

ZERODHA

Technical Analysis - Part 1

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Background

1.1 - Overview

The previous module set us on a good plane with the basic understanding about the stock markets. Taking cues from the previous module, we now know that developing a well researched point of view is critical for stock market success. A good point of view should have a directional view and should also include information such as:

1. Price at which one should buy and sell stocks
2. Risk involved
3. Expected reward
4. Expected holding period

Technical Analysis (also abbreviated as TA) is a popular technique that allows you to do just that. It not only helps you develop a point of view on a particular stock or index but also helps you define the trade keeping in mind the entry, exit and risk perspective.

Like all research techniques, Technical Analysis also comes with its own attributes, some of which can be highly complex. However technology makes it easy to understand. We will discover these attributes as we proceed along this module.

1.2 - Technical Analysis, what is it?

Consider this analogy.

Imagine you are vacationing in a foreign country where everything including the language, culture, climate, and food is new to you. On day 1, you do the regular touristy activities, and by evening you are very hungry. You want to end your day by having a great dinner. You ask around for a good restaurant and you are told about a nice food street which is close by. You decide to give it a try.

To your surprise, there are many vendors selling different varieties of food. Everything looks different and interesting. You are absolutely clueless as to what to eat for dinner. To add to your dilemma you cannot ask around as you do not know the local language. So given all this, how will you make a decision on what to eat?

Well, you have two options to figure out what to eat.



Option 1: You visit a vendor, figure out what they are cooking / selling. Check on the ingredients used, cooking style, probably taste a bit and figure out if you actually like the food. You repeat this exercise across a few vendors, after which you would most likely end up eating at a place that satisfies you the most.

The advantage with this technique is that you know exactly what you are eating since you have researched about it on your own. However on the flip side, the methodology you adopted is not really scalable as there could be about 100 odd vendors, and with limited time at your disposal, you can probably cover about 4 or 5 vendors. Hence there is a high probability that you could have missed the best tasting food on the street!

Option 2: You just stand in a corner and observe all the vendors. You try and find a vendor who is attracting the maximum crowd. Once you find such a vendor you make a simple assumption -‘The vendor is attracting so many customers which means he must be making the best food!’ Based on your assumption and the crowd’s preference you decide to go to that particular vendor for your dinner. Chances are that you could be eating the best tasting food available on the street.

The advantage of this method is the scalability. You just need to spot the vendor with the maximum number of customers and bet on the fact that the food is good based on the crowd’s preference. However, on the flipside the crowd need not always be right.

If you could recognize, option 1 is very similar to Fundamental Analysis where you research about a few companies thoroughly. We will explore about Fundamental Analysis in greater detail in the next module.

Option 2 is very similar to Technical Analysis where one scans for opportunities based on the current trend aka the preference of the market.

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

Like any research technique, technical analysis stands on a bunch of assumptions. As a practitioner of technical analysis, you need to trade the markets keeping these assumptions in perspective. Of course we will understand these assumptions in details as we proceed along.

Also, at this point it makes sense to throw some light on a matter concerning FA and TA. Often people get into the argument contending a particular research technique is a better approach to market. However in reality there is no such thing as the best research approach. Every research method has its own merits and demerits. It would be futile to spend time comparing TA and FA in order to figure out which is a better approach.

Both the techniques are different and not comparable. In fact a prudent trader would spend time educating himself on both the techniques so that he can identify great trading or investing opportunities.

1.3 - Setting expectations

Often market participants approach technical analysis as a quick and easy way to make a windfall gain in the markets. On the contrary, technical analysis is anything but quick and easy. Yes, if done right, a windfall gain is possible but in order to get to that stage one has to put in the required effort to learn the technique.

If you approach TA as a quick and easy way to make money in markets, trading catastrophe is bound to happen. When a trading debacle happens, more often than not the blame is on technical analysis and not on the trader's inability to efficiently apply Technical Analysis to markets. Hence before you start delving deeper into technical analysis it is important to set expectations on what can and cannot be achieved with technical analysis.

- a. **Trades** – TA is best used to identify short term trades. Do not use TA to identify long term investment opportunities. Long term investment opportunities are best identified using fundamental analysis. Also, If you are a fundamental analyst, use TA to calibrate the entry and exit points
- b. **Return per trade** – TA based trades are usually short term in nature. Do not expect huge returns within a short duration of time. The trick with being successful with TA is to identify frequent short term trading opportunities which can give you small but consistent profits.
- c. **Holding Period** – Trades based on technical analysis can last anywhere between few minutes and few weeks, and usually not beyond that. We will explore this aspect when we discuss the topic on timeframes.
- d. **Risk** – Often traders initiate a trade for a certain reason, however in case of an adverse movement in the stock, the trade starts making a loss. Usually in such situations, traders hold on to their loss making trade with a hope they can recover the loss. Remember, TA based trades are short term, in case the trade goes sour, do remember to cut the losses and move on to identify another opportunity.

Key takeaways from this chapter

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

Introducing Technical Analysis

2.1– Overview

In the previous chapter we briefly understood what Technical Analysis was all about. In this chapter we will focus on the versatility and the assumptions of Technical Analysis.



2.2 – Application on asset types

Probably one of the greatest versatile features of technical analysis is the fact you can apply TA on any asset class as long as the asset type has historical time series data. Time series data in technical analysis context is information pertaining to the price variables namely – open high, low, close, volume etc.

Here is an analogy that may help. Think about learning how to drive a car. Once you learn how to drive a car, you can literally drive any type of car. Likewise you only need to learn technical analysis once. Once you do so, you can apply the concept of TA on any asset class – equities, commodities, foreign exchange, fixed income etc.

This is also probably one of the biggest advantages of TA when compared to the other fields of study. For example when it comes to fundamental analysis of equity, one has to study the profit and loss, balance sheet, and cash flow statements. However fundamental analysis for commodities is completely different.

If you are dealing with agricultural commodity like Coffee or Pepper then the fundamental analysis includes analyzing rainfall, harvest, demand, supply, inventory etc. However the fundamentals of metal commodities are different, so is for energy commodities. So every time you choose a commodity, the fundamentals change.

However the concept of technical analysis will remain the same irrespective of the asset you are studying. For example, an indicator such as ‘Moving average convergence divergence’ (MACD) or ‘Relative strength index’ (RSI) is used exactly the same way on equity, commodity or currency.

2.3 – Assumption in Technical Analysis

Unlike fundamental analysts, technical analysts don’t care whether a stock is undervalued or overvalued. In fact the only thing that matters is the stocks past trading data (price and volume) and what information this data can provide about the future movement in the security.

Technical Analysis is based on few key assumptions. One needs to be aware of these assumptions to ensure the best results.

1) Markets discount everything – This assumption tells us that, all known and unknown information in the public domain is reflected in the latest stock price. For example there could be an insider in the company buying the company’s stock in large quantity in anticipation of a good quar-

terly earnings announcement. While he does this secretly, the price reacts to his actions thus revealing to the technical analyst that this could be a good buy.

2) The 'how' is more important than 'why' – This is an extension to the first assumption. Going with the same example as discussed above – the technical analyst would not be interested in questioning why the insider bought the stock as long he knows how the price reacted to the insider's action.

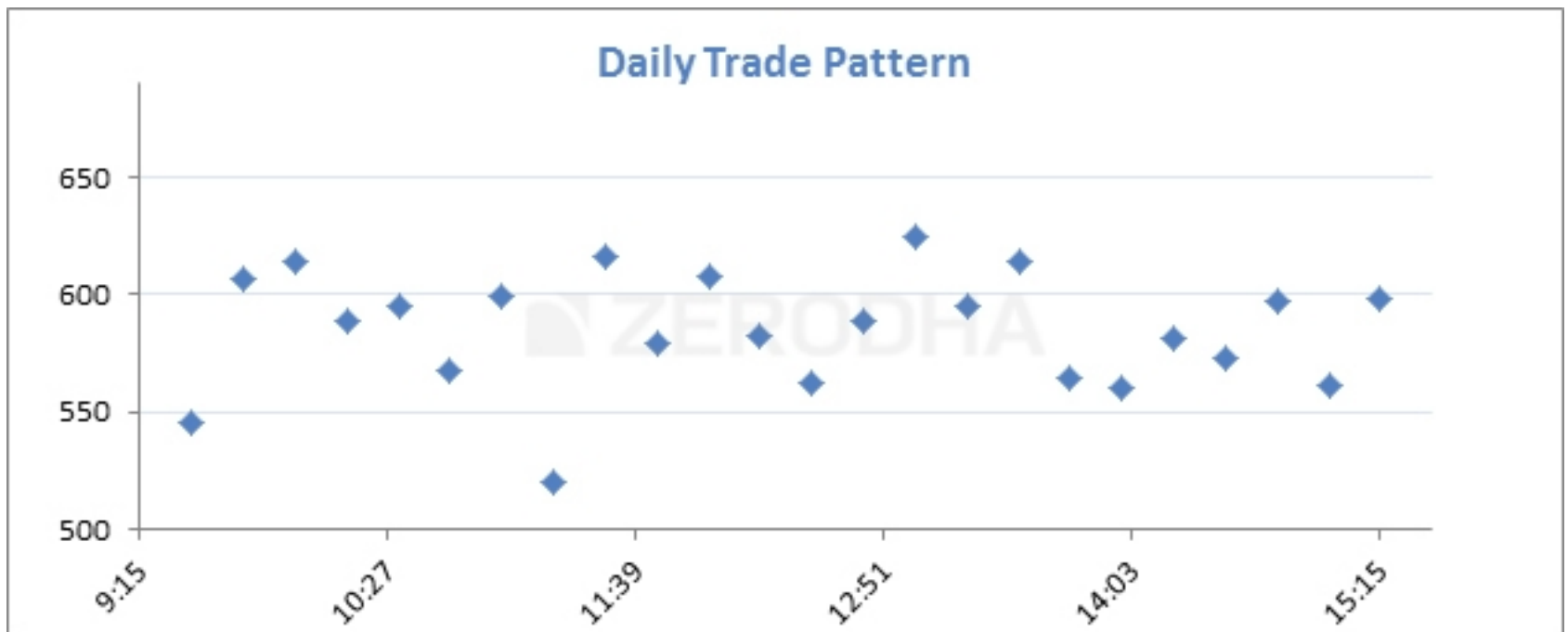
3) Price moves in trend - All major moves in the market is an outcome of a trend. The concept of trend is the foundation of technical analysis. For example the recent upward movement in the NIFTY Index to 7700 from 6400 did not happen overnight. This move happened in a phased manner, in over 11 months. Another way to look at it is, once the trend is established, the price moves in the direction of the trend.

4) History tends to repeat itself – In the technical analysis context, the price trend tends to repeat itself. This happens because the market participants consistently react to price movements in a remarkably similar way, each and every time the price moves in a certain direction. For example in up trending markets, market participants get greedy and want to buy irrespective of the high price. Likewise in a down trend, market participants want to sell irrespective of the low and unattractive prices. This human reaction ensures that the price history repeats itself.

2.4 – The Trade Summary

The Indian stock market is open from 9:15 AM to 15:30 PM. During the 6 hour 15 minute market session, there are millions of trades that take place. Think about an individual stock – every minute there is a trade that gets executed on the exchange. The question is, as a market participant, do we need to keep track of all the different price points at which a trade is executed?

To illustrate this further, let us consider this imaginary stock in which there are many trades. Look at the picture below. Each point refers to a trade being executed at a particular time. If one manages to plot a graph which includes every second from 9:15 AM to 15:30 PM, the graph will be cluttered with many points. Hence in the chart below, for ease of understating I've plotted a limited time scale period:



Market opened at 9:15 AM and closed at 15:30 PM during which there were many trades. It will be practically impossible to track all these different price points. In fact what one needs is a summary of the trading action and not really the details on all the different price points.

By tracking the Open, high, low and close we can draw a summary of the price action.

The open – When the markets open for trading, the first price at which a trade executes is called the opening Price.

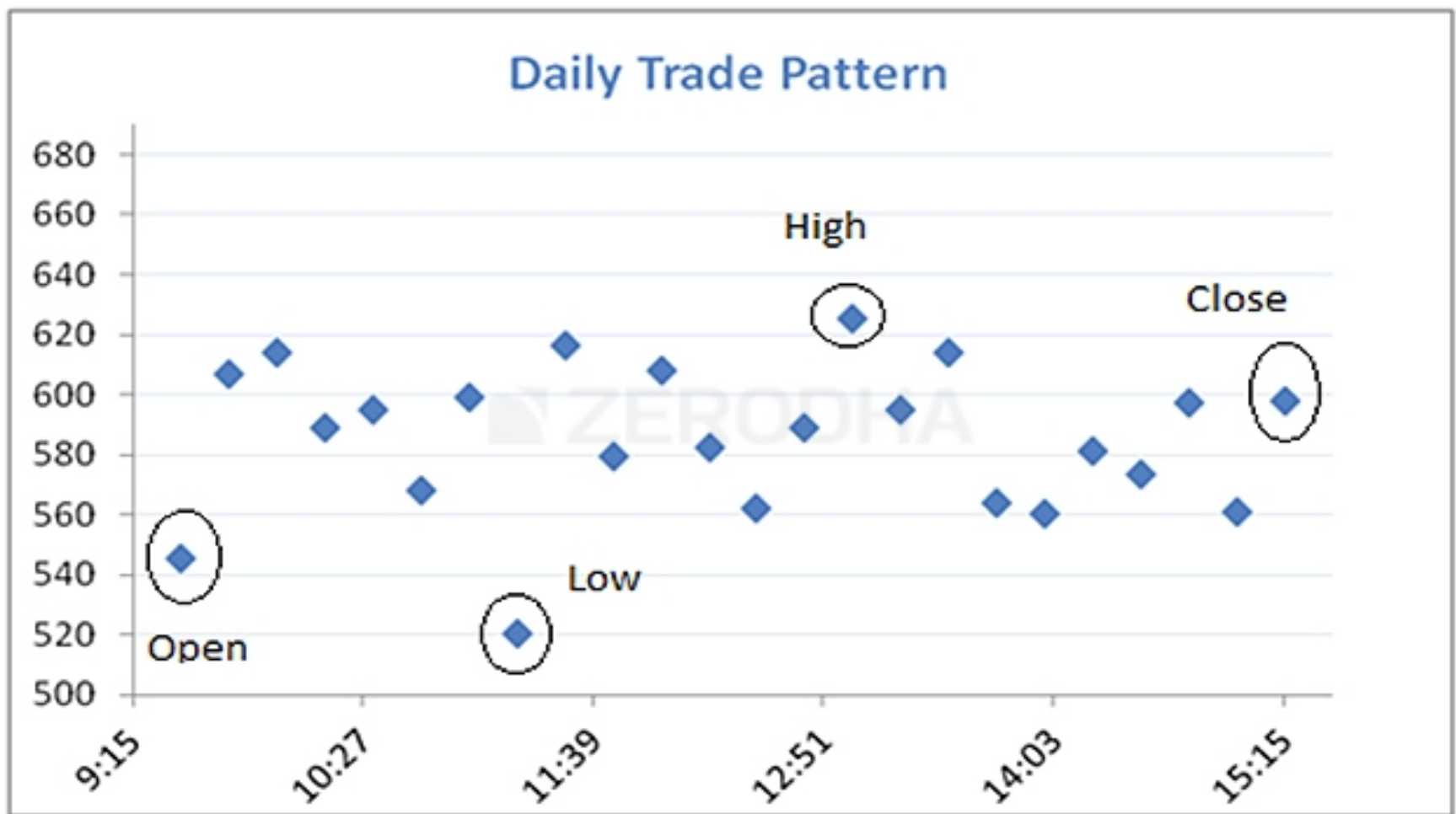
The high – This represents the highest price at which the market participants were willing to transact for the given day.

