Equity Basics: Introduction

Over the last few decades, the average person's interest in the equity market has grown exponentially. This demand coupled with advances in trading technology has opened up the markets so that nowadays nearly anybody can own equity. Despite their popularity, however, most people don't fully understand equity. Chances are you've already heard people say things like "Watch out with equity--you can lose your shirt in a matter of days!" People thought that equity were the magic answer to instant wealth with no risk. Equity can (and do) create massive amounts of wealth, but they aren't without risks. The only solution to this is education. The key to protecting yourself in the equity market is to understand where you are putting your money. It is for this reason that we've created this tutorial: To provide the foundation you need to make investment decisions yourself.

The Definition of Equity

Plain and simple, equity is a share in the ownership of a company. Equity represents a claim on the company's assets and earnings. As you acquire more equity, your ownership stake in the company becomes greater. Whether you say shares, equity, it all means the same thing.

Being an Owner

Holding a company's equity means that you are one of the many owners (shareholders) of a company and, as such, you have a claim (albeit usually very small) to everything the company owns. Yes, this means that technically you own a tiny sliver of every piece of furniture, every trademark, and every contract of the company. As an owner, you are entitled to your share of the company's earnings as well as any voting rights attached to the equity.
A stock is represented by a stock certificate. This is a piece of paper that is proof of your ownership. Today it's in dematerialized form i.e. in electronic form shares have been kept safe. This is done to make the shares easier to trade. In the past, when a person wanted to sell his or her shares, that person physically took the certificates down to the brokerage. Now, trading with a click of the mouse or a phone call makes life easier for everybody.

Being a shareholder of a public company does not mean you have a say in the day-to-day running of the business. Instead, one vote per share to elect the board of directors at annual meetings is the extent to which you have a say in the company. For instance, being a Reliance shareholder doesn't mean you can call up Mukesh Ambani and tell him how you think the company should be run.

The management of the company is supposed to increase the value of the firm for shareholders. If this doesn't happen, the shareholders can vote to have the management removed, at least in theory. In reality, individual investors like you and I don't own enough shares to have a material influence on the company.

**Debt vs. Equity**

Why does a company issue stock? Why would the founders share the profits with thousands of people when they could keep profits to themselves? The reason is that at some point every company needs to raise money. To do this, companies can either borrow it from somebody or raise it by selling part of the company, which is known as issuing stock. A company can borrow by taking a loan from a bank or by issuing bonds. Both methods fit under the umbrella of debt financing. On the other hand, issuing stock is called equity financing. Issuing stock is advantageous for the company because it does not require the company to pay back the money or make interest payments along the way. All that the shareholders get in return for their money is the hope that the shares will someday be worth more than what they paid for them. The first sale of a stock, which is issued by the private company itself, is called the initial public offering (IPO).

It is important that you understand the distinction between a company financing through debt and financing through equity. When you buy a debt investment such as a bond, you are guaranteed the return of your money (the principal) along with promised interest payments. This isn't the case with an equity investment. By becoming an owner, you assume the risk of the company not being successful - just as a small business owner isn't guaranteed a return, neither is a shareholder. As an owner, your claim on assets is less than that of creditors. This means that if a company goes bankrupt and liquidates, you, as a shareholder, don't get any money until the banks and bondholders have been paid out; we call this absolute priority. Shareholders earn a lot if a company is successful, but they also stand to lose their entire investment if the company isn't successful.

**Risk**

It must be emphasized that there are no guarantees when it comes to individual stocks. Some companies pay out dividends, but many others do not. And there is no obligation to pay out dividends even for those firms that have traditionally given them. Without dividends, an investor can make money on a stock only through its appreciation in the open market. On the downside, any stock may go bankrupt, in which case your investment is worth nothing.

Although risk might sound all negative, there is also a bright side. Taking on greater risk demands a greater return on your investment. This is the reason why stocks have historically outperformed other investments such as bonds or savings accounts. Over the long term, an investment in stocks has historically had an average return of around 10-12%.
Different types of Stocks

Common Stock

Common stock is, well, common. When people talk about stocks they are usually referring to this type. In fact, the majority of stock is issued in this form. We basically went over features of common stock in the last section. Common shares represent ownership in a company and a claim (dividends) on a portion of profits. Investors get one vote per share to elect the board members, who oversee the major decisions made by management.

