



## The Complete Guide to Trading

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# The Complete Guide to Trading

(How to Trade the Markets and Win)



A Publication of The Corporate Finance Institute

*"When you think the market can't possibly go any higher (or lower), it almost invariably will, and whenever you think the market "must" go in one direction, nine times out of ten it will go in the opposite direction. Be forever skeptical of thinking that you know what the market is going to do."*

– William Gallaher

## About Corporate Finance Institute®

CFI is a world-leading provider of online financial analyst training programs. CFI's courses, programs, and certifications have been **delivered to tens of thousands of individuals** around the world to help them become world-class financial analysts.

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## About CFI's Complete Guide to Trading

The following eBook's purpose is to outline all the necessary fundamental skills needed to understand the capital markets in a trading context. The three-part guide will walk you through the markets, trading concepts, and technical analysis and trading strategies. Produced after hours of research and planning by current and former professionals in the trading industry, you will become familiar with applicable knowledge that will allow you to be competitive in today's markets.

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At various points in the manual a number of financial analysis issues are examined. The financial analysis implications for these issues, although relatively standard in treatment, remain an opinion of the authors of this manual. No responsibility is assumed for any action taken or inaction as a result of the financial analysis included in the manual.



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# The Market



# The Market

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## Understanding Asset Classes

When you trade, you trade financial assets of one kind or another. There are different classes, or types, of assets – such as fixed income investments - that are grouped together based on their having a similar financial structure and because they are typically traded in the same financial markets and subject to the same rules and regulations.

There's some argument about exactly how many different classes of assets there are, but many analysts commonly divide assets into the following five categories:

- Stocks, or equities - Equities are shares of ownership that are issued by publicly traded companies and traded on stock exchanges, such as the NYSE or Nasdaq. You can potentially profit from equities either through a rise in the share price or by receiving dividends.
- Bonds, or other fixed income investments (such as certificates of deposit – CDs) – Fixed-income investments are investments in securities that pay a fixed rate of return in the form of interest. While not all fixed income investments offer a specific guaranteed return, such investments are generally considered to be less risk than investing in equities or other asset classes.
- Cash or cash equivalents, such as money market funds – The primary advantage of cash or cash equivalent investments is their liquidity. Money held in the form of cash or cash equivalents can be quickly and easily accessed at any time.
- Real estate, or other tangible assets – Real estate or other tangible assets are considered as an asset class that offers protection against inflation. The tangible nature of such assets also leads to them being considered as more of a “real” asset, as compared to assets that exist only in the form of financial instruments.



- Futures and other financial derivatives – This category includes futures contracts, the forex market, options, and an expanding array of financial derivatives.

It's difficult to classify some assets. For example, suppose you're investing in stock market futures. Should those be classified with equities, since they're essentially an investment in the stock market, or with futures, since they're futures? Gold and silver are tangible assets, but are most frequently traded in the form of commodity futures or options, which are financial derivatives. If you invest in a real estate investment trust (REIT), should that be considered an investment in real estate or as an equity investment since REITs are exchange-traded securities?

Things are further complicated by the expansion in available investments. Exchange-traded funds (ETFs), for example, are traded like stocks on equity exchanges, but ETFs may be composed of investments from one or more of the five basic asset classes. An ETF that offers exposure to the gold market may be partly composed of investments in gold bullion and partly composed of stock shares of gold mining companies.

There are additional asset classes, such as artwork, various other collectibles, and peer to peer lending. Hedge funds and other sources of venture capital, along with markets that trade things such as Bitcoin and other alternative currencies, represent some other asset classes that are a bit more off the beaten path. Generally speaking, the more an investment falls into the category of "alternative investment", the less liquid and the more risky it tends to be.

Good news! – You don't really have to know for certain which asset class a specific investment falls under. You just need to understand the basic concept that there are broad, general categories of investments. That fact is primarily important because of the concept of diversification. Diversification is the idea that you can reduce the overall risk of your investment portfolio by investing in different types of investments, such as investments in different asset classes.

There is usually little correlation between the different asset classes. In other words, during periods of time when equities are performing well, bonds, real estate, and commodities may not be performing well for investors. However, during bear markets in stocks, other assets, such as real estate or bonds, may be showing investors above average returns. You can hedge your investments

in one asset class, reducing your risk exposure by simultaneously holding investments in other asset classes. The practice of reducing investment portfolio risk by diversifying your investments across different asset classes is referred to as asset allocation.

The other reason to have a basic understanding of asset classes is just to help you recognize the nature of various investments that you may choose to trade. For example, you might choose to devote all, or nearly all, of your investment capital to trading futures or other financial derivatives, such as foreign currency exchange (forex). But if you do, you ought to at least be aware that you have chosen to trade a class of assets that is usually considered to carry significantly more risk than bonds or equities.

The extent to which you choose to employ asset allocation as a means of diversification is going to be an individual decision that is guided by your personal investment goals and your risk tolerance. If you're very risk averse – have an extremely low risk tolerance – then you may just want to invest only in the relatively safe asset class of fixed-income investments. Alternately, you may aim to further diversify within an asset class – such as by holding a selection of large cap, mid cap, and small cap stocks, or by investing in various industry sectors of the stock market.

On the other hand, if you're blessed with a high risk tolerance and/or having money to burn, you may care very little about diversification, being more focused on trying to correctly identify the asset class that currently offers the highest potential profits.

## Types of Markets – Dealers, Brokers, and Exchanges

For the buying and selling of assets, there are several different types of markets that facilitate trade. Each market operates under different trading mechanisms.

The three main types of markets are:

1. Dealers (also known as the over-the-counter market)
2. Brokers
3. Exchanges

### Dealer Markets

A dealer market operates with a dealer who acts as a counterparty for both buyers and sellers. The dealer sets bid and asks prices for the security in question, and will trade with any investor willing to accept those prices. Securities sold by dealers are sometimes referred to as being traded over-the-counter (OTC).

By acting as a counterparty for both buyers and sellers, the dealer provides liquidity in the market at the cost of a small premium that exists in the form of bid and ask spreads. In other words, dealers set bid prices slightly lower than the going market price and ask prices slightly higher than the market. The spread between these prices is the profit the dealer makes in return for assuming the counterparty risk.

Dealer markets are less common in stocks, more common in bonds and currency markets. Dealer markets are also appropriate for futures and options, or other standardized contracts and financial derivatives. Finally, the forex, or foreign exchange market is commonly operated through dealers, with banks and currency exchanges acting as the intermediary connecting dealers with buyers and sellers.

Of the three types of markets, the dealer market is usually the most liquid, because of the fact that the dealer's existence means that there will always be an available counterparty to traders wanting to buy or sell.

### Broker Markets

A broker market operates by finding a counterparty for both buyers and sellers. When dealers act as the counterparty, the delay with

brokers finding an appropriate counterparty results in less liquidity for brokered markets as compared to dealer markets.

Traditionally, stock markets were brokered. Stockbrokers would try to find an appropriate counterparty for their client on the trading floor of a stock exchange. This is the stereotypical image that Wall Street used to be known for, with men and women in suits yelling at each other while holding pieces of paper representing their clients orders that they are seeking to fill.

Broker markets are used for all manner of securities, especially those with initial issues. A stock initial public offering (IPO), for example, will usually be launched through an investment bank which brokers the issue trying to find buyers. There is a similar procedure for new bond issues. Finally, brokered markets are also appropriate for tailored or custom financial products.

### Exchanges

Of the three types of markets, the exchange is the most highly automated. However, if no buyers and sellers are able to meet in terms of price, then no trades are executed. Because of the huge number of potential buyers and sellers trading through exchanges, such a situation is extremely unlikely and commonly only occurs in times of economic crisis. In practice, the large numbers of buyers and sellers makes a stock exchange virtually just as liquid as a dealer market.

Although stockbrokers do still input orders for clients, the stock market is no longer truly a brokered market, having transitioned to operating as an automated exchange. Trades are executed based on order books that match buyers with sellers.

The advantage of an exchange is the provision of a central location for buyers and sellers to find counterparties. Exchanges are used for all manner of securities, but are most appropriate for standardized securities such as stocks, bonds, futures contracts, and options. Exchanges typically specify the characteristics for securities that are traded on the exchange.

### Exchange-Specified Characteristics

- Contract or Lot Size
- Contract Execution/Trading Months
- Tick Size
- Delivery Terms
- Quality



Delivery terms and quality are not commonly specified in stock exchange trading or bond trading. In a stock exchange transaction, all that is stated is the contract and tick size, as well as the execution, which is typically immediate.