The Low – This represents the lowest level at which the market participants were willing to transact for the given day.

The close – The Close price is the most important price because it is the final price at which the market closed for a particular period of time. The close serves as an indicator for the intraday strength. If the close is higher than the open, then it is considered a positive day else negative. Of course we will deal with this in a greater detail as we progress through the module.

The closing price also shows the market sentiment and serves as a reference point for the next day's trading. For these reasons, closing price is more important than the Open, High or Low prices.

The open, high, low, close prices are the main data points from the technical analysis perspective. Each of these prices have to be plotted on the chart and analyzed.



Key takeaways from this chapter

1. Technical Analysis is not bound by its scope. The concepts of TA can be applied across any asset class as long as it has a time series data
2. TA is based on few core assumptions.
 - a. Markets discount everything
 - b. The how is more important than why
 - c. Price moves in trends
 - d. History tends to repeat itself
3. A good way to summarize the daily trading action is by marking the open, high, low and close prices usually abbreviated as OHLC

The Chart Types



3.1– Overview

Having recognized that the Open (O), high (H), low (L), and close (C) serves as the best way to summarize the trading action for the given time period, we need a charting technique that displays this information in the most comprehensible way. If not for a good charting technique, charts can get quite complex. Each trading day has four data points' i.e the OHLC. If we are looking at a 10 day chart, we need to visualize 40 data points (1 day x 4 data points per day). So you can imagine how complex it would be to visualize 6 months or a year's data.

As you may have guessed, the regular charts that we are generally used to - like the column chart, pie chart, area chart etc does not work for technical analysis. The only exception to this is the line chart.

The regular charts don't work mainly because they display one data point at a given point in time. However Technical Analysis requires four data points to be displayed at the same time.

Below are some of the chart types:

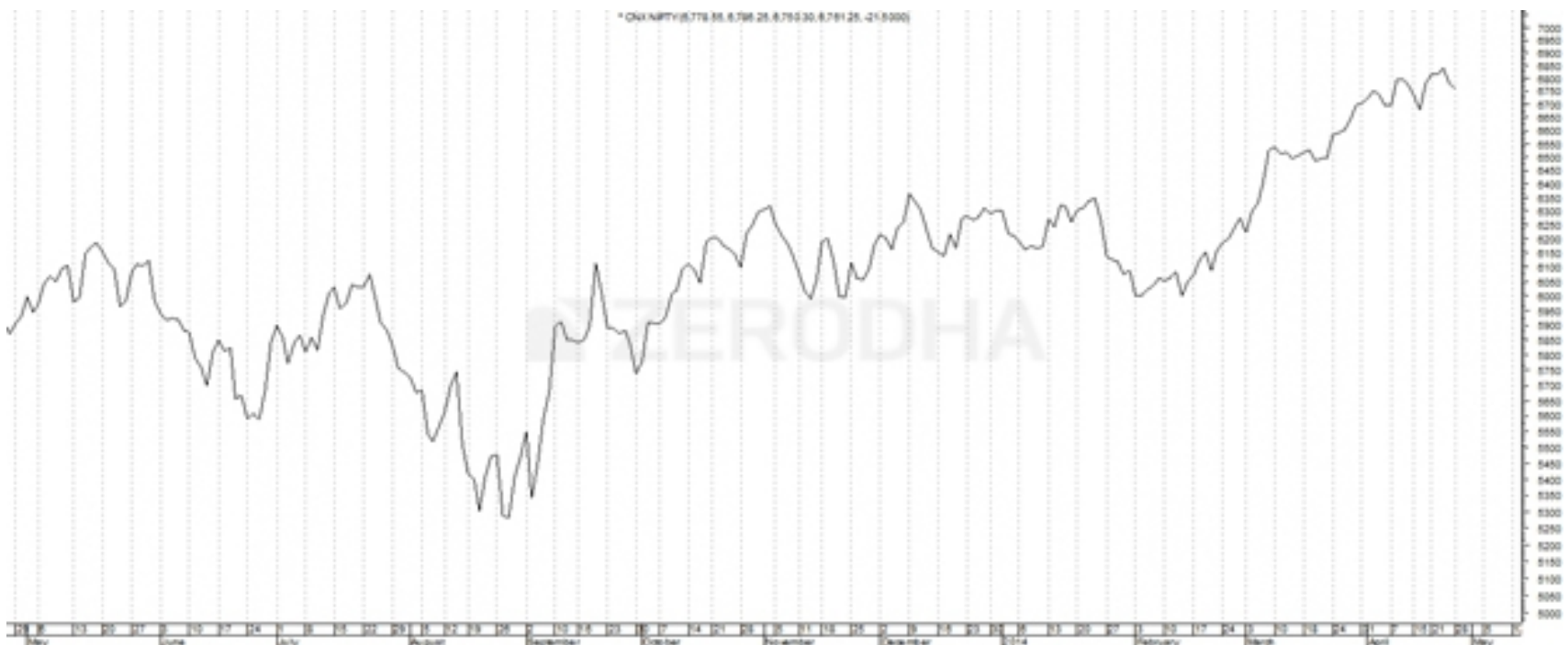
1. Line chart
2. Bar Chart
3. Japanese Candlestick

The focus of this module will be on the Japanese Candlesticks however before we get to candlesticks, we will understand why we don't use the line and bar chart.

3.2 – The Line and Bar chart

The line chart is the most basic chart type and it uses only one data point to form the chart. When it comes to technical analysis, a line chart is formed by plotting the closing prices of a stock or an index. A dot is placed for each closing price and the various dots are then connected by a line.

If we are looking 60 day data then the line chart is formed by connecting the dots of the closing prices for 60 days.



The line charts can be plotted for various time frames namely monthly, weekly, hourly etc. So, if you wish to draw a weekly line chart, you can use weekly closing prices of securities and likewise for the other time frames as well.

The advantage of the line chart is its simplicity. With one glance, the trader can identify the generic trend of the security. However the disadvantage of the line chart is also its simplicity. Besides giving the analysts a view on the trend, the line chart does not provide any additional detail. Plus the line chart takes into consideration only the closing prices ignoring the open, high and low. For this reason traders prefer not to use the line charts.

The bar chart on the other hand is a bit more versatile. A bar chart displays all the four price variables namely open, high, low, and close. A bar has three components.

1. The central line – The top of the bar indicates the highest price the security has reached. The bottom end of the bar indicates the lowest price for the same period.

2.The left mark/tick – indicates the open

3.The right mark/tick – indicates the close

For example assume the OHLC data for a stock as follows:

Open – 65

High – 70

Low – 60

Close - 68

For the above data, the bar chart would look like this:



As you can see, in a single bar, we can plot four different price points. If you wish to view 5 days chart, as you would imagine we will have 5 vertical bars. So on and so forth.



Note the position of the left and right mark on the chart varies based on how the market has moved for the given day.

If the left mark, which represents the opening price is placed lower than the right mark, it indicates that the close is higher than the open (close > open), hence a positive day for the markets. For example consider this: O = 46, H = 51, L = 45, C = 49. To indicate it is a bullish day, the bar is represented in blue color.



Likewise if the left mark is placed higher than the right mark it indicates that the close is lower than the open (close < open), hence a negative day for markets. For example consider this: O = 74, H=76, L=70, C=71. To indicate it is a bearish day, the bar is represented in red color.



The length of the central line indicates the range for the day. A range can be defined as the difference between the high and low. Longer the line, bigger the range, shorter the line, smaller is the range.

While the bar chart displays all the four data points it still lacks a visual appeal. This is probably the biggest disadvantage of a bar chart. It becomes really hard to spot potential patterns brewing when one is looking at a bar chart. The complexity increases when a trader has to analyze multiple charts during the day.

Hence for this reason the traders do not use bar charts. However it is worth mentioning that there are traders who prefer to use bar charts. But if you are starting fresh, I would strongly recommend the use of Japanese Candlesticks. Candlesticks are the default option for the majority in the trading community.

3.3 – History of the Japanese Candlestick

Before we jump in, it is worth spending time to understand in brief the history of the Japanese Candlesticks. As the name suggests, the candlesticks originated from Japan. The earliest use of candlesticks dates back to the 18th century by a Japanese rice merchant named Homma Munehisa.

Though the candlesticks have been in existence for a long time in Japan, and are probably the oldest form of price analysis, the western world traders were clueless about it. It is believed that sometime around 1980's a trader named Steve Nison accidentally discovered candlesticks, and he actually introduced the methodology to the rest of the world. He authored the first ever book on candlesticks titled “Japanese Candlestick Charting Techniques” which is still a favorite amongst many traders.

Most of the pattern in candlesticks still retains the Japanese names; thus giving an oriental feel to technical analysis.

3.4 – Candlestick Anatomy

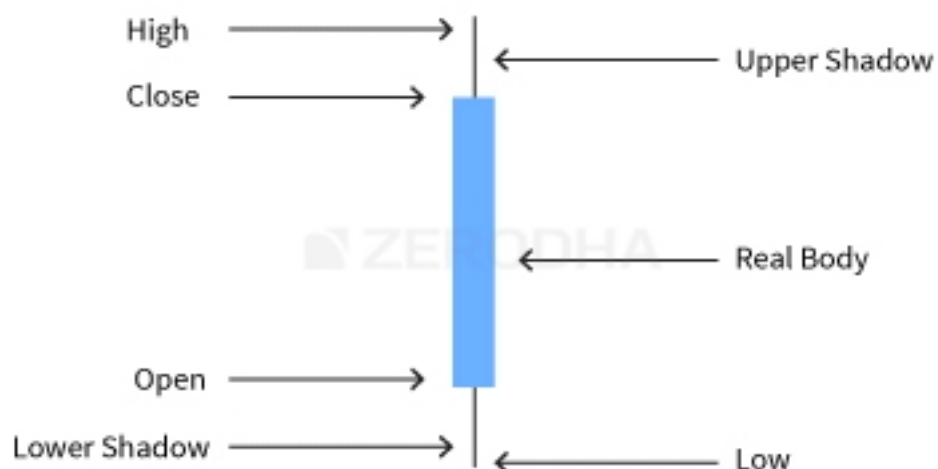
While in a bar chart the open and the close prices are shown by a tick on the left and the right sides of the bar respectively, however in a candlestick the open and close prices are displayed by a rectangular body.

In a candle stick chart, candles can be classified as a bullish or bearish candle usually represented by blue/green/white and red/black candles respectively. Needless to say, the colors can be customized to any color of your choice; the technical analysis software allows you to do this. In this module we have opted for the blue and red combination to represent bullish and bearish candles respectively.

Let us look at the **bullish candle**. The candlestick, like a bar chart is made of 3 components.

1. The Central real body – The real body, rectangular in shape connects the opening and closing price
2. Upper shadow – Connects the high point to the close
3. Lower Shadow – Connects the low point to the open

Have a look at the image below to understand how a bullish candlestick is formed:



This is best understood with an example. Let us assume the prices as follows..

Open = 62

High = 70

Low = 58

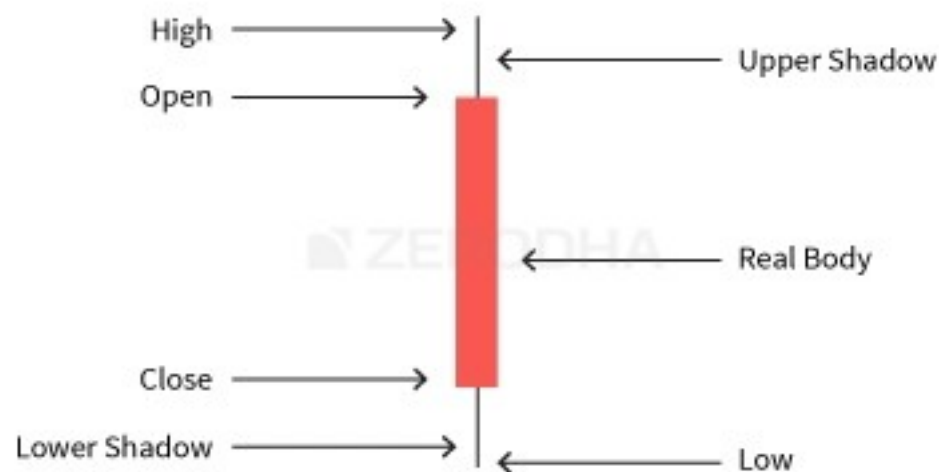
Close = 67



Likewise, the bearish candle also has 3 components:

1. The Central real body – The real body, rectangular in shape which connects the opening and closing price. However the opening is at the top end and the closing is at the bottom end of the rectangle
2. Upper shadow – Connects the high point to the open
3. Lower Shadow – Connects the Low point to the close

This is how a bearish candle would look like:



This is best understood with an example. Let us assume the prices as follows..

Open = 456

High = 470

Low = 420

Close = 435



Here is a little exercise to help you understand the candlestick pattern better. Try and plot the candlesticks for the given data.

Table 3.1- OHLC Data

Day	Open	High	Low	Close
Day 1	430	444	425	438
Day 2	445	455	438	450
Day 3	445	455	430	437

If you find any difficulty in doing this exercise, feel free to ask your query in the comments at the end of this chapter.

Once you internalize the way candlesticks are plotted, reading the candlesticks to identify patterns becomes a lot easier.



This is how the candlestick chart looks like if you were to plot them on a time series. The blue candle indicates bullishness and red indicates bearishness.

Also note, a long bodied candle depicts strong buying or selling activity. A short bodied candle depicts less trading activity and hence less price movement.

To sum up, candlesticks are easier to interpret in comparison to the bar chart. Candlesticks help you to quickly visualize the relationship between the open and close as well as the high and low price points.

3.5 – A note on time frames

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:

- Monthly Charts
- Weekly charts
- Daily or End of day charts
- 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 as opposed to any other time frame.

TABLE 3.2 - Time frames

Here is a quick note on different types of time frames.

Time Frame	Open	High	Low	Close	No of Candles
Monthly	The opening price on the first day of the month	Highest price at which the stock traded during the entire month	Lowest price at which the stock traded during the entire month	The closing price on the last day of the month	12 candles for the entire year
Weekly	Monday's Opening Price	Highest price at which the stock traded during the entire week	Lowest price at which the stock traded during the entire week	The closing price on Friday	52 candles for the entire year
Daily or EOD	Opening price of the day	Highest price at which the stock traded during the day	Lowest price at which the stock traded during the entire day	The closing price of the day	One candle per day, 252 candles for the entire year
Intraday 30 minutes	The opening price at the beginning of the 1st minute	Highest price at which the stock traded during the 30 minute duration	Lowest price at which the stock traded during the 30 minute duration	The closing price as on the 30th minute	Approximately 12 candles per day
Intraday 15 minutes	The opening price at the beginning of the 1st minute	Highest price at which the stock traded during the 15 minute duration	Lowest price at which the stock traded during the 15 minute duration	The closing price as on the 15th minute	25 candles per day
Intraday 5 minutes	The opening price at the beginning of the 1st minute	Highest price at which the stock traded during the 5 minute duration	Lowest price at which the stock traded during the 5 minute duration	The closing price as on the 5th minute	75 candles per day

As you can see from the table above as and when the time frame reduces, the number of candles (data points) increase. Based on the type of trader you are, you need to take a stand on the time frame you need.