Over the long term, common stock, by means of capital growth, yields higher returns than almost every other investment. This higher return comes at a cost since common stocks entail the most risk. If a company goes bankrupt and liquidates, the common shareholders will not receive money until the creditors, bondholders and preferred shareholders are paid.

Preferred Stock

Preferred stock represents some degree of ownership in a company but usually doesn't come with the same voting rights. (This may vary depending on the company.) With preferred shares, investors are usually guaranteed a fixed dividend forever. This is different than common stock, which has variable dividends that are never guaranteed. Another advantage is that in the event of liquidation, preferred shareholders are paid off before the common shareholder (but still after debt holders). Preferred stock may also be callable, meaning that the company has the option to purchase the shares from shareholders at anytime for any reason (usually for a premium).

Some people consider preferred stock to be more like debt than equity. A good way to think of these kinds of shares is to see them as being in between bonds and common shares.

How do Stock Price Change

Stock prices change every day as a result of market forces. By this we mean that share prices change because of supply and demand. If more people want to buy a stock (demand) than sell it (supply), then the price moves up. Conversely, if more people wanted to sell a stock than buy it, there would be greater supply than demand, and the price would fall.

Understanding supply and demand is easy. What is difficult to comprehend is what makes people like a particular stock and dislike another stock. This comes down to figuring out what news is positive for a company and what news is negative. There are many answers to this problem and just about any investor you ask has their own ideas and strategies.

That being said, the principal theory is that the price movement of a stock indicates what investors feel a company is worth. Don't equate a company's value with the stock price. The value of a company is its market capitalization, which is the stock price multiplied by the number of shares outstanding. For example, a company that trades at Rs 100 per share and has 1 million shares outstanding has a lesser value than a company that trades at Rs 50 that has 5 million shares outstanding (Rs 100 x 1 million = Rs 100 million while Rs 50 x 5 million = Rs 250 million).

To further complicate things, the price of a stock doesn't only reflect a company's current value, it also reflects the growth that investors expect in the future.
The important things to grasp about this subject are the following:

1. At the most fundamental level, supply and demand in the market determines stock price.
2. Price times the number of shares outstanding (market capitalization) is the value of a company. Comparing just the share price of two companies is meaningless.
3. Theoretically, earnings are what affect investors' valuation of a company, but there are other indicators that investors use to predict stock price. Remember, it is investors' sentiments, attitudes and expectations that ultimately affect stock prices.
4. There are many theories that try to explain the way stock prices move the way they do. Unfortunately, there is no one theory that can explain everything.

How to Read a Stock/Quote

A stock quote will look like something below.

<table>
<thead>
<tr>
<th>Security Name</th>
<th>Face Value</th>
<th>ISIN Code</th>
<th>52 week high price</th>
<th>52 week low price</th>
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<tr>
<td>Reliance Capital Limited</td>
<td>10.00</td>
<td>INE013AO1015</td>
<td>1067.70</td>
<td>274.10</td>
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**Price Information**

<table>
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<tr>
<th>Open</th>
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<tr>
<td>High</td>
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<tr>
<td>Low</td>
<td>730.00</td>
</tr>
<tr>
<td>Last Price</td>
<td><strong>810.00</strong></td>
</tr>
<tr>
<td>Prev. Close</td>
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<tr>
<td>Close Price</td>
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</tr>
<tr>
<td>Change</td>
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<tr>
<td>% Change</td>
<td>11.31</td>
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<tr>
<td>VWAP</td>
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<tr>
<td>Total traded quantity</td>
<td>5640004</td>
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<tr>
<td>Turnover in Rs.Lakh</td>
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**Order Book**

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<thead>
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<th>Buy Qty</th>
<th>Buy Price</th>
<th>Sell Price</th>
<th>Sell Qty</th>
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<td>30</td>
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<td>609.60</td>
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<td>810.45</td>
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<tr>
<td>200066</td>
<td>Total Buy Qty</td>
<td>Total Sell Qty</td>
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**Corporate Action Information**

