A Dictionary of FOREX & other Trading Terms

Dele Ogundahunsi & Charles Worterven

Table Of Content

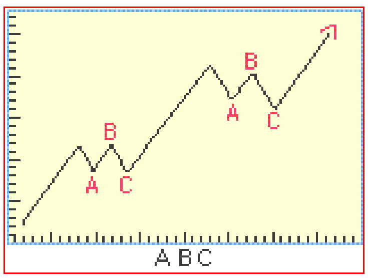
A

Abandon: To not exercise or sell an option by expiry. An Abandoned Option is one that is not exercised or sold by the maturity date. Abandonment occurs when the option is out of the money - or unprofitable - by expiration.

***A Priori*:** Known ahead of time.

***Abandoned Baby Pattern*:** A rare candlestick pattern in which an upside gap doji star (where the shadows do not touch) is followed by a downside gap black candlestick where the shadows also do not touch; considered a major top reversal signal.

***ABC*:**



Elliott wave terminology for a three-wave countertrend price movement. Wave A is the first price wave against the trend of the market. Wave B is a corrective wave to Wave A. Wave C is the final price move to complete the countertrend price move. Elliott wave followers study A and C waves for price ratios based on numbers from the Fibonacci series.

Absolute Rate: The fixed portion of an interest-rate swap, expressed as a percentage rather than as a premium or a discount to a reference rate. The absolute rate is a combination of the reference rate and the premium or discounted fixed percentage. For example, if the LIBOR is 3% and the fixed interest portion of the swap is at a 7% premium, the absolute rate is 10%.

Accreting Principal Swap Mean: A swap whereby the notional value is increasing over time. This type of swap is used mainly by companies willing to pay a fixed rate in return for an increasing notional as a result of increasing working capital requirements

Accrual: The apportionment of premiums and discounts on forward exchange transactions that relate directly to deposit swap (Interest Arbitrage) deals, over the period of each deal.

Accumulation: An addition to a trader's original market position. The first of three distinct phases in a major trend in which investors are buying.

Accumulation/Distribution Mean: **(***Also See* Chaikin Oscillator). A momentum indicator that attempts to gauge supply and demand by determining whether investors are generally "accumulating" (buying) or "distributing" (selling) a certain stock by identifying divergences between stock price and volume flow. It is calculated using the following formula: Acc/Dist = ((Close – Low) – (High – Close)) / (High – Low) * Period's volume

Actualize: The underlying assets or instruments which are traded in the cash market.

Actuals: Refers to actual physical commodities, as distinguished from futures.

ADA: Block-structured programming language developed under the guidance of the U.S. Department of Defense to provide a medium for writing real-time, concurrent applications, for facilitating program verification.

Adaptive Filter**:** Smoothing and/or forecasting prices with continuously updated weighting of past prices.

Adjustable Peg: Term for an exchange rate regime where a country's exchange rate is "pegged" (i.e. fixed) in relation to another currency , often the dollar or French Franc, but where the rate may be changed from time to time. This was the basis of the Bretton Woods system. See peg, and crawling peg.

Adjustment: Official action normally by either change in the internal economic policies to correct a payment imbalance or in the official currency rate.

Advance-Decline Line: Each day's number of declining issues is subtracted from the number of advancing issues. The net difference is added to a running sum if the difference is positive or subtracted from the running sum if the difference is negative.

Adverse Excursion: The loss attributable to price movement against the position in any one trade.

ADX Directional Movement Index: ADX fluctuates between 0 and 100. Readings below 20 indicate a weak trend or ranging market and readings above 40 indicate a strong trend. ADX does not indicate direction but rather just the strength of the trend, up or down. Often plotted with ADX are two lines that indicate direction. The lines are +DI and -DI. If the +DI line is above the -DI line, then the trend is considered bullish. Crosses of the +DI and -DI lines generate buy and sell signals. For example, if +DI crosses above -DI, then a buy signal is generated.

Agent Bank: (1) A bank acting for a foreign bank. (2) In the Euro market - the agent bank is the one appointed by the other banks in the syndicate to handle the administration of the loan.

Aggregate Demand: Total demand for goods and services in the economy. It includes private and public sector demand for goods and services within the country and the demand of consumers and firms in other countries for good and services. Aggregate demand is the demand for the gross domestic product (GDP) of a country, and is represented by this formula: Aggregate Demand (AD) = C + I + G (X-M)   C = Consumers' expenditures on goods and services. I = Investment spending by companies on capital goods. G = Government expenditures on publicly provided goods and services. X = Exports of goods and services. M = Imports of goods and services.

***Aggregate risk*:** Size of exposure of a bank to a single customer for both spot and forward contracts.

Aggregate Supply: Total supply of goods and services in the economy from domestic sources (including imports) available to meet aggregate demand.

Agio: Difference in the value between currencies. Also used to describe percentage charges for conversion from paper money into cash, or from a weak into a strong currency.

AKA: An acronym for "automated knowledge acquisition." Refers to the use of programs to create knowledge needed by other programs (usually expert systems).

Alpha: Premium that an investment portfolio earns above a given point of reference; a measure of stock performance independent of the market.

American Currency Quotation Mean: A direct quotation in the foreign exchange markets whereby the value of the American dollar is stated as a per-unit measure of a foreign currency. This type of quotation shows how much U.S. currency it takes to purchase one unit of foreign currency. For example, an American currency quote would be US$0.85 per C$1. This shows that it will take only 0.85 U.S. dollars to purchase a single unit of Canadian currency. If you wanted to purchase C$1,000, it would cost you US$850.

American Depository Receipts (ADRs): Certificates that are issued by a bank of US origin and traded in the U.S. as domestic shares. The certificates represent the foreign securities that the bank holds in that security's country of origin.

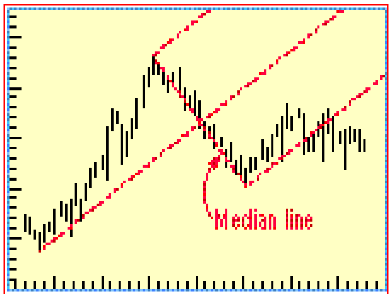
Amortization: Accounting method in which an asset's cost is spread out.

Analysis of Variance: (Anova) The partitioning of total sum of squares into the sum of squares explained by the model and the remaining sum of squares unexplained.

***Anaume*:** Candlestick formation. An exceptional exhaustion pattern (meaning "gap filling") composed of five candles. The anaume occurs when the gap is filled in after a market price has changed directions. This pattern coupled with the other patterns indicates a strong potential for a bullish reversal and price advance.

***Anchoring-and-Adjustment*:**
Behavioral finance. The tendency to evaluate current decisions in the context of past events.

Andrews Method:



Andrews Method

A technique whereby a technician will pick an extreme low or high to use as a pivot point and draw a line, called the median line, from this point that bisects a line drawn through the next corrective phase that occurs after the pivot point. Lines parallel to the median line are drawn through the high and low points of the corrective phase. The parallel lines define the resistance and support levels for the price channel.

Annealing (Simulated): Generally a metallurgical process, in artificial intelligence a process in which a neural net work searches for a set of weights to minimize errors; the search constantly shrinks as the weights find better values, analogous to the rearrangement of the molecules in a heated metal bar as the bar cools.

Annual Earnings Change: (%) The historical earnings change between the most recently reported fiscal year earnings and the preceding.

Annual Net Profit Margin: (%) The percentage that the company earned from gross sales for the most recently reported fiscal year.

Annual Sales Change: (%) The percentage change in sales between the most recently reported fiscal year and the preceding.

Annualized: Translating the figures for a given year into an annual rate.

Antithetic Forecasts: Two forecasts whose errors are negatively correlated.

Appreciation: Describes a currency strengthening in response to market demand rather than by official action.

Arbitrage: The simultaneous purchase and sale of two different, but closely related, securities to take advantage of a disparity in their prices. The simultaneous purchase and sale on different markets, of the same or equivalent financial instruments to profit from price or currency differentials. The exchange rate differential or Swap points. May be derived from Deposit Rate differentials.

Arbitrage channel: The range of prices within which there will be no possibility to arbitrage between the cash and futures market.

ARIMA: See AutoRegressive Integrated Moving Average

ARMAX (AutoRegressive Moving Average eXogenous variables model): The combination of fundamental variables outside the particular market that correlates with the independent variable added with the ARMA modeling of the remaining residuals

Arms Index: Also known as TRading INdex (TRIN). An advance/decline stock market indicator. A reading of less than 1.0 indicates bullish demand, while greater than 1.0 is bearish.

$$= \frac{\dfrac{\text{No. of advancing issues}}{\text{No. of declining issues}}}{\dfrac{\text{Total up volume}}{\text{Total down volume}}}$$

The index is often smoothed with a simple moving average.

Around: Used in quoting forward "premium / discount". "Five-five around" would mean five points on either side of the present spot value.

Artificial Intelligence**:** The field of computer science dedicated to producing programs that attempt to mimic the processes of the human brain.

Asian Financial Crisis: Also called the "Asian Contagion", this was a series of currency devaluations and other events that spread through many Asian markets beginning in the summer of 1997. The currency markets first failed in Thailand as the result of the government's decision to no longer peg the local currency to the U.S. dollar. Currency declines spread rapidly throughout South Asia, in turn causing stock market declines, reduced import revenues and even government upheaval. The Asian Financial Crisis was stemmed somewhat by financial intervention from the International Monetary Fund and the World Bank. However, market declines were also felt in the United States, Europe and Russia as the Asian economies slumped

Ask: The price at which a currency or an instrument is offered.

Asset: In the context of foreign exchange is the right to receive from a counterparty an amount of currency either in respect of a balance sheet asset (e.g. a loan) or at a specified future date in respect of an unmatched forward or spot deal.

Asset Allocation: Dividing instrument funds among markets to achieve diversification or maximum return.

Asset Swap**:** Similar in structure to a plain vanilla swap, the key difference is the underlying of the swap contract. Rather than regular fixed and floating loan interest rates being swapped, fixed and floating investments are being exchanged. In a plain vanilla swap, a fixed libor is swapped for a floating libor. In an asset swap, a fixed investment such as a bond with guaranteed coupon payments is being swapped for a floating investment such as an index

Assign**:** To transfer to another to whom property is assigned.

Astrophysical Cycle**:** Any earthly cycle, such as a market cycle, that has been scientifically related to the physics of the planetary system.

At best: An instruction given to a dealer to buy or sell at the best rate that can be obtained

At or Better: An order to deal at a specific rate or better.

At The Market**:** An order to buy or sell a futures contract at the best available price upon entrance into the exchange for execution. This is identical to a market order in the securities markets. When an investor places an order at the market, he or she is willing to forgo price discrimination for speediness of entry to or exit from a futures contract.

At-the-Money: An option whose strike price is nearest the current price of the underlying deliverable.

Attenuation: The fractional part of reduced energy or lost power due to smoothing or filtering.

Authorized Forex Dealer**:** Any type of financial institution that has received authorization from a relevant regulatory body to act as a dealer involved with the trading of foreign currencies. Dealing with authorized forex dealers ensure that your transactions are being executed in a legal and just way. In the United States, one regulatory body responsible for authorizing forex dealers is the National Futures Association (NFA). The NFA ensures that authorized forex dealers are subject to stringent screening upon registration and strong enforcement of regulations upon approval

Autocorrelation: The correlation between the values of a time series and previous values of the same time series.

AutoRegressive Integrated Moving Average (ARIMA): A linear stochastic model forecasting methodology described by Box and Jenkins in their book *Time Series Analysis, Forecasting and Control.*

Autoregressive**:**
Using previous data to predict future data.

Average Directional Movement Index (ADX): Indicator developed by J. Welles Wilder to measure market trend intensity

Average True Range**:**
A moving average of the true range

B

***%b*:** Indicates where the closing price is within Bollinger bands:

$$\frac{\text{close} - \text{lower band}}{\text{upper band} - \text{lower band}}$$

Back Month: The out, or *back*, contract month, as opposed to the current contract month; the expiration month farther in the future than the current, or *spot*, month.

Back-Propagation Network: A feedforward multilayered neural network that is a commonly used neural network paradigm.

Back-Testing: A strategy is tested or optimized on historical data and then the strategy is applied to new data to see if the results are consistent.

Backwardation: Term referring to the amount that the spot price exceeds the forward price.

***Balanced Mutual Fund*:** A mutual fund that seeks a return that is a combination of capital appreciation and current income, generally by building a portfolio of bonds, preferred stocks and common stocks.

Balance of Payments: A systematic record of the economic transactions during a given period for a country. (1) The term is often used to mean either: (i) balance of payments on "current account"; or (ii) the current account plus certain long term capital movements. (2) The combination of the trade balance, current balance, capital account and invisible balance, which together make up the balance of payments total. Prolonged balance of payment deficits tend to lead to restrictions in capital transfers, and or decline in currency values.

Band: The range in which a currency is permitted to move. A system used in the ERM

***Bandpass Filter*:** An oscillator that accentuates only the frequencies in an intermediate range and rejects high and low frequencies. Implemented by first applying a low pass filter to the data and then a high pass filter to the resulting data (e.g., two SMA crossover system).

***Bank Investment Contracts (BICs)*:** A negotiated-term deposit issued by a commercial bank. *See* Guaranteed Investment Contracts (GICs).

Bank line: Line of credit granted by a bank to a customer, also known as a “line"

Bank Rate: The rate at which a central bank is prepared to lend money to its domestic banking system

***Bar Chart*:** Used to plot price movements using vertical bars indicating price ranges.

***Basis*:** The difference between spot (cash) prices and the futures contract price.

***Basis Point*:** **(1.)** The measure of yields on bonds and notes; one basis point equals 0.01% of yield **(2.)** In Forex, for most currencies, it denotes the fourth decimal place in exchange rate and represents 1/100 of one percent (.01%). For such currencies as the Japanese Yen, a basis point is the second decimal place when quoted in currency terms or the sixth and seventh decimal places, respectively, when quoted in reciprocal terms.

Basis trading: Taking opposite positions in the cash and futures market with the intention of profiting from favorable movements in the basis.

***Basket Trade(s)*:** **(1.)** Large transactions made up of a number of different stocks **(2.)** A group of currencies normally used to manage the exchange rate of a currency. Sometimes referred to as a unit of account.

***Bayes Decision Rule*:** A rule that states the strategy chosen from those available is that for which the expected value of payoff is the greatest.

***Bear**:* An investor who believes that prices are going to fall.

***Bear Market*:** **(1.)** A securities market characterized thus based on declining prices **(2.)** A prolonged period of generally falling prices.

***Beta*:** A regression of the estimated coefficient that belongs to a particular variable.

Beta (Coefficient):
A measure of the market/nondiversifiable risk associated with any given security in the market. A ratio of an individual's stock historical returns to the historical returns of the stock market. If a stock increased in value by 12% while the market increased by 10%, the stock's beta would be 1.2.

Bias: The difference between the expected value of an estimator and the actual value to be estimated.