Contract sizes for securities or financial instruments are typically set to a minimum amount. For example, a stock might only be available for purchase in lots of 100 on a certain exchange. Tick size is commonly the lowest denomination of a currency. On US stock exchanges, the lowest tick price is one cent. A minimum 100-lot contract size under such conditions might then have a minimum tick value of \$1 ( $\$0.01 \times 100$  shares per lot).

Delivery terms and quality are more appropriately used in reference to commodity trading and to derivatives involving commodity-like assets. Gold and diamonds, for example, have qualities and ratings. Additionally, there must be provisions for potential delivery of the physical asset to the buyer or contract holder. Such characteristics are specified by the exchange an asset or financial instrument is traded on.

## The Fixed Income Market

Fixed income securities such as Treasury bonds are a type of debt instrument that provides returns in the form of regular, or fixed, payments and repayments of the principal when maturity is reached. These instruments are issued by governments, corporations and other entities to finance their operations. They differ from equity, as they do not entail ownership in a company, but bonds usually have seniority of claim in cases of bankruptcy or default.

Fixed income securities are generally considered a safer investment than equities or other market investments, but do not usually offer investment returns as high as those that can be obtained through other investments.

The term fixed income refers to interest payments that an investor receives, which are based on the creditworthiness of the borrower and current market rates. Generally speaking, fixed income securities such as bonds pay a higher rate of interest - known as the coupon - the longer their maturities are. At the end of the term or maturity, the borrower returns the borrowed money, known as the principal, or par value, amount.

The primary risks associated with fixed income securities concern the borrower's vulnerability to defaulting on its debt. In turn, this risk is incorporated in the interest or coupon that the security pays the investor. Additional risks involving the exchange rate for international bonds can be of concern, as well as the risk that changes in interest rates may increase (or decrease) the market value of a bond currently held. This is known as interest rate risk.

Credit/default risk arises if the issuer of a security is unable to pay interest and/or principal in a timely fashion. The probability of credit/default risk occurring depends on the issuer's ability to meet their financial obligations and on their credit worthiness. There is a negative correlation between credit rating and yield – the lower a bond issuer's credit rating, the higher the yield that will be offered to compensate for higher risk. A change in the issuer's credit rating affects the value of their outstanding fixed income securities.

There is a purchasing power risk associated with fixed income securities because the real rate of return on fixed income investments equals the rate of return minus the rate of inflation. During periods of high inflation, the real rate of return on fixed income investments may become negative.

## Bond Pricing

The price of a bond depends on several characteristics that apply to every bond issued. These characteristics are as follows:

- **Coupon, or lack thereof** - A bond may or may not come with attached coupons. A coupon is stated as a nominal percentage on the par value of the bond. Each coupon is redeemable per period for that percentage. A bond may also come with no coupon. In this case, the bond is known as a zero-coupon bond. Zero-coupon bonds are typically priced lower than bonds with coupons.
- **Principal/par value** - Every bond comes with a par value – the principal amount that is repaid at maturity. Without the principal value, a bond would have no use. The principal value is to be repaid to the lender (the bond purchaser) by the borrower (the bond issuer). A zero-coupon bond pays no coupons but guarantees the principal amount at maturity. The interest paid on a zero-coupon bond is delivered in the form of the bond price being less than the principal amount that will be paid at maturity. For example, a zero-coupon bond with a par value of \$1,000 might be available for purchase for \$900. When the purchaser of the bond receives the \$1,000 par value on the bond's maturity date, they have, in effect, received approximately 10% interest on the bond.
- **Yield to maturity** - Bonds are priced to yield a certain return to investors. A bond that sells at a premium (where price is above par value) will have a yield to maturity that is lower than the coupon rate. Alternatively, the causality of the relationship between yield to maturity and price may be reversed. A bond could be sold at a higher price if the intended yield (market interest rate) is lower than the coupon rate. This is because the bondholder will receive coupon payments that are higher than the market interest rate, and will therefore pay a premium for the difference.
- **Coupon Periods to Maturity** – Bonds vary in the number of coupon payments that occur until the bond matures. More frequent coupon (interest) payments are considered more desirable and typically increase the price of a bond.

All else being equal, the following statements about bond pricing are true:

A bond with a higher coupon rate will be priced higher.

A bond with a higher par value will be priced higher.

A bond with a higher number of periods to maturity will be priced higher.

A bond with a higher yield to maturity or market rates will be priced lower.

An easier way to remember this is that bonds are priced higher for all characteristics except for yield to maturity. A higher yield to maturity results in lower bond pricing.



## The Money Market

The money market is an organized exchange market where participants can lend and borrow short-term, high-quality debt securities for one year or less. The market allows governments, companies, or banks and other financial institutions to obtain short-term securities to fund their short-term cash flow needs. It also allows individual investors to invest small amounts of money in a low-risk market. Some of the instruments traded in this market include Treasury bills, certificates of deposit, commercial paper, bills of exchange, and short-term mortgage-backed or asset-backed securities.

Large corporations with short-term cash flow needs can borrow from the money market directly through a dealer while small companies with excess cash can lend money through money market mutual funds. Individual traders who want to profit from the money market can invest through a money market bank account or money market mutual fund. A money market mutual fund is a professionally managed fund that buys money market securities on behalf of individual investors.

### Functions of the Money Market

The money market contributes to a smooth-running economy of a country by providing short-term liquidity to governments, banks, and other large organizations. Investors with excess money that they do not immediately need can invest it in the money market and earn interest.

Here are the main functions of the money market:

#### #1 Financing Trade

The money market provides financing to local and international traders who are in an urgent need of short-term funds. It provides a facility to discount bills of exchange, and this provides buyers of goods with immediate financing to pay for such goods. The money market also makes funds available for other units of the economy, such as agriculture and small-scale industries.

#### #2 Central Bank Policies

The central bank is responsible for guiding the monetary policy of a country and taking measures to ensure a healthy financial system. Through the money market, the central bank can perform part of its policy-making function efficiently. For example, the short-term interest rates in the money market represent the prevailing

conditions in the banking industry and can guide the central bank in developing an appropriate future interest rate policy. Also, by adjusting the interest rates at which government-issued debt, such as Treasury bills and bonds, are offered, the central bank can influence interest rates for all types of fixed-income financial instruments.

### #3 Growth of Industries

The money market provides an easy avenue for companies to obtain short-term loans to finance their working capital or other cash flow needs. Due to the large volumes of transactions, companies may experience cash shortages in regard to buying raw materials, paying employees, or meeting other short-term expenses. Through commercial paper or similar financing, they can borrow and obtain funds almost immediately for a relatively short loan duration. Although the money market does not provide long-term loans, it influences the overall capital market and can help companies obtain long-term financing. The capital market benchmarks its interest rates based on the prevailing interest rate in the money market.

### #4 Commercial Banks Self-Sufficiency

The money market provides commercial banks with a ready market where they can invest their excess reserves and earn interest while maintaining liquidity. The short-term investments such as bills of exchange can easily be converted to cash to support customer withdrawals. Also, when faced with liquidity problems, they can borrow from the money market on a short-term basis as an alternative to borrowing from the central bank.

### Instruments Traded in the Money Market

Several financial instruments are created for short-term lending and borrowing in the money market, such as the following:

#### #1 Treasury Bills

Treasury bills are considered the safest money market instruments because they are issued with a full guarantee by the United States government. They are regularly issued by the U.S. Treasury to refinance Treasury bills reaching maturity and to finance government deficits. T-bills have a maturity of one, three, six, or twelve months. They are sold at a discount to their face value, and the difference between the discounted purchase price and face value represents the interest rate paid to investors. They are commonly purchased by banks, broker-dealers, individual

investors, pension funds, insurance companies, and other large institutions.

## #2 Certificates of Deposit

A certificate of deposit (CD) is issued directly by a commercial bank, but it can also be purchased through brokerage firms. It has a maturity date ranging from three months to five years and can be issued in any denomination. Most CDs have a fixed maturity date and interest rate, and they extract a penalty for cashing in the CD prior to the time of maturity. Any time after the expiry of the CD's maturity date, the principal amount and interest earned is available for withdrawal. CDs are insured by the Federal Deposit Insurance Corporation (FDIC).