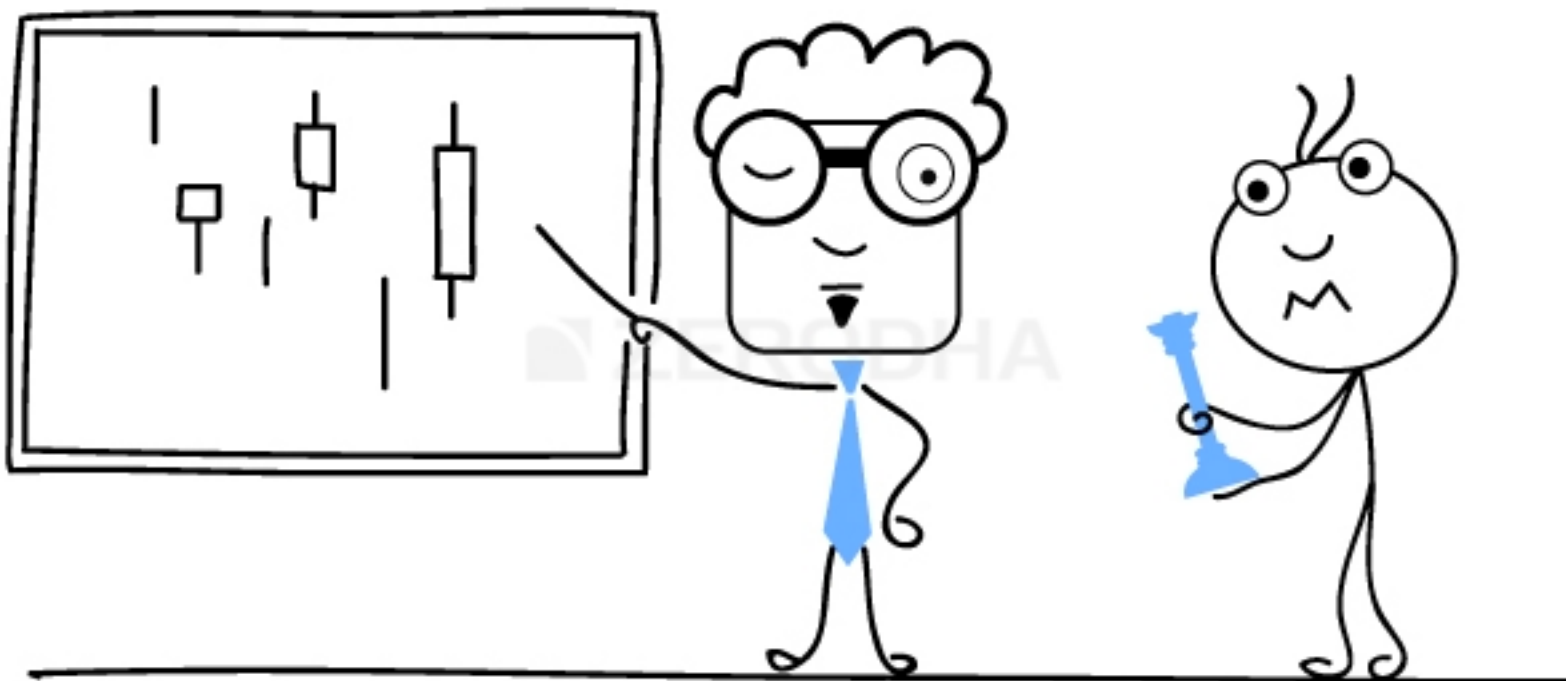
The data can either be information or noise. As a trader, you need to filter information from noise. For instance a long term investor is better off looking at weekly or monthly charts as this would provide information. While on the other hand an intraday trader executing 1 or 2 trades per day is better off looking at end of day (EOD) or at best 15 mins charts. Likewise for a high frequency trader, a 1 minute charts can convey a lot of information.

So based on your stance as a trader you need to choose a time frame. This is extremely crucial for your trading success, because a successful trader looks for information and discards the noise.

Key takeaways from this chapter

1. Conventional chart type cannot be used for technical analysis as we need to plot 4 data points simultaneously
2. Line chart can be used to interpret trends but besides that no other information can be derived
3. Bar charts lacks visual appeal and one cannot identify patterns easily. For this reason bar charts are not very popular
4. There are two types of candlesticks – Bullish candle and Bearish candle. The structure of the candlestick however remains the same
5. When close > open = It is a Bullish candle. When close < open = It is a Bearish candle
6. Time frames play a very crucial role in defining the trading success. One has to choose this carefully
7. The number of candle increases as and when the frequency increases
8. A traders should be in a position to discard noise from relevant information

Getting Started with Candlesticks



4.1 – History tends to repeat itself - The big assumption

As mentioned earlier one of the key assumptions in technical analysis is that, we rely on the fact that the history tends to repeats itself. This probably is one of the most important assumptions in Technical Analysis.

It would make sense to explore this assumption in greater detail at this juncture as candlestick patterns are heavily dependent on it.

Assume today, the 7th of July 2014 there are few things happening in a particular stock. Let us call this factor:

1. **Factor 1** - The stock has been falling for the last 4 consecutive trading sessions
2. **Factor 2** –Today (7th July 2014) is the 5th session and the stock is falling on relatively lower volumes

3. **Factor 3** – The range in which the stock trades today is quite small compared to the last four days.

With these factors are playing in the background, let us assume that on the next day (8th July 2014) the fall in stock gets arrested and in fact the stock rallies towards a positive close. So, as an outcome of the 3 factors the stock went up on the 6th day.

Time passes and let's say after a few months, the same set of factors is observed for 5 consecutive trading sessions. What would you expect for the 6th day?

According to the assumption – History tends to repeat itself. However we need to make an addendum to this assumption. When a set of factors that has panned out in the past tends to repeat itself in the future, we expect the same outcome to occur, as was observed in the past, provided the factors are the same.

Therefore, based on this assumption even this time round we can expect the stock price to go up on the 6th trading session.

4.2 – Candlestick patterns and what to expect

The candlesticks are used to identify trading patterns. Patterns in turn help the technical analyst to set up a trade. The patterns are formed by grouping two or more candles in a certain sequence. However, sometimes powerful trading signals can be identified by just single candlestick pattern.

Hence, candlesticks can be broken down into single candlestick pattern and multiple candlestick patterns.

Under the single candlestick pattern we will be learning the following...

1. Marubozu
 - a. Bullish Marubozu
 - b. Bearish Marubozu
2. Doji
3. Spinning Tops
4. Paper umbrella
 - a. Hammer
 - b. Hanging man
5. Shooting star

Multiple candlestick patterns are a combination of multiple candles. Under the multiple candlestick patterns we will learn the following:

1. Engulfing pattern
 - a. Bullish Engulfing
 - b. Bearish Engulfing
2. Harami
 - a. Bullish Harami
 - b. Bearish Harami
3. Piercing Pattern
4. Dark cloud cover
5. Morning Star
6. Evening Star

Of course you must be wondering what these names mean. As I had mentioned in the previous chapter, some of the patterns retain the original Japanese name.

Candlestick patterns help the trader develop a complete point of view. Each pattern comes with an in built risk mechanism. Candlesticks gives an insight into both entry and stop loss price.

4.3 – Few assumptions specific to candlesticks

Before we jump in and start learning about the patterns, there are few more assumptions that we need to keep in mind. These assumptions are specific to candlesticks. Do pay a lot of attention to these assumptions as we will keep referring back to these assumptions quite often later.

At this stage, these assumptions may not be very clear to you. I will explain them in greater detail as and when we proceed. However, do keep these assumptions in the back of your mind:

- **Buy strength and sell weakness** – Strength is represented by a bullish (blue) candle and weakness by a bearish (red) candle. Hence whenever you are buying ensure it is a blue candle day and whenever you are selling, ensure it's a red candle day.
- **Be flexible with patterns (quantify and verify)** – While the text book definition of a pattern could state a certain criteria, there could be minor variations to the pattern owing to market conditions. So one needs to be a bit flexible. However one needs to be flexible within limits, and hence it is required to always quantify the flexibility.

- **Look for a prior trend** – If you are looking at a bullish pattern, the prior trend should be bearish and likewise if you are looking for a bearish pattern, the prior trend should be bullish.

In the next chapter, we will begin with learning about single candlestick patterns.

Key takeaways from this chapter

1. History tends to repeat itself – we modified this assumption by adding the factor angle
2. Candlestick patterns can be broken down into single and multiple candlestick patterns
3. There are three important assumptions specific to candlestick patterns
 - a. Buy strength and sell weakness
 - b. Be flexible – quantify and verify
 - c. Look for a prior trend.

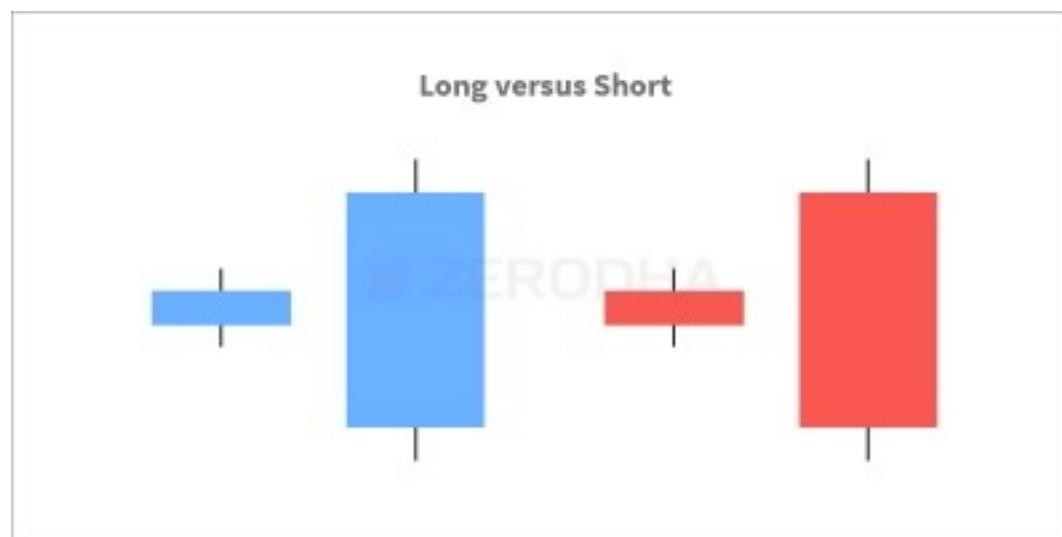
Single Candlestick patterns (Part 1)

5.1 – Overview

As the name suggests, a single candlestick pattern is formed by just one candle. So as you can imagine, the trading signal is generated based on 1 day's trading action. The trades based on a single candlestick pattern can be extremely profitable provided the pattern has been identified and executed correctly.

One needs to pay some attention to the length of the candle while trading based on candlestick patterns. The length signifies the range for the day. In general, the longer the candle, the more intense is the buying or selling activity. If the candles are short, it can be concluded that the trading action was subdued.

The following picture gives a perspective on the long/short – bullish, and bearish candle.



The trades have to be qualified based on the length of the candle as well. One should avoid trading based on subdued short candles. We will understand this perspective as and when we learn about specific patterns.

5.2 – The Marubozu

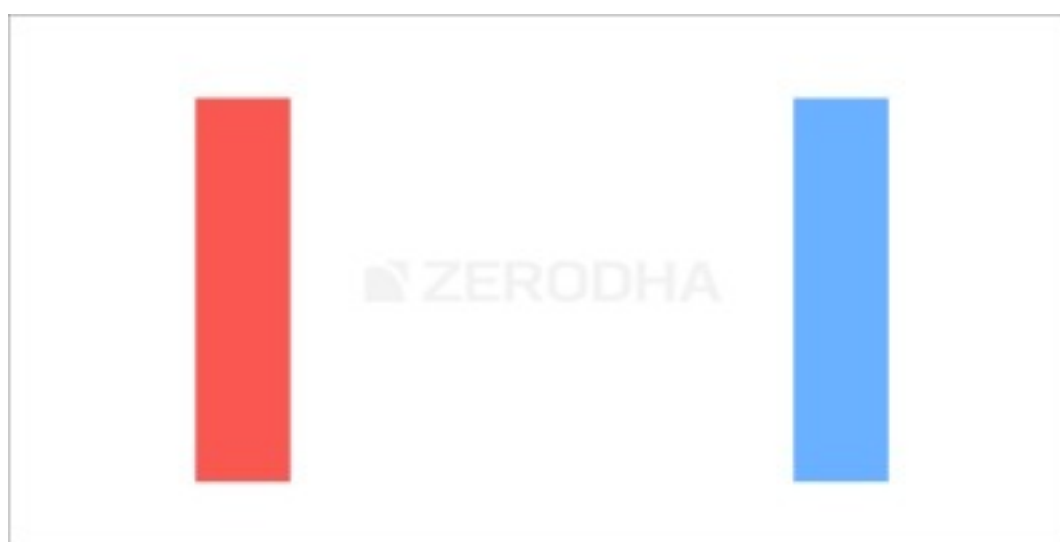
The Marubozu is the first single candlestick pattern that we will understand. The word Marubozu means “Bald” in Japanese. We will understand the context of the terminology soon. There are two types of marubozu – the bullish marubozu and the bearish marubozu.

Before we proceed, let us lay down the three important rules pertaining to candlesticks. We looked at it in the previous chapter; I’ve reproduced the same for quick reference:

1. Buy strength and sell weakness
2. Be flexible with patterns (verify and quantify)
3. Look for prior trend

Marubozu is probably the only candlestick pattern which violates rule number 3 i.e look for prior trend. A Marubozu can appear anywhere in the chart irrespective of the prior trend, the trading implication remains the same.

The text book defines Marubozu as a candlestick with no upper and lower shadow (therefore appearing bald). A Marubozu has just the real body as shown below. However there are exceptions to this. We will look into these exceptions shortly.



The red candle represents the bearish marubozu and the blue represents the bullish marubozu.