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<tr>
<td>BC Start Date</td>
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</tr>
<tr>
<td>Purpose</td>
<td>DIVIDEND-RS:6.50 PR SHARE</td>
<td></td>
</tr>
</tbody>
</table>

**Stock Symbol** - This is the unique alphabetic name which identifies the stock. If you watch financial TV, you have seen the ticker tape move across the screen, quoting the latest prices alongside this symbol. If you are looking for stock quotes online, you always search for a company by the ticker symbol. In above stock quote it's Relcapital

**52-Week High and Low** - These are the highest and lowest prices at which a stock has traded over the previous 52 weeks (one year). This typically does not include the previous day's trading.
Security Name & Type of Stock - This column lists the name of the company. If there are no special symbols or letters following the name, it is common stock. Different symbols imply different classes of shares. For example, "eq" means the shares are equity.

Total Traded Quantity - This figure shows the total number of shares traded for the day. It's the volume for the day.

Day High and Low - This indicates the price range at which the stock has traded throughout the day. In other words, these are the maximum and the minimum prices that people have paid for the stock.

Close - The close is the last trading price recorded when the market closed on the day. Keep in mind, you are not guaranteed to get this price if you buy the stock the next day because the price is constantly changing (even after the exchange is closed for the day). The close is merely an indicator of past performance and except in extreme circumstances serves as a ballpark of what you should expect to pay.

Net Change - This is the rupee value change in the stock price from the previous day's closing price. When you hear about a stock being "up for the day," it means the net change was positive.

Order Book – On the right hand side you see “Buy Qty”, “Buy Price”. This shows the top 5 bid and asks figures at which the security is trading. This basically shows the demands and supply of a particular stock. It's actually shows the market breadth which will give you the number of buyers and sellers.

**Bulls & Bears**

**The Bulls**
A bull market is when everything in the economy is great, people are finding jobs, gross domestic product (GDP) is growing, and stocks are rising. Picking stocks during a bull market is easier because everything is going up. Bull markets cannot last forever though, and sometimes they can lead to dangerous situations if stocks become overvalued. If a person is optimistic and believes that stocks will go up, he or she is called a "bull" and is said to have a "bullish outlook".

**The Bears**
A bear market is when the economy is bad, recession is looming and stock prices are falling. Bear markets make it tough for investors to pick profitable stocks. One solution to this is to make money when stocks are falling using a technique called short selling. Another strategy is to wait on the sidelines until you feel that the bear market is nearing its end, only starting to buy in anticipation of a bull market. If a person is pessimistic, believing that stocks are going to drop, he or she is called a "bear" and said to have a "bearish outlook".

After knowing about the stock basics. Let’s discuss now about the company research analysis which can help you in deciding which particular stocks to choose.

**Types of Research**

**Fundamental Analysis:**
Fundamental analysis is the cornerstone of investing. In fact, some would say that you aren't really investing if you aren't performing fundamental analysis. Because the subject is so broad, however, it's tough to know where to start. There are an endless number of investment strategies that are very different from each other, yet almost all use the fundamentals.

The biggest part of fundamental analysis involves delving into the financial statements. Also known as quantitative analysis, this involves looking at revenue, expenses, assets, liabilities and all the other financial aspects of a company. Fundamental
analysts look at this information to gain insight on a company's future performance. A good part of this tutorial will be spent learning about the balance sheet, income statement, cash flow statement and how they all fit together.

Basics
When talking about stocks, fundamental analysis is a technique that attempts to determine a security’s value by focusing on underlying factors that affect a company's actual business and its future prospects. On a broader scope, you can perform fundamental analysis on industries or the economy as a whole. The term simply refers to the analysis of the economic well-being of a financial entity as opposed to only its price movements.

Fundamental analysis serves to answer questions, such as:

- Is the company’s revenue growing?
- Is it actually making a profit?
- Is it in a strong-enough position to beat out its competitors in the future?
- Is it able to repay its debts?