## #3 Commercial Paper

Commercial paper is an unsecured loan issued by large institutional buyers to finance short-term financial needs such as inventory and accounts receivables. It is issued at a discount, with the difference between the price and face value of the commercial paper being the profit in interest paid to the investor. Typically, only large institutions with a high credit rating can issue commercial paper, and it is, therefore, considered a very safe investment. Commercial paper is issued in denominations of \$100,000 and above. Individual investors can invest in commercial paper indirectly through money market funds. Commercial paper usually has a maturity date of less than one year from the date of issue.

## #4 Banker's Acceptance Notes

A banker's acceptance note is a short-term debt instrument issued by a non-financial institution but guaranteed by a commercial bank. It is created by a drawer, providing the bearer the right to the monetary amount indicated on its face at a specified date. It is often used in international trade because of the benefits to both the drawer (issuer) and bearer (holder). The holder of the acceptance note may decide to sell it on a secondary market. The date of maturity for banker's acceptance notes usually ranges between one month and six months from the date of issue.

## #5 Repurchase Agreements

A repurchase agreement, commonly known as a "repo", is a short-term form of borrowing that involves selling a security with an agreement to repurchase it at a higher price at a later date. It is commonly used by dealers in government securities who sell Treasury bills to a lender and agree to repurchase them at an

agreed upon price at a later date. The Federal Reserve buys repurchase agreements as a way of regulating the money supply and bank reserves. Repo dates of maturity range from overnight to 30 days or more.

### Conclusion

The money market exists to facilitate short-term cash flow needs. Because of the fact that most money market instruments are issued by either government entities or large financial institutions, and also because most money market instruments mature within a short period of time, money market instruments are considered among the safest of fixed income investments. However, short-term maturities and low risk translate to lower profit potential for investors. For example, while a 10-year bond issued by a private corporation might offer investors a 5% interest rate, a three-month Treasury bill might only offer an interest rate return of just 1%.



## The Stock Market

The stock market refers to public markets that exist for issuing, buying, and selling of stocks that trade on a stock exchange or over-the-counter. Stocks, also known as equities, represent fractional ownership in a company, asset, or security, and so the stock market is a place where investors can buy and sell ownership of such investable assets. An efficiently functioning stock market is critical to economic development, as it gives companies the ability to quickly access capital from the public.

### Purposes of the Stock Market – Capital and Investment Income

The stock market serves two very important purposes. The first is to provide capital to companies that they can use to fund and expand their businesses. If a company issues one million shares of stock that initially sell for \$10 a share, then that provides the company with \$10 million of capital that it can use to grow its business (minus whatever fees the company pays for an investment bank to manage the stock offering). By offering stock shares instead of borrowing the capital needed for expansion, the company avoids incurring debt and paying interest charges on that debt.

The secondary purpose that the stock market serves is to give investors – those who purchase stocks – the opportunity to share in the profits of publicly-traded companies. Investors can profit from stock buying in one of two ways. Some stocks pay regular dividends (a given amount of money per share of stock someone owns). The other way investors can profit from buying stocks is by selling their stock for a profit if the stock price increases from their purchase price. For example, if an investor buys shares of a company's stock at \$10 a share and the price of the stock subsequently rises to \$15 a share, the investor can then realize a 50% profit on their investment by selling their shares.

### History of Stock Trading

Although stock trading dates back as far as the mid-1500s in Antwerp, modern stock trading is generally recognized as starting with the trading of shares in the East India Company in London.

Throughout the 1600s, British, French, and Dutch governments provided charters to a number of companies that included East India in the name. All goods brought back from the east were transported by sea, involving risky trips often threatened by severe storms and pirates. To mitigate these risks, ship owners regularly

sought out investors to proffer financing collateral for a voyage. In return, investors received a portion of the monetary returns realized if the ship made it back successfully, loaded with goods for sale. These are the earliest examples of limited liability companies (LLCs), and many held together only long enough for one voyage.

The formation of the East India Company in London eventually led to a new investment model, with importing companies offering stocks that essentially represented a fractional ownership interest in these companies, and that offered investors dividends on all proceeds from all the voyages a company funded, instead of just a single trip. The new business model made it possible for the companies to ask for larger investments per share, enabling them to easily increase the size of their shipping fleets. Investing in such companies, they are often protected from competition by royally-issued charters, which became very popular due to the fact that investors could potentially realize massive profits on their investments.

### **The First Shares and the First Exchange**

Company shares were issued on paper, enabling investors to trade shares back and forth with other investors, but regulated exchanges did not exist until the formation of the London Stock Exchange (LSE) in 1773. Although a significant amount of financial turmoil followed the immediate establishment of the LSE, exchange trading overall managed to survive and grow throughout the 1800s.

### **The Beginnings of the New York Stock Exchange**

Enter the New York Stock Exchange (NYSE), established in 1792. Though not the first on U.S. soil – that honor goes to the Philadelphia Stock Exchange (PSE) – the NYSE rapidly grew to become the dominant stock market in the United States and eventually in the world. The NYSE occupied a physically strategic position, located among some of the country's largest banks and companies, not to mention being situated in a major shipping port. The exchange established listing requirements for shares, and rather hefty fees initially, enabling it to quickly become a wealthy institution itself.

### **Modern Stock Trading – The Changing Face of Global Exchanges**

Domestically, the NYSE saw meager competition for more than two centuries, and its growth was primarily fueled by an ever-growing American economy. The LSE continued to dominate the European market for stock trading, but the NYSE became home to a continually expanding number of large companies. Other major

countries, such as France and Germany, eventually developed their own stock exchanges, though these were often viewed primarily as stepping stones for companies on their way to listing with the LSE or NYSE.

The late 20<sup>th</sup> century saw the expansion of stock trading into many other exchanges, including the NASDAQ, which became a favorite home of burgeoning technology companies, which gained increased importance during the technology sector boom of the 1980s and 1990s. The NASDAQ emerged as the first exchange operating between a web of computers that electronically executed trades. Electronic trading made the entire process of trading more time and cost-efficient. In addition to the rise of the NASDAQ, the NYSE faced increasing competition from stock exchanges in Australia and Hong Kong, the financial center of Asia.

The NYSE eventually merged with Euronext, which formed in 2000 through the merger of the Brussels, Amsterdam, and Paris exchanges. The NYSE/Euronext merger in 2007 established the first trans-Atlantic exchange.

### How Stocks are Traded – Exchanges and OTC

Most stocks are traded on exchanges such as the New York Stock Exchange (NYSE) or the NASDAQ. Stock exchanges essentially provide the marketplace to facilitate the buying and selling of stocks among investors. Stock exchanges are regulated by government agencies, such as the Securities and Exchange Commission (SEC) in the United States, that oversee the market in order to protect investors from financial fraud and to keep the exchange market functioning smoothly.

Although the vast majority of stocks are traded on exchanges, some stocks are traded over the counter (OTC), where buyers and sellers of stocks commonly trade through a dealer, or “market maker”, who specifically deals with the stock. OTC stocks are stocks that do not meet the minimum price or other requirements for being listed on exchanges.

OTC stocks are not subject to the same public reporting regulations as stocks listed on exchanges, so it is not as easy for investors to obtain reliable information on the companies issuing such stocks. Stocks in the OTC market are typically much more thinly traded than exchange-traded stocks, which means that investors often must deal with large spreads between bid and ask prices for an OTC stock. In contrast, exchange-traded stocks are much more liquid, with relatively small bid-ask spreads.

## Stock Market Players – Investment Banks, Stockbrokers, and Investors

There are a number of regular participants in stock market trading.

Investment banks handle the initial public offering – IPO – of stock that occurs when a company first decides to become a publicly-traded company by offering stock shares.

Here's an example of how an IPO works. A company that wishes to go public and offer stock shares approaches an investment bank to act as the “underwriter” of the company's initial stock offering. The investment bank, after researching the company's total value and taking into consideration what percentage of ownership the company wishes to relinquish in the form of stock shares, handles the initial issuing of shares in the market in return for a fee, while guaranteeing the company a determined minimum price per share. It is therefore in the best interests of the investment bank to see that all the shares offered are sold, and at the highest possible price.

Shares offered in IPOs are most commonly purchased by large institutional investors such as pension funds or mutual fund companies.

The IPO market is known as the primary, or initial, market. Once a stock has been issued in the primary market, all trading in the stock thereafter occurs through the stock exchanges in what is known as the secondary market. The term “secondary market” is a bit misleading, since this is the market where the overwhelming majority of stock trading occurs day to day.

Stockbrokers, who may or may not also be acting as financial advisors, buy and sell stocks for their clients, who may be either institutional investors or individual retail investors.

Equity research analysts may be employed by stock brokerage firms, mutual fund companies, hedge funds, or investment banks. These are individuals who research publicly-traded companies and attempt to forecast whether a company's stock is likely to rise or fall in price.