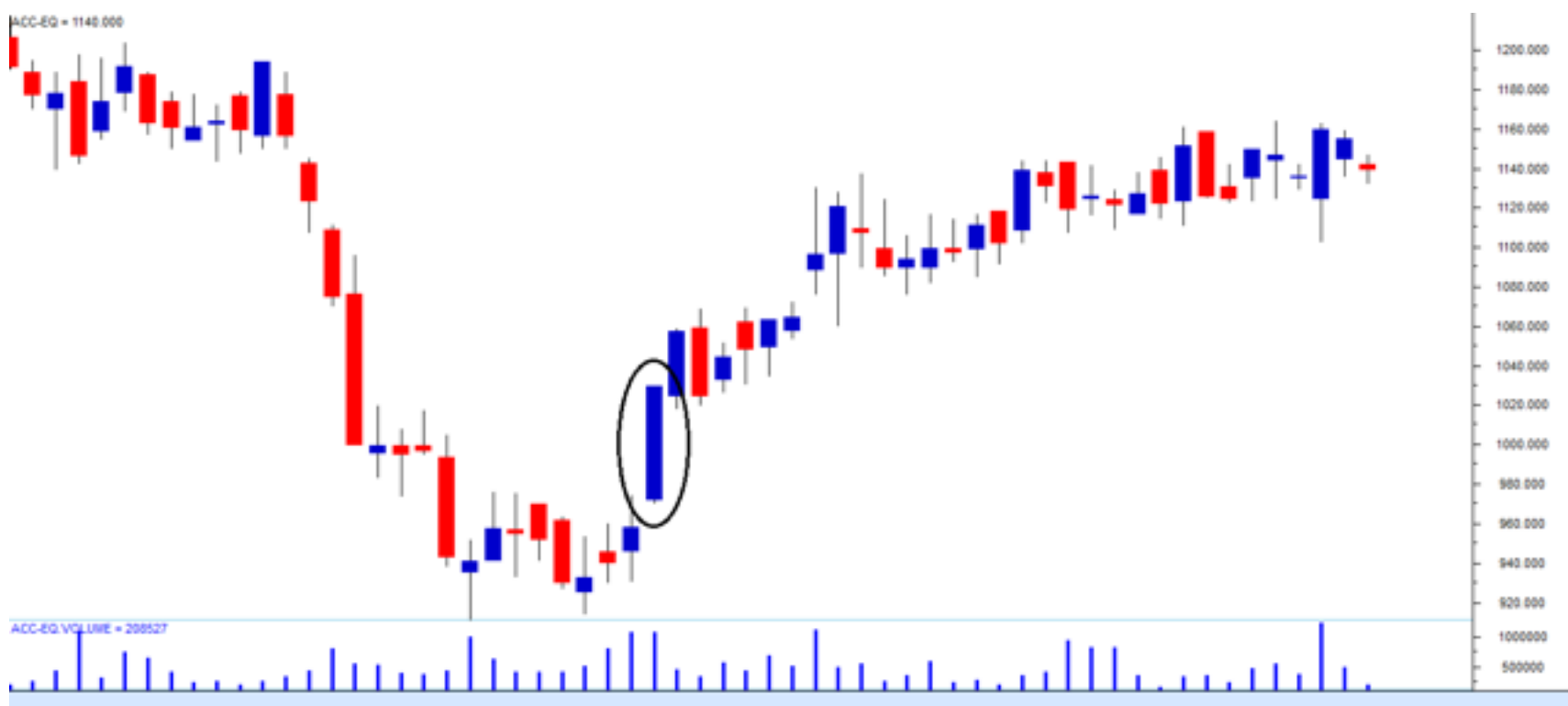


5.3 – Bullish Marubuzo

The absence of the upper and lower shadow in a bullish marubuzo implies that the low is equal to the open and the high is equal to the close. Hence whenever the, **Open = Low and High = close**, a bullish marubuzo is formed.

A bullish marubuzo indicates that there is so much buying interest in the stock that the market participants were willing to buy the stock at every price point during the day, so much so that the stock closed near its high point for the day. It does not matter what the prior trend has been, the action on the marubuzo day suggests that the sentiment has changed and the stock is now bullish.

The expectation is that with this sudden change in sentiment there is a surge of bullishness and this bullish sentiment will continue over the next few trading sessions. Hence a trader should look at buying opportunities with the occurrence of a bullish marubuzo. The **buy price** should be around the closing price of the marubuzo.



In the chart above (ACC Limited), the encircled candle is a bullish marubuzo. Notice the bullish marubuzo candle does not have a visible upper and a lower shadow. The OHLC data for the candle is: Open = 971.8, High = 1030.2, Low = 970.1, Close = 1028.4

Please notice, as per the text book definition of a marubozu **Open = Low, and High = Close**. However in reality there is a minor variation to this definition. The variation in price is not much when measured in percentage terms, for example the variation between high and close is 1.8 which as a percentage of high is just 0.17%. **This is where the 2nd rule applies – Be flexible, Quantify and Verify.**

With this occurrence of a marubuzo the expectation has turned bullish and hence one would be a buyer of the stock. The trade setup for this would be as follows:

Buy Price = Around 1028.4 and Stoploss = 970.0

As it is evident, candlestick patterns do not give us a target. However we will address the issue of setting targets at a later stage in this module.

Having decided to buy the stock, when do we actually buy the stock? The answer to this depends on your risk appetite. Let us assume there are two types of trader with different risk profiles – the risk taker and the risk averse.

The risk taker would buy the stock on the same day as the marubozu is being formed. However the trader needs to validate the occurrence of a marubozu. Validating is quite simple. Indian markets close at 3:30 PM. So, around 3:20 PM one needs to check if the **current market price (CMP) is approximately equal to the high price for the day, and the opening price of the day is approximately equal to the low price the day**. If this condition is satisfied, then you know the day is forming a marubozu and therefore you can buy the stock around the closing price. It is also very important to note that the risk taker is buying on a bullish/blue candle day, thereby following rule 1 i.e buy on strength and sell on weakness.

The risk averse trader would buy the stock on the next day i.e the day after the pattern has been formed. However before buying the trader needs to ensure that the day is a bullish day to comply with the rule number 1. This means the risk averse buyer can buy the stock only around the close of the day. The disadvantage of buying the next day is that the buy price is way above the suggested buy price, and therefore the stoploss is quite deep. However as a trade off the risk averse trader is buying only after doubly confirming that the bullishness is indeed established.

As per the ACC's chart above, both the risk taker and the risk averse would have been profitable in their trades.

Here is another example (Asian Paints Ltd) where both the risk taker, and the risk averse trader would have been profitable



Here is an example where the risk averse trader would have benefited :



Notice in the chart above, a bullish marubuzo has been encircled. The risk taker would have initiated a trade to buy the stock on the same day around the close, only to book a loss on the next day. However the risk averse would have avoided buying the stock entirely because the next day happened to be a red candle day. Going by the rule, we should buy only on a blue candle day and sell on a red candle day.

5.4 – The Stoploss on Bullish Marubuzo

What if after buying, the market reverses its direction and the trade goes wrong? Like I had mentioned earlier, candlestick patterns comes with a inbuilt risk management mechanism. In case of a bullish marubuzo, the low of the stock acts as a stoploss. So after you initiate a buy trade , in case the markets moves in the opposite direction, you should exit the stock if price breaches the low of the marubuzo.

Here is an example where the bullish marubuzo qualified as a buy for both the risk averse and the risk taker. The OHLC is : O = 960.2, H = 988.6, L = 959.85, C = 988.5.



But the pattern eventually failed and one would have booked a loss. The stoploss for this trade would be the low of marubuzo, i.e 959.85.

Booking a loss is a part of the game. Even a seasoned trader goes through this. However the best part of following the candlestick is that the losses are not allowed to run indefinitely. There is a clear agenda as to what price one has to get out of a trade provided the trade starts to move in the opposite direction. In this particular case booking a loss would have been the most prudent thing to do as the stock continued to go down.

Of course there could be instances where the stoploss gets triggered and you pull out of the trade. But the stock could reverse direction and start going up after you pulled out of the trade.

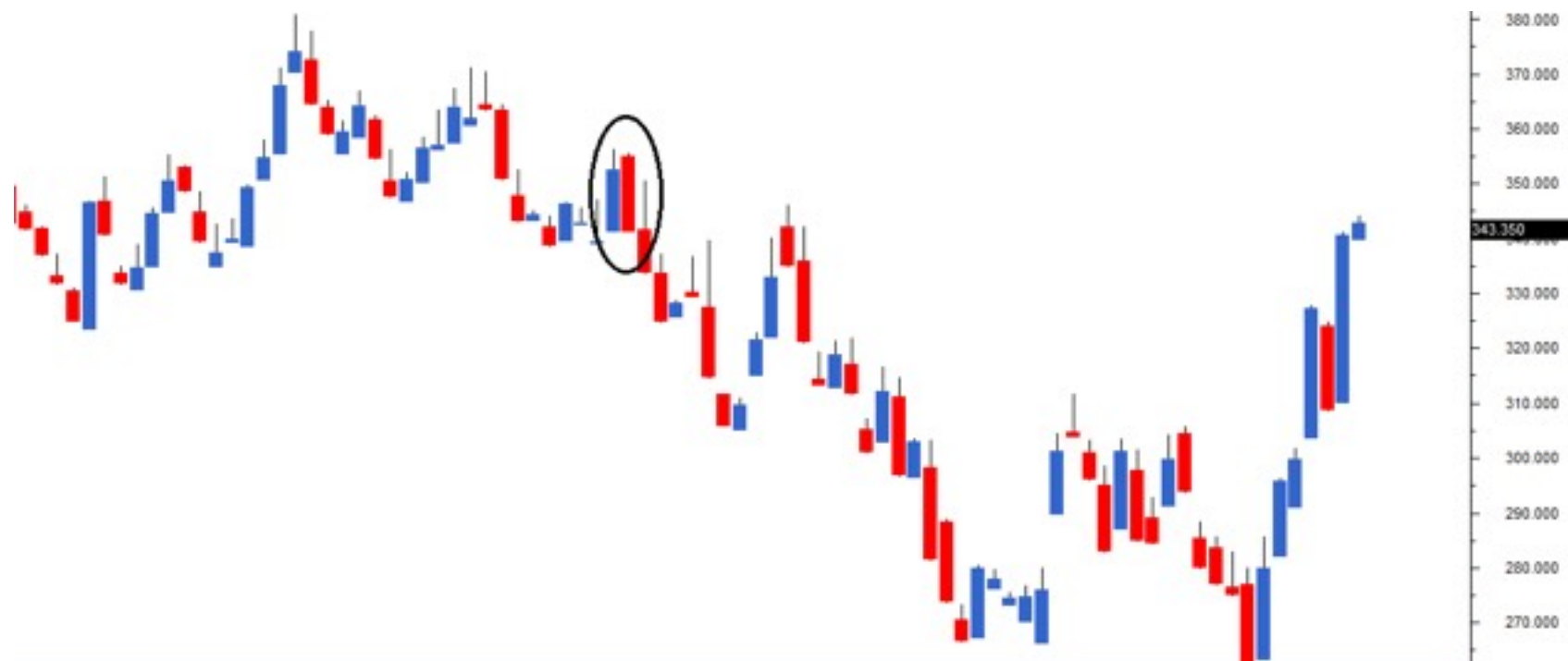
But unfortunately this is also a part of the game and one cannot really help it. No matter what happens, the trader should stick to the rules and not find excuses to deviate from it.



5.5 - Bearish Marubuzo

Bearish Marubuzo indicates extreme bearishness. Here the open is equal to the high and close the is equal to low. Open = High, and Close = Low.

A bearish marubuzo indicates that there is so much selling pressure in the stock that the market participants actually sold at every price point during the day, so much so that the stock closed near its low point of the day. It does not matter what the prior trend has been, the action on the marubuzo day suggests that the sentiment has changed and the stock is now bearish.



The expectation is that this sudden change in sentiment will be carried forward over the next few trading sessions and hence one should look at shorting opportunities. The sell price should be around the closing price of the marubuzo.

In the chart above (BPCL Limited), the encircled candle indicates the presence of a bearish marubuzo. Notice the candle does not have an upper and a lower shadow. The OHLC data for the candle is as follows:

Open = 355.4, High = 356.0, Low = 341, Close = 341.7

As we had discussed earlier a minor variation between the OHLC figures leading to small upper and lower shadows is ok as long as it is within a reasonable limit.

The trade on the bearish marubuzo would be to short BPCL approximately at 341.7 with a stop-loss at the high point of the candle.

In this case the stoploss price is 356.0. Of course at this stage we still haven't dealt with setting targets, and we will figure that out much later in this module.

Do remember this, once a trade is initiated you should hold on to it until either the target is hit or the stoploss is breached. If you attempt to do something else before any one of these event triggers, then most likely your trade could go bust. So staying on course of the plan is extremely crucial.

Trade can be initiated based on the risk appetite of the person. The risk taker can initiate a short trade on the same day around the closing. Of course, he has to make sure that the candle is forming a bearish marubuzo. To do this at 3:20PM the trader has to confirm if the open is approximately equal to the high and the current market price is equal to the low price. If the condition is validated, then it is a bearish marubuzo and hence a short position can be initiated.

If the trader is risk averse, he can wait till the next day's closing. The short trade will go through only by 3:20PM next day after ensuring that the day is a red candle day. This is also to ensure that we comply with 1st rule – Buy strength, and Sell weakness.

In the BPCL chart above, both risk taker and risk averse would have been profitable.

Here is another chart, Cipla Limited, where the bearish marubuzo has been profitable for both risk taker, and a risk averse trader. Remember these are short term trades and one needs to be quick in booking profits.



Here is a chart which show bearish marubuzo pattern which would have not worked out for the risk taker but a risk averse trader would have entirely avoided initiating the trade, thanks to rule 1.



5.6 – The trade trap

Earlier in this chapter we did discuss about the length of the candle. One should avoid trading during an extremely small (below 1% range) or long candle (above 10% range).

A small candle indicates subdued trading activity and hence it would be difficult to identify the direction of the trade. On the other hand a long candle indicates extreme activity. The problem with lengthy candles would be the placement of stoploss. The stoploss would be deep and in case the trade goes wrong the penalty to pay would be painful. For this reason, one should avoid trading on candles that are either too short or too long.

Key takeaways from this chapter

1. Remember the rules based on which candlesticks work
2. Marubuzo is the only pattern which violates rule number 3 i.e Look for prior trend
3. A bullish marubuzo indicates bullishness
 - a. Buy around the closing price of a bullish marubuzo
 - b. Keep the low of the marubuzo as the stoploss
4. A bearish marubuzo indicates bearishness
 - a. Sell around the closing price of a bearish marubuzo
 - b. Keep the high of the marubuzo as the stoploss
5. An aggressive trader can place the trade on the same day as the pattern forms
6. Risk averse traders can place the trade on the next day after ensuring that it obeys rule number 1, i.e Buy strength, and Sell weakness
7. An abnormal candle lengths should not be traded
 - a. Short candle indicates subdued activity
 - b. Long candle indicates extreme activity, however placing stoploss becomes an issue.

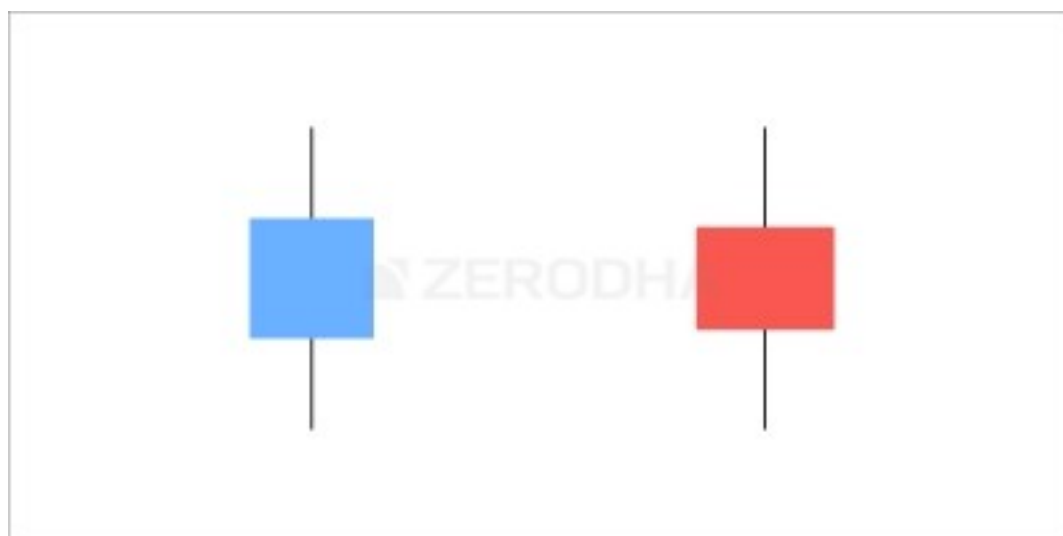
Single Candlestick patterns (Part 2)



6.1 – The Spinning Top

The spinning top is a very interesting candlestick. Unlike the Marubuzo, it does not give the trader a trading signal with specific entry or an exit point. However the spinning top gives out useful information with regard to the current situation in the market. The trader can use this information to position himself in the market.

