

# Bijl Investment Consultants

## Chart Basics

### Chart Basics

#### Introduction

- In technical analysis, charts are similar to the charts that you see in any business setting.
- A chart is simply a **graphical representation** of a series of prices over a set time frame.
- **For example**, a chart may show a stock's price movement over a one-year period, where each point on the graph represents the closing price for each day the stock is traded.

## Chart Basics

### Introduction



Figure

- Figure provides an example of a basic chart. It is a representation of the price movements of a stock over a 1.5 year period. The bottom of the graph, running horizontally (x-axis), is the date or time scale.

On the right hand side, running vertically (y-axis), the price of the security is shown. By looking at the graph we see that in October 2004 (Point 1), the price of this stock was around `245, whereas in June 2005 (Point 2), the stock's price is around `265. This tells us that the stock has risen between October 2004 and June 2005.

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## Chart Basics

### Chart Types

- There are four main types of charts that are used by investors and traders depending on the information that they are seeking and their individual skill levels.
- **The chart types are:**
  1. The Line Chart,
  2. The Bar Chart,
  3. The Candlestick Chart,
  4. The Point And Figure Chart.

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# Chart Basics

## Chart Types

### Line Chart



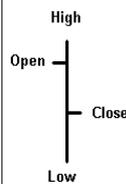
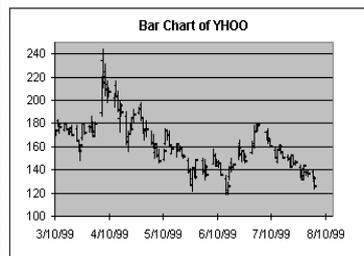
- The most basic of the four charts is the line chart because it **represents only the closing prices over a set period of time.**
- The line is formed by connecting the closing prices over the time frame. Line charts *do not provide visual information of the trading range* for the individual points 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.

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# Chart Basics

## Chart Types

### Bar Charts



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.

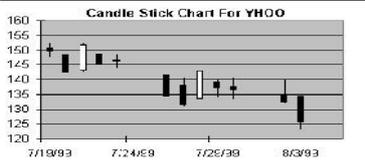
The opening price on a bar chart is illustrated by the dash that is located on the left side of the vertical bar. Conversely, the close is represented by the dash on the right. Generally, if the left dash (open) is lower than the right dash (close) then the bar will be shaded **Green**, representing 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).

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# Chart Basics

## Candlestick Charts

## Chart Types

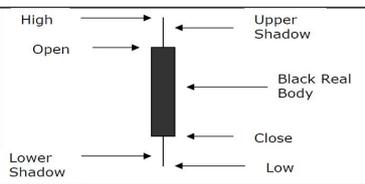
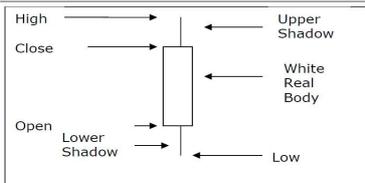


Four elements needed to construct a Candlestick Chart, The **Open, High, Low and Closing Price** for a given time period.

➤ The Body of the candlestick chart is known as the **real body**, and represents the range between the open and closing prices.

➤ A black or filled-in body highlights that the close during that time period was lower than the open (usually considered **bearish**). When the body is open or white, it shows the close was higher than the open (usually considered **Bullish**)

➤ The slim straight line above and/or below the real body is known as the **upper/lower shadow**, representing the high/low price limits for the period.

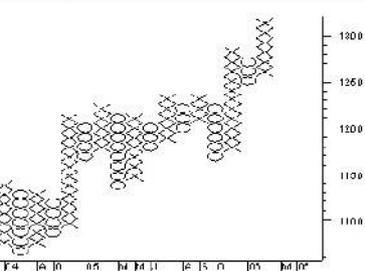


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# Chart Basics

## Point and Figure Charts

## Chart Types



➤ A Point and Figure Chart consists 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.

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## Chart Basics

### Chart Properties

#### The Time Scale

- The time scale refers to **the range of dates at the bottom of the chart**, which can vary from decades to seconds.
- The most frequently used time scales are **intraday, daily, weekly, monthly, quarterly and annually**.
- The shorter the time frame, the more detailed the chart.
- Each data point can represent the closing price of the period or show the open, the high, the low and the close depending on the chart used.

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## Chart Basics

### Chart Properties

#### The Time Scale

- Intraday charts plot price movement within the period of one day. This means that the time scale could be as short as five minutes or could cover the whole trading day from the opening bell to the closing bell.
- Daily charts are comprised of a series of price movements in which each price point on the chart is **a full day's trading** condensed into one point.
- These data points are spread out over **weekly, monthly and even yearly time scales to monitor both short-term and intermediate trends** in price movement.

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# Chart Basics

## Chart Properties

### The Price Scale and Price Point Properties

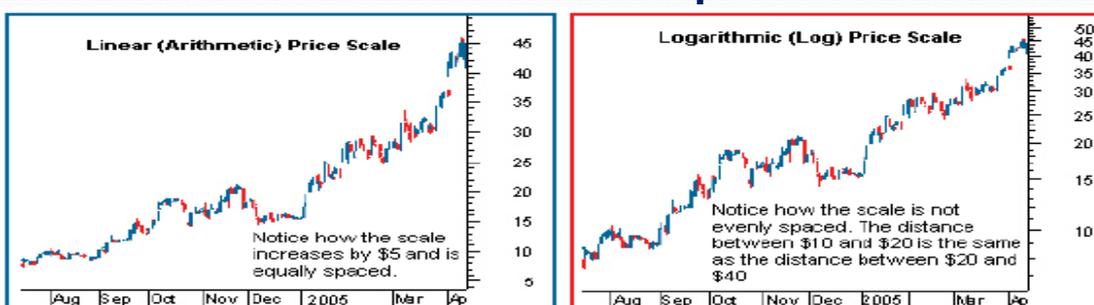
- The price scale is on the right-hand side of the chart.
- It shows a stock's current price and compares it to past data points. This may seem like a simple concept in that the price scale goes from lower prices to higher prices as you move along the scale from the bottom to the top. The problem, however, is in the structure of the scale itself.
- A scale can either be constructed in a linear (arithmetic) or logarithmic way, and both of these options are available on most charting services.

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# Chart Basics

## Chart Properties

### The Price Scale and Price Point Properties



- If a price scale is constructed using a linear scale, the space between each price point (10, 20, 30, 40) is separated by an equal amount.
- A price move from 10 to 20 on a linear scale is the same distance on the chart as a move from 40 to 50.

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## Chart Basics

### Chart Properties

#### The Price Scale and Price Point Properties

- In other words, the price scale **measures moves in absolute terms** and **does not show the effects of percent change**.
- If a price scale is in logarithmic terms, then the distance between points will be equal in terms of percent change.
- A price change from 10 to 20 is a 100% increase in the price while a move from 40 to 50 is only a 25% change, even though they are represented by the same distance on a linear scale.
- On a logarithmic scale, the distance of the 100% price change from 10 to 20 will not be the same as the 25% change from 40 to 50.

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## Chart Basics

### Chart Properties

#### The Price Scale and Price Point Properties

- In this case, the move from 10 to 20 is represented by a larger space on the chart, while the move from 40 to 50, is represented by a smaller space because, percentage-wise, it indicates a smaller move.
- In Figure, the logarithmic price scale on the right leaves the same amount of space between 10 and 20 as it does between 20 and 40 because these both represent 100% increases.

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# Thank You