Fund managers or portfolio managers, which include hedge fund managers, mutual fund managers, and exchange-traded fund managers, are important stock market participants because they buy and sell large quantities of stocks. If a popular mutual fund decides to invest heavily in a particular stock, that demand for



the stock alone is often significant enough to drive the stock's price noticeably higher.

### Stock Market Indexes

The overall performance of the stock markets is usually tracked and reflected in the performance of various stock market indexes. Stock indexes are composed of a selection of stocks that is designed to reflect how stocks are performing overall. Stock market indexes themselves are traded in the form of options and futures contracts which are also traded on regulated exchanges.

Among the key stock market indexes are the Dow Jones Industrial Average (DJIA), Standard & Poor's 500 Index (S&P 500), the Financial Times Stock Exchange 100 Index (FTSE 100), the Nikkei 225 Index, the NASDAQ Composite Index, and the Hang Seng Index.

### Bull and Bear Markets, and Short Selling

Two of the basic concepts of stock market trading are "bull" and "bear" markets. The term bull market is used to refer to a stock market in which the price of stocks is generally rising. This is the type of market most investors prosper in, as the majority of stock investors are buyers, rather than sellers, of stocks. A bear market exists when stock prices are overall declining in price.

Investors can still profit even in bear markets through short selling. Short selling is the practice of borrowing stock that the investor does not hold from a brokerage firm which does own shares of the stock. The investor then sells the borrowed stock shares in the secondary market and receives the money from that sale of stock. If the stock price declines as the investor hopes, then the investor can realize a profit by purchasing a sufficient number of shares to return to the broker the number of shares they borrowed.

For example, if an investor believes that the stock of company "A" is likely to decline from its current price of \$20 a share, the investor can put down what is known as a margin deposit in order to borrow 100 shares from his broker. He then sells those shares for \$20 each, the current price, which gives him \$2,000. If the stock then falls to \$10 a share, the investor can then buy 100 shares to return to his broker for only \$1,000, leaving him with a \$1,000 profit.

### Analyzing Stocks – Market Cap, EPS, and Financial Ratios

Stock market analysts and investors may look at a variety of factors to indicate a stock's probable future direction, up or down in price.

Here's a rundown on some of the most commonly viewed variables for stock analysis.

A stock's market capitalization, or market cap, is the total value of all the outstanding shares of the stock. A higher market capitalization usually indicates a company that is more well-established and financially sound.

Publicly traded companies are required by exchange regulatory bodies to regularly provide earnings reports. These reports, issued quarterly and annually, are carefully watched by market analysts as a good indicator of how well a company's business is doing. Among the key factors analyzed from earnings reports are the company's earnings per share (EPS), which reflects the company's profits as divided among all of its outstanding shares of stock.

Analysts and investors also frequently examine any of a number of financial ratios that are intended to indicate the financial stability, profitability, and growth potential of a publicly traded company. Following are a few of the key financial ratios that investors and analysts consider:

**Price to Earnings (P/E) Ratio:** The ratio of a company's stock price in relation to its EPS. A higher P/E ratio indicates that investors are willing to pay higher prices per share for the company's stock because they expect the company to grow and the stock price to rise.

**Debt to Equity Ratio:** This is a fundamental metric of a company's financial stability, as it shows what percentage of company's operations are being funded by debt as compared to what percentage are being funded by equity investors. A lower debt to equity ratio, indicating primary funding from investors, is preferable.

**Return on Equity (ROE) Ratio:** The return on equity (ROE) ratio is considered a good indicator of a company's growth potential, as it shows the company's net income relative to the total equity investment in the company.

**Profit Margin:** There are several profit margin ratios that investors may consider, including operating profit margin and net profit margin. The advantage of looking at profit margin over just an absolute dollar profit figure is that it shows what a company's percentage profitability is. For example, a company may show a profit of \$2 million, but if that only translates to a 5% profit margin, then any

significant decline in revenues may threaten the company's profitability.

Other commonly used financial ratios include return on assets (ROA), dividend yield, price to book (P/B) ratio, current ratio and the inventory turnover ratio.

### **Two Basic Approaches to Stock Market Investing – Value Investing and Growth Investing**

There are countless methods of stock picking that analysts and investors employ, but virtually all of them are one form or another of the two basic stock buying strategies of value investing or growth investing.

Value investors typically invest in well-established companies that have shown steady profitability over a long period of time, and that may offer regular dividend income. Value investing is more focused on avoiding risk than growth investing is.

Growth investors seek out companies with exceptionally high growth potential, hoping to realize maximum appreciation in share price. They are usually less concerned with dividend income and are more willing to risk investing in relatively young companies. Technology stocks, because of their high growth potential, are often favored by growth investors.

## Exchange-Traded Funds

An exchange-traded fund (ETF) is an investment fund that holds assets such as stocks, commodities, bonds, and foreign currency. An ETF is traded like a stock, throughout the trading day, at fluctuating prices. They often track indexes such as the NASDAQ, S&P 500, Dow Jones, and Russell 2000. Investors in ETFs do not directly own the underlying investments, but instead have an indirect claim and are entitled to a portion of the profits and residual value in case of fund liquidation. Their ownership shares or interest can be readily bought and sold in the secondary market.

ETFs have begun to eclipse mutual funds as a favored investment vehicle because they offer investments beyond just stocks, and because of the fact that ETFs often have lower transaction costs than the average mutual fund.

### Different Types of ETFs

There are many types of ETFs, including the following:

**Stock ETFs** – These hold a particular set of equities or stocks and are similar to an index. Stock ETFs commonly hold a selection of stocks in a given market sector.

**Index ETFs** – These ETFs have portfolios that are designed to mimic the performance of a specific stock index, such as the S&P 500 Index. They only make portfolio changes when changes happen in the underlying index.

**Bond ETFs** – These are specifically invested in bonds or other fixed-income securities.

**Commodity ETFs** – These ETFs hold physical commodities, such as agricultural goods, natural resources, and precious metals.

**Currency ETFs** – These are invested in a single currency or a basket of various currencies, and are widely used by investors who wish to gain exposure to the foreign exchange market without using futures or trading the forex market directly. They usually track the most popular international currencies, such as the U.S. dollar, the euro, the British pound, or the Japanese yen.

**Inverse ETFs** – These are funds built by using various derivatives to gain profits through short selling when there is a decline in the value of broad market indexes.

**Leveraged ETFs** – These funds mostly consist of financial derivatives that are used to amplify percentage returns. It's important to note that while leveraged ETFs increase profit potential, they also likewise increase risk.

**Real Estate ETFs** – These funds invest in real estate investment trusts (REITs), real estate service firms, and real estate development companies.

### Advantages of Investing in ETFs

There are many advantages to investing in an exchange-traded fund, including:

**Cost benefits:** ETFs usually offer a significantly lower expense ratio than the average mutual fund. This is in part because of their exchange-traded nature, which places typical costs on the brokers or the exchange, in comparison with a mutual fund which must bear the cost in aggregate.

**Accessibility to markets:** ETFs offer exposure to asset classes that were previously hard for individual investors to access, and provide investors with the possibility to own assets such as emerging markets bonds, gold bullion, or crypto-currencies. Because ETFs can be sold short and used to apply other more sophisticated investment strategies, they represent a broader range of opportunities for investors.

**Transparency:** Hedge funds and even mutual funds operate in a not-so-transparent manner as compared to ETFs. Hedge funds and mutual funds usually report their holdings only on a quarterly basis. In contrast, ETFs clearly disclose their daily portfolio holdings.

**Liquidity:** Because they can be bought or sold in secondary markets throughout the day, ETFs are extremely liquid. This is in contrast to mutual funds which can only be bought or sold at their end-of-day closing price.

**Tax Efficiency:** Generally, ETFs pose a major tax advantage over mutual funds for two main reasons. First, ETFs reduce portfolio turnover and offer the ability to avoid short-term capital gains that incur a higher tax rate. Second, ETFs can overcome rules that prohibit selling and

claiming a loss on a security if a very similar security is bought within a 30-day window.

### Potential Drawbacks of ETFs

Despite the abovementioned benefits, ETFs encounter some challenges as well. For instance, they provide higher exposure to previously unattended asset classes that could bear risks that equity investors might not be familiar with. Some sophisticated examples such as leveraged ETFs involve complex or unfamiliar portfolio structures, tax treatments, or counterparty risks, which require clear understanding of the underlying assets.