A spinning top looks like the candle shown below. Take a good look at the candle. What observations do you make with regard to the structure of the candle?



Two things are quite prominent...

- The candles have a small real body
- The upper and lower shadow are almost equal

What do you think would have transpired during the day that leads to the creation of a spinning top? On the face of it, the spinning top looks like a humble candle with a small real body, but in reality there were a few dramatic events which took place during the day.

Let us follow these events:

1. **Small real body** – This indicates that the open price and close price are quite close to each other. For instance the open could be 210 and the close could be 213. Or the open could be 210 and close at 207. Both these situations lead to the creation of a small real body because a 3 point move on a 200 Rupee stock is not much. Because the open and close price points are nearby to one another, the color of the candle does not really matter. It could be a blue or a red candle, what really matters is the fact that the open prices and close prices are near to one another.

2. **The upper shadow** – The upper shadow connects the real body to the high point of the day. If it is a red candle, the high and open are connected. If it is blue candle, the high and close are connected. If you think about the real body in conjunction with the upper shadow ignoring the lower shadow what do you think had happened? The presence of the upper shadow tells us that the bulls did attempt to take the market higher. However they were not really successful in their endeavor. If the bulls were truly successful, then the real body would have been a long blue candle and not really a short candle. Hence this can be treated as an attempt by the bulls to take the markets higher but they were not really successful at it.

3. **The lower shadow** – The lower shadow connects the real body to the low point of the day. If it is a red candle, the low and close are connected. If it is a blue candle, the low and open are connected. If you think about the real body in conjunction with the lower shadow ignoring the upper shadow what do you think had happened? This is pretty much the same thing that happened with the bulls. The presence of the lower shadow tells us that the bears did attempt to take the market lower. However they were not really successful in their endeavor. If the bears were truly successful, then the real body would have been long red candle and not really a short candle. Hence this can be treated as an attempt by the bears to take the markets lower but they were not really successful.

Now think about the spinning top as a whole along with all its components i.e real body, upper shadow, and lower shadow. The bulls made a futile attempt to take the market higher. The bears

tried to take the markets lower and it did not work either. Neither the bulls nor the bears were able to establish any influence on the market as this is evident with the small real body. Thus Spinning tops are indicative of a market where indecision and uncertainty prevails.

If you look at a spinning top in isolation it does not mean much. **It just conveys indecision as both bulls and bears were not able to influence the markets.** However when you see the spinning top with respect to the trend in the chart it gives out a really powerful message based on which you can position your stance in the markets.

6.2 – Spinning tops in a downtrend

What if the spinning tops were to occur when the stock is in a down trend?

In a down trend, the bears are in absolute control as they manage to grind the prices lower. With the spinning top in the down trend the bears could be consolidating their position before resuming another bout of selling. Also, the bulls have attempted to arrest the price fall and have tried to hold on to their position, though not successfully. After all, if they were successful the day would have resulted in a good blue candle and not really a spinning top.

So what stance would you take considering that there are spinning tops in a down trend. The stance depends on what we expect going forward. Clearly there are two foreseeable situations with an equal probability:

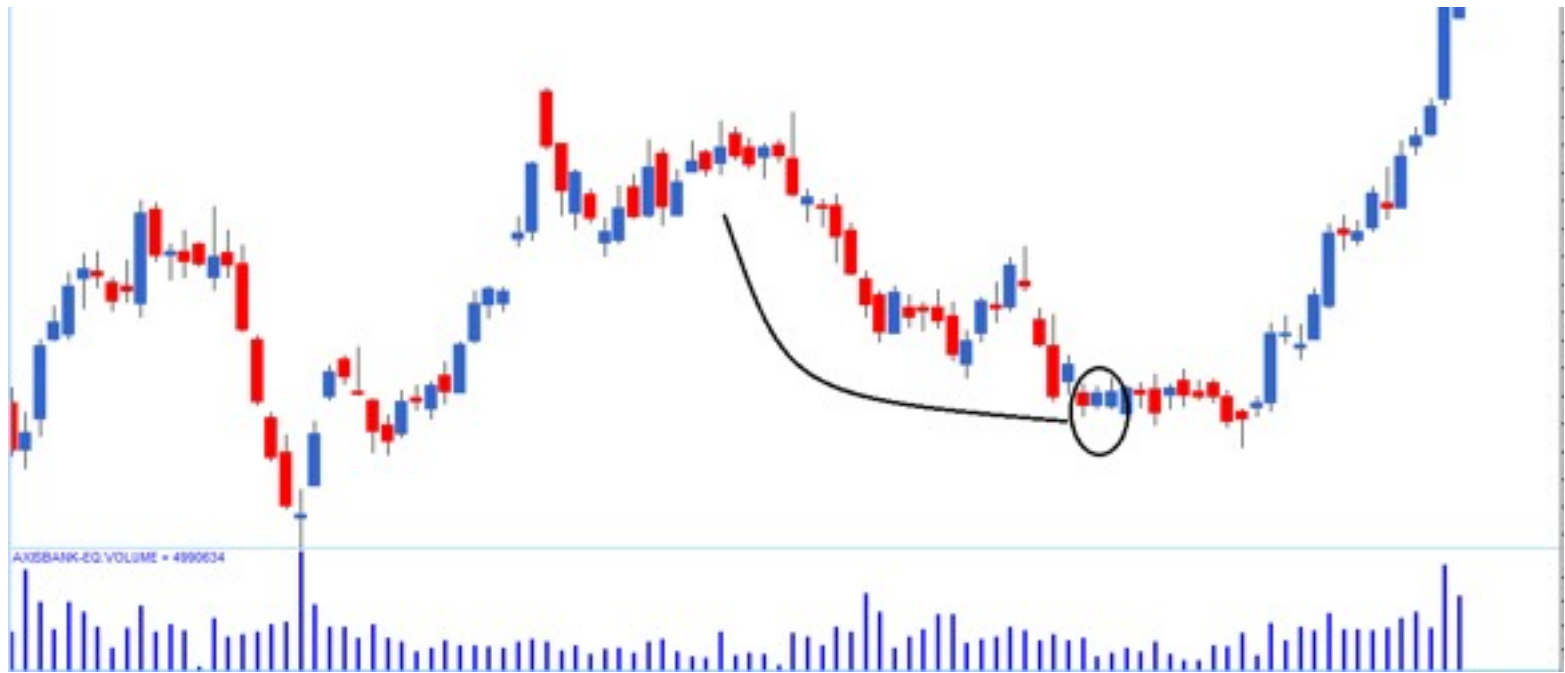
1. Either there will be another round of selling
2. Or the markets could reverse its directions and the prices could increase

Clearly, with no clarity on what is likely to happen, the trader needs to be prepared for both the situations i.e reversal and continuation.

If the trader has been waiting for an opportunity to go long on the stock, probably this could be his opportunity to do so. However to play safe he could test the waters with only half the quantity. If the trader wants to buy 500 shares, he could probably enter the trade with 250 shares and could wait and watch the market. If the market reverses its direction, and the prices indeed start going up then the trader can average up by buying again. If the prices reverse; most likely the trader would have bought the stocks at the lowest prices.

If the stock starts to fall, the trader can exit the trade and book a loss. At least the loss is just on half the quantity and not really on the entire quantity.

Here is a chart, which shows the downtrend followed by a set of spinning tops. The stock rallied post the occurrence of the spinning top.



Here is another chart which shows the continuation of a down trend after the occurrence of spinning tops.



So, think about the spinning top as “The calm before the storm”. The storm could be in the form of a continuation or a reversal of the trend. In which way the price will eventually move is not certain, however what is certain is the movement itself. One needs to be prepared for both the situations.

6.2 – Spinning tops in an uptrend

A spinning top in an uptrend has similar implications as the spinning top in a down trend, except that we look at it slightly differently. Look at the chart below, what can you see and what would be the inference?



An obvious observation is the fact that there is an uptrend in the market, which implies the bulls have been in absolute control over the last few trading sessions. However with the occurrence of the recent spinning tops the situation is a bit tricky:

1. The bulls are no longer in control, if they were, spinning tops would not be form on the charts
2. With the formation of spinning tops, the bears have made an entry to the markets. Though not successful, but the emphasis is on the fact that the bulls gave a leeway to bears

Having observed the above, what does it actually mean and how do you position yourself in the market?

1. The spinning top basically conveys indecision in the market i.e neither the bulls nor the bears are able to influence the markets.
2. Placing the above fact in the context of an uptrend we can conclude two things..

- a. The bulls could be consolidating their position before initiating another leg of up move
- b. Or the bulls are fatigued and may give way to bears. Hence a correction could be around the corner.
- c. The chances of both these events taking place is equal i.e 50%

Having said that, what should you do? The chances of both events playing out are equal, how are you going to take a stance? Well, in such a situation you should prepare for both the outcomes!

Assume you had bought the stock before the rally started; this could be your chance to book some profits. However, you do not book profits on the entire quantity. Assume you own 500 shares; you can use this opportunity to book profits on 50% of your holding i.e 250 shares. Two things can happen after you do this:

1. The bears make an entry – When this happens the market starts to slide down, and as you have booked 50% profits at a higher price, and can now choose to book profits on the balance 50% as well. Your net selling price will anyway be higher than the current market price.
2. The bulls make an entry – It turns out that the bulls were indeed taking a pause and the rally continues, at least you are not completely out of the market as you still have the balance 50% of your holdings invested in the markets

The stance you take helps you tackle both the outcomes.

Here is a chart which shows an uptrend and after the occurrence of spinning tops, the stock rallied. By being invested 50%, you can continue to ride the rally.

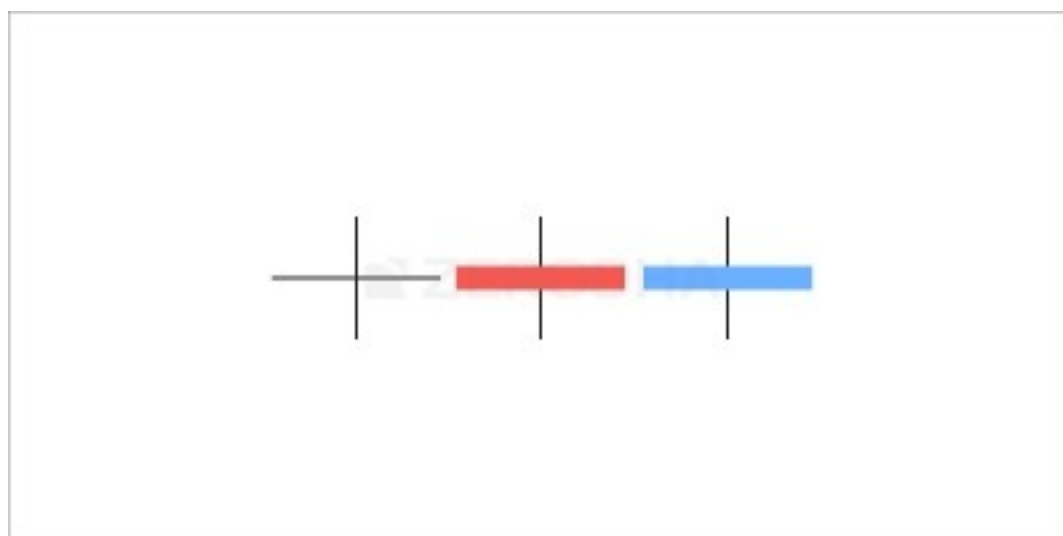


To sum up, the spinning top candle shows confusion and indecision in the market with an equal probability of reversal or continuation. Until the situation becomes clear the traders should be cautious and they should minimize their position size.



6.3 - The Dojis

The Doji's are very similar to the spinning tops, except that it does not have a real body at all. This means the open and close prices are equal. Doji's provide crucial information about the market sentiments and is an important candlestick pattern.



The classic definition of a doji suggests that the open price should be equal to the close price with virtually a non-existent real body. The upper and lower wicks can be of any length.

However keeping in mind the 2nd rule i.e 'be flexible, verify and quantify' even if there is a wafer thin body, the candle can be considered as a doji.

Obviously the color of the candle does not matter in case of a wafer thin real body. What matters is the fact that the open and close prices were very close to each other.

The Dojis have similar implications as the spinning top. Whatever we learnt for spinning tops applies to Dojis as well. In fact more often than not, the dojis and spinning tops appear in a cluster indicating indecision in the market.

Have a look at the chart below, where the dojis appear in a downtrend indicating indecision in the market before the next big move.



Here is another chart where the doji appears after a healthy up trend after which the market reverses its direction and corrects.



So the next time you see either a Spinning top or a Doji individually or in a cluster, remember there is indecision in the market. The market could swing either way and you need to build a stance that adapts to the expected movement in the market.

Key takeaways from this chapter

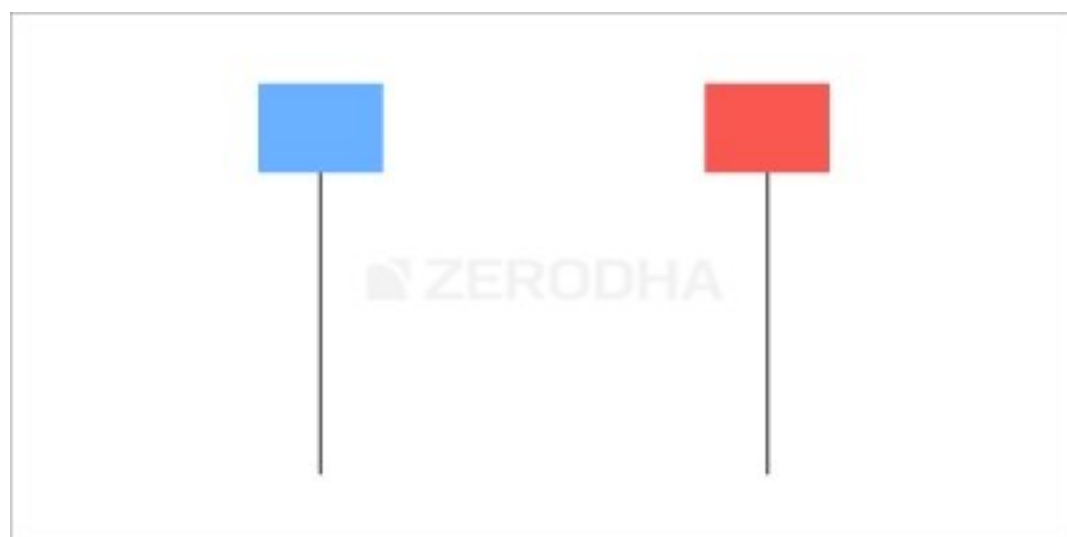
1. A spinning top has a small real body. The upper and lower shadows are almost equal in length
2. The colour of the spinning top does not matter. What matters is the fact that the open and close prices are very close to each other
3. Spinning tops conveys indecision in the market with both bulls and bears being in equal control
4. Spinning top at the top end of the rally indicates that either the bulls are taking a pause before they can resume the uptrend further or the bears are preparing to break the trend. In either case, the trader's stance has to be cautious. If the trader's intent is to buy, he is better off buying only half the quantity and he should wait for the markets to move in his direction
5. Spinning top at the bottom end of the rally indicates that either the bears are taking a pause before they can resume the down trend further or the bulls are preparing to break the trend and take the markets higher. Either case, the trader's stance has to be cautious. If the traders intent is to buy, he is better off buying only half the quantity and he should wait for the markets to make the move
6. Doji's are very similar to spinning tops. Doji also convey indecision in the market. By definition dojis do not have a real body. However in reality, even if a wafer thin body appears it is acceptable
7. A trader's stance based on doji's is similar to stance taken when a spinning top occurs.