***Bid and Ask*:** **(1.)** Highest price that an investor will pay for a tradable. **(2.)** The price at which a buyer has offered to purchase a currency or an instrument

***Bimodal Distribution*:** In which observations are displayed as having two distinct peaks.

***Black Box*:** A proprietary, computerized trading system whose rules are not disclosed or readily accessible

Black-Scholes Option Pricing Model**:** A model developed to estimate the market value of option contracts

Block Trades: Large transactions of a particular stock sold as a unit

Blow-Off Top**:** A steep and rapid increase in price followed by a steep and rapid drop in price

Bonds: A long-term debt security with a stated interest rate and fixed due dates, issued by a corporation or a government, when interest and principal must be paid. There are many variations.

Book: The summary of currency positions held by a dealer, desk, or room. A total of the assets and liabilities. If the average maturity of the book is less than that of the assets, the bank is said to be running a short and open book. Passing the Book refers normally to transferring the trading of the Banks positions to another office at the close of the day, e.g. from London to New York.

Boolean**:** Describes a variable that may have one of only two possible values: true or false. After George Boole, English logician, credited with the invention of "Boolean logic."

Box-Jenkins Linear Least Squares**:** The additive structure of Box-Jenkins models with a polynomial structure.

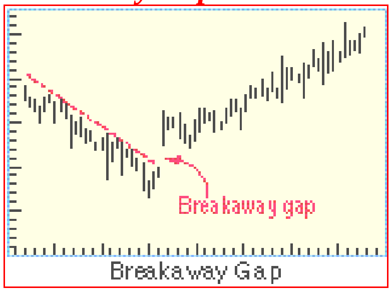
Box-Jenkins Method**:** From G.E.P. Box and G.M. Jenkins, who authored *Time Series Analysis: Forecasting and Control.* The method refers to the use of autoregressive integrated moving averages (ARIMA), which fit seasonal models and nonseasonal models to a time series.

Box-Jenkins Nonlinear Least Squares**:** The multiplicative structure of Box-Jenkins models using the Gauss-Newton algorithm with numerical derivatives.

Bozu: Literally "bald" or "monk" in Japanese; in candlestick terminology refers to a situation during which a trading cycle opens or closes on a high or low, indicating a victory for the bulls or the bears.

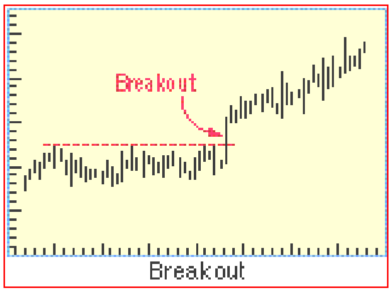
Bracketing**:** A trading range market or a price region that is non-trending.

***Breakaway Gap*:**



When a tradable exits a trading range by trading at price levels that leaves a price area where no trading occurs on a bar chart. Typically, these gaps appear at the completion of important chart formations.

Breakout:



The point when the market price moves out of the trend channel.

***Bretton Woods*:** The site of the conference which in 1944 led to the establishment of the post war foreign exchange system that remained intact until the early 1970s. The conference resulted in the formation of the IMF. The system fixed currencies in a fixed exchange rate system with 1% fluctuations of the currency to gold or the dollar.

Broker: Brings buyers and sellers together for a commission paid by the initiator of the transaction. Brokers do not take market positions.

***Broker-dealer*:** A firm that handles transactions for its customers and also purchases securities for its own account, selling them to customers.

***Broker's Deck*:** Orders physically held by the floor broker in the trading pit.

Bull: An investor who believes that prices are going to rise

***Bull Market*:** **(1.)** A securities market characterized thus on rising prices. **(2.)** A prolonged period of generally rising prices

Bundesbank: Central Bank of Germany

***Buy and Hold*:** The acquisition of a tradable for the long term rather than quick turnover

Buying Rate: Rate at which the market and a market maker in particular is willing to buy the currency. Sometimes called bid rate.

C

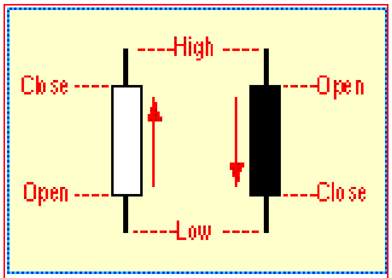
Cable: A term used in the foreign exchange market for the US Dollar/British Pound rate

C Language: Widely used systems development language, also block-structured, but with more facilities to control the machine at the level of the hardware.

Call Option: A contract that gives the buyer of the option the right but not the obligation to take delivery of the underlying security at a specific price within a certain time.

Calmar Ratio: Takes the average rate of return for the last 36 months and divides it by the maximum drawdown for the same period. It is usually calculated on a monthly basis. A negative value for the Calmar ratio means that the system or trader had a negative performance over the last three years.

Candlestick Charts:



Candlestick Charts

A charting method, originally from Japan, in which the high and low are plotted as a single line and are referred to as shadows. The price range between the open and the close is plotted as a narrow rectangle and is referred to as the body. If the close is above the open, the body is white. If the close is below the open, the body is black.

Capital Gains Distribution**:** A distribution to investment company shareholders from net long-term capital gains realized by a regulated investment company on the sale of portfolio securities.

Capital Losses**:** Losses resulting from selling at a loss.

Capital Risk: The risk arising from a bank having to pay to the counter party with out knowing whether the other party will or is able to meet its side of the bargain. see Herstat

Carry: The interest cost of financing securities or other financial instruments held.

Cash: normally refers to an exchange transaction contracted for settlement on the day the deal is struck. This term is mainly used in the North American markets and those countries which rely for foreign exchange services on these markets because of time zone preference i.e. Latin America. In Europe and Asia, cash transactions are often referred to as value same day deals

Cash and Carry: The buying of an asset today and selling a future contract on the asset. A reverse cash and carry is possible by selling an asset and buying a future.

Cash Delivery: Same day settlement

Cash market: The market in the actual financial instrument on which a futures or options contract is based.

Cash Settlement: A procedure for settling futures contract where the cash difference between the future and the market price is paid instead of physical delivery

***CBOT*:** Chicago Board of Trade.

Central Bank: A nation's main regulatory bank. Traditionally, its primary responsibility is development and implementation of monetary policy.

***Central Limit Theorem*:** From statistics, the theorem that the distribution of sample means taken from a large population approaches a normal, Gaussian, curve.

Central Rate: Exchange rates against the ECU adopted for each currency within the EMS. Currencies have limited movement from the central rate according to the relevant band

Certificate of Deposit: Abbreviated as CD, refers to a short- or medium-term, interest-bearing, FDIC-insured debt instrument offered by banks and savings and loans. CDs offer higher rates of return than most comparable investments, in exchange for tying up invested money for the duration of the certificate's maturity

***Chaikin Oscillator*:** An oscillator created by subtracting a 10-day EMA from a three-day EMA of the accumulation /distribution line.

***Channel*:** In charting, a price channel contains prices throughout a trend. There are three basic ways to draw channels: parallel, rounded and channels that connect lows (bear trend) or highs (bull trend).

***Chaos Theory*:** Describes the behavior of nonlinear systems. A subset of nonlinear dynamics analysis, chaos theory is a branch of mathematics focusing on irregular and complex behavior that has an underlying order. In the stock market, chaos theory seeks to forecast the future path of stock prices, including sudden changes that occur during periods of intense market activity.

Chartist: An individual who studies graphs and charts of historic data to find trends and predict trend reversals which include the observance of certain patterns and characteristics of the charts to derive resistance levels, head and shoulders patterns, and double bottom or double top patterns which are thought to indicate trend reversals

Charts**:** A display or picture of a security that plots price and/or volume (the number of shares sold). The chart is the foundation of technical analysis, and over the years, many different types of charts have been developed.

Chi Square**:** A statistical test to determine if the patterns exhibited by data could have been produced by chance. The chi-square test with Yates's correction using two-way statistics for decline vs. advance is:

$$\chi^2 = \sum_{j=1}^{k} \frac{\left(\left|o_j - e_j\right| - 0.5\right)^2}{e_j}$$

where:
oj = actual observed frequency of test
ej = expected or theoretical frequency of test.

Christmas Tree Spread**:** The simultaneous purchase and writing of options with either a different strike price or expiration date or combination of the two.

Classifier Systems**:** In artificial intelligence, these systems perform a type of machine learning that generates rules from examples.

Clean float: An exchange rate that is not materially effected by official intervention

Clone Fund**:** A smaller version of a retail mutual fund, it is offered as a subaccount in a variable annuity. The daily price of a clone fund is different among variable annuities that carry it because each clone fund starts on a different date and with a base price of $10.

Closed-End Funds**:** A mutual fund that does not sell unlimited shares; one with a specific number of outstanding shares.

Closed Trades**:** Positions that have been either liquidated or offset.

Clustering**:** Locating the presence of groups of vectors that are similar in some fashion.

CME**:** The Chicago Mercantile Exchange.

Closed position: A transaction which leaves the trade with a zero net commitment to the market with respect to a particular currency.

***Coefficient*:** A constant used to multiply another quantity or series; as in 3*x* and *ax*, 3 and *a* are *coefficients* of *x*

***Coefficient of Determination*:** R-squared. The proportion of the variation in the data explained by the model.

***Coincidence*:** In Gann theory, a projected reversal point.

***Colinear*:** *see* Multicolinearity

***Combined Forecast*:** The weighted average of two or more forecasts.

***Confirmation**:* A memorandum to the other party describing all the relevant details of the transaction.

Commission: The fee that a broker may charge clients for dealing on their behalf

Commodity Futures Trading Commission (CFTC): A commission that oversees the commodity exchanges in the US.

***Comparative Relative Strength*:** Compares the price movement of a stock with that of its competitors, industry group or the entire market. This is distinct from J. Welles Wilder's Relative Strength Index, which compares current price movement to previous price movement of the same instrument.

***Comparitor*:** A device of some kind that compares two inputs.

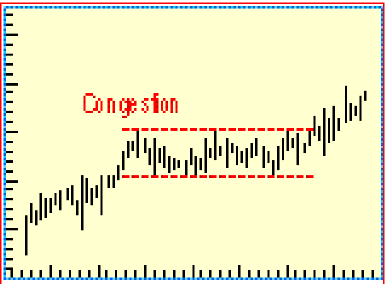
***Compounding*:** The payment, through interest, based on the sum of the original principal amount and its accrued interest.

***Confidence Factor*:** A measure of the degree of likelihood that a rule is correct, which may reflect the percentage of times that it has proven to be correct in the past or just a subjective measure of our confidence in its degree of reliability.

***Confidence Level*:** The degree of assurance that a specified failure rate is not exceeded.

***Confirmation*:** Indication that at least two indices, in the case of Dow theory the industrials and the transportation, corroborate a market trend or a turning point.

Congestion Area or Pattern:



Congestion Area

A series of trading days in which there is no visible progress in price.

***Consolidation*:** Also known as a congestion period. A pause that allows participants in a market to reevaluate the market and sets the stage for the next price move.

Consumer Price Index: The gauge of US inflation.

Continuation Chart: A chart in which the price scale for the data for the end of a given contract and the data for the beginning of the next contract are merged in order to ease the transition of one contract to the next.

***Contract*:** **(1.)** An agreement as in options in which rights are exchanged by law. **(2.)** An agreement to buy or sell a specified amount of a particular currency or option for a specified month in the future (See Futures contract)

Conversion: The process by which an asset or liability denominated in one currency is exchanged for an asset or liability denominated in another currency.

Conversion Account: A general ledger account representing the uncovered position in a particular currency. Such accounts are referred to as Position Accounts.

Conversion arbitrage: **(1.)** A transaction where the asset is purchased and buys a put option and sells a call option on the asset purchased, each option having the same exercise price and expiry. **(2.)** Traders buy and sell two different securities (or synthetic securities), forcing equivalent prices for equivalent securities.

***Convergence*:** When futures prices and spot prices come together at the futures expiration.

Copey: Slang for the Danish Krone.

***Coppock Curve*:** Also *Coppock Guide.* A long-term price momentum indicator: a 10-month weighted moving aver age of the sum of the 14-month rate of change and the 11-month rate of change for the Djia.

Correction: Any price reaction within the market leading to an adjustment by as much as one-third to two-thirds of the previous gain.

Correction Wave: A wave or cycle of waves moving against the current impulse trend's direction.

Correlation Coefficient: When two random variables X and Y tend to vary together. The measurement is given by the ratio of the covariance of X and T to the square root of the product of the variance of X and the variance of Y.

$$r = \frac{\sum XY - n\overline{XY}}{\sqrt{\left(\sum X^2 - n\overline{X}^2\right)\left(\sum Y^2 - n\overline{Y}^2\right)}}$$

Correlation Coefficient: Degree to which two series of numbers plot as a straight line. A correlation coefficient of 1 (or -1) indicates that the two series of numbers plot exactly along a straight line. A correlation coefficient of zero indicates that there is no straight line relationship between the two series of numbers. As applied to two portfolios, a high correlation coefficient for the relative returns indicates that the portfolio values have moved in tandem and a low correlation coefficient means the opposite. When the correlation coefficient is high, one portfolio could have been used as a surrogate or a hedge for the other.

Correlogram**:** A numerical and graphical display of the test statistics of an autocorrelation diagnostic routine.

Correspondent Bank: The foreign banks representative who regularly performs services for a bank which has no branch in the relevant centre, e.g. to facilitate the transfer of funds. In the US this often occurs domestically due to inter-state banking restrictions

Cost Basis**:** The cost of a given share or group of stock shares

Countermove**:** A price bar showing movement opposite to the direction of the prior time period; a retracement

Counterparty: The other organization or party with whom the exchange deal is being transacted

Countervalue: Where a person buys a currency against the dollar it is the dollar value of the transaction

Country risk: The risk attached to a borrower by virtue of its location in a particular country. This involves examination of economic, political and geographical factors. Various organizations generate country risk tables

Covariance: Multiplies the deviation of each variable from its mean, adds those products and then divides by the number of observations

***Cover*:** **(1.)** Purchasing back a contract sold earlier. **(2)** To close out a short position by buying currency or securities which have been sold. **(3.)** To take out a forward foreign exchange contract

Covered Arbitrage: Arbitrage between financial instruments denominated in different currencies, using forward cover to eliminate exchange risk

Covered Margin: The interest rate margin between two instruments denominated in different currencies after taking account of the cost of forward cover.

***Covered Write*:** Writing a call against a long position in the underlying stock. By receiving a premium, the writer intends to realize additional return on the underlying common stock or gain some element of protection (limited to the amount of the premium less transaction costs) from a decline in the value of that underlying stock.

***Crack Spreads*:** The spread between crude oil and its products: heating oil and unleaded gasoline plays a major role in the trading process.

Crawling peg: A method of exchange rate adjustment; the rate is fixed/ pegged, but adjusted at certain intervals in line with certain economic or market indicators

***Credit Spread*:** The difference in value of two options, where the value of the one sold exceeds the value of the one purchased.