Additionally, ETFs carry transaction costs that should be carefully considered in the process of portfolio creations, such as Bid/Ask spreads and commissions.

### Who are the biggest ETF management companies?

As of 2017, there are *thousands* of ETFs in existence. If you want to know who the largest ETF management companies are, here is a list of the top 10 fund companies ranked by assets under management.

1. BlackRock
2. Vanguard
3. State Street Global Advisors
4. Invesco PowerShares
5. Charles Schwab
6. First Trust
7. WisdomTree
8. Guggenheim
9. VanEck
10. ProShares



## Commodity Futures Trading

Commodity futures trading is an often-overlooked investment arena. There are a number of reasons for this. First of all, it's simply not an investment that's publicly touted as widely as stock trading and other more common investments. Commodity futures trading is different from stock trading, so it does require traders to learn how to handle investments in a different type of market. Also, many investors have been scared away from commodity trading by horror stories from investors who lost huge sums in the commodity markets. The truth is that while commodity trading is a higher risk venture than conservative fixed-income investments or traditional stock trading, it is nonetheless a market in which it is possible to generate high returns that more than justify the additional risk.

### Understanding Futures Contracts

Commodity futures are traded in the form of contracts of a standardized size (for example, 5,000 bushels of wheat) that expire in different months. This is obviously different from stock shares that have no expiration date and can be held indefinitely. Futures for a given commodity can usually be traded as far ahead in time as two to three years, however, the vast majority of trading nearly always occurs in the contract with the closest expiration date, known as the "front month".

Futures prices are more subject to sudden, volatile price changes than stocks typically are. A stock that has a long history of steady price appreciation or dividend payouts is likely to continue that trend. But with commodity futures, a downtrend in price can change to an uptrend literally overnight due to factors such as an unexpected freeze or drought during growing season.

Futures contracts are divided into five main categories:

Agricultural futures, such as corn, wheat, orange juice, and cocoa

Livestock futures, such as lean hogs and live cattle

Energy futures, such as oil, heating oil, and natural gas

Metals futures, such as gold, silver, and copper

Financial futures, such as Treasury bonds, stock indexes, and currencies

### Fundamental and Technical Analysis in Commodity Trading

Fundamental forces of supply and demand are what ultimately move commodity prices. Therefore, there is a high percentage of

commodity traders who use fundamental analysis to attempt to predict futures prices. Commodity traders glean information on the commodity markets from sources such as financial newspapers, research information from brokers, and government reports.

Advisory services that traders can subscribe to are an important source of information. Some advisory services feature their own expert meteorologists offering weather forecasts for important crop-growing regions, and send their own investigators out to make personal estimates of eventual expected crop sizes.

Despite the fact that genuine supply and demand factors are what drive commodity prices, technical trading is still enormously popular among commodity traders. In fact, many of the most well-known technical indicators that are applied across many other investing markets, such as stocks and forex, were first developed by commodity traders.

### **Advantages of Commodity Trading**

Unlike stock trading or investing in mutual funds or ETFs, commodity trading offers tremendous leverage. In trading commodity futures, you typically only have to put up about 10% of the total futures contract value. This enables you to make much higher percentage gains with your trading capital. For example, you could hold one S&P 500 Index futures contract with a margin deposit of just over \$20,000, while it would take several hundred thousand dollars to buy each of the actual stocks contained in the index. A 20% rise in the Index would return you a more than 100% profit from buying a futures contract – you'd realize approximately the same absolute dollar amount in profit as from buying the stocks in the index, but you would have made that profit with a much smaller investment.

Commodity futures trading may also offer lower commissions and trading costs, although, with all the discount stock brokerages that exist now, that's not as much an issue as it was 20 years ago.

Commodity trading holds an advantage over illiquid investments such as real estate since any money in your account that is not being used to margin market positions that you're holding is readily available to you at any time.

One really key advantage – a double advantage, actually – that commodity trading offers is diversification within simplicity. There are commodity futures available to trade that cover virtually every sector of the economy – agriculture, energy, precious metals, foreign exchange, and stock indexes. However, unlike the stock

market where there are thousands of stocks to choose from – often hundreds within any given industry – there are only a few dozen commodity futures contracts to choose from. So, for example, if cotton prices rise, then you can profit handsomely by being invested in cotton futures contracts, whereas if you were trading stocks, there are hundreds of companies to choose from whose fortunes might be affected by the price of cotton but that would also be affected by other market factors. You might end up buying stock in a company whose share price falls due to other market factors, despite a favorable change for the company in terms of cotton prices.

Finally, in commodity trading, it is just as easy to profit selling short as buying long. There are no restrictions on short selling as there are in the stock markets. Having the potential to profit just as easily from falling prices as from rising prices is a major advantage for traders.

### **Commodity Trading Secrets – Find Your Market**

Here is a little-known secret about consistently successful commodity traders: They almost always specialize in trading either a single market, such as cotton, or a small market segment, such as precious metals or grain futures.

No one has yet offered a completely satisfactory reason for this fact, but it remains a fact that very few traders seem capable of trading all commodity markets equally well. There was a fairly well-known trader back in the 1980s who had a nearly flawless trading record in the cotton market. Copying his cotton trades back then would have been about the closest thing to just printing piles of money for yourself. Year in and year out, he called market highs and lows and trend changes almost as if he'd traveled into the future and already seen them all unfold.

However, this uncannily brilliant cotton trader had one fatal flaw: He also loved trading the silver market. Unfortunately for him, he was just as outrageously bad at trading silver as he was outrageously good at trading cotton. His weakness was compounded by the fact that while he typically traded long-term trends in the cotton market, he day traded the silver market, which provided him with fresh opportunities to lose money every trading day of the week.

How did this all play out for him? Well, in one year when he made over a million dollars trading cotton futures, he ended up filing a net loss in trading for the year. That's right – his horrifically bad

silver trading had more than wiped out every bit of his huge profits from trading cotton.

(Fortunately, this story does have a happy ending. After two or three years of stubbornly losing money trading the silver market, the gentleman did finally accept the fact that, "I just can't trade silver," and very wisely stopped doing so. He continued piling up a fortune trading cotton over the next several years, and finally retired from trading with the very concise proclamation that, "I've made enough money and I've had enough fun.")

And so we say: Find your market. It may take some time – and some losing trades – to do this, but it isn't really all that difficult to determine, over a reasonable period of time, what you seem to have a knack for trading – and what you don't have a knack for trading. A simple review of your trades over, say, a six-month period should pretty clearly show you what markets you're frequently doing well in and what markets you aren't having success with. As you trade, you'll probably also develop a feel for which markets you feel most confident in trading. Trust your instincts on that score. If profitably trading oil futures comes easily to you, then just stick with that and don't go trying to complicate your life by trying to master trading some market that's obviously more difficult for you. Why make your trading life more difficult than it need be? You'll likely fare much better by gradually adding trades in related markets such as natural gas or heating oil.

Large institutional traders such as banks have learned this basic truth about trading well. At the trading desks in a bank, you'll rarely, if ever, find the same person assigned to trading both the gold market and the soybean market. The common arrangement is to have commodity trading very specialized, usually with one trader or one team of traders and analysts assigned to trading just one segment of the futures markets, such as energy futures or precious metals futures.

### **Commodity Trading Secrets – Prices Tend to Trend**

The supply and demand quotient for basic raw materials is usually much less subject to ongoing volatility than is the case with stocks. Certainly, there are some very volatile trading days, such as those that occur at the end of major bull or bear trends when there are long-term market reversals or following a crop report that comes out unexpectedly good or bad. But generally speaking, there tend to be sustained periods of time when high demand or short supply controls a market, driving prices higher, or when oversupply or lack of demand drives prices lower.

To confirm this, one need look no further than the past several years in oil prices. After experiencing a multi-year bull market that drove oil prices over \$100 a barrel, from 2014 onward, oil prices entered a sustained downtrend, eventually carrying the price back below \$40 a barrel.

Similar action occurred in a protracted bull market that drove grain prices to record highs in the first decade of this century, followed by a general decline in prices that has generally been sustained since 2009. Again, while there are occasional sharp and volatile movements in commodity prices, commodities typically experience overall bull or bear trends that last several years.

Therefore, trend-following trading strategies – especially as applied to long-term time frames such as daily, weekly, or monthly charts – tend to work well in commodity trading. To demonstrate the wisdom of trading with the trend, one noted technical analyst devised a very simple trading strategy and then fine-tuned it by matching it to the long-term trend according to the daily chart. His basic trading strategy he devised was as follows: Buy a new 10-day high and sell short a new 10-day low. It doesn't get much simpler than that.