Single Candlestick patterns (Part 3)



7.1 – Paper Umbrella

The paper umbrella is a single candlestick pattern which helps traders in setting up directional trades. The interpretation of the paper umbrella changes based on where it appears on the chart.



A paper umbrella consists of two trend reversal patterns namely the hanging man and the hammer. The hanging man pattern is bearish and the hammer pattern is relatively bullish. A paper umbrella is characterized by a long lower shadow with a small upper body.

If the paper umbrella appears at the bottom end of a downward rally, it is called the ‘**Hammer**’.

If the paper umbrella appears at the top end of an uptrend rally, it is called the ‘**Hanging man**’.

To qualify a candle as a paper umbrella, the length of the lower shadow should be at least twice the length of the real body. This is called the ‘**shadow to real body ratio**’.

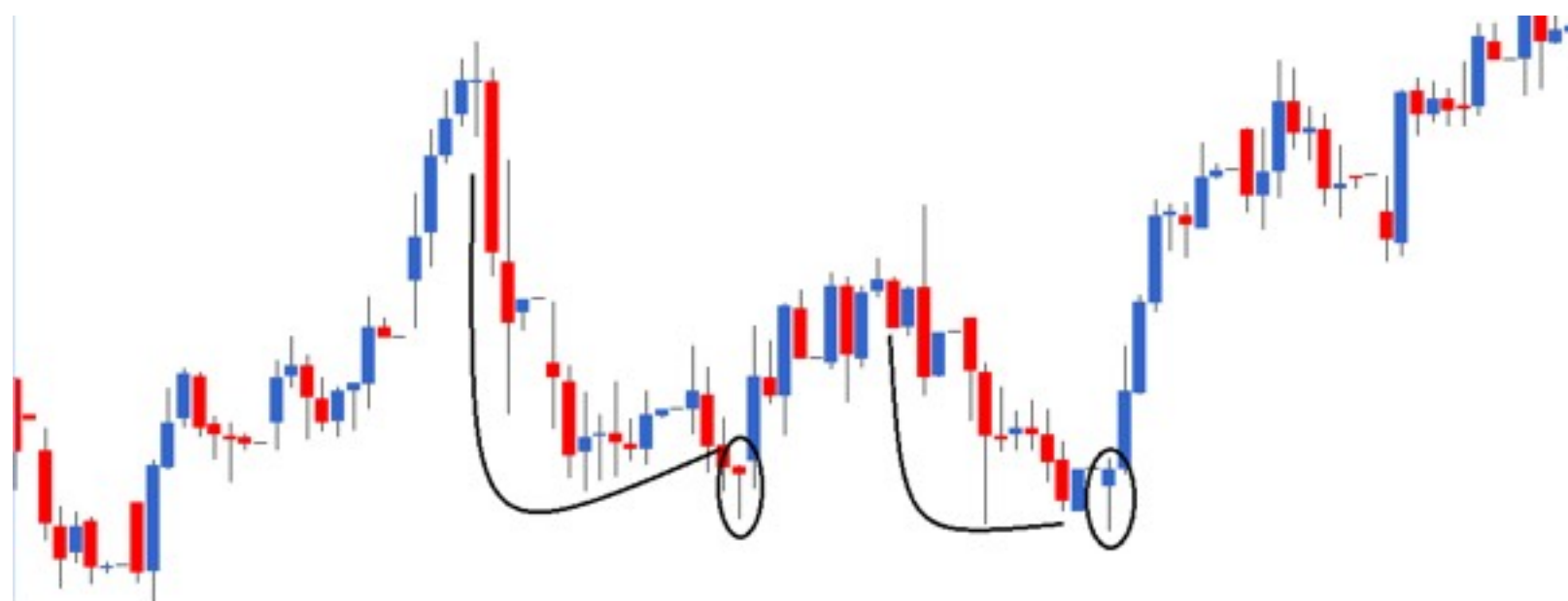
Let us look at this example: Open = 100, High = 103, Low = 94, Close = 102 (bullish candle).

Here, the length of the real body is **Close - Open i.e 102-100 = 2** and the length of the lower shadow is **Open - Low i.e 100 - 94 = 6**. As the length of the lower shadow is more than twice of the length of the real body; hence we can conclude that a paper umbrella has formed.

7.2 – The Hammer formation

The bullish hammer is a significant candlestick pattern that occurs at the bottom of the trend. A hammer consists of a small real body at the upper end of the trading range with a long lower shadow. The longer the lower shadow the more bullish the pattern.

The chart below shows the presence of two hammers formed at the bottom of a down trend.



No-
tice the blue hammer has a very tiny upper shadow, which is acceptable considering the “Be flexible – quantify and verify” rule.

A hammer can be of any color as it does not really matter as long as it qualifies 'the shadow to real body' ratio. However, it is slightly more comforting to see a blue colored real body.

The prior trend for the hammer should be a down trend. The prior trend is highlighted with the curved line. The thought process behind a hammer is as follows:

1. The market is in a down trend, where the bears are in absolute control of the markets
2. During a downtrend, every day the market would open lower compared to the previous day's close and again closes lower to form a new low
3. On the day the hammer pattern forms, the market as expected trades lower, and makes a new low
4. However at the low point, there is some amount of buying interest that emerges, which pushes the prices higher to the extent that the stock closes near the high point of the day
5. The price action on the hammer formation day indicates that the bulls attempted to break the prices from falling further, and were reasonably successful
6. This action by the bulls has the potential to change the sentiment in the stock, hence one should look at buying opportunities

The trade setup for the hammer is as follows:

1. A hammer formation suggests a long trade
2. The trader's entry time depends on the risk appetite of the trader. If the trader is a risk taker, he can buy the stock the same day. Remember, the color of the real body in hammer does not matter; hence there is no violation to the Rule 1. If the trader is risk averse, he can buy the stock the day after the pattern has formed only after ensuring that the day is a blue candle day
 - a. Risk takers can qualify the day as a hammer by checking the following condition at 3:20PM on the hammer day..
 - i. Open and close should be almost the same (within 1-2% range)
 - ii. Lower shadow length should be at least twice the length of real body
 - iii. If both these conditions are met, then the pattern is a hammer and the risk taker can go long
 - b. The risk averse trader should evaluate the OHLC data on the 2nd. If it's a blue candle, the trade is valid and hence he can go long
3. The low of the hammer acts as the stoploss for the trade

The chart below shows the formation of a hammer where both the risk taker and the risk averse would have set up a profitable trade. This is a 15 minutes intraday chart of Cipla Ltd.



The trade set up would be as follows:

Buy Price for a risk taker - He takes the trade on the Hammer candle itself at – Rs.444/-

Buy price for a risk averse - He takes the trade on the next candle after evaluating that the candle is blue at – Rs. 445.4/-

Stoploss for both the traders is at Rs.441.5/-, which is the low of the hammer formation.

Do notice how the trade has evolved, yielding a desirable intraday profit.

Here is another chart where the risk averse trader would have benefited by virtue of the ‘Buy strength and Sell weakness’ rule.



Here is another interesting chart with two hammer formation.



Both the hammers qualified on the pre conditions of a hammer i.e :

- 1.Prior trend to be a down trend
- 2.Shadow to real body ratio

On the first hammer, the risk averse trader would have saved himself from a loss making trade, thanks to Rule 1 of candlesticks. However, the second hammer would have enticed both the risk averse and risk taker to enter a trade. After initiating the trade, the stock did not move up, it stayed nearly flat and cracked down eventually.

Please note once you initiate the trade you stay in it until either the stop loss or the target is reached. You should not tweak the trade until one of these events occurs. The loss in this particular trade (first hammer) is inevitable. But remember this is a calculated risk and not a mere speculative risk.

Here is another chart where a perfect hammer appears, however it does not satisfy the prior trend condition and hence **it is not defined pattern**.



7.3 – The Hanging man

If a paper umbrella appears at the top end of a trend, it is called a Hanging man. The bearish hanging man is a single candlestick, and a top reversal pattern. A hanging man signals a market high. The hanging man is classified as a hanging man **only after it precedes an uptrend**. Since the hanging man is seen after a high, the bearish hanging man pattern signals selling pressure.



A hanging man can be of any color and it does not really matter as long as it qualifies ‘the shadow to real body’ ratio. The prior trend for the hanging man **should be an uptrend**, as highlighted by the curved line in the chart above. The thought process behind a hanging man is as follows:

- 1.The market is in an uptrend, hence the bulls are in absolute control
- 2.The market is characterized by new highs and higher lows
- 3.The day the hanging man pattern appears, the bears have managed to make an entry
- 4.This is emphasized by a long lower shadow of the hanging man
- 5.The entry of bears signifies that they are trying to break the strong hold of the bulls

Thus, the hanging man makes a case for shorting the stock. The trade set up would be as follows:

- 1.For the risk taker, a short trade can be initiated the same day around the closing price
- 2.For the risk averse, a short trade can be initiated at the close of the next day after ensuring that a red candle would appear
 - a.The method to validate the candle for the risk averse, and risk taker is exactly the same as explained in the case of a hammer pattern

Once the short has been initiated, the high of the candle works as a stoploss for the trade.



In the chart above, BPCL Limited has formed a hanging man at 593. The OHLC details are -

Open = 592, High = 593.75, Low = 587, Close = 593. Based on this, the trade set up would be as follows:

- The risk taker, initiates the short trade on the day the pattern appears (at 593)
- The risk averse, initiates the short trade on the next day at closing prices after ensuring it is a red candle day
- Both the risk taker and the risk averse would have initiated their respective trades
- The stoploss price for this trade would be the high price i.e above 593.75

The trade would have been profitable for both the risk types.

7.4 –My experience with a paper umbrella

While both the hammer and the hanging man are valid candlestick patterns, my dependence on a hammer is a little more as opposed to a hanging man. All else equal, if there were two trading opportunities in the market, one based on hammer and the other based on hanging man I would prefer to place my money on hammer. The reason to do so is simply based on my experience in trading with both the patterns.

My only concern with a hanging man is the fact that if the bears were indeed influential during the day, why did the price go up after making a low? This according to me re establishes the bull's supremacy in the market.

I would encourage you to develop your own thesis based on observations that you make in the markets. This will not only help you calibrate your trade more accurately but also help you develop structured market thinking.



7.5 – The shooting star

The shooting star is the last single candlestick pattern that we will learn about before we move to multiple candlestick patterns. The price action on the shooting star is quite powerful, thus making the shooting star a very popular candlestick pattern to trade.

The shooting star looks just like an inverted paper umbrella.



Unlike a paper umbrella, the shooting star does not have a long lower shadow. Instead it has a long upper shadow where the length of the shadow is at least twice the length of the real body. The colour of the body does not matter, but the pattern is slightly more reliable if the real body is red. The longer the upper wick, the more bearish is the pattern. The small real body is a common feature between the shooting star and the paper umbrella. Going by the text book definition, the shooting star should not have a lower shadow, however a small lower shadow, as seen in the chart above is considered alright. The shooting star is a bearish pattern; **hence the prior trend should be bullish.**

The thought process behind the shooting star is as follows:

- The stock is in an uptrend implying that the bulls are in absolute control. When bulls are in control, the stock or the market tends to make a new high and higher low

- On the day the shooting star pattern forms, the market as expected trades higher, and in the process makes a new high
- However at the high point of the day, there is a selling pressure to an extent where the stock price recedes to close near the low point of the day, thus forming a shooting star
- The selling indicates that the bears have made an entry, and they were actually quite successful in pushing the prices down. This is evident by the long upper shadow
- The expectation is that the bears will continue selling over the next few trading sessions, hence the traders should look for shorting opportunities

Take a look at this chart where a shooting star has been formed right at the top of an uptrend.



The OHLC data on the shooting star is; open = 1426, high = 1453, low = 1410, close = 1417. The short trade set up on this would be:

1. The risk taker will initiate the trade at 1417, basically on the same day the shooting star forms
 - a. The risk taker initiates the trade the same day after ensuring that the day has formed a shooting star. To confirm this the trader has to validate:
 - i. If the current market price is more or less equal to the low price
 - ii. The length of the upper shadow is at least twice the length of the real body
 - b. The risk averse will initiate the trade on the next day, only after ensuring that the 2nd day a red candle has formed
2. Once the trade has been initiated, the stoploss is to be placed at the high of the pattern. In the case the stop loss is at 1453

As we have discussed this before, once a trade has been set up, we should wait for either the stoploss or the target to be triggered. It is advisable not to do anything else, except for maybe trail-

ing your stoploss. Of course, we still haven't discussed about trailing stoploss yet. We will discuss it at later stage.

Here is a chart where both the risk taker and the risk averse would have made a remarkable profit on a trade based on shooting star.



Here is an example, where both the risk averse and the risk taker would have initiated the trade based on a shooting star. However the stoploss has been breached. Do remember, when the stoploss triggers, the trader will have to exit the trade, as the trade no longer stands valid. More often than not exiting the trade is the best thing to do when the stoploss triggers.



Key takeaways from this chapter

1. A paper umbrella has a long lower shadow and a small real body. The lower shadow and the real body should maintain the 'shadow to real body' ratio. In case of the paper umbrella the lower shadow should be at least twice the length of the real body
2. Since the open and close prices are close to each other, the color of the paper umbrella should not matter
3. If a paper umbrella appears at the bottom of a down trend, it is called the 'hammer'
4. If the paper umbrella appears at the top end of an uptrend, it is called the hanging man
5. The hammer is a bullish pattern and one should look at buying opportunities when it appears
 - a. The low of the hammer acts as the stop loss price trade
6. The hanging man is a bearish pattern which appears at the top end of the trend, one should look at selling opportunities when it appears
 - a. The high of the hanging man acts as the stop loss price for the trade
7. 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
 - a. The high of the shooting star will be the stop loss price for the trade.

Multiple candlestick patterns (Part 1)



8.1 – The Engulfing Pattern

In a single candlestick pattern, the trader needed just one candlestick to identify a trading opportunity. However when analyzing multiple candlestick patterns, the trader needs 2 or sometimes 3 candlesticks to identify a trading opportunity. This means the trading opportunity evolves over a minimum of 2 trading sessions.

The engulfing pattern is the first multiple candlestick pattern that we need to look into. The engulfing pattern needs 2 trading sessions to evolve. In a typical engulfing pattern, you will find a small candle on day 1 and a relatively long candle on day 2 which appears as if it engulfs the candle on day 1. If the engulfing pattern appears at the bottom of the trend, it is called the “Bullish Engulfing” pattern. If the engulfing pattern appears at the top end of the trend, it is called the “Bearish Engulfing” pattern.

8.2 – The Bullish Engulfing Pattern

The bullish engulfing pattern is a two candlestick pattern which appears at the bottom of the down trend. As the name suggests, this is a bullish pattern which prompts the trader to go long.