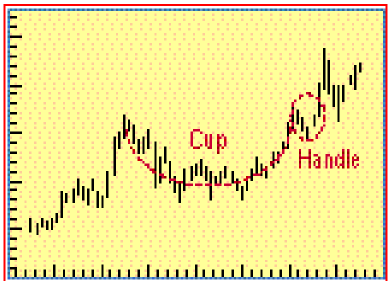
Credit Risk: Risk of loss that may arise on outstanding contracts should a counter party default on its obligations.

***Cross Correlations*:** The extent to which the revenue streams of individual traders within a single enterprise tend to exhibit similar patterns over time.

Cross deal: A foreign exchange deal entered into involving two currencies, neither of which is the base currency.

***CTI2*:** Market Profile terminology for commercial clearing members, as opposed to CTI1, local floor traders.

Cup and Handle:



Cup and Handle

An accumulation pattern observed on bar charts. The pattern lasts from seven to 65 weeks; the cup is in the shape of a "U" and the handle is usually more than one or two weeks in duration. The handle is a slight downward drift with low trading volume from the right-hand side of the formation

Current Account: The net balance of a country's international payment arising from exports and imports together with unilateral transfers such as aid and migrant remittances. It excludes capital flows.

***Current Ratio*:** The current assets of a company divided by its current liabilities. Balance-sheet strength indication.

Curve: The continuous image of the unit interval.

***Curve-Fitting*:** Developing complicated rules that map known conditions.

CUSIP: The number assigned by the Committee of Uniform Security Identification Procedure that appears on all securities documents. Each security is given a number so that it is easily identifiable.

***Cutoff Frequency*:** A point where higher frequency cycles will not pass through a filter (e.g., a 10-day SMA will eliminate cycles of 20 days or less).

Cycle: A variation where a point of observation returns to its origin.

D

***%D*:** A stochastics indicator that has had its values smoothed a second time, usually with a three-period moving average.

***Daily Range*:** The difference between the high and low price during one trading day.

***Data Preprocessing*:** Altering data to some extent to be more accurately analyzed; smoothing, reducing unwanted data, removing trend. Processing data is mathematically transforming the data from one form into another with the goal of amplifying pertinent information for traders.

Day trader: Speculators who take positions in commodities which are then liquidated prior to the close of the same trading day.

***Dead Cat Bounce*:** A rebound in a market that sees prices recover and come back up somewhat.

Deal date: The date on which a transaction is agreed upon.

Deal Ticket: The primary method of recording the basic information relating to a transaction

Dealer: One who, as opposed to a broker, acts as a principal in all transactions, buying and selling for his own accounts?

***Debit Spread*:** The difference in value of two options, where the value of the long position exceeds the value of the short position.

Deductive Logic: Logic traditionally used in expert systems, which defines a method for reasoning from the general to the specific.

Deep-in-the-Money: A deep-in-the-money call option has the strike price of the option well below the current price of the underlying instrument. A deep-in-the-money put option has the strike price of the option well above the current price of the underlying instrument.

Deflator: Difference between real and nominal Gross National Product, which is equivalent to the overall inflation rate

***Degrees of Freedom*:** The number of independent observations; the number of observations minus the number of parameters to be estimated.

***Delay*:** The amount of time that elapses between a change in an input event and the resultant change in a related output event or time series.

Delivery date: The date of maturity of the contract, when the exchange of the currencies is made This date is more commonly known as the value date in the FX or Money markets

Delivery Risk: A term to describe when counterparty will not be able to complete his side of the deal, although willing to do so

***Delta*:** The amount by which the price of an option changes for every dollar move in the underlying instrument.

Delta-Hedged: An options strategy that protects an option against small price changes in the option's underlying instrument. These hedges are constructed by taking a position in the underlying instrument that is equal in magnitude but opposite in sign (+/-) to the option's delta.

***Delta Neutral*:** This is an "options/options" or "options/underlying instrument" position constructed so that it is relatively insensitive to the price movement of the underlying instruments. This is arranged by selecting a calculated ratio of offsetting short and long positions.

***Delta Position*:** A measure of option price vs. the underlying futures contract or stock price.

***Demand Index*:** An index that shows the buying and selling power of markets and stocks from mathematical calculations of volume and price ratios.

Density Function: For any measure *m* , a function that gives rise to *m* when integrated with respect to some other specified measure. A probability density function is a function whose integral over any set gives the probability that a random variable has values in this set.

***Dependence*:** A relationship between two different experimental results in which the first result does not directly influence the chances of the second result occurring, but instead, the two results are indirectly related because they are subject to influences from a common outside factor.

Depreciation: A fall in the value of a currency due to market forces rather than due to official action

***Derivatives*:** Financial contracts the value of which depend on the value of the underlying instrument commodity, bond, equity, currency or a combination.

Desk: Term referring to a group dealing with a specific currency or currencies

Details: All the information required to finalize a foreign exchange transaction, i.e. name, rate, dates, and point of delivery

***Deterministic*: (1.)** Known in advance when the sum of one-step ahead forecast mean squared errors is zero. **(2.)** The fundamental continuous effect of an exogenous variable such as money supply that can be determined to be explanatory.

***Deterministic System*:** A system in which the outcome is determined by an equation; a system in which cause and effect is easily determined.

***Detrend*:** To remove the general drift, tendency, or bent of a set of statistical data as related to time.

Devaluation: Deliberate downward adjustment of a currency against its fixed parities or bands, normally by formal announcement

Difference-in-Means Test: A statistical test that indicates the likelihood of observing the difference if the true difference were zero. A large value of this statistic leads to non-acceptance of the null hypothesis that the true difference is zero.

***Differencing*:** Subtracting previous from current values to obtain a stationary (detrended) time series: P stationary = Pt - Pt-1.

Diffusion Equation: A partial differential equation, used in solving a random walk problem.

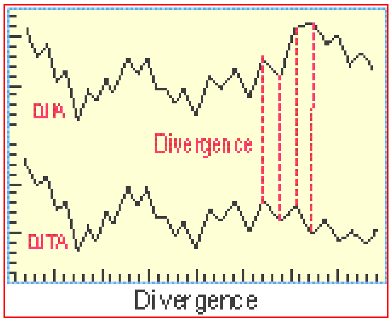
Diffusion Index: An index that measures the percentage of individual series that are positive compared with the aggregate group that is, the percentage of S&P groups that are above their 30-week moving average.

Directional Movement Index (DMI): Developed by J. Welles Wilder, DMI measures market trend.

Direct quotation: Quoting in fixed units of foreign currency against variable amounts of the domestic currency

Dirty Float: Floating a currency when the rate is controlled by intervention by the monetary authorities
***Distribution*:** Any set of related values described by an average (that is, mean), which identifies its midpoint, a measure of spread (that is, standard distribution) and a measure of its shape (that is, skew or kurtosis).

Divergence:



When two or more averages or indices fail to show confirming trends.

***Dividend*:** Stockholder payment of a share of a company's profits.

***Dividend Reinvestment Plan*:** A program offered by a publicly held company in which dividends are used to buy more shares of the company.

Doji: A session in which the open and close are the same (or almost the same). Different varieties of doji lines (such as a gravestone or long-legged doji) depend on where the opening and close are in relation to the entire range. Doji lines are among the most important individual candlestick lines. They are also components of important candlestick patterns.

***Dollar Cost Averaging*:** Using the same amount of funds to regularly invest (often quarterly or monthly) and not take into consideration whether the securities being purchased are high or low in price. By using this method, an investor will see an average between their investment costs and the market's up and down movements.

***Double Bottom (Top)*:** The price action of a security or market average where it has declined (advanced) two times to the same approximate level, indicating the existence of a support (resistance) level and a possibility that the down ward (upward) trend has ended.

Double-Smoothed: A price series that has been smoothed by a mathematical technique such as a moving average. This first series of smoothed price data is then smoothed a second time.

***Double Top*:** *See* Double Bottom. A price pattern seen on a chart. The patterns occurs when prices rise to a resistance level on significant volume, retreat to a support level, and subsequently return to the resistance level on decreased volume. Prices then decline and break through the support level, marking the beginning of a new downtrend in the price of the stock.

Drawdown: The reduction in account equity as a result of a trade or series of trades.

Drunkard's Walk: *See* Random walk.

***Durbin-Watson Statistic*:** The probability that first order correlation exists. With a range between zero and 4, the closer to 2.0, the lower the probability is.

***Dynamic Data Exchange*:** Ability to automatically update an application from within another application.

***Dynamic Linked Language*:** Refers to programming code that can be used ("called") by your main program while running under Windows

E

Early Entry**:** A large price movement in one direction within the first 15 minutes after the open of the daily session.

Earnings Estimates**:** The estimated earnings projected for a company for a fiscal year.

Easing: Modest decline in price

Economic Indicator: A statistics which indicates current economic growth rates and trends such as retail sales and employment.

ECU: European Currency Unit

EDI: Electronic Data Interchange

Effective Exchange Rate: An attempt to summarize the effects on a country's trade balance of its currency's changes against other currencies

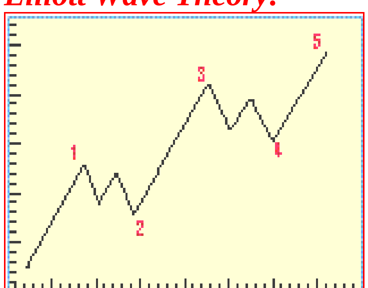
Efficient Market Theory: All known information is already discounted by the market and reflected in the price due to market participants acting upon the information.

EFT: Electronic Fund Transfer

Elasticity**:** The ability to recover an original configuration.

Electronic Communications Network**:** Independent execution systems set up by brokerage firms, matching new retail limit orders with compatible orders already in the system.

Elliott Wave Theory:



Elliott Wave Theory

A pattern-recognition technique published by Ralph Nelson Elliott in 1939, which holds that the stock market follows a rhythm or pattern of five waves up and three waves down to form a complete cycle of eight waves. The three waves down are referred to as a "correction" of the preceding five waves up.

EMA**:** *See* Exponential Moving Average.

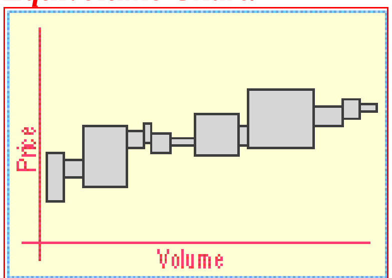
***Engulfing Pattern*:** In candlestick terminology, a multiple candlestick line pattern; a major reversal signal with two opposing-color real bodies making up the pattern (Also referred to as *tsutsumi.)*

Envelope: Lines surrounding an index or indicator that is, trading bands.

***Entry*:** The point at which a trader gets into a position in the market.

Equilibrium Market: A price region that represents a balance between demand and supply.

Equivolume Chart:



Equivolume Chart

Created by Richard W. Arms, a chart in which the vertical axis is the high-low range for each day, while the horizontal axis represents the volume of shares of stock or the number of contracts traded for the day. The purpose of the chart is to highlight the relationship between price and volume.

***ERISA*:** The Employee Retirement Income Security Act.

***Estimated EPS Change*:** (%) Change in estimated mean earnings for the current fiscal year from the last month, last three months and last six months to the current month.

***Eurodollar*:** Dollars deposited in foreign banks, with the futures contract reflecting the rates offered between London branches of top US banks and foreign banks.

European Monetary System (EMS): A system designed to stabilize if not eliminate exchange risk between member states of the EMS as part of the economic convergence policy of the EU. It permits currencies to move in a measured fashion (divergence indicator) within agreed bands (the parity grid) with respect to the ECU and consequently with each other

Evening Star Pattern: The bearish counterpart of the morning star pattern; a top reversal, it should be acted on if it arises after an uptrend.

Exchange control: Rules used to preserve or protect the value of a countries currency

Exchange-Traded Funds**:** Collections of stocks that are bought and sold as a package on an exchange, principally the American Stock Exchange (AMEX), but also the New York Stock Exchange (NYSE) and the Chicago Board Options Exchange (CBOE).

Ex-Dividend Date**:** The day on or after which the right to receive a current dividend is not automatically transferred to a buyer.

Exercise**:** The process by which the holder of an option makes or receives delivery of shares of the underlying security.

Exit**:** The point at which a trader closes out of a trade.

Exotic Currency: A less broadly traded currency

Expert Systems: Dynamic but not adaptable, expert systems are rule-driven systems that cannot learn as the result of new information being fed into its system as opposed to neural networks, which can.

Expiration**:** The last day on which an option can be traded.

Explained**:** The relative reduction in the variation of variable Y that can be attributed to knowledge of variable X and its relationship to Y.

Exponential Moving Average**:** The EMA for day D is calculated as:

$$EMA_D = \alpha PR_D + (1-\alpha) EMA_{D-1},$$

Where PR is the price on day D and a (alpha) is a smoothing constant $(0<\alpha<1)$. Alpha may be estimated as $2/(n+1)$, where n is the simple moving average length. Another form of the formula is $EMA_D = EMA_{D-1} + \alpha(PR_D - EMA_{D-1})$.

Exponential Smoothing**:** A mathematical-statistical method of forecasting that assumes future price action is a weighted average of past periods; a mathematic series in which greater weight is given to more recent price action.

Expert Systems: Dynamic but not adaptable, expert systems are rule-driven systems that cannot learn as the result of new information being fed into its system as opposed to neural networks, which can. Most successful in financial applications where governing rules are consistent.

Exposure: In foreign exchange, a potential for gain or loss because of movement in foreign exchange rate. There are three primary types of exposure: **(1.)** Economic: The change in future earning power and cash flow arising from a change in exchange rates. In effect, it represents a change in the value of a company holding foreign currency. **(2.)** Transnational: A potential gain or loss arising from transactions that will definitely occur in the future, are currently in progress, or could have already been completed. A signed but not shipped sales contract, a receivable or foreign currency payment collected but not converted to local currency would all be examples of transaction exposure.
(3.) Translation: The potential for change in reported earnings and/or the book value of the consolidated company equity accounts, as the result of a change in foreign exchange rates used to translate the foreign currency statements of subsidiaries and affiliates known as accounting exposure.

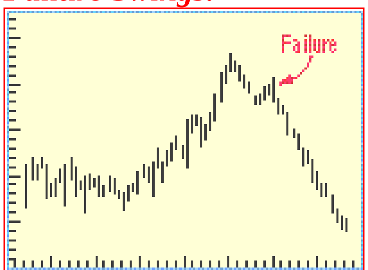
***Extreme*:** The highest or lowest price during any time period, a price extreme; in the CBOT Market Profile, the highest/lowest prices the market tests during a trading day

F

F Statistics: The ratio of the variance explained by treatments to the unexpected variance.

***Fade*:** Selling a rising price or buying a falling price. A trader fading an up opening would be short, for example.

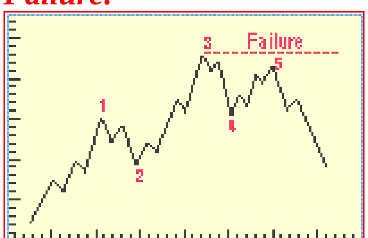
Failure Swings:



Failure Swings

The inability of price to reaffirm a new high in an uptrend or a new low in a downtrend.