That basic strategy worked well enough. It wasn't a huge moneymaker, but it was at least profitable overall. However, when adjusted according to the overall trend as indicated by the daily chart, the strategy performed markedly better. The adjustment he made was to only take trading signals that were in the same direction as the overall long-term trend. In other words, if the daily chart showed an overall bullish trend, then he would only follow the trading signals to "buy a new 10-day high," while ignoring the trading signals to "sell a new 10-day low". Conversely, in an overall bear market, he would only take the sell signals, while ignoring buy signals.

He tested his strategy refinement by trading both strategies – the basic strategy and the version adjusted to only take trades in the same direction as the existing trend – using separate trading accounts, over the same one-year period of time. The fine-tuning of the trading strategy yielded an impressive improvement in profitability. The fine-tuned version of the strategy, the one which only traded with the existing trend, generated approximately 180% more in profits than did the basic strategy that took both buy and sell signals regardless of the existing long-term trend.

There's another good reason to employ a solid, long-term, trend trading strategy when investing in commodities. While

commodities do tend to enjoy long-term trends, on a daily trading basis they tend to be just the opposite – excessively volatile. Day trading commodity futures – because of the leverage available which makes even small price fluctuations significant as far as potential profits or losses on any given day – does indeed offer tremendous opportunities for profits. However, it's extremely risky. Any commodity trader who's been at the game for a while can tell you stories of days when the price of a given commodity has gone from limit up (the maximum daily price advance allowed by the exchange) to limit down (the maximum daily price decline allowed), and then back to limit up again, sometimes within just a three or four hour period. The odds of being able to successfully navigate your way through price runs like that are slim and none.

### **Commodity Trading Secrets – Take Advantage of the Nature of the Market**

Wise commodity traders know to pay attention to a factor that is almost unique to commodities as opposed to other investment vehicles and which tends to significantly drive prices – seasonality. Nearly all major commodity markets usually tend to follow established seasonal price patterns. A simple example is heating oil and natural gas futures. Both of these commodities tend to, year in and year out, rise into the winter months when demand is highest and decline into summer as demand falls off.

Certainly, there may be specific economic conditions that disrupt this general pattern from time to time, but over any 10-year period, one can reasonably expect such general season price trends to run true at least seven or eight years out of 10.

There are specific seasonal patterns that traders can watch for, and take advantage of, in commodity trading. Years ago, famed futures trader, Jake Bernstein, put together a book on seasonal trends detailing dozens of seasonal patterns that occur throughout the year in the various commodity markets, along with the historical record of what percentage of the time the markets stayed true to each seasonal pattern. More recently, seasonal trading software that basically incorporates such data has been created and is available for traders to use.

Trading seasonal patterns is not a guaranteed win – nothing in trading ever is – but it definitely offers traders an extra edge. Seasonal patterns can be used as confirming indicators of an existing trend, or as cautionary contrary indicators that may make a trader wisely watchful for an upcoming trend change.



If nothing else, proper awareness of seasonal tendencies in various commodity markets can at least help you avoid suffering huge losses. For example, only the bravest of traders ever holds a large short sell position in orange juice futures heading into winter, when just one overnight freeze can send the price of orange juice futures prices suddenly soaring.

### Recent Developments in Commodity Futures Trading

The commodity futures markets have been hurt in recent years by both regulation and failures of regulation. Government attempts to regulate commodity trading have, unfortunately, resulted in misguided legislation that has negatively impacted the markets while failing to provide much in the way of real protection for independent traders. For example, the infamous Dodd-Frank Act in the U.S., enacted in 2014, effectively prohibited banks from conducting short-term trading of their own accounts in the futures markets, leading to a huge decline in liquidity in some markets as many banks exited the commodity trading business.

Not only has legislation resulted in direct negative impacts on the commodity trading markets, it has failed to effectively address real issues such as price manipulation. There have been several cases in recent years of large-scale traders manipulating commodity prices, but government regulators have either failed to respond, or in some cases even completely ignored this problem.

Commodity trading has also suffered from the loss of several major brokerage firms and commodity trading companies. Ironically, many of these companies went out of business as a result of losing millions trading their own accounts. Accusations of accounting fraud have led to the demise of once well-known commodity brokerage firms such as Refco.

### Conclusion

Learning about commodity trading offers traders significant advantages, such as high amounts of leverage and the opportunity to ride sustained bull or bear trends. However, commodity trading is not a charitable organization that hands out suitcases full of money to anyone who wants some. Just as is the case with any other investing arena, it takes discipline and practice to become a highly-skilled and successful commodity trader. One of the major challenges is learning how to take advantage of the leverage offered without exposing yourself to excessively high risks and potentially disastrous losses.

If you enter the business of commodity trading with proper caution – realizing that you need to learn how to successfully navigate a completely different trading arena than that of stocks, forex, or other investments – then there's no reason that you can't reap the rewards of highly profitable investments, all earned with the use of a minimum amount of trading capital.

## Trading the Forex Market

Whether you're an individual trader or a financial or investment professional, the foreign exchange (forex) market, also known as the currency or foreign currency market, is where the money is - literally. Forex trading amounts to approximately \$5 trillion (yes, *trillion*, not billion) per day. By comparison, the approximately \$700 billion a day bond market and \$200 billion a day in stock trading worldwide appear relatively small in size. The total daily value of all the stock trading in the world equals just about one hour's worth of trading in the forex market every day.

### Forex Players – Banks, Governments, Companies, and Traders

There are several distinct groups of participants in the forex market. The largest group of forex traders, in terms of the total dollar value of trading that they account for, is comprised of commercial and investment banks. Banks conduct a large amount of currency trading on behalf of their customers who are involved in international operations. They also serve as market makers in forex trading and trade heavily in their own accounts. (If a banker ever cautions you against forex trading, you might want to ask them why, if forex is such a bad investment, their bank invests such huge sums in the forex market. Just a thought. ☺ )

Governments, through their central banks, are also major players in the forex market. The central bank of a nation will often adopt large positions of buying or selling its own currency in an attempt to control the currency's relative value in order to combat inflation or to improve the country's balance of trade. Central bank interventions in the forex market are similar to policy-driven interventions in the bond market.

Large companies that operate internationally are also substantially involved in forex trading, trading up to hundreds of billions of dollars annually. Corporations use the forex market to hedge their primary business operations in foreign countries. For example, if a U.S.-based company is doing a significant amount of business in Singapore, requiring it to conduct large business transactions in Singapore dollars, then it might hedge against a decline in the relative value of the Singapore dollar by selling the currency pair Sgd/Usd (Singapore dollar vs. US dollar).

Last, but certainly not least, are individual forex traders, speculators who trade the forex market seeking trading profits. This group includes a disparate cast of characters, from professional investment fund managers to individual small

investors, who come to the market with widely varying levels of skill, knowledge, and resources.

### Learning Forex Trading – Currency Pairs

The forex market trades fluctuations in the exchange rate between currency pairs, such as the euro and the US dollar, which is stated as Eur/Usd. In the quoting of exchange rates, the first currency in the quotation is known as the base currency and the second currency is the quote currency. The exchange rate for a currency pair appears as a number like 1.1235. If the pair Eur/Usd is quoted as 1.1235, that means that it takes \$1.12 (and 35/100<sup>th</sup>) in US dollars to equal one euro.

The most widely traded currency pairs are, naturally enough, those involving the currencies that are most widely used worldwide – the US dollar (Usd), the euro (Eur), and the British pound (Gbp).

### Learning Forex Trading – Pips

Generally, the smallest fluctuation in an exchange rate is called a “pip”. With most currency pairs, which are quoted to four decimal places, a pip equals 0.0001. The primary exception is Japanese yen currency pairs that are only quoted to two decimal places so that a pip equals 0.01. Many brokers now quote to five decimal places, with the last number signifying a fractional 1/10<sup>th</sup> of a pip.

The value of a pip depends on both the currency pair being traded and what lot size is traded. For one standard lot, a pip commonly equals \$10 (US); trading mini-lots, a pip equals \$1; and trading micro-lots, a pip equals 10 cents. The value of a pip varies slightly depending on the currency pair being traded, but those figures are roughly accurate for all pairs.