The two day bullish engulfing pattern is encircled in the chart below. The prerequisites for the pattern are as follows:

1. The prior trend should be a downtrend
2. The first day of the pattern (P1) should be a red candle reconfirming the bearishness in the market
3. The candle on the 2nd day of pattern (P2) should be a blue candle, long enough to engulf the red candle



The thought process behind the bullish engulfing pattern is as follows:

1. The market is in down trend with prices steadily moving down
2. On the first day of the pattern (P1), the market opens low and makes a new low. This forms a red candle in the process
3. On the second day of the pattern (P2), the stock opens near the closing prices of P1, and attempts to make a new low. However, at this low point of the day there is a sudden buying interest, which drives the prices to close higher than the previous day's open. This price action forms a blue candle
4. The price action on P2 also suggests that bulls made a very sudden and strong attempt to break the bearish trend and they did so quite successfully. This is evident by the long blue candle on P2
5. The bears would not have expected the bull's sudden action on P2 and hence the bull's action kind of rattles the bears causing them some amount of nervousness

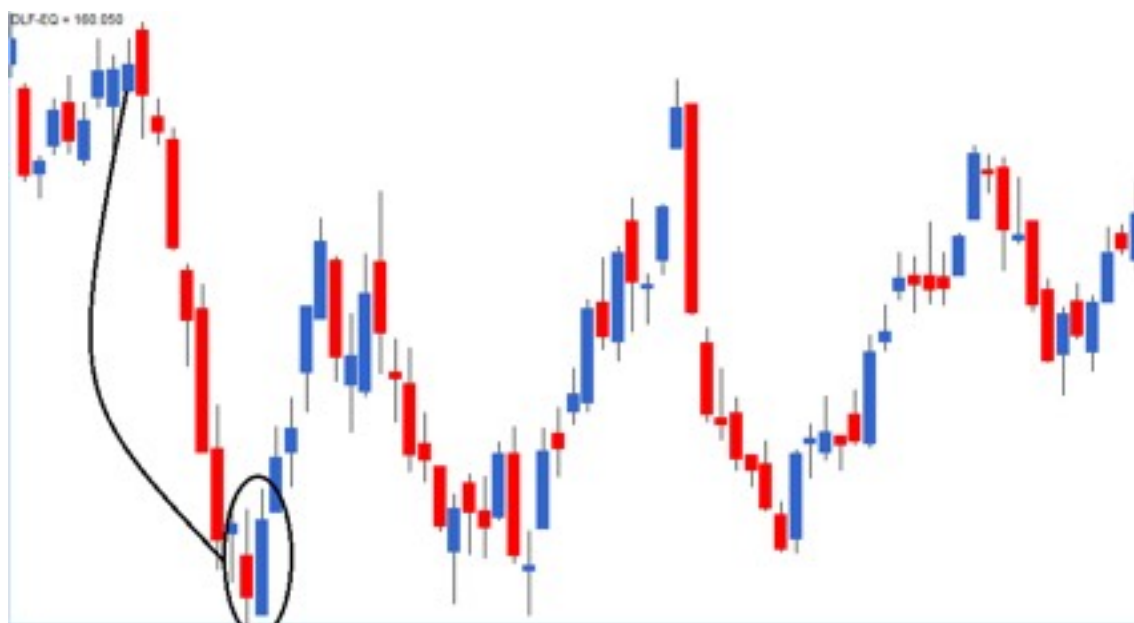
6. The bullishness is expected to continue over the next few successive trading sessions, driving the prices higher and hence the trader should look for buying opportunities

The trade set up for the bullish engulfing pattern is as follows:

1. The bullish engulfing pattern evolves over two days
2. The suggested buy price is around the close price of blue candle i.e on P2
 - Risk taker initiates the trade on P2 itself after ensuring P2 is engulfing P1
 - The risk averse initiates the trade on the next day i.e the day after P2 around the closing price, after confirming the day is forming a blue candle
 - If the day after P2 is a red candle day, the risk averse trader will ignore the trade, owing to rule 1 of candlesticks (Buy strength and Sell weakness)
 - On a personal note, in multiple candlestick patterns where the trade evolves over 2 or more days it is worth to be a risk taker as opposed to a risk averse trader
3. The stop loss for the trade would be at the lowest low between P1, and P2

Needless to say, once the trade has been initiated you will have to wait until the target has been hit or the stoploss has been breached. Of course, one can always trail the stop loss to lock in profits.

Have a look at DLF's chart below; the bullish engulfing pattern is encircled.



The OHLC on P1 – Open = 163, High = 168, Low = 158.5, Close = 160. On P2 the OHLC details are – Open = 159.5, High = 170.2, Low = 159, Close = 169.

The trade set up for the bullish engulfing pattern is as follows:

1. The risk taker would go long on P2 at 169. He can do this by validating P2 as an engulfing pattern. To validate P2 as an engulfing pattern there are 2 conditions:

- One, the current market price at 3:20 PM on P2 should be higher than P1's close.
- Second, the open on P2 should be equal to or lower than P1's close

2. The risk averse will initiate the trade, the day after P2 only after ensuring that the day is a blue candle day. So if the P1 falls on a Monday, the risk averse would be initiating the trade on Wednesday, around 3:20 PM. However, as I had mentioned earlier, while trading based on multiple candlestick pattern, it may be worth initiating the trade on pattern completion day itself i.e P2

3. The stop loss on this trade will be the lowest low between P1 and P2. In this example, lowest low falls on P1 at 158.5

In this example, both the risk averse and the risk taker would have been profitable.

Here is an example of a perfect bullish engulfing pattern formed on Cipla Ltd, the risk averse trader would have completely missed out a great trading opportunity.



There is often a lot of confusion on whether the candle should engulf just the real body or the whole candle, including the lower and upper shadows. In my personal experience, as long as the real bodies are engulfed, I would be happy to classify the candle as a bullish engulfing pattern. Of

course, candlestick sticklers would object to this but what really matters is how well you hone your skills in trading with a particular candlestick pattern.

So going by that thought, I'd be happy to classify the following pattern as a bullish engulfing pattern, even though the shadows are not engulfed.



8.3 – The bearish engulfing pattern

The bearish engulfing pattern is a two candlestick pattern which appears at the top end of the trend, thus making it a bearish pattern. The thought process remains very similar to the bullish engulfing pattern, except one has to think about it from a shorting perspective.

Take a look at the chart below, the two candles that make up the bearish engulfing pattern is circled. You will notice:



1. To begin with the bulls are in absolute control pushing the prices higher
2. On P1, as expected the market moves up and makes a new high, reconfirming a bullish trend in the market
3. On P2, as expected the market opens higher and attempts to make a new high. However at this high point selling pressure starts. This selling comes unexpected and hence tends to displace the bulls
4. The sellers push the prices lower, so much so that the stock closes below the previous day's (P1) open. This creates nervousness amongst the bulls
5. The strong sell on P2 indicates that the bears may have successfully broken down the bull's stronghold and the market may continue to witness selling pressure over the next few days
6. The idea is to short the index or the stock in order to capitalize on the expected downward slide in prices

The trade set up would be as follows:

1. The bearish engulfing pattern suggests a short trade
2. The risk taker initiates the trade on the same day after validating two conditions
 - The open on P2 is higher than P1's close
 - The current market price at 3:20 PM on P2 is lower than P1's open price. If the two conditions are satisfied, then it would be logical to conclude that it is a bearish engulfing pattern
3. The risk averse will initiate the trade on the day after P2 only after ensuring that the day is a red candle day
4. Since the bearish engulfing pattern is a 2 day pattern, it makes sense to be a risk taker. However this purely depends on the individual's risk appetite

Take a look at the chart below of Ambuja Cements. There are two bearish engulfing patterns formed. The first pattern on the chart (encircled, starting from left) did not work in favor of a risk taker. However the risk averse would have completely avoided taking the trade. The second bearish engulfing pattern would have been profitable for both the risk taker and the risk averse.



The OHLC data for the bearing engulfing pattern (encircled at the top end of the chart) is as below:

P1: Open – 214, High – 220, Low – 213.3, Close – 218.75

P2: Open – 220, High – 221, Low – 207.3, Close – 209.4

The trade setup for the short trade, based on the bearish engulfing pattern is as follows:

1. On P2 by 3:20 PM the risk taker would initiate the short trade at 209 after ensuring P1, and P2 together form a bearish engulfing pattern
2. The risk averse will initiate the trade, the day after P2 only after ensuring that the day is a red candle day
3. The stoploss in both the cases will be the highest high of P1 and P2, which in this case is at 221.

Both the risk averse and the risk taker would have been profitable in this particular case.

8.4 – The presence of a doji

Now here is a very interesting chart. From my own personal experience I can tell you, charts like the one shown below are highly profitable. One should not miss such trading opportunities

Take a look at the chart, what are the things that catch your attention?

1. An obvious uptrend as highlighted
2. A bearish engulfing pattern right at the top end of the upward rally
3. A doji formation on the day following P2

What implication would a doji have in this chart?



Let us inspect this chart event by event:

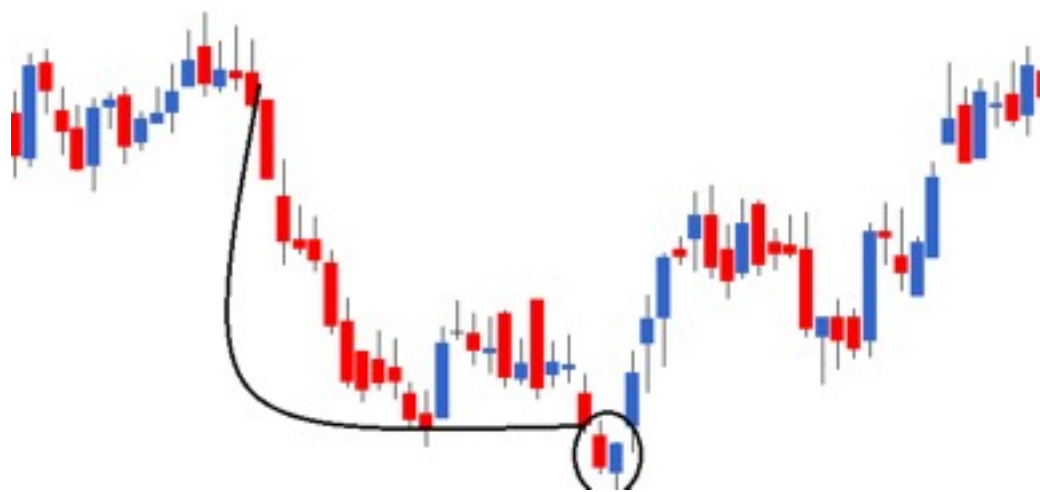
1. A prolonged uptrend in the chart confirms the bulls are in absolute control
2. On P1 a blue candle is formed, reconfirming the bull's dominance in the markets
3. On P2 markets open higher and make a new high comforting the bulls. However at the high point a strong surge to sell builds up, to an extent that the price closes below P1's opening price
4. This trading action on P2 sets in a bit of panic to bulls, but they are not shaken yet
5. On day 3, let us call it as P3, though the opening is weak it is not much lower compared to P2's close. This is not too comforting for the bulls, as they expect the market to be stronger.
6. During P3 the market attempts to move higher (Doji's upper shadow) however the high is not sustained. Even the low is not sustained and eventually the day closes flat forming a Doji. As you may recall, Dojis indicate indecision in the market
7. On P2 bulls panicked and on P3 bulls were uncertain

8. Panic with uncertainty is the perfect recipe for a catastrophe. Which explains the long red candle following the Doji

From my own personal trading experience I can tell you that whenever a doji follows a recognizable candlestick pattern, the opportunity created is bigger. Besides illustrating this point, I also want to draw your attention to chart analysis methodology. Notice in this particular chart, we did not just look at what was happening on P1 or P2 but we went beyond that and actually combined two different patterns to develop a comprehensive view on the market.

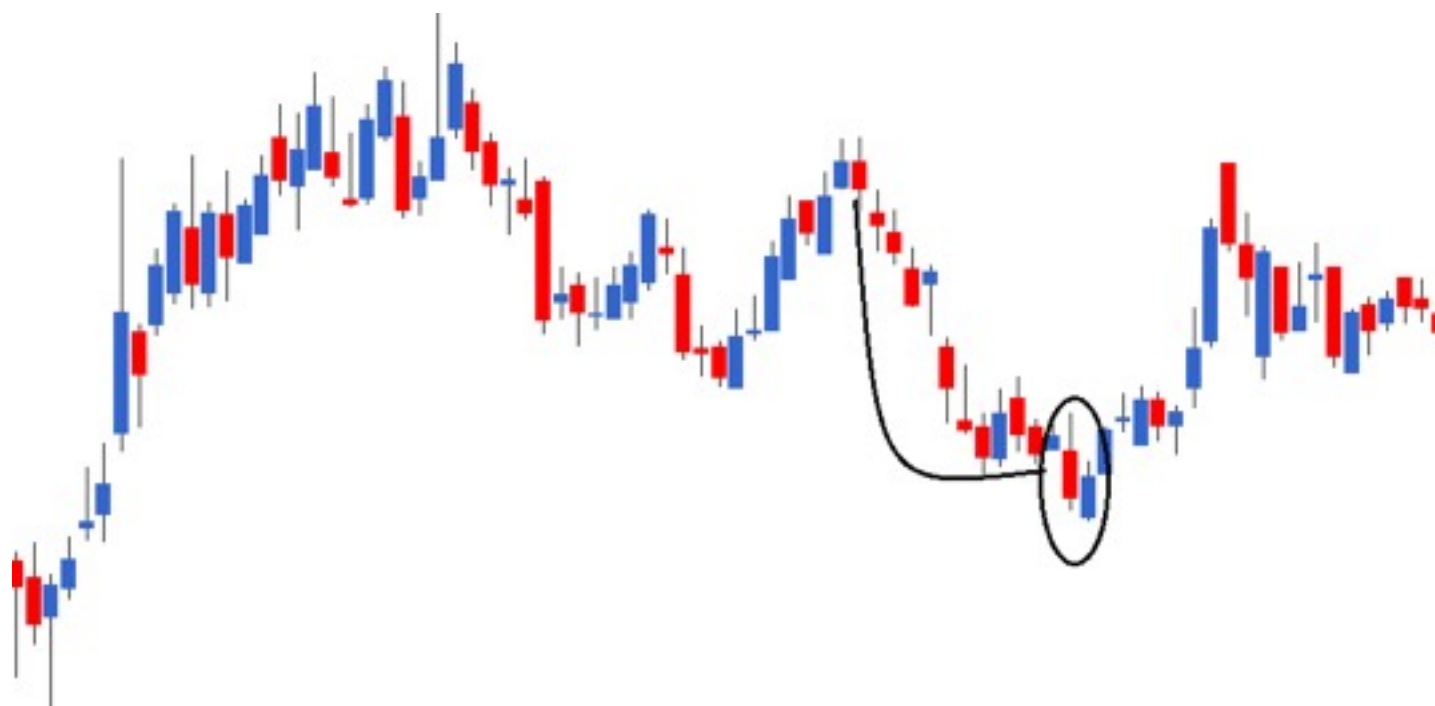
8.5 – The Piercing Pattern

The piercing pattern is very similar to the bullish engulfing pattern with a very minor variation. In a bullish engulfing pattern the P2's blue candle engulfs P1's red candle completely. However in a piercing pattern P2's blue candle partially engulfs P1's red candle, however the engulfing should be between 50% and less than 100%. You can validate this visually or calculate the same. For example if P1's range (Open – Close) is 12 , P2's range should be at least 6 or higher but below 12.



