing	Semi-Annually

Index Returns (%)	QTD	YTD	1 Year	5 Years	Since Inception
Price Return	22.46	14.90	14.90	11.96	11.04
Total Return	22.76	16.14	16.14	13.40	

Statistics ##	1 Year	5 Years	Since Inception
Std. Deviation *	31.10	18.16	23.88
Beta (NIFTY 50)	1.00	1.00	1.00
Correlation (NIFTY 50)	1.00	1.00	1.00

Sector Representation

Sector	Weight(%)
FINANCIAL SERVICES	38.79
IT	16.29
OIL & GAS	12.49
CONSUMER GOODS	11.52
AUTOMOBILE	5.38
PHARMA	3.61
CONSTRUCTION	2.61
METALS	2.50
CEMENT & CEMENT PRODUCTS	2.15
TELECOM	2.03
POWER	1.61
SERVICES	0.59
FERTILISERS & PESTICIDES	0.43

Fundamentals

P/E	P/B	Dividend Yield
38.45	3.96	1.14

Top constituents by weightage

Company's Name	Weight(%)
Reliance Industries Ltd.	10.66
HDFC Bank Ltd.	10.37
Infosys Ltd.	7.64
Housing Development Finance Corporation	7.61
ICICI Bank Ltd.	6.12
Tata Consultancy Services Ltd.	4.99
Kotak Mahindra Bank Ltd.	4.85
Hindustan Unilever Ltd.	3.55
ITC Ltd.	3.03
Larsen & Toubro Ltd.	2.61

Clearing and Settlement Process

What happens when you buy a stock?

Day 1 – The trade (T Day), Monday

Assume on 23rd June 2014 (Monday) you buy 100 shares of Reliance Industries at Rs.1,000/- per share. The total buy value is Rs.100,000/- (100 * 1000). The day you make the transaction is referred to as the trade date, represented as 'T Day'.

By the end of trade day, your broker will debit Rs.100,000/- and the applicable charges towards your purchase. Assuming the trade is executed through Zerodha, the applicable charges would be as follows:

So, an amount of Rs.100,000/- plus Rs.103.93/- (which includes all the applicable charges) totalling Rs.100,103.93/- will be debited from your trading account the day you make the transaction. Remember, the money goes out of your account, but the stock has not come into your DEMAT account yet.

Also, on the same day, the broker generates a 'contract note' and sends you a copy. A contract note is like a bill generated detailing every transaction you made. This is an important document that is worth saving for future reference. A contract note typically shows a breakup of all transactions done during the day along with the trade reference number. It also shows the breakup of charges charged by the broker.

Day 2 – Trade Day + 1 (T+ day, Tuesday)

The day after you made the transaction is called the T+1 day. On T+1 day, you can sell the stock that you purchased the previous day. If you do so, you are basically making a quick trade called "Buy Today, Sell Tomorrow" (BTST) or "Acquire Today, Sell Tomorrow" (ATST). Remember the stock is not in your DEMAT account yet. Hence, there is a risk involved, and you could be in trouble for selling a stock that you don't really own. This doesn't mean, every time you make a BTST trade, you end up in trouble, but it does once in a way, especially when you trade B group and illiquid stocks. This happens a little convoluted, and we deliberately will not touch this topic now.

If you start fresh in the markets, I suggest you do not make BTST trades unless you understand the risk involved.

From your perspective, nothing happens on T+1 day. However, in the background, the money required to purchase the shares is collected by the exchange and the exchange transaction charges and Security transaction tax.

Day 3 – Trade Day + 2 (T+2 day, Wednesday)

On day 3 or the T+2 day, around 11 AM shares are debited from the person who sold you the shares and credited to the brokerage with whom you are trading, who will in turn credit it to your DEMAT account by the end of the day. Similarly, money that was debited from you is credited to the person who sold the shares.

The shares will now start reflecting in the DEMAT account indicating that you own 100 shares of Reliance.

So for all practical purposes, if you buy a share on day T Day, you can expect to receive the shares in your DEMAT account only by the end of T+2 day. The shares are available for a transaction on T+3day.

10.3 – What happens when you sell a stock?

The day you sell the stocks is again called the trading day, represented as 'T Day'. The moment you sell the stock from your DEMAT account, the stock gets blocked. Before the T+2 day, the blocked shares are given to the

exchange. On T+2 day you would receive the funds from the sale which will be credited to your trading account after deduction of all applicable charges.