Failure:



Failure

In Elliott wave theory, a five-wave pattern of movement in which the fifth impulse wave fails to move above the end of the third, or in which the fifth wave does not contain the five subwaves.

Fair Values: The theoretical prices generated by an option pricing model (*i.e.* , the Black-Scholes option pricing model).

Fake Out
A large, quick, temporary rise or fall in price.

Fast Fourier Transform: A method by which to decompose data into a sum of sinusoids of varying cycle length, with each cycle being a fraction of a common fundamental cycle length.

Fast Market: **(1.)** Rapid movement in a market caused by strong interest by buyers and/or sellers. In such circumstances price levels may be omitted and bid and offer quotations may occur too rapidly to be fully reported. **(2.)** A declaration that market conditions in the futures pit are so disorderly temporarily to the extent that floor brokers are not held responsible for the execution of orders.

Federal Deposit Insurance Corporation: A self-sustaining, independent executive agency established to insure deposits of all US banks entitled to federal deposit insurance, as stated by the Federal Reserve Act.
***Federal Reserve Bank (also abbreviated as Fed)*:** **(1.)** The governing central bank of the US. **(2.)** The United States Federal Reserve. Federal Deposit Insurance Corporation Membership is compulsory for Federal Reserve members. The corporation had deep involvement in the Savings and Loans crisis of the late 80s.

Federal Open Market Committee: The policymaking committee of the Federal Reserve Bank. They meet on a regular basis to make decisions on economic policy.

Fed Fund Rate: The interest rate on Fed funds. This is a closely watched short term interest rate as it signals the Feds view as to the state of the money supply

Feedforward Computation: Neural network in which neurons receive information only from the previous layer and send outputs only to the following layer.

Fibonacci Ratio: The ratio between any two successive numbers in the Fibonacci sequence, known as phi (f). The ratio of any number to the next higher number is approximately 0.618 (known as the Golden Mean or Golden Ratio), and to the lower number approximately 1.618 (the inverse of the Golden Mean), after the first four numbers of the series. The three important ratios the series provides are 0.618, 1.0 and 1.618.

Fibonacci Sequence: The sequence of numbers (0, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233...), discovered by the Italian mathematician Leonardo de Pisa in the 13th century and the mathematical basis of the Elliott wave theory, where the first two terms of the sequence are 0 and 1 and each successive number in the sequence is the sum of the previous two numbers. Technically, it is a sequence and not a series.

***Fill*:** An executed order; sometimes the term refers to the price at which an order is executed.

***Fill Order*:** An order that must be filled immediately (or canceled).

***Filter Point*:** The time at which a portfolio insurance program makes an adjusting trade.

***Filter*:** A device or program that separates data, signal or information in accordance with specified criteria.

Fire**:** (verb) In expert system programming, ordinarily used to describe the "triggering" or "activation" of a rule. A rule is "fired," "triggered" or "activated" when its conditions have been met, and its "consequents" (resultant facts) are added to the knowledge base.

Fisher Effect: The relationship that exists between interest rates and exchange rate movements, so that in an ideal situation interest rate differentials would be exactly off set by exchange rate movements. See interest rate parity.

Fit Criterion**:** A quantitative comparable measure used to minimize model errors.

Fixed exchange rate: Official rate set by monetary authorities. Often the fixed exchange rate permits fluctuation within a band.

5% Confidence: Before conducting statistical tests, an analyst must select a confidence level that will be used to determine when to accept the null hypothesis. A 5% confidence level indicates that one is not willing to accept the null hypothesis when the average net return calculated from the sample could have occurred in only five of 100 samples if the null hypothesis were true.

Flaglike: Sideways market price action that has a slight drift in price counter to the direction of the main trend; a consolidation phase.

Flash Fill**:** Order filled immediately by hand signal on the trading floor.

Flexible exchange rate: Exchange rates with a fixed parity against one or more currencies with frequent revaluations. A form of managed float

Float**:** The number of shares currently available for trading.

Floating exchange rate: An exchange rate where the value is determined by market forces. Even floating currencies are subject to intervention by the monetary authorities. When such activity is frequent the float is known as a dirty float

Floor Traders**:** Employees of brokerage firms working on exchange trading floors.

Flyers: Speculative or high-risk trades.

Forecast Origin**:** The most recent historical period for which data is used to build a forecasting model. The next time period is the first forecast period.

Foreign Exchange: The purchase or sale of a currency against sale or purchase of another.

Forex: Term commonly used when referring to the foreign exchange market.

Forex Club: Groups formed in the major financial centers to encourage educational and social contacts between foreign exchange dealers, under the umbrella of Association Cambiste International

Forward margins: Discounts or premiums between spot rate and the forward rate for a currency. Normally quoted in points.

Forward Operations: Foreign exchange transactions, on which the fulfillment of the mutual delivery obligations is made on a date later than the second business day after the transaction was concluded

Forward Outright: A commitment to buy or sell a currency for delivery on a specified future date or period. The price is quoted as the Spot rate minus or plus the forward points for the chosen period

Forward Rate: Forward rates are quoted in terms of forward points , which represents the difference between the forward and spot rates. In order to obtain the forward rate from the actual exchange rate the forward points are either added or subtracted from the exchange rate. The decision to subtract or add points is determined by the differential between the deposit rates for both currencies concerned in the transaction. The base currency with the higher interest rate is said to be at a discount to the lower interest rate quoted currency in the forward market. Therefor the forward points are subtracted from the spot rate. Similarly, the lower interest rate base currency is said to be at a premium, and the forward points are added to the spot rate to obtain the forward rate

Forward-Rate Agreements (FRAs): Cash payments are made daily as the spot rate varies above or below an agreed -upon forward rate and can be hedged with Eurodollar futures.

Fractal Dimension**:** From fractal geometry, used to describe the irregular nature of lines, curves, planes or volumes.

Fractals**:** Depiction of mathematical models that may be applied to identify data patterns.

Framing or Frame Dependence**:** Behavioral finance. The tendency to evaluate current decisions within the framework in which they have been presented. Making decisions based on perceptions of risk/return rather than pure risk and return. The usual example is categorization of where money comes from and what it is "assigned" to instead of recognizing its fungibility. The alternative is to speak of frame independence, wherein behavior is not influenced by how the decision is framed. Examples are loss aversion, hedonic editing, loss of self-control, regret, and money illusion.

Free Reserves: Total reserves held by a bank less the reserves required by the authority

Frequency**:** The number of complete cycles observed per time period (i.e., cycles per year).

***Frequency Component*:** That part of a time series that may be represented as a cycle.

***Frequency Distribution*:** A chart showing the number of times (or "frequency") an event occurs for each possible value of the event. The vertical or y-axis of the chart is the frequency axis and the horizontal or x-axis shows the different values the variable being measured can take.

***Frequency Domain*:** Variation in a time series is accounted for by cyclical components at different frequencies.

***Frequency Response*:** The transfer of the frequency of the underlying data, usually prices, to the frequency of its moving average.

***Front-Loaded*:** Commission and fees taken out of investment capital before the money is put to work.

***Front Month*:** The first expiration month in a series of months.

Front Office: The activities carried out by the dealer, normal trading activities

***Front-Running*:** The practice of trading ahead of large orders to take advantage of favorable price movement. Brokers are prohibited from this practice.

Fundamental Analysis: The analytical method by which only the sales, earnings and the value of a given tradable's assets may be considered.

Fundamentals: The theory that holds that stock market activity may be predicted by looking at the relative data and statistics of a stock as well as the management of the company in question and its earnings.

***Future Volatility*:** A prediction of what volatility may be like in the future.

Fuzzy Systems: A problem-solving method that can be applied to neural networks, expert systems and other computing methods. Fuzzy systems process inexact information inexactly and describe ambiguity rather than the uncer- tainty of an occurrence and are useful in performing control and decision-making tasks. Not Boolean.

G

G7: The seven leading industrial countries, being US , Germany, Japan, France, UK, Canada, Italy

G10: G7 plus Belgium, Netherlands and Sweden, a group associated with IMF discussions. Switzerland is sometimes peripherally involved

***Gamma*:** The degree by which the delta changes with respect to changes in the underlying instrument's price.

***Gann's Square of 9*:** A trading tool that relates numbers, such as a stock price, to degrees on a circle.

***Gann Theory*:** Various analytical techniques developed by legendary trader W.D. Gann.

***Gap*:** **(1.)** A day in which the daily range is completely above or below the previous day's daily range. **(2.)** A mismatch between maturities and cash flows in a bank or individual dealer's position book. Gap exposure is effectively interest rate exposure

Garbatrage
A term used to describe rising prices and volume throughout a sector due to the psychological impact of a major takeover within the sector

Genetic Algorithms: Algorithms that mimic the characteristics associated with evolution and that are well-suited to optimization problems such as optimizing neural network parameters.

***Genetic Programming*:** In artificial intelligence, this form of programming automatically generates a program from a set of primitive constructs.

***Give-up*:** When a broker executes an order for another broker's client and the two brokers split the commission; the client pays nothing extra.

Going long: The purchase of a stock, commodity, or currency for investment or speculation

Going short: The selling of a currency or instrument not owned by the seller

Gold Standard: The original system for supporting the value of currency issued. The was that where the price of gold is fixed against the currency it means that the increased supply of gold does not lower the price of gold but causes prices to increase

***Golden or Mean Ratio*:** The ratio of any two consecutive numbers in the Fibonacci sequence, known as phi and equal to 0.618; a proportion that is an important phenomenon in music, art, architecture and biology.

***Golden Section*:** Any length divided so that the ratio of the smaller to the larger part is equivalent to the ratio between the larger part and the whole and is always 0.618.

Good until canceled: An instruction to a broker that unlike normal practice the order does not expire at the end of the trading day, although normally terminates at the end of the trading month

Graveyard market
A type of bear market characterized by a reluctance to sell in the face of substantial losses and a reluctance to buy in the face of a dismal outlook. The market is termed a graveyard market because those on the inside cannot get out, and those on the outside have no desire to get in

***Greeks*:** Jargon; a loose term encapsulating a set of risk variables used by options traders.

Grid: Fixed margin within which exchange rates are allowed to fluctuate

***Gross Domestic Product*:** Total value of a country's output, income or expenditure produced within the country's physical borders

Gross National Product: Gross domestic product plus “factor income from abroad" - income earned from investment or work abroad

***Growth Fund*:** A more speculative mutual fund made up primarily of the growth or performance stocks that are expected to appreciate in price more than the broad market over an extended time period.

Guaranteed Investment Contracts (GICs): A single lump-sum deposit that earns a guaranteed interest until a known maturity date. GICs are issued by insurance companies.

H

Hanning Weight

$$W_J = 1/2\left[1 - \cos\left(\frac{2\pi J}{N-1}\right)\right]$$

Where weight (W) at point J in window width of N points is determined by this formula.

***Harami*:** In candlestick terminology, a small real body contained within a relatively long real body.

Head and Shoulders: **(1.)** When the middle price peak of a given tradable is higher than those around it. **(2.)** A pattern in price trends which chartist consider indicates a price trend reversal. The price has risen for some time, at the peak of the left shoulder, profit taking has caused the price to drop or level. The price then rises steeply again to the head before more profit taking causes the the price to drop to around the same level as the shoulder. A further modest rise or level will indicate a that a further major fall is imminent. The breach of the neckline is the indication to sell

Hedge: The purchase or sale of options or futures contracts as a temporary substitute for a transaction to be made at a later date. Usually it involves opposite positions in the cash or futures or options market.

***Hedge Fund*:** A mutual fund involving speculative investing in stocks and options.

Hedged position: One open buy position and one open sell position in the same currency

***Herrick Payoff Index*:** An index requiring two inputs, one of which is a smoothing factor known as the multiplying factor and the other of which is the value of a one-cent move.

***Heuristic Bias*:** The use of rules of thumb for decisions.

***Heuristic Method*:** Problem solving approached by trying out several different methods and comparing which pro vides the best solution.

***Heuristics*:** (computer science) Computational rules of thumb. Distinct from algorithms, which are programs guaranteed to generate the correct result under all circumstances; heuristics may only turn out to be correct a certain percentage of time.

Hiccup
A brief market dip

***Hidden node*:** Elements that give a neural network the ability to learn nonlinear patterns. The hidden nodes mathematically transform inputs by passing weighted sums of those inputs through nonlinear functions.

Hierarchical Neural Network: In artificial intelligence, a neural network in which predictions derived from networks at one level of the hierarchy are incorporated as inputs at another level. This architecture lends itself to faster training, as each net:work focuses learning solely on its own output.

***High Pass Frequency Filter*:** A detrending filter that lets pass the high frequency noise and rejects low frequency trend. Implemented by first applying a low pass filter to the data, then subtracting the filtered data from the original data.

***High-Ticking*:** To pay the offered price.

Hines Ratio: A modified put/call ratio that refines traditional option ratio analysis by including the open interest figures in the equation and can be defined as (Total put volume/Total put open interest) divided by (Total call volume/Total call open interest)

***Historic Volatility*:** How much contract price has fluctuated over a period of time in the past; usually calculated by taking a standard deviation of price changes over a time period.

***Historical Data*:** A series of past daily, weekly or monthly market prices (open, high, low, close, volume, open interest).

Hit the bid: Acceptance of purchasing at the offer or selling at the bid

***Hook Day*:** A trading day in which the open is above/below the previous day's high/low and the close is below/above the previous day's close with narrow range.

I

IMF: International Monetary Fund, established in 1946 to provide international liquidity on a short and medium term and encourage liberalization of exchange rates. The IMF supports countries with balance of payments problems with the provision of loans

IMM: International Monetary Market part of the Chicago Mercantile Exchange that lists a number of currency and financial futures implied volatility. A measurement of the market's expected price range of the underlying currency futures based on the traded option premiums

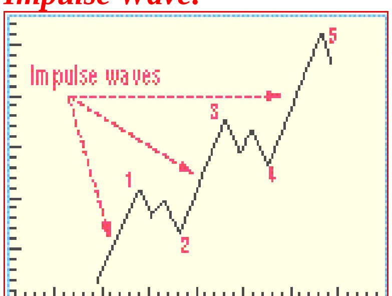
Implied Alpha: The excess return expected from a stock to justify its current weighing in the portfolio.

Implied Rates: The interest rate determined by calculating the difference between spot and forward rates

Implied Volatility**:** The volatility computed using the actual market prices of an option contract and one of a number of pricing models. For example, if the market price of an option rises without a change in the price of the underlying stock or future, implied volatility will have risen.

Impulse**:** A sharply defined change in a series of input data being studied, such as market prices or volume.

Impulse Wave:



Impulse Wave

A wave or cycle of waves that carries the current trend further in the same direction.