Note: The term fundamental analysis is used most often in the context of stocks, but you can perform fundamental analysis on any security, from a bond to a derivative. As long as you look at the economic fundamentals, you are doing fundamental analysis. For the purpose of this tutorial, fundamental analysis always is referred to in the context of stocks.

Fundamentals: Quantitative and Qualitative
You could define fundamental analysis as “researching the fundamentals”, but that doesn’t tell you a whole lot unless you know what fundamentals are. As we mentioned in the introduction, the big problem with defining fundamentals is that it can include anything related to the economic well-being of a company. Obvious items include things like revenue and profit, but fundamentals also include everything from a company’s market share to the quality of its management.

The various fundamental factors can be grouped into two categories: quantitative and qualitative. The financial meaning of these terms isn’t all that different from their regular definitions. Here is how the MSN Encarta dictionary defines the terms:

- Quantitative – capable of being measured or expressed in numerical terms.
- Qualitative – related to or based on the quality or character of something, often as opposed to its size or quantity.

In our context, quantitative fundamentals are numeric, measurable characteristics about a business. It’s easy to see how the biggest source of quantitative data is the financial statements. You can measure revenue, profit, assets and more with great precision.

Turning to qualitative fundamentals, these are the less tangible factors surrounding a business - things such as the quality of a company’s board members and key executives, its brand-name recognition, patents or proprietary technology.

Quantitative Meets Qualitative
Neither qualitative nor quantitative analysis is inherently better than the other. Instead, many analysts consider qualitative factors in conjunction with the hard, quantitative factors. Take the Coca-Cola Company, for example. When examining its stock, an analyst might look at the stock’s annual dividend payout, earnings per share, P/E ratio and many other quantitative factors. However, no analysis of Coca-Cola would be complete without taking into account its brand recognition. Anybody can start a company that sells sugar and water, but few companies on earth are recognized by billions of people. It’s tough to put your finger on exactly what the Coke brand is worth, but you can be sure that it’s an essential ingredient contributing to the company’s ongoing success.

The Concept of Intrinsic Value
Before we get any further, we have to address the subject of intrinsic value. One of the primary assumptions of fundamental analysis is that the price on the stock market does not fully reflect a stock’s “real” value. After all, why would you be doing price analysis if the stock market were always correct? In financial jargon, this true value is known as the intrinsic value.

For example, let’s say that a company’s stock was trading at Rs 20. After doing extensive homework on the company, you
determine that it really is worth Rs 25. In other words, you determine the intrinsic value of the firm to be Rs 25. This is clearly relevant because an investor wants to buy stocks that are trading at prices significantly below their estimated intrinsic value.

This leads us to one of the second major assumptions of fundamental analysis: in the long run, the stock market will reflect the fundamentals. There is no point in buying a stock based on intrinsic value if the price never reflected that value. Nobody knows how long “the long run” really is. It could be days or years.

This is what fundamental analysis is all about. By focusing on a particular business, an investor can estimate the intrinsic value of a firm and thus find opportunities where he or she can buy at a discount. If all goes well, the investment will pay off over time as the market catches up to the fundamentals.

Technical Analysis:
Technical analysis really just studies supply and demand in a market in an attempt to determine what direction, or trend, will continue in the future. In other words, technical analysis attempts to understand the emotions in the market by studying the market itself, as opposed to its components. If you understand the benefits and limitations of technical analysis, it can give you a new set of tools or skills that will enable you to be a better trader or investor.

Technical analysis is a method of evaluating securities by analyzing the statistics generated by market activity, such as past prices and volume. Technical analysts do not attempt to measure a security’s intrinsic value, but instead use charts and other tools to identify patterns that can suggest future activity.

Just as there are many investment styles on the fundamental side, there are also many different types of technical traders. Some rely on chart patterns, others use technical indicators and oscillators, and most use some combination of the two. In any case, technical analysts’ exclusive use of historical price and volume data is what separates them from their fundamental counterparts. Unlike fundamental analysts, technical analysts don’t care whether a stock is undervalued - the only thing that matters is a security’s past trading data and what information this data can provide about where the security might move in the future.