### Advantages of Forex Trading – Leverage, Liquidity, and Volatility

One of the major attractions of forex trading is the unparalleled leverage that is available to forex traders. Leverage is the ability to hold a market position with only a fractional amount of the market value of the instrument being traded. This fractional amount is known as “margin”. Leverage is expressed as a ratio that shows the amount of margin required by a broker to hold a position in the market. For example, 50:1 leverage means that a trader only needs to put up 2% of a trade’s total value to initiate a trade. Some brokers offer up to 1000:1 leverage.

High amounts of leverage mean that forex traders can utilize a very small amount of investment capital to realize sizeable gains. For

example, by putting only around \$10 in margin money, trading micro-lots with 500:1 leverage, a trader can realize a profit of approximately \$20 (double his investment) on just a 20-pip change in the exchange rate. Given that many currency pairs often have a daily trading range of 100 pips or more, it's easy to see how traders can realize substantial gains from very small market movements, using minimal amounts of trading capital, thanks to leverage.

However, traders have to keep in mind that just as leverage magnifies profits, it also magnifies losses. So a trader might only commit \$10 of his total trading capital to initiate a trade, but end up realizing a loss substantially greater than \$10.

### Liquidity

The extremely high volume of trading that occurs in the forex market each trading day makes for correspondingly high levels of liquidity. High liquidity makes for low bid-ask spreads and allows traders to easily enter and exit trades throughout the trading day. The bid-ask spread on major currency pairs, such as Gbp/Usd, are typically much lower than the bid-ask spread on many stocks, which minimizes transaction costs for traders.

For large institutional traders, such as banks, high liquidity enables them to trade large positions without causing large fluctuations in price that typically occur in markets with low liquidity. Again, that makes for lower total trading costs and thus larger net profits or smaller net losses.

Higher liquidity is also considered by many traders to make markets more likely to trade in long-term trends that can more easily be analyzed with the use of charting and technical analysis.

### Volatility

As previously noted, many of the most widely traded currency pairs often have a daily trading range of up to 100 pips or more. Combined with high leverage, this daily volatility makes for significant opportunities to realize profits simply within the range of price fluctuations that occur within a normal trading day.

The advantage of volatility is enhanced by the fact in forex trading, it is just as easy to sell short as it is to buy long. There are no restrictions on short selling such as those that exist in stock markets. A wide daily trading range, with equal opportunities to profit from both buying and selling, makes the forex market very attractive to speculators.

## Forex Trading Strategies – Fundamental Analysis

As with other investment markets, there are two basic strategic approaches to forex trading – fundamental and technical.

Fundamental analysis trading is generally more favored by long-term traders, those who buy (or sell) and hold a currency pair for an extended period of time. Fundamental analysis is based on economic conditions, both within specific countries and globally.

Throughout most trading days, various economic reports from the different countries in the world are released. The indications, positive or negative, coming from such reports are the main drivers of major changes in exchange rates between currency pairs. If, for example, several positive reports on the United Kingdom's economy are issued within a three-month time frame, that is likely to increase the value of Gbp against other currencies such as Eur and Usd.

Among the most significant economic reports issued, those most likely to impact the currency markets, are gross domestic product (GDP), the consumer price index (CPI), the producer price index (PPI), various employment and consumer confidence reports, and the policy decisions of central banks.

Fundamental analysis may also be based on global economic trends. For example, if the usage of cotton is rising worldwide, then countries that are major cotton producers can be expected to benefit, and the relative value of their currency may be expected to increase.

Interest rates, which are set by a country's central bank, are a major factor in determining the relative value of a currency. If investors can realize significantly higher gains from money held in interest-bearing accounts in the United States than from interest-bearing accounts in other countries, then that makes the US dollar more attractive, and therefore likely to increase in value relative to other currencies.

## Forex Trading Strategies – Technical Analysis

Many forex traders favor technical analysis in determining the trading positions they adopt. Technical analysis based on charts of price movements in a market, with the aid of various technical indicators – is generally favored by speculators and short-term or intraday traders, although long-term traders may also utilize technical analysis.



Technical analysis is simply analysis that is based on past price movement and market behavior (such as volume or volatility). Technical indicators include trend indicators such as moving averages and market strength, and momentum indicators such as the relative strength indicator (RSI).

A basic technical trading strategy might be something as simple as buying a currency pair when the price/exchange rate is above a 50-period moving average, and selling the pair when it is below the 50-period moving average. Some technical traders utilize a single technical indicator for trades, while others apply multiple technical indicators as trade indicators. For example, the simple technical trading strategy just outlined, using a moving average, might be combined with a momentum indicator such as the MACD, with trades only being initiated when certain price levels and momentum levels exist.

Technical traders analyze charts of varying time frames based on the trader's individual trading time frame preference. Traders who make very quick, in-and-out of the market trades, may concentrate their analysis on a 5-minute, or even 1-minute time frame chart. Traders with a longer term trading time frame are more likely to apply technical analysis to hourly, 4-hour, or daily charts.

### **The Forex Market – The Profit Opportunity Market**

The forex market is one of the most attractive markets for traders. Forex trading has exploded in popularity since retail trading by individual small investors became more readily available around the turn of the century. The ability to open a trading account with amounts as small as \$50-\$100, and the possibility of then turning such a small amount into millions within just the space of a few years, is an almost irresistible draw.

However, the lure of “easy money” from forex trading can be deceptive. The fact is that only a small percentage of traders are consistent winners in the currency trading market. The keys to success in forex trading include not just a good, sound trading strategy, but exceptional trading discipline, patience, and risk management. A number of super-successful forex traders have summed up the secret to their success as something like, “Just avoid taking big losses until you stumble into a huge winner. Most traders fail because they gamble away all their trading capital and don't have any money left to trade with when a ‘million dollar’ trading opportunity finally comes around”.

## PART 02

# Basic Trading Concepts

01

02

03



# Basic Trading Concepts

To learn more, please check out our online courses



## Random Walk Theory

Before you decide if you want to be a trader, you have to first decide whether or not it's even reasonable to believe that trading can be a profitable endeavor. In order to make that call, you have to choose which basic market theory you believe.

A "random walk" is a statistical phenomenon where a variable follows no discernible trend and moves seemingly at random. The random walk theory as applied to trading, most clearly laid out by Burton Malkiel, an economics professor at Princeton University, posits that the price of securities moves randomly (hence the name of the theory), and that, therefore, any attempt to predict future price movement, through either fundamental or technical analysis, is futile. The implication for traders is that it is impossible to outperform the overall market average other than by sheer chance. Those who subscribe to the random walk theory recommend using a "buy and hold" strategy, investing in a selection of stocks that represent the overall market – for example, an index mutual fund or ETF.

### Basic Assumptions of the Random Walk Theory

1. The Random Walk Theory assumes the price of each stock follows a random walk.
2. The Random Walk Theory also assumes that the movement in the price of one security is independent of price movement in another security.

One of the main criticisms of the Random Walk Theory is that the stock market consists of a large number of investors and the amount of time each investor spends in the market is different. Thus, it is possible for trends to emerge in the prices of securities in the short run, and a savvy investor can outperform the market by strategically buying stocks when the price is low and selling stocks when the price is high within a short time span.

Other critics argue that the entire basis of the Random Walk Theory is flawed and that stocks prices do follow patterns or trends even over the long run. They argue that because the

price of a security is affected by an extremely large number of factors, it may be impossible to find out the pattern or trend followed by the price of that security, but just because a pattern cannot be found does not mean that a pattern does not exist.

### A Non-Random Walk

In contrast to the random walk theory is the contention of believers in technical analysis, those who think that future price movements *can* be predicted based on trends, patterns, and historical price action. The implication arising from this point of view is that traders with superior market analysis and trading skills can significantly outperform the overall market average.

Both sides can present evidence to support their position, so it's up to each individual to choose what they believe. However, there is one fact, perhaps a decisive one, which goes against the random walk theory: the fact that there are some individual traders who consistently outperform the market average for long periods of time. According to the random walk theory, a trader should only be able to outperform the overall market by chance, or luck. This would allow for there being *some* traders who, at any given point in time, would – purely by chance – be outperforming the market average. But what are the odds then that the *same* traders would be “lucky” year in and year out for decades? Yet there are indeed such traders, people like Paul Tudor Jones, who have managed to generate above average trading returns on a consistent basis over a long span of time.

It's important to note that even the most devout believers in technical analysis – those who think that future price movements in the market can be predicted – don't believe that there's any way to infallibly predict future price action. It is more accurate to say that *probable* future price movement can be predicted by using technical analysis, and that by trading based on such probabilities it is possible to generate higher returns on investment.