Indicative quote: A market-maker's price which is not firm

Inflation: Continued rise in the general price level in conjunction with a related drop in purchasing power. Sometimes referred to as an excessive movement in such price levels

Initial margin: The margin required by a Foreign Exchange firm to initiate the buying or selling of a determined amount of currency

***In Play*:** A stock that is the focus of a public bidding contest, as in a takeover or bear raid.

Inter-bank rates: The bid and offer rates at which international banks place deposits with each other. The basis of the Interbank market

Interest Arbitrage: Switching into another currency by buying spot and selling forward, and investing proceeds in order to obtain a higher interest yield. Interest arbitrage can be inward, i.e. from foreign currency into the local one or outward, i.e. from the local currency to the foreign one. Sometimes better results can be obtained by not selling the forward interest amount. In that case some treat it as no longer being a complete arbitrage, as if the exchange rate moved against the arbitrageur, the profit on the transaction may create a loss

***In-the-Money*:** A call option whose strike price is lower than the stock or future's price, or a put option whose strike price is higher than the underlying stock or future's price. For example, when a commodity price is $500, a call option with a strike price of $400 is considered in-the-money.

***Income Dividends*:** Payments to mutual fund shareholders consisting of dividends, interest and short-term capital gains earned on the fund's portfolio securities after deduction of operating expenses.

***Index Fund*:** A mutual fund that replicates the behavior of a given index.

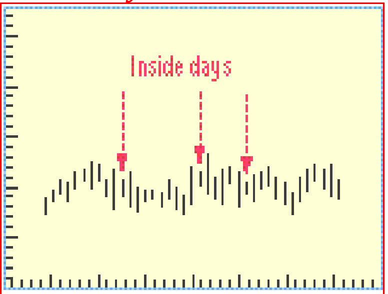
***Inductive Logic*:** The progress from statements describing particular events to a general statement.

***Inefficient Markets*:** Behavioral finance. Driven by frame dependence and heuristic bias, when market prices stray from fundamental values.

***Initial Balance*:** The first or first two half-hour trading periods in the CBOT Market Profile during which prices tend to converge; the initial auction of the trading day.

***Initial Public Offering*:** When a stock is officially available for the public to buy.

Inside Day:



Inside Days

A day in which the daily price range is completely within the previous day's daily price range.

Interest parity: One currency is in interest parity with another when the difference in the interest rates is equalized by the forward exchange margins. For instance, if the operative interest rate in Japan is 3% and in the UK 6%, a forward premium of 3% for the Japanese Yen against sterling would bring about interest parity

Interest Rate Swaps: An arrangement that requires both sides of the transaction to make payments to each other based on two different interest rates. The most commonly traded requires one side to pay a fixed rate and the other to pay a floating rate.

InterMarket Analysis: Observing the price movement of one market for the purpose of evaluating a different market.

Internationalization: Referring to a currency that is widely used to denominate trade and credit transactions by non residents of the country of issue. US dollar and Swiss Franc are examples

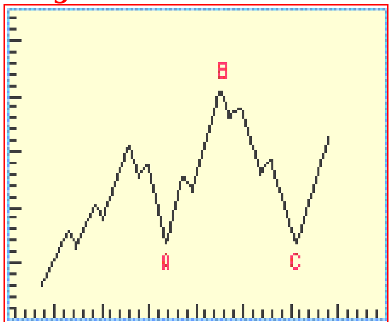
Intervention: Action by a central bank to effect the value of its currency by entering the market. Concerted intervention refers to action by a number of central banks to control exchange rates

***Intrinsic Value*:** The portion of an option's premium that is represented when the cash market price is greater than the exercise price; a known constant equal to the difference between the strike price and underlying market price.

***Investment Clubs*:** Small, private organizations in which a group of investors, usually novices, pool their time and resources to learn more than they could on their own about various forms of investments and then invest their own money as a group.

***IRA*:** Individual Retirement Account. An employer's retirement plan that, as specified by tax law, allows employees to elect to have their federal taxable income be deducted and set aside for retirement.

Irregular Flat:



Irregular Flat

A type of Elliott wave correction that has a 3-3-5 wave pattern, where the B wave terminates beyond the start of wave A. A "flat" is in progress, implying that a larger pattern is developing. It will contain waves of one higher degree than the A-B-C waves just completed.

***Island*:** Electronic communications network.

J

January Effect: The tendency for securities prices to recover in January after tax-related selling is completed before the year-end. It refers to the general tendency for major currencies pairs to change trend after January 1st

Jumbo Certificate of Deposit**:** A Certificate of Deposit (CD) worth at least $100,000.

K

***Kagi*:** One of three types of Japanese candlestick charts that does not have time on the horizontal axis.

Kalman Filters: A linear system in which the mean squared error between the desired and the actual output is minimized when the input is a random signal.

***Kelly's Law*:** Bet bigger when the odds are in your favor. In management wisdom, if anything does go wrong, it will do so in triplicate. Also, an executive will always go back to work early if no one takes him.

Kiwi: Slang for the New Zealand dollar

Knowledge Base: In artificial intelligence, a given inventory of knowledge specific to a set of rules.

Kondratieff, Nikolai: Developer of a wave theory.

KST: Indicator developed by Martin Pring. A weighted summed rate of change oscillator. Four different rates of change are calculated, smoothed, multiplied by weights and then summed to form one indicator.

***Kurtosis*:** Descriptive measure of how flat or pointed a distribution is.

L

Lag**:** The number of data points that a filter, such as a moving average, follows or trails the input price data.

***Latest Quarterly Earnings* (%):** The percentage change from the latest earnings reported compared with the same quarter a year earlier.

Law of Series**:** A succession of random events, such as flipping a coin.

Lead**:** The number of data points that a filter, much as a moving average, precedes the input price data.

Leading Indicators: Statistic that are considered to precede changes in economic growth rates and total business activity, e.g. factory orders

LEAPS**:** Acronym for *long-term equity anticipation securities* , which are long-term listed options, with maturities that can be as long as two and a half years.

Least Squares Method**:** A technique of fitting a curve close to some given points that minimizes the sum of the squares of the deviations of the given points from the curve.

Leg**:** One side of a spread.

Leg Out**:** In rolling forward in futures, a method that would result in liquidating a position.

Liability: In terms of foreign exchange , the obligation to deliver to a counterparty an amount of currency either in respect of a balance sheet holding at a specified future date or in respect of an un-matured forward or spot transaction.

Limit Move**:** A change in price that exceeds the limits set by the exchange on which the contract is traded.

Limit Order**:** **(1.)** An order to buy or sell when a price is fixed. **(2.)** A request to deal as a buyer or seller for a foreign currency transaction at a specified price, or at a better price, if obtainable

Limit Up, Limit Down: Commodity exchange restrictions on the maximum upward or downward movements permitted in the price for a commodity during any trading session day.

***LISP*:** A programming language based on predicate logic and is the one most commonly used in artificial intelligence applications.

Liquidation: Any transaction that offsets or closes out a previously established position

Liquidity: The ability of a market to accept large transactions

***Ljung-Box statistic*:** A chi-square test of significance of higher order correlation existence. The marginal significance level is the probability that a no more higher order correlation exists.

Load: Commission and fees taken out of investment capital; that is, the situation in which a front-loaded mutual fund takes commission and fees out of investment capital before the money is put to work.

***Local*:** The trader in a pit of a commodity exchange who buys and sells for his or her account.

***Locked Limit*:** A market that, if not restricted, would seek price equilibrium outside the limit but, instead, moves to the limit and ceases to trade.

***Long*:** Establishing ownership of the responsibilities of a buyer of a tradable; holding securities in anticipation of a price increase in that security.

Long squeeze: Situation in which investors who hold long positions feel the need to sell into a falling market to cut their losses, which leads to a further decline in market prices. Less common than the opposite, short squeeze

Lookback Interval: The number of periods of historical data used for observation and calculation.

***Low Pass Frequency Filter*:** A data smoother or filter that lets pass low frequency trend sinusoids and rejects high frequency noise (*see* SMA).

***Low-Ticking*:** To sell at the bid price.

M

***MACD*: *See* Moving Average Convergence/Divergence.

Macro: A computer method commonly used in spreadsheets to automate repetitive steps by recording the necessary keystrokes. The macro can then be run and the keystrokes implemented.

Maintenance margin: The minimum margin which an investor must keep on deposit in a margin account at all times in respect of each open contract.

Major Auction: The overall trend of the market such as might be observed on a bar chart.

Make a market: A dealer is said to make a market when he or she quotes bid and offer prices at which he or she stands ready to buy and sell

Managed Futures: A fund that uses the futures market as its primary asset.

Mandelbrot Set: Complex but structured pattern produced by an equation in which the result is fed back into the equation repeatedly; self-similarity.

Mapping: A function, or relation between values.

Margin: **(1.)** In stock trading, an account in which purchase of stock may be financed with borrowed money; in futures trading, the deposit placed with the clearinghouse to assure fulfillment of the contract. This amount varies daily and is settled in cash. **(2.)** The amount of money or collateral that must be, in the first instance, provided or thereafter, maintained, to ensure against losses on open contracts. Initial must be placed before a trade is entered into. Maintenance or Variation margin must be added to initial to maintain against losses on open positions. Sometimes herein the amount that needs to be present to establish or thereafter maintained is sometimes herein referred to as necessary margin

Marginal Significance Level of Test-Statistics: The probability distribution used to test the hypothesis that the beta coefficient does not equal zero. A T-statistic of approximately 1.65 reflects a 0.90 or 90% confidence and the marginal significance is 1-0.90 = 0.1 or 10%.

Margin call: A claim by one's broker or dealer for additional good faith performance monies usually issued when an investor's account suffers adverse price movements

***Marked to Market*:** At the end of each business day the open positions carried in an account held at a brokerage firm are credited or debited funds based on the settlement price of the open positions that day.

***Market Breadth*:** The shares of a particular stock traded during a specific period. Usually refers to the overall strength and trading volume of the market.

Market If Touched: Resting order with the floor broker that becomes a market order to be executed if the trigger price is traded.

***Market Maker*:** A broker or bank continually prepared to make a two-way price to purchase or sell for a security or currency.

***Market on Close*:** An order specification that requires the broker to get the best price available on the close of trading, usually during the last five minutes of trading.

Market Order: Instructions to the broker to immediately sell to the best available bid or to buy from the best available offer.

***Market Risk*:** The uncertainty of returns attributable to fluctuation of the entire market.

***Market Sentiment*:** Crowd psychology, typically a measurement of bullish or bearish attitudes among investors and traders.

***Market Timing*:** Using analytical tools to devise entry and exit methods.

***Market Value*:** Company value determined by investors, obtained by multiplying the current price of company stock by the common shares outstanding.

***Markov Chain*:** A set of processes where the probabilities for the next state are dependent on the present state.

***Martingale*:** From roulette; a tactical system that requires doubling your bet after each loss, so that winning once you recoup the amount originally bet.

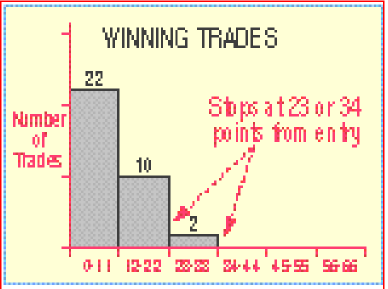
***MATIF*:** The Marche A Terme Des Instruments Financiers exchange in Paris.

***Maxima*:** The highest or maximum value.

***Maximax*:** Optimistic decision-making that identifies the decision alternative with the best possible outcomes.

***Maximin*:** Pessimistic decision-making that identifies the decision alternative with the worst possible outcomes.

Maximum Adverse Excursion:



Maximum Adverse Excursion

A historical measurement of the closed losing trades versus the closed profitable trades of a trading system. Used to determine the stop-loss level that can be used that will allow winning trades to remain; the extreme unfavorable price level reached for both profitable and unprofitable trades.

***Maximum Entropy Method*:** More flexible than Fourier analysis, the maximum entropy method is both a tool for spectrum analysis and a method of adaptive filtering and trend forecasting. As a tool for spectrum analysis, the MEM system can provide high resolution spectra for identifying the dominant data cycles within relatively short time series, such as open, high, low, close, volume and open interest, or study results, such as RSI, TRIX, and so on. (Fourier analysis, in contrast, gives best results when applied to time series of six months or longer.) As a forecasting tool, MEM is used in conjunction with moving averages to forecast lower and upper trend channels in the data.

***Maximum Entropy Spectrum Analysis*:** *See* Maximum Entropy Method.

Mean: When the sum of the values is divided by the number of observation.

***Mean Deviation*:** The average absolute value of the difference between the population of numbers and the mean.

***Mean P/L*:** The average profitability of a trader's account, as measured over a given period.

***Mean Return*:** The average monthly total return of a stock. The total return is price change added to dividends.

***Mean Reverting*:** The term adopted in academic literature for one possible state of a price series: that state when price is oscillating randomly about some (unknown) mean value. That is, it is not trending.

***Median Line*:** The line that is drawn from an extreme that bisects a line drawn through the next corrective phase after the pivot point. *See* Andrews Method.

***MEM*:** *See* Maximum Entropy Method.

Mental Stop-Loss:
A stop-loss order kept in your head instead of instructing your broker.

MESA**:** *See* Maximum Entropy Spectrum Analysis.

Micro economics: The study of economic activity as it applies to individual firms or well defined small groups of individuals or economic sectors.

Mid-price or middle rate: The price half-way between the two prices, or the average of both buying and selling prices offered by the market makers

Minima**:** The lowest or minimum value.

Minimum price fluctuation: The smallest increment of market price movement possible in a given futures contract

Minor Auction**:** The latest trend of the market, i.e., what it is doing now.

Mode: The most frequently occurring value.

Model**:** Equation.

Modern Portfolio Theory**:** Investing theory in which portfolio managers estimate and manage risk and return.

Modified Endowment Contract**:** Life insurance in which funds such as policy loans, assignments, pledges, and partial surrenders are considered gross income and subject to income tax.

Momentum**:** A time series representing change of today's price from some fixed number of days back in history.

Momentum Filter**:** A measure of change, derivative or slope of the underlying trend in a time series. Implemented by first applying a low pass filter to the data and then applying a differencing operation to the results.

Momentum Indicator**:** A market indicator utilizing price and volume statistics for predicting the strength or weakness of a current market and any overbought or oversold conditions, and to note turning points within the market.
Monetary Base*:* Currency in circulation plus banks' required and excess deposits at the central bank

Money Flow**:** A number of technical indicators that incorporate volume and price action to measure buying or selling pressure.

***Money Market*:** The market in which dealers trade riskless, short-term securities such as certificates of deposit and Treasury bills.

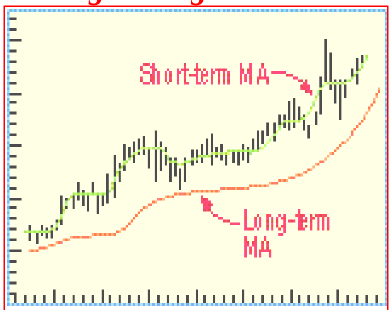
***Money Market Fund*:** A mutual fund made up of money market instruments that are short term in nature.