The field of technical analysis is based on three assumptions:

1. The market discounts everything.
2. Price moves in trends.
3. History tends to repeat itself.

1. The Market Discounts Everything
A major criticism of technical analysis is that it only considers price movement, ignoring the fundamental factors of the company. However, technical analysis assumes that, at any given time, a stock’s price reflects everything that has or could affect the company - including fundamental factors. Technical analysts believe that the company's fundamentals, along with broader economic factors and market psychology, are all priced into the stock, removing the need to actually consider these factors separately. This only leaves the analysis of price movement, which technical theory views as a product of the supply and demand for a particular stock in the market.

2. Price Moves in Trends
In technical analysis, price movements are believed to follow trends. This means that after a trend has been established, the future price movement is more likely to be in the same direction as the trend than to be against it. Most technical trading strategies are based on this assumption.

3. History Tends To Repeat Itself
Another important idea in technical analysis is that history tends to repeat itself, mainly in terms of price movement. The repetitive nature of price movements is attributed to market psychology; in other words, market participants tend to provide a consistent reaction to similar market stimuli over time. Technical analysis uses chart patterns to analyze market movements and understand trends. Although many of these charts have been used for more than 100 years, they are still believed to be relevant because they illustrate patterns in price movements that often repeat themselves.
A More Formal Definition
Unfortunately, trends are not always easy to see. In other words, defining a trend goes well beyond the obvious. In any given chart, you will probably notice that prices do not tend to move in a straight line in any direction, but rather in a series of highs and lows. In technical analysis, it is the movement of the highs and lows that constitutes a trend. For example, an uptrend is classified as a series of higher highs and higher lows, while a downtrend is one of lower lows and lower highs.

Figure 1 is an example of an uptrend. Point 2 in the chart is the first high, which is determined after the price falls from this point. Point 3 is the low that is established as the price falls from the high. For this to remain an uptrend, each successive low must not fall below the previous lowest point or the trend is deemed a reversal.

Types of Trend
There are three types of trend:
- Uptrend
- Downtrends
- Sideways/Horizontal Trends

As the names imply, when each successive peak and trough is higher, it's referred to as an upward trend. If the peaks and troughs are getting lower, it's a downtrend. When there is little movement up or down in the peaks and troughs, it's a sideways or horizontal trend. If you want to get really technical, you might even say that a sideways trend is actually not a trend on its own, but a lack of a well-defined trend in either direction. In any case, the market can really only trend in these three ways: up, down or nowhere.

Trend Lengths
Along with these three trend directions, there are three trend classifications. A trend of any direction can be classified as a long-term trend, intermediate trend or a short-term trend. In terms of the stock market, a major trend is generally categorized as one lasting longer than a year. An intermediate trend is considered to last between one and three months and a near-term trend is anything less than a month. A long-term trend is composed of several intermediate trends, which often move against the direction of the major trend. If the major trend is upward and there is a downward correction in price movement followed by a continuation of the uptrend, the correction is considered to be an intermediate trend. The short-term trends are components of both major and intermediate trends. Take a look at Figure 2 to get a sense of how these three trend lengths might look.
When analyzing trends, it is important that the chart is constructed to best reflect the type of trend being analyzed. To help identify long-term trends, weekly charts or daily charts spanning a five-year period are used by chartists to get a better idea of the long-term trend. Daily data charts are best used when analyzing both intermediate and short-term trends. It is also important to remember that the longer the trend, the more important it is; for example, a one-month trend is not as significant as a five-year trend.

**Trendlines**

Trendline is a simple charting technique that adds a line to a chart to represent the trend in the market or a stock. Drawing a trendline is as simple as drawing a straight line that follows a general trend. These lines are used to clearly show the trend and are also used in the identification of trend reversals.

As you can see in Figure 3, an upward trendline is drawn at the lows of an upward trend. This line represents the support the stock has every time it moves from a high to a low. Notice how the price is propped up by this support. This type of trendline helps traders to anticipate the point at which a stock's price will begin moving upwards again. Similarly, a downward trendline is drawn at the highs of the downward trend. This line represents the resistance level that a stock faces every time the price moves from a low to a high.
Channels

A channel, or channel lines, is the addition of two parallel trendlines that act as strong areas of support and resistance. The upper trendline connects a series of highs, while the lower trendline connects a series of lows. A channel can slope upward, downward or sideways but, regardless of the direction, the interpretation remains the same. Traders will expect a given security to trade between the two levels of support and resistance until it breaks beyond one of the levels, in which case traders can expect a sharp move in the direction of the break. Along with clearly displaying the trend, channels are mainly used to illustrate important areas of support and resistance.