As long as this condition is satisfied, everything else is similar to the bullish engulfing including the trade set up. Here a risk taker would initiate the trade on P2 around the close. The risk averse would initiate the trade, the day after P2 only after ensuring a blue candle is formed. The stoploss would be the low of the pattern.

Have a look at the following chart:



Here P2's blue candle engulfs just under 50% of P1's red candle. For this reason we do not consider this as a piercing pattern.



8.6 – The Dark Cloud Cover

The dark cloud cover is very similar to the bearish engulfing pattern with a minor variation. In a bearish engulfing pattern the red candle on P2 engulfs P1's blue candle completely. However in a dark cloud cover, the red candle on P2 engulfs about 50 to 100% of P1's blue candle. The trade

set up is exactly the same as the bearish engulfing pattern. Think about the dark cloud cover as the inverse of a piercing pattern.



8.7 – A perspective on selecting a trade

Typically stocks in the same sector have similar price movement. For example, think about TCS and Infosys or ICICI Bank and HDFC bank. Their price movement is similar because these companies are more or less of the same size, have similar business, and the same external factors that affect their business. However this does not mean their stock price movement would match point to point. For example if there is negative news in the banking sector, banking stocks are bound to fall. In such a scenario if the stock price of ICICI Bank falls by 2%, it is not really necessary that HDFC Bank's stock price should also fall exactly 2%. Probably HDFC Bank stock price may fall by 1.5% or 2.5%. Hence the two stocks may form 2 different (but somewhat similar) candlestick patterns such as a bearish engulfing and dark cloud cover at the same time.

Both these are recognizable candlestick patterns but if I were to choose between the two patterns to set up a trade. I would put my money on the bearish engulfing pattern as opposed to a dark cloud cover. This is because the bearishness in a bearish engulfing pattern is more pronounced (due to the fact that it engulfs the previous day's entire candle). On the same lines I would choose a bullish engulfing pattern over a piercing pattern.

However there is an exception to this selection criterion. Later in this module I will introduce a 6 point trading checklist. A trade should satisfy at least 3 to 4 points on this checklist for it to be considered as a qualified trade. Keeping this point in perspective, assume there is a situation where the ICICI Bank stock forms a piercing pattern and the HDFC Bank stock forms a bullish engulfing pattern. Naturally one would be tempted to trade the bullish engulfing pattern, however if the HDFC Bank stock satisfies 3 checklist points, and ICICI Bank stock satisfies 4 checklist points, I would go ahead with the ICICI Bank stock even though it forms a less convincing candlestick pattern.

On the other hand, if both the stocks satisfy 4 checklist points I will go ahead with the HDFC Bank trade.

Key takeaways from this chapter

1. Multiple candlestick patterns evolve over two or more trading days
2. The bullish engulfing pattern evolves over two trading days. It appears at the bottom end of a downtrend. Day one is called P1 and day 2 is called P2
3. In a bullish engulfing pattern, P1 is a red candle, and P2 is a blue candle. P2's blue candle completely engulfs P1's red candle
4. A risk taker initiates a long trade at the close of P2 after ensuring P1 and P2 together form a bullish engulfing pattern. A risk averse trader will initiate the trade the day after P2, near the close of the day
5. The stoploss for the bullish engulfing pattern is the lowest low between P1 and P2
6. The bearish engulfing pattern appears at the top end of an uptrend. P1's blue candle is completely engulfed by P2's red candle
7. A risk taker initiates a short trade at the close of P2 after ensuring P1 and P2 together form a bearish engulfing pattern. The risk averse trader will initiate the trade the day after P2, after confirming the day forms a red candle
8. The highest high of P1 and P2 forms the stoploss for a bearish engulfing pattern
9. The presence of a doji after an engulfing pattern tends to catalyze the pattern's evolution.
10. The piercing pattern works very similar to the bullish engulfing pattern, except that P2's blue candle engulfs at least 50% and below 100% of P1's red candle
11. The dark cloud cover works similar to the bearish engulfing pattern, except that P2's red candle engulfs at least 50% and below 100% of P1's blue candle.

Multiple Candlestick Patterns (Part 2)



9.1 – The Harami Pattern

Before you get thinking, the word ‘Harami’ does not stand for the word harami used in Hindi . Apparently it is old Japanese word for ‘pregnant’. You’d appreciate the intuitiveness of this word, when you see the candlestick formation.

Harami is a two candle pattern. The first candle is usually long and the second candle has a small body. The second candle is generally opposite in colour to the first candle. On the appearance of the harami pattern a trend reversal is possible. There are two types of harami patterns – the bullish harami and the bearish harami.

9.2 – The Bullish Harami

As the name suggests, the bullish harami is a bullish pattern appearing at the bottom end of the chart. The bullish harami pattern evolves over a two day period, similar to the engulfing pattern.

In the chart below, the bullish harami pattern is encircled.



The thought process behind a bullish harami pattern is as follows:

- 1.The market is in a downtrend pushing the prices lower, therefore giving the bears absolute control over the markets
- 2.On day 1 of the pattern (P1) a red candle with a new low is formed, reinforcing the bear's position in the market
- 3.On day 2 of the pattern (P2) the market opens at a price higher than the previous day's close. On seeing a high opening price the bears panic ,as they would have otherwise expected a lower opening price
- 4.The market gains strength on P2 and manages to close on a positive note, thus forming a blue candle. However P2's closing price is just below the previous days (P1) open price
- 5.The price action on P2 creates a small blue candle which appears contained (pregnant) within P1's long red candle
- 6.The small blue candle on a standalone basis looks harmless, but what really causes the panic is the fact that the bullish candle appears all of a sudden, when it is least expected

7. The blue candle not only encourages the bulls to build long positions, but also unnerves the bears

8. The expectation is that panic amongst the bears will spread in an accelerated manner, giving a greater push to bulls. This tends to push the prices higher. Hence one should look at going long on the stock.

The trade setup for the bullish harami is as follows:

1. The idea is to go long on the bullish harami formation

2. Risk takers can initiate a long trade around the close of the P2 candle

3. Risk takers can validate the following conditions to confirm if P1, and P2 together form a bullish harami pattern:

a. The opening on P2 should be higher than the close of P1

b. The current market price at 3:20 PM on P2 should be less than P1's opening price

c. If both these conditions are satisfied then one can conclude that both P1 and P2 together form a bullish harami pattern

4. The risk averse can initiate a long trade at the close of the day after P2, only after confirming that the day is forming a blue candle

5. The lowest low of the pattern will be the stoploss for the trade

Here is a chart of Axis Bank; the bullish harami is encircled below:



The OHLC details for the pattern are as follows:

P1 – Open = 868, High = 874, Low = 810, Close = 815

P2 – Open = 824, High = 847, Low = 818, Close = 835

The risk taker would initiate the long position at the close of P2 which is around 835. The stop loss for the trade would be lowest low price between P1 and P2; which in this case it is 810.

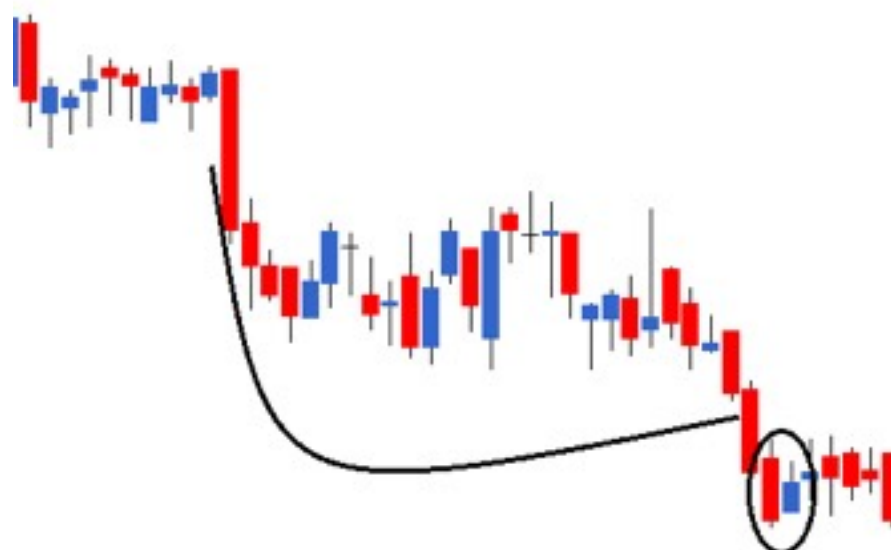
The risk averse will initiate the trade the day near the close of the day after P2, provided it is a blue candle day, which in this case is.

Once the trade has been initiated, the trader will have to wait for either the target to be hit or the stop loss to be triggered.

Here is a chart below where the encircled candles depict a bullish harami pattern, but it is not. The prior trend should be bearish, but in this case the prior trend is almost flat which prevents us from classifying this candlestick pattern as a bullish harami.



And here is another example where a bullish harami occurred but the stoploss on the trade triggered leading to a loss.



9.3 – The bearish harami

The bearish harami pattern appears at the top end of an uptrend which gives the trader a opportunity to initiate a short trade.



The thought process behind shorting a bearish harami is as follows:

- 1.The market is in an uptrend, placing the bulls in absolute control
- 2.On P1, the market trades higher, and makes a new high and closes positively forming a blue candle day. The trading action reconfirms the bulls dominance in the market
- 3.On P2 the market unexpectedly opens lower which displaces the bulls ,and sets in a bit of panic to bulls
- 4.The market continues to trade lower to an extent where it manages to close negatively forming a red candle day
- 5.The unexpected negative drift in the market causes panic making the bulls to unwind their positions
- 6.The expectation is that this negative drift is likely to continue and therefore one should look at setting up a short trade.

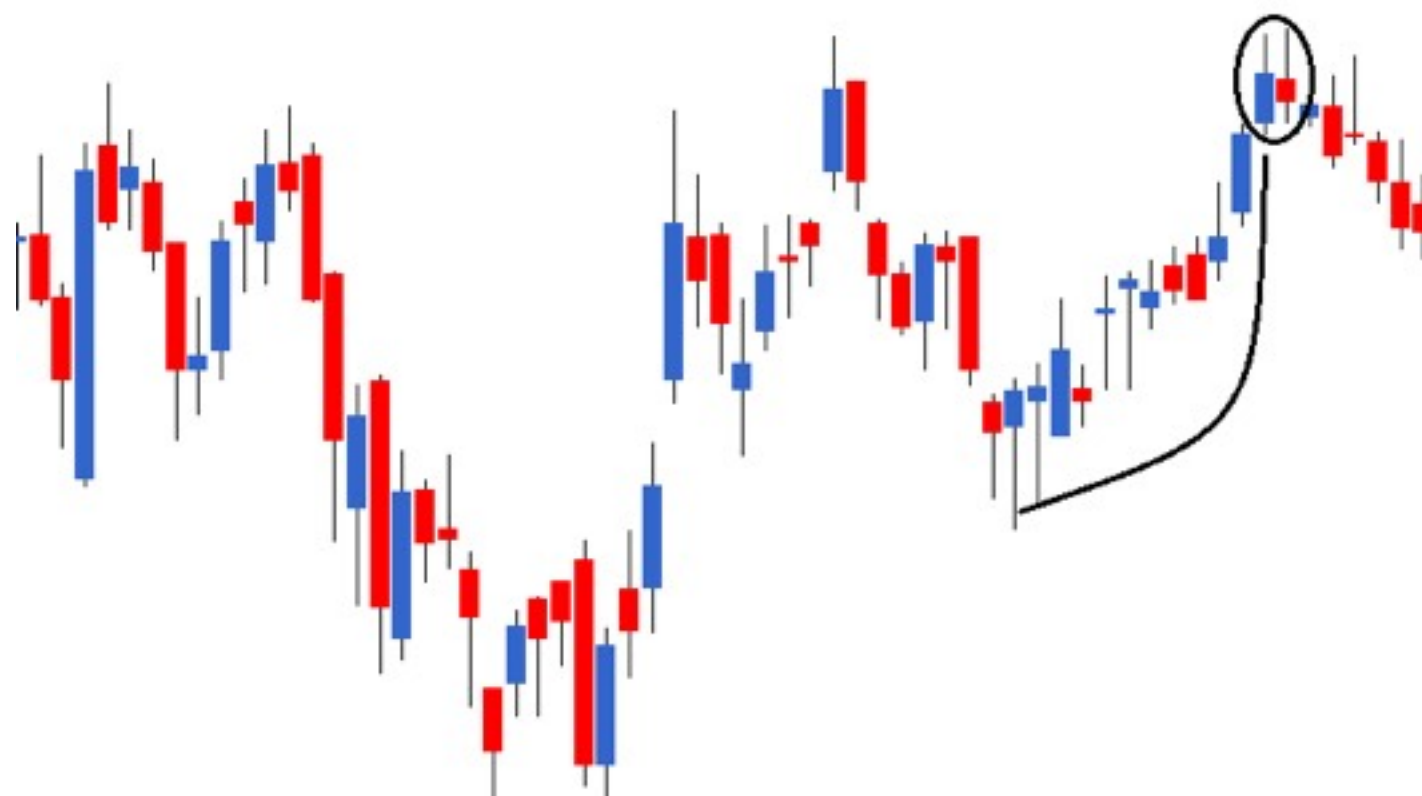
The trade setup for the short trade based on bearish harami is as follows:

- 1.The risk taker will short the market near the close of P2 after ensuring P1 and P2 together forms a bearish harami. To validate this, two conditions must be satisfied:
 - a.The open price on P2 should be lower than the close price of P1
 - b.The close price on P2 should be less than the open of P1
- 2.The risk averse will short the market the day after P2 after ensuring it forms a red candle day
- 3.The highest high between P1 and P2 acts as the stoploss for the trade.

Here is a chart of IDFC Limited where the bearish engulfing pattern is identified. The OHLC details are as follows:

P1 – Open = 124, High = 129, Low = 122, Close = 127

P2 – Open = 126.9, High = 129.70, Low, = 125, Close = 124.80



The risk taker will initiate the trade on day 2, near the closing price of 125. The risk averse will initiate the trade on the day after P2, only after ensuring it forms a red candle day. In the above example, the risk averse would have avoided the trade completely.

The stop loss for the trade would be the highest high between P1 and P2. In this case it would be 129.70.

Key takeaways from this chapter

- 1.The harami pattern evolves over 2 trading sessions – P1 and P2.
- 2.Day 1 (P1) of the pattern forms a long candle and day 2(P2) of the pattern forms a small candle which appears as if it has been tucked inside the P1's long candle
- 3.A bullish harami candle pattern is formed at the lower end of a down trend. P1 is a long red candle, and P2 is a small blue candle. The idea is to initiate a long trade near the close of P2 (risk taker). A risk averse trader will initiate the long trade near the close of the day after P2 only after ensuring it forms a blue candle day
- 4.The stop loss on a bullish harami pattern is the lowest low price between P1 and P2
- 5.The bearish harami pattern is formed at the top end of an uptrend. P1 is a long blue candle, and P2 is a small red candle. The idea is to initiate a short trade near the close of P2 (risk taker). The risk averse will initiate the short near the close of the day only after ensuring it is a red candle day
- 6.The stop loss on a bearish harami pattern is the highest high price between P1 and P2.