***Money Stop*:** A fixed amount of money that a market participant would lose if a stop were hit.

***Monowave*:** In Elliott wave theory, a single wave within a range of waves.

***Morning Star*:** A bottom reversal pattern, according to Steve Nison a signal that the bulls have seized control.

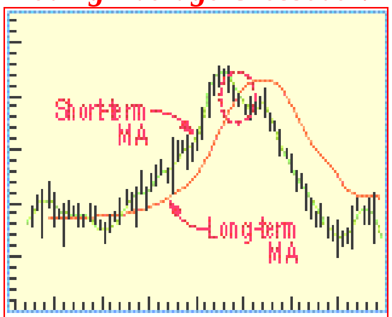
Moving Average:



Simple Moving Average

A mathematical procedure to smooth or eliminate the fluctuations in data and to assist in determin ing when to buy and sell. Moving averages emphasize the direction of a trend, confirm trend reversals and smooth out price and volume fluctuations or "noise" that can confuse interpretation of the market; the sum of a value plus a selected number of previous values divided by the total number of value

Moving Average Crossover:



Moving Average Crossover

The point where the various moving average lines intersect each other or the price line on a moving average price bar chart. Technicians use crossovers to signal price-based buy and sell opportunities.

***Moving Average Model*: ** A time series equation representing an observed value at time t as a linear combination of present and past random shocks et (forecast errors). A moving-average process of order Q, MA(q), may be written: $P_t = e_t - b_1 e_{t-1} - b_2 e_{t-2} \ldots b_q e_{t-q}$

Moving Average Convergence/ Divergence (MACD): The crossing of two exponentially smoothed moving averages that are plotted above and below a zero line. The crossover, movement through the zero line, and divergences generate buy and sell signals.

***Moving Window*: ** Snapshot of a portion of a time series at an instant in time. The window is moved along the time series at a constant rate.

***Multicolinearity*: ** Two variables that have a correlation of greater than 0.70 or less than -0.70 in a regression model. The final result is the two variables explaining the same portion of variation where either variable would be sufficient.

***Multiple Linear Regression*: ** More than one independent variable is used to account for the variability in one dependent variable.

***Mutual Fund*: ** A company that invests money of its shareholders in a variety of areas, usually stocks.

N

Naked Put: The writer of a put option contract who is not short the underlying security.

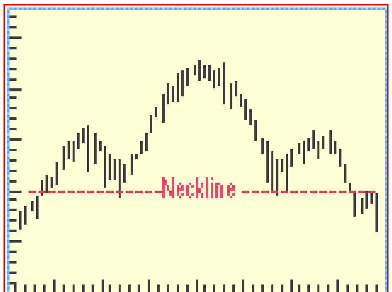
***Narrow Range Day*:** A trading day with a smaller price range relative to the previous day's price range.

***National Association of Investors Corporation*:** Also known as the National Association of Investment Clubs.

***Near-Month Contract/Far-Month Contract*:** Contract whose expiration is near/far.

***Near-the-Money*:** An option with a strike price close to the current price of the underlying tradable.

***Neckline*:**



Neckline of Head and Shoulders

A trendline drawn along the support or resistance points of various reversal and consolidation pattern (i.e., head and shoulder, double and triple top/bottom formations).

Negative Amortization: This means that a payment of the stated size is insufficient to repay even the interest on the debt, meaning the total debt actually increases each month instead of falling.

Negative Divergence: When two or more averages, indices or indicators fail to show confirming trends.

***Net Asset Value*:** The total market value of all securities contained in a mutual fund; also known as price per share.

Net Position: The amount of currency bought or sold which have not yet been offset by opposite transactions

Neural Network: An artificial intelligence program that is capable of learning through a training process of trial and error.

***No-Action Letter*:**

The Federal Reserve, the Securities and Exchange Commission (SEC) or the Commodity Futures Trading Commission (CFTC) agrees to take no action to block a proposal by an exchange or company in conducting some aspect of the securities business. The aspect could be for almost anything, but the most common is a new contract listing or a new security issuance.

***No-Load*:** Without any sales charge. For mutual funds, shares sold at net asset value.

***Noise*:** Price and volume fluctuations that can confuse interpretation of market direction.

***Noisy Signal*:** A signal in which the effects of random influences cannot be dismissed.

***Nonlinear Dynamics Analysis*:** Analysis of relationships that start from well-defined outcomes to complex and chaotic results.

***Nonlinear Statistics*:** Statistics theory that attempts to define probability distribution from disorder to either a more orderly state or a sharp trend reversal, such as stock market fluctuations.

***Non-Seasonal Autocorrelation*:** Autocorrelation that shows up other than at 12-month lag intervals.

***Non-Trend Day*:** A narrow range day lacking any discernible movement in either direction.

Normal Distribution: For the purposes of statistical testing, the simulated net returns are assumed to be drawn from a particular distribution. If net returns are drawn from a normal distribution, low and high returns are equally likely, and the most likely net return in a quarter is the average net return.

***Normalized*:** Adjusting a time series so that the series lies in a prescribed normal, standard range.

***Notice Day*:** The day that a notice of intent to deliver is issued to a futures contract holder.

***Null Hypothesis*:** The hypothesis that there is no validity to the specific claim that two variations (treatments) of the same thing can be distinguished by a specific procedure.

O

Observer**:** A concept used in radar research, applicable to trading, in how often and what manner detection or radar contact is achieved.

OBV**:** *See* On-Balance Volume.

Odd Lot**:** An order to buy/sell fewer than 100 shares of stock.

Offer: The price at which a seller is willing to sell. The best offer is the lowest such price available.

Off Farm: The amount of stocks held by nonproducers including supplies held at mills, elevators, terminals, and processors.

Offset: The closing-out or liquidation of a futures position

Off-shore: The operations of a financial institution which although physically located in a country, has little connection with that country's financial systems. In certain countries a bank is not permitted to do business in the domestic market but only with other foreign banks. This is known as an off shore banking unit.

On Farm**:** The amount of stocks held by producers.

On-Balance Volume**:** Plotted as a line representing the cumulative total of volume. The volume from a day's trading with a higher close when compared with the previous day is assigned a positive value, while volume on a lower close from the previous day is assigned a negative value. Traders look for a confirmation of a trend in OBV with the market or a divergence between the two as an indication of a potential reversal.

One-Tailed T-Test: A statistical test of significance for a distribution that changes its shape as N gets smaller; based on a variable *t* , equal to the difference between the mean of the sample and the mean of the population divided by a result obtained by dividing the standard deviation of the sample by the square root of the number of individuals in the sample.

OPEC**:** Organization of Petroleum Exporting Countries

Opening Print**:** The first price of a stock that comes across the ticker for the session.

Open Trades: Current trades that are still held active in the customer's account.

Open TRIN: *n* -day open TRIN =

$$\left(\frac{\left(\frac{n-\text{day avg of advancing issues}}{n-\text{day avg. of declining issues}}\right)}{\left(\frac{n-\text{day avg. of total up volume}}{n-\text{day avg. of total down volume}}\right)}\right)$$

Opening Call: A period at the opening of a futures market in which the price for each contract is established by outcry.

Opening Range: The range of prices that occur during the first 30 seconds to five minutes of trading, depending on the preference of the individual analyst.

Opportunity Costs: Income foregone by the commitment of resources to another use.

Optimization: A methodology by which a system is developed with rules tailored to fit the data in question precisely.

Option: A contract that provides the right but not the obligation to buy or sell a specified amount of a security within a specified time period.

Optional Cash Purchase: Buying additional shares made through the dividend reinvestment account.

Order: The number of days of past price history used to predict the following day's price.

Oscillator: Technical indicator used to identify overbought and oversold price regions. An indicator that detrends data, such as price.

Out-of-Sample: An item within the range of a sample that does not conform to the mean of the sample.

Out-of-the-Money: A call option whose exercise price is above the current market price of the underlying security or futures contract. For example, if a commodity price is $500, then a call option purchased for a strike price of $550 is considered out-of-the-money.

Out Trade: A mismatched trade between two traders in the pit, and which is settled the next day.

Outdata: The result (singular) stemming from a statistical test.

Outlier: A value removed from the other values to such an extreme that its presence cannot be attributed to the random combination of chance causes.

***Outside Reversal Month*:** A month in which the recent monthly trading range exceeds the previous month's range and closes opposite (reverses) the previous month's close.

***Overbought*:** Market prices that have risen too steeply and too fast.

***Overbought/Oversold Indicator*:** An indicator that attempts to define when prices have moved too far and too fast in either direction and thus are vulnerable to a reaction.

***Overfitting*:** The parameters of a trading system are selected to return the highest profit over the historical data.

***Overfitting*:** A model developed with rules tailored to fit the historical data precisely.

***Overshoot*:** To pass beyond or over a specific targeted level.

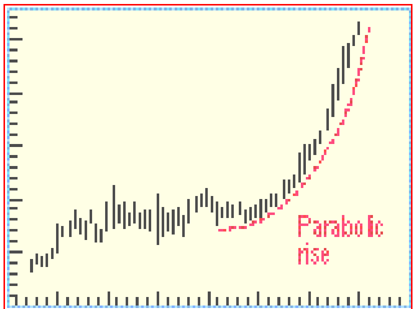
***Oversold*:** Market prices that have declined too steeply and too fast.

P

Par: The full principal amount of an investment instrument.

Parabola: The U-shaped curve in the plane given by the equation of the form $y=ax^2+bx+c$

Parabolic:



Parabolic

Of, having the form of or relating to a parabola.

Parameter: A variable, set of data, or rule that establishes a precise format for a model.

Pareto's Law: A law that states that 80% of results come from 20% of the effort.

Parities: The value of one currency in terms of another

Parity: **(1)** Foreign exchange dealer's slang for your price is the correct market price. **(2)** Official rates in terms of SDR or other pegging currency

PASCAL: Block-structured programming language developed originally as an aid to instruction, now widely used for applications development.

Pegged: A system where a currency moves in line with another currency, some pegs are strict while others have bands of movement

Pennants: A short compact wedge accompanied by receding volume.

Percentile: A value on a scale of one hundred that indicates the percent of a distribution that is equal to or below it.

Perceptron: A pattern-recognition machine, based on an analogy to the human nervous system, capable of learning by means of a feedback system that reinforces correct answers and discourages wrong ones.

Pessimistic Rate of Return: A statistic that adjusts the usual wins/losses statistic to estimate the worst return from trading results. It reduces the number of wins by the square root of the actual number and increase the number of losses by the square root of the actual number of losses. The resulting numbers of wins or losses are multiplied by the average win or loss and the sum of the resulting wins/losses is divided by the required investment.

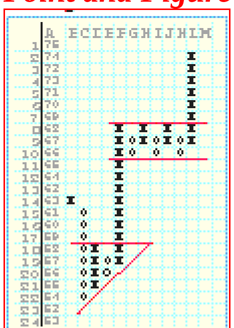
***Phase Delay*:** The time lag that a filter falls behind the pre-filtered data.

***Phasor*:** Used to describe the frequency, amplitude, and phase of all frequency components of the signal.

Pip: One unit of price change in the bid/ask price of a currency. For most currencies, it denotes the fourth decimal place in an exchange rate and represents 1/100 of one percent (.01%).

***Pivot Point*:** In market activity, a price reversal point.

Point and Figure Chart:



Point & Figure

A price-only chart that plots up prices as Xs and down prices as Os. The minimum price recorded is called the *box size*. Typically, a three-box reversal indicates a change in the direction of prices.

Position: The netted total commitments in a given currency. A position can be either flat or square (no exposure), long, (more currency bought than sold), or short (more currency sold than bought).

***Position Management Ratio*:** The ratio of profits extracted on winning transactions versus losses suffered on trades that liquidate unprofitably.

***Premium*:** The price a buyer pays to an option writer for granting an option contract.

Preprocessing: Altering data to some extent to be more accurately analyzed; smoothing, reducing unwanted data, removing trend. Processing data is mathematically transforming the data from one form into another with the goal of amplifying the pertinent information for traders.

***Prewhitening*:** Removing the bulk of first, second and possibly third order autocorrelations using non-linear regression.

***Price/Earnings Ratio*:** Stock price divided by annual earnings per share.

***Price to Sales Ratio*:** The price of a stock divided by sales-per-share of the company in the most recent fiscal year.

***Probability Density Function*:** A graph showing the probability of occurrence of a particular data point (price).

***Profit Margin Expansion*:** In long-term reference, a measure of a company's net profit margin in the latest reported quarter divided by profit margin in the fiscal year previous. In short-term reference, a measure of a company's net profit margin in the latest reported quarter divided by profit margin in the quarter immediately preceding.

***Profit Taking*:** **(1.)** Selling tradables that have appreciated since initial purchase in order to take advantage of the appreciation. **(2.)** The unwinding of a position to realize profits

***Program Trading*:** Trades based on signals from computer programs, usually entered directly from the trader's computer to the market's computer system.

***Prospectus*:** Report published by the company that operates a mutual fund. It describes the fund's investment objectives; its managers and their experience; the fees and charges associated with the fund; and policies and restrictions.

***Put Option*:** A contract to sell a specified amount of a stock or commodity at an agreed time at the stated exercise price.

Pyramid: To increase holdings that an investor has by using the most buying power available in a margin account with paper and real profits.

Q

Quarterly Earnings Change: (%) Historical earnings change between the earnings most recently reported and the quarter preceding.

***Quarterly Net Profit Margin*:** (%) Net operating earnings after taxes for the latest quarter divided by revenues for the quarter.

***Quick Ratio*:** Indicates a company's financial strength; a company's cash and equivalent divided by current liabilities.

Quote: An indicative price. The price quoted for information purposes but not to deal

Quotron: A proprietary financial data service.

R

R-squared**:** The percentage of variation in the dependent variable that is explained by the regression equation. A relative measure of fit.

Rally: A recovery in price after a period of decline

Rally Tops**:** A price level that concludes a short-term rally in an ongoing trend. A bull market will be made up of a series of rally tops.

Random Shock**:** The unexplained component of an equation that models a time series (e forecast errors).

Random Walk**:** A theory that says there is no sequential correlation between prices from one day to the next, that prices will act unpredictably as they seek a level in response to supply and demand.

Range**:** The difference between the high and low price during a given period.

Range Extension**:** In the CBOT Market Profile, a price movement beyond the range set by the initial auction.

Rate: **(1.)** The price of one currency in terms of another, normally against USD. **(2.)** Assessment of the credit worthiness of an institution

Rate of Change: In which today's closing price is divided by the closing price *n* days ago. Multiply by 100. Subtract 100 from this value. ((C today/Cn) * 100) - 100.

Ratio**:** The relation that one quantity bears to another of the same kind, with respect to magnitude or numerical value.

RBAR-squared**:** The R-squared value adjusted for the number of degrees of freedom.

Reaction**:** A short-term decline in price.

Realized/Unrealized P/L**:** The difference between trading revenues that are generated on positions that have been offset and closed, versus those associated with the marking of open positions to current market prices.

Reciprocal currency: A currency that is normally quoted as dollars per unit of currency rather than the normal quote method of units of currency per dollar. Sterling is the most common example.