![Descending Channel](image)

Figure 4 illustrates a descending channel on a stock chart; the upper trendline has been placed on the highs and the lower trendline is on the lows. The price has bounced off of these lines several times, and has remained range-bound for several months. As long as the price does not fall below the lower line or move beyond the upper resistance, the range-bound downtrend is expected to continue.

The Importance of Trend

It is important to be able to understand and identify trends so that you can trade with rather than against them. Two important sayings in technical analysis are "the trend is your friend" and "don't buck the trend," illustrating how important trend analysis is for technical traders.

Chart Types

Line Chart

The most basic of the four charts is the line chart because it represents only the closing prices over a set period of time. The line is formed by connecting the closing prices over the time frame. Line charts do not provide visual information of the trading range for the individual points such as the high, low and opening prices. However, the closing price is often considered to be the most important price in stock data compared to the high and low for the day and this is why it is the only value used in line charts.
Bar Charts
The bar chart expands on the line chart by adding several more key pieces of information to each data point. The chart is made up of a series of vertical lines that represent each data point. This vertical line represents the high and low for the trading period, along with the closing price. The close and open are represented on the vertical line by a horizontal dash. The opening price on a bar chart is illustrated by the dash that is located on the left side of the vertical bar. Conversely, the close is represented by the dash on the right. Generally, if the left dash (open) is lower than the right dash (close) then the bar will be shaded black, representing an up period for the stock, which means it has gained value. A bar that is colored red signals that the stock has gone down in value over that period. When this is the case, the dash on the right (close) is lower than the dash on the left (open).

Candlestick Charts
The candlestick chart is similar to a bar chart, but it differs in the way that it is visually constructed. Similar to the bar chart, the candlestick also has a thin vertical line showing the period's trading range. The difference comes in the formation of a wide bar on the vertical line, which illustrates the difference between the open and close. And, like bar charts, candlesticks also rely heavily on the use of colors to explain what has happened during the trading period. A major problem with the candlestick color configuration, however, is that different sites use different standards; therefore, it is important to understand the candlestick configuration used at the chart site you are working with. There are two color constructs for days up and one for days that the price falls. When the price of the stock is up and closes above the opening trade, the candlestick will usually be white or clear. If the stock has traded down for the period, then the candlestick will usually be red or black, depending on the site. If the stock's price has closed above the previous day's close but below the day's open, the candlestick will be black or filled with the color that is used to indicate an up day.
Point and Figure Charts
The point and figure chart is not well known or used by the average investor but it has had a long history of use dating back to the first technical traders. This type of chart reflects price movements and is not as concerned about time and volume in the formulation of the points. The point and figure chart removes the noise, or insignificant price movements, in the stock, which can distort traders' views of the price trends. These types of charts also try to neutralize the skewing effect that time has on chart analysis.

When first looking at a point and figure chart, you will notice a series of Xs and Os. The Xs represent upward price trends and the Os represent downward price trends. There are also numbers and letters in the chart; these represent months, and give investors an idea of the date. Each box on the chart represents the price scale, which adjusts depending on the price of the stock: the higher the stock's price the more each box represents. On most charts where the price is between $20 and $100, a box represents $1, or 1 point for the stock. The other critical point of a point and figure chart is the reversal criteria. This is usually set at three but it can also be set according to the chartist's discretion. The reversal criteria set how much the price has to move away from the high or low in the price trend to create a new trend or, in other words, how much the price has to move in order for a column of Xs to become a column of Os, or vice versa. When the price trend has moved from one trend to another, it shifts to the right, signaling a trend change.