Rectangle**:** A trading area bounded by horizontal, or near horizontal, lines. It can either be a reversal or continuation pattern, depending on the breakout.

***Recursive*:** A process that is repetitive and usually dependent upon the results of the previous repetition.

***Regression (simple)*:** A mathematical way of stating the statistical linear relationship between one independent and one dependent variable.

***Relative Return*:** The annualized return on an investment in excess of the average three-month US Treasury bill yield during the same period as the investment. This statistic measures the return on an investment relative to what would have otherwise been earned on a risk-free investment.

***Relative Return Standard Deviation*:** Measures the amount of variability of the relative return. A large relative return standard deviation indicates that the relative return experienced during the holding period fluctuated dramatically and, if the holding period was different, a significantly different relative return would have been achieved. A small relative return standard deviation indicates the opposite.

***Relative Strength*:** A comparison of the price performance of a stock to a market index such as Standard & Poor's 500 stock index.

Relative Strength Index: An indicator invented by J. Welles Wilder and used to ascertain overbought/oversold and divergent situations.

***Renko*:** A kind of candlestick chart that does not take time into account for constructing the chart.

***Representativeness*:** Behavioral finance. Judgment by stereotype.

Residual Value: The standard deviation of the unexplained portion of the monthly return.

***Resistance*:** A price level at which rising prices have stopped rising and either moved sideways or reversed direction; usually seen as a price chart pattern.

***Resistance Line*:** On a chart, a line drawn indicating the price level at which rising prices have stopped rising and have moved sideways or reversed direction.

Resistance Point or Level (also see ***Resistance Line***)**:** A price recognized by technical analysts as a price which is likely to result in a rebound but if broken through is likely to result in a significant price movement.

***Response*:** The change in value of the average in response to the impulse.

***Resting Order*:** An order placed with a condition or qualifer but not yet executed.

***Retention Rate*:** Percentage of a firm's aftertax profits that can be put to those earnings retained.

***Retracement*:** A price movement in the opposite direction of the previous trend.

***Return on Assets*:** (%ROA) The net earnings of a company divided by its assets.

***Return on Equity*:** (%ROE) the net earnings of a company divided by its equity.

Revaluation: Increase in the exchange rate of a currency as a result of official action

Revaluation rate: The rate for any period or currency which is used to revalue a position or book.

***Reverse Exponential Moving Average*:** An exponential moving average computed working backward through the time series, rather than forward, as is the case with a standard EMA. A REMA is used so the target would reflect only future price behavior, not past action that would induce spurious correlation.

***Reward-Risk Ratio*:** Monthly excess return to risk comparison, calculated by dividing alpha by standard deviation. (A ratio better than 0.4 is excellent.)

***Reward-Risk Rank*:** Stocks ranked in descending order by reward-risk ratio.

***Reversal Gap*:** A chart formation where the low of the last day is completely above the previous day's range with the close above midrange and above the open.

***Reversal Stop*:** A stop that, when hit, is a signal to reverse the current trading position, i.e., from long to short. Also known as *stop and reverse*.

***Rich*:** Price higher than expected.

Risk (Implied): In which the formula produces the percentage overbought/oversold for a contract using the price, a moving average and the option's implied volatility.

***Risk-Adjusted Return on Capital (RAROC)*:** Another measure of risk-adjusted profitability, derived as the ratio between P/L and value at risk.

***Risk management*:** The identification and acceptance or offsetting of the risks threatening the profitability or existence of an organisation. With respect to foreign exchange involves among others consideration of market, sovereign, country, transfer, delivery, credit, and counterparty risk.

Risk Position: An asset or liability, which is exposed to fluctuations in value through changes in exchange rates or interest rates.

Roll: Substituting a far option for a near option on the same underlying instrument at the same strike price; also to roll forward or roll over.

Rollover: An overnight swap, specifically the next business day against the following business day (also called Tomorrow Next, abbreviated to Tom-Next

Root Mean Square Percentage Error**:** (Rmspe) Square root of the average sum of squared errors expressed as a percentage.

Rotation**:** Moving funds from one sector to another sector of the stock market as the business cycle unfolds.

Roth IRA**:** An individual retirement account where contributions are not deductible, taxes are not paid on distributions and allows penalty-free withdrawals for first-time homebuyers and retirees.

Round trip: Buying and selling of a specified amount of currency

Running Market**:** A market wherein prices are changing rapidly in one direction with very few or no price changes in the opposite direction.

Running Total: Each day's value is added to yesterday's total or subtracted if the value is negative.

S

***Sales Growth*: **The growth in sales in a company.

***Sales Load*: **A service charge of a mutual fund that is added to the costs of owning a stake in the fund.

Same day transaction: A transaction that matures on the day the transaction takes place

***Saucer Base*: **Similar to a cup and handle formation, but the saucer base is shallower and rounder in shape.

Savings and Loan Investment Contracts (SLICs): A negotiated-term deposit issued by a savings and loan.

***Scallop*: **Chart formation in which the price dips momentarily, forming a cup, before resuming its upward course.

***Scalp*: **In commodities, purchasing and selling in equal amounts so there is no net position at the end of the trading day; a speculative attempt to make a quick profit by buying at the initial offering price in the hope the issue will increase and can be sold.

***Schwarz-a-tron*: **A dedicated computer system for options calculations and simulations.

***Seasonal Autocorrelation*: **Autocorrelation that shows up at 12-, 24-, 36- and 48-month lag intervals or at four, eight, 12 and 16 quarterly lags.

***Seasonal Trend*: **A consistent but short-lived rise or drop in market activity that occurs due to predictable changes in climate or calendar.

***Seasonality*: **A consistent and predictable change in market activity that occurs from consistent and predictable events.

***Sector Fund*: **A mutual fund that concentrates on trading a range of securities within a broad industry group, such as technology, energy or financial services.

***Sector Rotation*: **When a block of investment professionals cash out of one industry sector to invest in another.

Secular Trend: Pertaining to a long indefinite period of time.

***Security Selection Ratio*: **The percentage of trades in a given account that liquidate profitably.

***Seed*: **The first value used to start a calculation. For example, an exponentially smoothed moving average (EMA) uses the previous day's EMA for the calculation. On the first day's calculation of the EMA, you could use a simple moving average as the seed for the EMA.

***SelectNet*:** A NASDAQ execution technology.

Self-Affine Transformation: A rescaling procedure used in fractal geometry and performed on a two-variable system. For example, in a system utilizing an x-axis and y-axis representing time and price, the x-axis could be rescaled by one ratio and/or procedure while the y-axis is rescaled by a different ratio and/or procedure.

Selling rate: Rate at which a bank is willing to sell foreign currency

Selling Short: Selling a security and then borrowing the security for delivery with the intent of replacing the security at a lower price. In futures trading, selling short is to assume the responsibility of the seller vs. the buyer in the establishment of the futures contract between parties.

***Semilog*:** Scaling method. With semilog, the distance between each point of a chart is exponential. Semilog scaling is used to compare relative price changes rather than physical point changes.

Sensitivity: The rate of change of the moving average in response to the movement of the underlying data. The most sensitive period is that in which the rate of change of the moving average is fastest in response to changes in the sinewave.

***Serial Correlation*:** The systematic relationship between successive observation of a time series.

***Serially Independent*:** A number that is unrelated to the previous number in a given series in any way.

***Settlement*:** The price at which all outstanding positions in a stock or commodity are marked to market. Typically, the closing price.

Settlement date: The date upon which foreign exchange contracts settle.

Settlement Risk: Where a payment is made to a counter party before the counter value payment has been made. The risk is that the counter party's payment will not be received

Shapiro-Wilkes Test: A statistical test indicating the likelihood that the sample of simulated net returns was drawn from a normal distribution. A small value of this statistic leads to nonacceptance of the null hypothesis that the sample is drawn from a normal distribution.

***Shareholder of Record*:** Share owner of company stock as registered in company files.

Sharpe Ratio Method**:** (*Also see* Sterling ratio method) The Sharpe Ratio Method is the classic return/risk measure, given by:

$$\frac{E-I}{sd}$$

where:
E = Expected return
I = Risk-free interest rate
sd = Standard deviation of returns

Both the Sharpe and the Sterling ratio methods compare returns with variability of returns, as opposed to risk of loss of original investment.

Shaved Candlestick: In candlestick charting, when the shadows of a candle which mark the area between the real body and the extremes and give the appearance of being wicks are absent.

Short Interest**:** Shares that have been sold short but not yet repurchased.

Short Interest Ratio**:** A ratio that indicates the number of trading days required to repurchase all of the shares that have been sold short. A short interest ratio of 2.50 would tell us that based on the current volume of trading, it will take two and a half days' volume to cover all shorts.

Short sale: The sale of a specified amount of currency not owned by the seller at the time of the trade. Short sales are usually made in expectation of a decline in the price

Short-term interest rates: Normally the 90 day rate.

Sidelined: A major currency that is lightly traded due to major market interest being in another currency pair

Signal**:** In the context of stock or commodity time series historical data, this is usually daily or weekly prices.

Signal Line**:** In artificial intelligence, a numeric variable that is prevalued in the knowledge base. In moving average jargon, the first moving average is smoothed by a second moving average. The second moving average is the signal line.

Signature Medallion Guaranty**:** Program used by banks and other institutions to verify a signature.

Significance**:** The probability of rejection on the basis of a statistical test and a hypothesis that there is no validity to the specific claim that two variations of the same thing can be distinguished by a specific procedure.

Simple Moving Average**:** The arithmetic mean or average of a series of prices over a period of time. The longer the period of time studied (that is, the larger the denominator of the average), the less impact an individual data point has on the average.

Simple Regression**:** A mathematical way of stating the statistical linear relationship between one independent and one dependent variable.

Sinewave**:** A wave whose amplitude varies as the sine of a linear function of time.

Skew**:** A descriptive measure of lopsidedness in a distribution.

Slippage**:** **(1.)** The difference between estimated transaction costs and actual transaction costs. **(2.)** Refers to the negative (or depreciating) pip value between where a stop loss order becomes a market order and where that market order may be filled

SMA: *See* Simple Moving Average.

Small Order Execution System (SOES)**:** Computerized system developed by NASDAQ for immediate electronic execution of up to 1,000 shares of stock.

Smoothing**:** Simply, a mathematical technique that removes excess data variability while maintaining a correct appraisal of the underlying trend.

Soft Market: More potential sellers than buyers, which creates an environment where rapid price falls are likely.

Specialist**:** A trader on the market floor assigned to fill bids/orders in a specific stock out of his/her own account when the order has no competing bid/order to ensure a fair and orderly market.

Specify: To set the parameters and variables of a given model.

Spectrum**:** The frequency decomposition of time series data. This is used to detect periodic fluctuations or cycles in historical price data.

Spike**:** A sharp rise in price in a single day or two; may be as great as 15-30%, indicating the time for an immediate sale.
Spline: The linear interpolation between two adjacent points on a curve.

Spot: **(1.)** The most common foreign exchange transaction. **(2.)** Spot or Spot date refers to the spot transaction value date that requires settlement within two business days, subject to value date calculation

Spot Month**:** In trading, the current contract month. Also known as the *front month*.

Spot next: The overnight swap from the spot date to the next business day

***Spot Prices*: (1.)** Same as cash price, the price at which a commodity is selling at a particular time and place. **(2.)** The price at which the currency is currently trading in the spot market

***Spread*: (l.)** The difference between the bid and ask price of a currency. **(2.)** The difference between the prices of two related futures contracts. **(3.)** A trade in which two related contracts/stocks/bonds/options are traded to exploit the relative differences in price change between the two.

***Spread Rolls*:** Using a spread order to bridge the closing of one position and the establishment of a new one.

***Spring*:** A two-day pattern in which on the first day, the market declines below a support point, while the next day sees the market move strongly back up into the congestion area.

***Spring*:** Another term for upthrust; occurs when price moves above a pivot top and a widespread reversal ensues as follows: **(1.)** two previous closes are reversed, **(2.)** close is below pivot top, **(3.)** close is below opening and mid-range, d) daily price range is greater than the previous day's range.

Square: Purchase and sales are in balance and thus the dealer has no open position

Squeeze: Action by a central bank to reduce supply in order to increase the price of money

Stable market: An active market which can absorb large sale or purchases of currency without major moves

***Stair-stepping*:** In which market activity is characterized by a trend, then sideways movements, followed by another trend and further sideways movement.

Standard: A term referring to certain normal amounts and maturities for dealing

***Standard Deviation*:** The positive square root of the expected value of the square of the difference between a random variable and its mean. A measure of the fluctuation in a stock's monthly return over the preceding year.

***Standard Error of the Estimate (SEE)*:** A measure of absolute fit. One can use this measure to compare the last portion of this model with another portion of the same dependent variable.

***Standardized Unanticipated Earnings*:** (SUE) A company's average earnings surprise is compared with analyst earnings estimates dispersion, which can be used to estimate the likelihood of earnings surprises.

Stationarity: A distribution of a quantity that does not change over time.

Stationary Time Series: Implies that no trend is observed in the time series. Identified when the time series has a constant mean and variance.

Step Function: A function defined on an interval so that the interval can be partitioned into a finite number of subinter vals on each of which the function is a constant. Also known as a simple function.

Stepwise Regression: A mathematical technique to choose the independent variables that best describe the behavior of the dependent, in order of improving description.

Sterilization: Central Bank activity in the domestic money market to reduce the impact on money supply of its intervention activities in the FX market

Sterling: British pound, otherwise known as cable

Sterling Ratio Method: A measure of risk/return given by:

$$\frac{T(\%)}{AM(\%) + 10\%}$$

where:
T = Three-year average annual return

AM = Three-year average maximum annual drawdown. Both Sharpe and Sterling ratio methods compare returns with variability of returns, as opposed to risk of loss of original investment.
Stochastic: Literally means random.

Stochastics Oscillator: An overbought/oversold indicator that compares today's price to a preset window of high and low prices. These data are then transformed into a range between zero and 100 and then smoothed.

Stock Index Futures: A futures contract traded that uses a market index as the underlying instrument. Typically, the value of the contract is $500 times the underlying index. The delivery mechanism is usually cash settlement.

Stocky: Market slang for Swedish Krona

Stop and Reverse (SAR): A stop that, when hit, is a signal to reverse the current trading position, i.e., from long to short. Also known as *reversal stop* .

Stop Loss: The risk management technique in which the trade is liquidated to halt any further decline in value.

***Stop-Running*:** After a trend, the market will enter into a trading range and have a tendency to trade to levels where stop-loss orders have been placed.

***Stops*:** Buy stops are orders that are placed at a predetermined price over the current price of the market. The order becomes a "buy at the market" order if the market is at or above to the price of the stop order. Sell stops are orders that are placed with a predetermined price below the current price. Sell-stop orders become "Sell at the market" orders if the market trades at or below the price of the stop order.

***Straddle*:** The purchase or sale of an equivalent number of puts and calls on an underlying stock with the same exercise price and expiration date.

***Strange Attractor*:** A balance point between a set of conflicting forces.

***Strangle*:** The purchase or sale of an equivalent number of puts and calls on an underlying stock with the same expiration date but a different exercise price. Usually, the put has a low strike price and the call has a higher strike price.

***Street Name*:** Stock ownership in which shares are registered to a brokerage or other financial institution and held.

***Strike Price*:** The price per unit at which the holder of an option may receive or deliver the underlying unit; also known as the *exercise price* .

Strips: An option strategy in which an investor buys one call and two puts on the same underlying security with the same exercise price and expiration date.

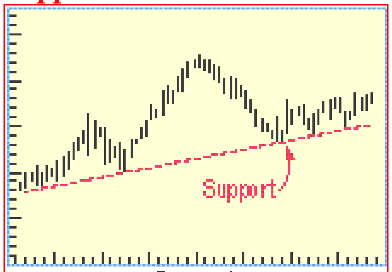
***Struck*:** The price at which an exercised option delivers the underlying securities.

***Student*:** The pseudonym for Irish chemist W.S. Gosset, who published "The Probable Error at a Mean" under that name in 1908.

***Sum of Squared Residuals (SSR)*:** Measure related to the R-squared value and the smaller the number, the higher will be the R-squared, and the better the regression.

***SuperDot*:** NYSE execution technology.

Support:



Support

A historical price level at which falling prices have stopped falling and either moved sideways or reversed direction; usually seen as a price chart pattern.

Support levels: When an exchange rate depreciates or appreciates to a level where (1) Technical analysis techniques suggest that the currency will rebound, or not go below; (2) the monetary authorities intervene to stop any further down ward movement. See resistance point.

Support Line**:** On a chart, a line drawn indicating the price level at which falling prices have stopped falling and have moved sideways or reversed direction.

Swaps: The sale of one security to purchase another with similar features.

Swap price: A price as a differential between two dates of the swap

Swing Chart**:** A chart that has a straight line drawn from each price extreme to the next price extreme based on a set criteria such as percentages or number of days. For example, percentage price changes of less than 5% will not be measured in the swing chart.

Swings**:** The measurement of movement of the price of a tradable between extreme highs and lows.

Swissy: Market slang for Swiss Franc

Synergistic Market Analysis: Also known as *synergistic analysis* . An analytical method that merges technical and fundamental analysis with an emphasis on intermarket analysis.

Synthetic Securities**:** Security created by buying and writing a combination of options that imitate the risk and profit profile of a security.

T

***T-Statistics*:** The probability distribution used to test the hypothesis that a random sample of *n* observations comes from a normal population with a given mean.

***T-Test*:** A statistical test of significance for a distribution that changes its shape as N gets smaller; based on a variable *t* equal to the difference between the mean of the sample and the mean of the population divided by a result obtained by dividing the standard deviation of the sample by the square root of the number of individuals in the sample.

Tangibles: Cash equivalents of the futures contracts.

***Tax-Deferred*:** In which an investment allows an investor to postpone paying taxes on money put into the investment until the investor literally takes possession of the money invested.

***Technical Analysis*:** A form of market analysis that studies demand and supply for securities and commodities based on trading volume and price studies. Using charts and modeling techniques, technicians attempt to identify price trends in a market.

Technical Correction: An adjustment to price not based on market sentiment but technical factors such as volume and charting

***Telegrapher's Equation*:** A variation of the Diffusion Equation that describes minor differences in the drunkard's walk, in which the random decision controls the change in direction rather than the direction itself.

***Term Structure*:** Also known as yield curve. The slope of the term structure is the yield on long-term government bonds minus the yield on short-term instruments such as Treasury bills.

***Theta*:** The measurement of the time decay of a position.

***Thin market*:** A market in which trading volume is low and in which consequently bid and ask quotes are wide and the liquidity of the instrument traded is low

***Thrust*:** A comparison between the price difference of successively lower pivot bottoms or higher pivot tops. For example, a reduction in the difference between pivot bottoms shows loss of momentum; an increase in the difference shows increased momentum.

***Thursday/Friday Dollars*:** A US foreign exchange technicality. If a foreign bank buys dollars on Tuesday for Thursday delivery. If the bank leaves the funds overnight and transfers them on Friday by means of a clearing house cheque then clearance is not until Monday, the next working day. Higher interest rates for this period are thus available

Tick: A minimum change in price, up or down. The minimum fluctuation of a tradable. For example, bonds trade in 32nds, while most stocks trade in eighths.

***Tick Indicator*:** The number of stocks whose last trade was an uptick or a downtick.

***Time Domain*:** Variation of a time series is accounted for by an autocorrelation function and other time series.

***Time Series*:** A collection of observations made sequentially in time and indexed by time.

***Time Value*:** The difference between the premium paid for an option and the intrinsic value. As the option approaches expiration, the time value erodes, eventually to zero.
Today/Tomorrow: Simultaneous buying of a currency for delivery the following day and selling for the spot day, or vice versa. Also referred to as overnight

Tomorrow next (Tom next): Simultaneous buying of a currency for delivery the following day and selling for the spot day or vice versa

***TPO*:** Time-Price Opportunity; a price that occurs during designated half-hour periods of trading; a price-time relationship developed for the Chicago Board of Trade's Market Profile and Liquidity Data Bank reports.

***Tradable*:** Trading instrument

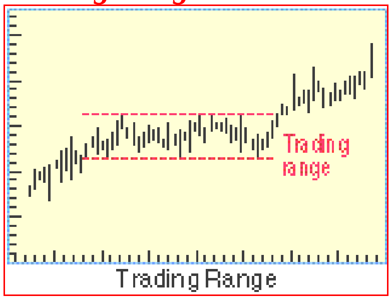
Tradeable amount: Smallest transaction size acceptable

Trade date: The date on which a trade occurs.

***Trade Facilitation*:** Liquidity.

***Trading Bands*:** Lines plotted in and around the price structure to form an envelope, answering whether prices are high or low on a relative basis and forewarning whether to buy or sell by using indicators to confirm price action.

Trading Range:



The difference between the high and low prices traded during a period of time; in commodities, the high/low price limit established by the exchange for a specific commodity for any one day's trading.

Trailing Stop: A stop-loss order that follows the prevailing price trend.

Transaction: The buying or selling of a tradable (e.g currencies), resulting from the execution of an order

Transaction date: The date on which a trade occurs

Transfer Agent**:** Financial institution that manages ownership records of company stock.

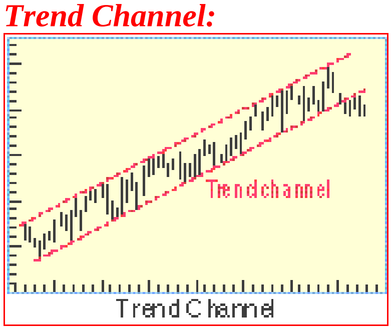
Transfer Function**:** The mathematical relationship between the output of a control system and its input for a linear system, it is the Laplace transform of the output divided by the Laplace transform of the input under conditions of zero initial energy.

Transfer Response**:** Refers to the shape of the wave coming out of a filter in comparison to the shape going into it.

Transform**:** A process to change or convert. For example, a simple moving average is a filter to reduce noise; the moving average is the transform function.

Trend**:** The general drift, tendency or bent of a set of statistical data as related to time.

Trend Channel:



A parallel probable price range centered about the most likely price line. Historically, this term has been used to denote the area between the base trendline and the reaction trendline defined by price moves against the prevailing trend.

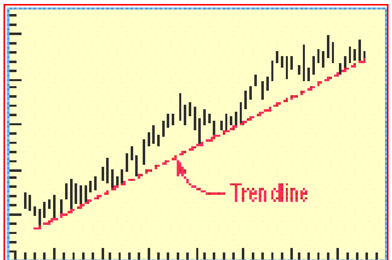
***Trend Day*:** A day in which the price of a futures contract moves consistently away from the opening range and does not return to the opening range prior to the close.

***Trend-Following*:** Moving in the direction of the prevailing price movement.

***Trending Market*:** Price moves in a single direction, generally closing at an extreme for the day.

***Trendless*:** Price movement that vacillates to the degree that a clear trend cannot be identified.

Trendline:



Trendline

A line drawn that connects either a series of highs or lows in a trend. The trendline can represent either support as in an uptrend line or resistance as in a downtrend line. Consolidations are marked by horizontal trendlines.

***Triangle*:** A pattern that exhibits a series of narrower price fluctuations over time; top and bottom boundaries need not be of equal length.

***Triangular Moving Average*:** A moving average in which each day's data are multiplied by a weight that increases in value at steady increments to a peak value and then declines to zero at equivalent increments. The sum of the weighted daily data is divided by the number of variables.

***TRIN*:** *See* Arms Index Trix-The one-period difference of the triple exponential smoothing operating on the log of price.

***True Range*:** The largest of the following: Today's high minus today's low, today's high minus yesterday's lose, today's low minus yesterday's close.

***True Strength Index*:** A momentum indicator developed by William Blau that double-smoothes the ratio of the market momentum to the absolute value of the market momentum.

$$TSI_{r,s} = 100\left(\frac{E_s(E_r(Mtm))}{E_s(E_r(|Mtm|))}\right)$$

where:
Mtm = one-day change in closing price.
|Mtm| = absolute value of Mtm.
Er = exponential smoothed moving average of *r* days.
Es = exponential smoothed moving average of *s* days.

***Tulip Sector*:** A sector that is the intense focus of speculators at the moment.

***Turning Point*:** The approximate time at which there is a change in trend.

***Tweezers Bottoms and Tops*:** Candlestick formations. Both candles must have identical highs and lows. Significant when found at contract highs or lows, and can indicate a breakout.

Two Tier market: A dual exchange rate system where normally only one rate is open to market pressure, e.g. South Africa

Two-Way quotation: When a dealer quotes both buying and selling rates for foreign exchange transactions

U

Uncovered: Another term for an open position (e.g ***Uncovered Option:*** The buy or sale of an option without a position in the underlying futures contract; also known as a naked option).

***Underlying Instrument*:** A trading instrument subject to purchase upon exercise.

***Underlying Security*:** In options, a stock subject to purchase upon exercise of the option.

Under-valuation: An exchange rate is normally considered to be undervalued when it is below its purchasing power parity

***Uniform Gifts to Minors Acts*:** A law that allows minors to own property without the use of a trust.

***Univariate*:** Involving only one variable.

***Upthrust*:** Occurs when price moves above a pivot top and a widespread reversal ensues as follows: a) two previous closes are reversed, b) close is below pivot top, c) close is below opening and mid-range, d) daily price range is greater than the previous day's range.

Up tick: A transaction executed at a price greater than the previous transaction

V

***Value Area*:** The price range on the CBOT Market Profile in which approximately 70% of the day's trades occur.

***Value at Risk (VaR)*:** A measure of exposure within a given portfolio, which attempts to estimate how much the portfolio would be expected to lose, given the recent behavior of the securities contained therein.

***Value Averaging*:** In which the average is taken of a series of values.

Value Date: For a spot transaction it is two business banking days forward in the country of the bank providing quotations which determine the spot value date. The only exception to this general rule is the spot day in the quoting centre coinciding with a banking holiday in the country(ies) of the foreign currency(ies). The value date then moves forward a day

Value Spot: Normally settlement for two working days from today. See value date

***Value-Weighted Index*:** A market average such as Standard & Poor's 500 Index that takes into account the market value of each security rather than calculating a straight price average.

***Variable-Length Moving Average*:** A moving average where the number of periods selected for smoothing is based on a volatility measurement of price. Typically, the standard deviation of price is used to measure price volatility. The more volatile the price is, the shorter the number of periods used is for smoothing.

***Vega*:** The amount by which the price of an option changes when the volatility changes.

***Vertical Spread*:** A stock option spread based on simultaneous purchase and sale of options on the same underlying stock with the same expiration months but different strike prices.

***Vesting*:** The rights that an employee gains for working at a firm for a specific length of time.

***Volatility*:** A measure of the amount by which an asset price is expected to fluctuate over a given period (e.g a measure of a stock's tendency to move up and down in price, based on its daily price history over the latest 12 months).

***Volume*:** The shares that are traded for a given market or tradable within a specified time period.

***Volume Price Trend (VPT)*:** In which a running sum is maintained when a day's total volume is added if the market closes positive or the day's total volume is subtracted if the market closes lower. *See* On-balance volume.

***Vostro Account*:** A local currency account maintained with a bank by another bank. The term is normally applied to the counterparty's account from which funds may be paid into or withdrawn, as a result of a transaction

W

W Formation**:** A double-bottom formation.

Warrant**:** A company-issued certificate that represents an option to buy stock shares at a given time.

Wash trade: A matched deal which produces neither a gain nor a loss

Wasting**:** A term depicting how an option's value decreases over time; as each day after acquisition passes a portion of the option's time value is lost or wasted.

Wave**:** In Elliott wave theory, a sustained move by a market's price in one direction as determined by the reversal points that initiated and terminated it.

Wave Cycle**:** An impulse wave followed by a correction wave, the impulse wave being made up of five smaller, numbered waves of alternating direction designated 1, 2, 3, 4 and 5, and the correction wave being composed of three smaller alternating waves designated a, b, and c.

Wedge**:** A pattern in which two converging lines connect a group of price peaks and troughs.

Weighted Average Purchase Price**:** Multiply each purchase order bought by the associated purchase price, add them together and divide the total by the number of blocks. The result is the weighted average purchase price.

Weighted Industry Index**:** An index where the importance of each stock is related to its market capitalization.

Weighted Moving Average (WMA)**:** A moving average that puts more weight on recent prices. A three-day weighted moving average would add a multiple of 1 to the first date, 2 to the second date and 3 to the third date.

Whiplash**:** Alternating buy and sell signals that result in losses.

Whipsaw**:** Losing money on both sides of a price swing (e.g where a trader takes a position, then has to move against it triggering stop loss limits and liquidation of positions, then having to move in the original direction). Normally occurs in volatile markets

Wildcards**:** Characters in a quote symbol or Dos file name that indicates an undefined, but categorized, value.
Williams' %R**:** Overbought and oversold indicator that is used to determine market entry and exit points.

***Window*: ** Set period of time such as a lookback period for market indicator in question.

Wizard: A preprogrammed step-by-step procedure to aid the user in accomplishing a specific task.

Working day: A day on which the banks in a currency's principal financial centre are open for business. For FX transactions, a working day only occurs if the bank in both financial centre's are open for business (all relevant currency centers in the case of a cross are open).

Y

***Yates's Correction*:** When a small amount of data is available for testing, the chi-square formula is adjusted to account for the small sample base.

Z

***Zero-Coupon Government Bonds*:** Government bonds that are purchased at a deep discount and pay no cash dividend, unlike regular bonds.

***Zeta*:** The percentage change in an options price per 1% change in implied volatility.

***Zigzag*:** In a bull market, an Elliott three-wave pattern that subdivides into a 5-3-5 pattern with the top of wave B noticeably lower than the start of wave A. In a bear market, this pattern will be inverted.