Conclusion
Charts are one of the most fundamental aspects of technical analysis. It is important that you clearly understand what is being shown on a chart and the information that it provides. Now that we have an idea of how charts are constructed, we can move on to the different types of chart patterns.
Indicators & Oscillators

There are two main types of indicators: leading and lagging. A leading indicator precedes price movements, giving them a predictive quality, while a lagging indicator is a confirmation tool because it follows price movement. A leading indicator is thought to be the strongest during periods of sideways or non-trending trading ranges, while the lagging indicators are still useful during trending periods.

There are also two types of indicator constructions: those that fall in a bounded range and those that do not. The ones that are bound within a range are called oscillators - these are the most common type of indicators. Oscillator indicators have a range, for example between zero and 100, and signal periods where the security is overbought (near 100) or oversold (near zero). Non-bounded indicators still form buy and sell signals along with displaying strength or weakness, but they vary in the way they do this.

The two main ways that indicators are used to form buy and sell signals in technical analysis is through crossovers and divergence. Crossovers are the most popular and are reflected when either the price moves through the moving average, or when two different moving averages cross over each other. The second way indicators are used is through divergence, which happens when the direction of the price trend and the direction of the indicator trend are moving in the opposite direction. This signals to indicator users that the direction of the price trend is weakening.

Indicators that are used in technical analysis provide an extremely useful source of additional information. These indicators help identify momentum, trends, volatility and various other aspects in a security to aid in the technical analysis of trends. It is important to note that while some traders use a single indicator solely for buy and sell signals, they are best used in conjunction with price movement, chart patterns and other indicators.

Accumulation/Distribution Line

The accumulation/distribution line is one of the more popular volume indicators that measures money flows in a security. This indicator attempts to measure the ratio of buying to selling by comparing the price movement of a period to the volume of that period.

Calculated:

\[
= \frac{(\text{Close} - \text{Low}) - (\text{High} - \text{Close})}{(\text{High} - \text{Low}) \times \text{Period's Volume}}
\]

Aroon Oscillator

An expansion of the Aroon is the Aroon oscillator, which simply plots the difference between the Aroon up and down lines by subtracting the two lines. This line is then plotted between a range of -100 and 100. The centerline at zero in the oscillator is considered to be a major signal line determining the trend. The higher the value of the oscillator from the centerline point, the more upward strength there is in the security; the lower the oscillator's value is from the centerline, the more downward pressure. A trend reversal is signaled when the oscillator crosses through the centerline. For example, when the oscillator goes from positive to negative, a downward trend is confirmed. Divergence is also used in the oscillator to predict trend reversals. A reversal warning is formed when the oscillator and the price trend are moving in an opposite direction.

The Aroon lines and Aroon oscillators are fairly simple concepts to understand but yield powerful information about trends. This is another great indicator to add to any technical trader's arsenal.

Moving Average Convergence

The moving average convergence divergence (MACD) is one of the most well known and used indicators in technical analysis. This indicator is comprised of two exponential moving averages, which help to measure momentum in the security. The MACD is simply the difference between these two moving averages plotted against a centerline. The centerline is the point at which the two moving averages are equal. Along with the MACD and the centerline, an exponential moving average of the MACD itself is plotted on the chart. The idea behind this momentum indicator is to measure short-term momentum compared to longer term momentum to help signal the current direction of momentum.
When the MACD is positive, it signals that the shorter term moving average is above the longer term moving average and suggests upward momentum. The opposite holds true when the MACD is negative - this signals that the shorter term is below the longer and suggest downward momentum. When the MACD line crosses over the centerline, it signals a crossing in the moving averages. The most common moving average values used in the calculation are the 26-day and 12-day exponential moving averages. The signal line is commonly created by using a nine-day exponential moving average of the MACD values. These values can be adjusted to meet the needs of the technician and the security. For more volatile securities, shorter term averages are used while less volatile securities should have longer averages.

Another aspect to the MACD indicator that is often found on charts is the MACD histogram. The histogram is plotted on the centerline and represented by bars. Each bar is the difference between the MACD and the signal line or, in most cases, the nine-day exponential moving average. The higher the bars are in either direction, the more momentum behind the direction in which the bars point.

So this is all we think that after reading these concepts you must have been able to get something about the stock and its valuation through research analysis.