So, who do you believe? If you believe in the random walk theory, then you should just invest in a good ETF or mutual fund designed to mirror the performance of the S&P 500 Index, and hope for an overall bull market. If, on the other hand, you believe that price movements are not random, then you should be polishing your fundamental or technical analysis skills, confident that doing such work will pay off with superior profits through actively trading the market.

Since you're reading a book on trading, we'll assume that you fall into the latter camp. We wholeheartedly agree with you. So keep reading...

## Fundamental and Technical Analysis

I still like the old joke that goes, “How can I end up with a million dollars through trading stocks?” – “Start with two million and trade using technical analysis.”

Let me put a disclaimer on that by saying that I am, in fact, primarily a technical trader myself and very much an advocate of technical trading. But it’s still a good joke.

Fundamental analysis and technical analysis are the two broad, general approaches to market analysis and trading. Each approach has its advocates and its detractors, and there are hugely successful – and unsuccessful – traders in both camps.

### The Fundamentals of Fundamental Analysis

Fundamental analysis aims at identifying the real, intrinsic value of a security, based on the belief that the genuine value of something is what will ultimately determine its price. Fundamental market analysts attempt to identify a stock or other security’s intrinsic value by looking at factors such as overall economic conditions, industry trends, company management, profit and loss data, and any of a number of financial metrics that are used to determine the financial health and future prospects for a company. Some of the most commonly used financial metrics are the price-to-earnings ratio (P/E), price-to-book ratio (P/B), debt-to-equity ratio (D/E), return on investment (ROI), and return on assets (ROA).

Fundamental stock traders rely heavily on data such as a company’s quarterly and annual earnings reports, to see the earnings-per-share which indicates a company’s profitability as divided among the total amount of publicly-traded equity in the company. Additional data for analysis by fundamental traders is gleaned from the published financial statements of publicly traded companies, such as a company’s income statement and balance sheet.

The exact nature of fundamental analysis varies according to investments. For example, fundamental traders of the foreign exchange – forex – market eye data such as gross domestic product (GDP), manufacturing, import and export data, and the consumer price index (CPI) in order to assess the overall health of a nation’s economy. Logically, nations with stronger economies will also likely have relatively stronger currencies.

Advocates of fundamental analysis point out that it is based on solid financial data, and therefore likely to be reliable. However, a



drawback of fundamental analysis is that it requires time-consuming research, and doing things like financial modeling and company valuations is not an endeavor well-suited to many investors.

### The Fundamentals of Technical Analysis

(Get it? – the FUNDAMENTALS of TECHNICAL analysis? See what I did there? 😊 )

Technical analysts ignore all of the factors considered by fundamental analysts, and instead concentrate their evaluation of a security solely on analyzing market price action in order to identify current and likely future price trends. The basic belief of technical traders is that all relevant factors of supply and demand are reflected in the price movement of a security. Technical traders argue, for example, that there's no need to engage in the practice of fundamental traders attempting to assess whether current economic or marketplace conditions favor increasing demand for a company's products – Instead, technical traders would say that if the company's stock price is rising steadily, then that shows that their products are in increasing demand.

The basic tool of technical analysts is the price chart. Technical analysts look at all manner of data that can be plotted on a price chart for a security, such as trend lines, trading volume, moving averages, and support and resistance levels. Technical analysts don't bother attempting to identify intrinsic value of a security, instead using chart analysis to identify price action patterns that indicate probable future price direction and movement.

Both the strength and the weakness of technical analysis lie in the fact that there is virtually an endless list of technical indicators to choose from in analyzing a security. That's strength because you have a wealth of price analysis tools at your disposal to help you determine probable future price movements. It's a weakness because of the fact that you can get an endless number of conflicting indications and trading signals from different technical indicators. Among the endless choices of indicators to look at – such as moving averages, candlestick patterns, momentum indicators, and pivot points - how do you know what to pay attention to? And the simple answer is: you don't. Technical traders select the indicators they use based on any number of reasons, and then hope that those indicators are the ones giving the most reliable trading signals.

### So Which One Should You Use – Fundamental or Technical Analysis?

Use the analytical approach that you're most comfortable using, that you have the most confidence in.

Okay, you want something more than that? All right, but in the end your chosen method of market analysis really is going to come down to your personal preference and what is best suited to your personal trading style, financial goals, and risk tolerance.

The practical fact is that while 50 or 100 years ago fundamental analysis held sway, the arrival of computers has made technical analysis both easier and more widely used. These days, most of the largest market players – such as investment banks – base nearly all of their trading decisions on complex computer algorithms. It's estimated that as much as 70-80% of all the trading volume on exchanges is generated through technical analysis. That doesn't mean that fundamental analysis is a useless dinosaur as a trading approach, but it does mean that even fundamental market analysts have to pay attention to technical factors that may be driving market prices.

Many traders use some combination of fundamental and technical analysis. For example, a stock trader might select companies to invest in based on fundamental analysis of market sectors and various companies, but select specific price entry and exit points based on technical analysis.

## How to Read Stock Charts

If you're going to actively trade stocks, then you need to know how to read stock charts. Even traders who primarily use fundamental analysis to select stocks still often use technical analysis of stock price movement to determine specific buy, or entry, and sell, or exit, points.

Stock charts are freely available on websites such as Google Finance and Yahoo Finance, and stock brokerages always make stock charts available for their clients. In short, you shouldn't have any trouble finding stock charts to examine.

### Stock Chart Construction – Lines, Bars, Candlesticks

Stock charts can vary in their construction from bar charts to candlestick charts to line charts to point and figure charts. Nearly all stock charts give you the option to switch between the various types of charts, as well as the ability to overlay various technical indicators on a chart. You can also vary the time frame shown by a chart. While daily charts are probably the most commonly used, intraday, weekly, monthly, year-to-date (YTD), 5-year, 10-year, and complete historical lifetime of a stock are also available.

There are relative advantages and disadvantages to using different chart construction styles and to using different time frames for analysis. What style and time frame will work best for you as an individual analyst or trader is something that you can only discover through actually doing stock chart analysis. You can glean valuable indications of probable stock price movement from stock chart analysis. You should choose the chart style that makes it easiest for you to read and analyze the chart, and trade profitably.

### Looking at a Stock Chart

Below is a year-to-date daily chart of Apple Inc. (AAPL), courtesy of stockcharts.com. This chart is a candlestick chart, with white candles showing up days for the stock and red candles showing down days. In addition, this chart has several technical indicators added: a 50-period moving average and a 200-period moving average, appearing as blue and red lines on the chart; the relative strength indicator (RSI) which appears in a separate window above the main chart window; the moving average convergence divergence indicator (MACD) which appears in a separate window below the chart.



Along the bottom of the main chart window, the daily trading volume is shown. Note the large spike in volume that occurred on February 1<sup>st</sup>, when the stock gapped higher and began a strong uptrend which lasted until early June. Also note the high amount of selling volume (indicated by red volume bars which indicate days with a greater amount of selling volume than buying volume) that occurs when the stock moves sharply downward around June 12<sup>th</sup>.

### The Importance of Volume

Volume appears on nearly every stock chart that you'll find. That's because trading volume is considered a critical technical indicator by nearly every stock trader. On the chart above, in addition to showing the total level of trading volume for each day, days with greater buying volume are indicated with blue bars and days with greater selling volume are indicated with red bars.

The reason that volume is considered to be a very important technical indicator is a simple one. The vast majority of stock

market buying and selling is done by large institutional traders, such as investment banks, and by fund managers, such as mutual fund or exchange-traded fund (ETF) managers. When those investors make major purchases or sales of a stock, it creates high trading volume, and it is that kind of major buying and selling by large investors that typically move a stock higher or lower.

Therefore, individual or other institutional traders watch volume figures for indications of major buying or selling activity by large institutions. This information can be used either to forecast a future price trend for the stock or to identify key price support and resistance levels.

In fact, many individual traders determine their buying and selling decisions almost solely based on following the identified actions of major institutional traders. They buy stocks when volume and price movement indicate that major institutions are buying, and sell or avoid buying stocks when there are indications of major institutional selling. Such a strategy works best when applied to major stocks that are generally heavily traded. It will likely be less effective when applied to stocks of small companies that are not yet on the radar screens of large institutional investors and that have relatively small trading volumes even on days when the stock is more heavily traded than usual.

### Basic Volume Patterns

There are four basic volume patterns that traders typically watch as indicators.

**High volume trading on Up Days** – This is a bullish indication that a stock's price will continue to rise

**Low volume trading on Down Days** – This is also a bullish indication since it indicates that on days when the stock's price falls back a bit not many investors are involved in the trading. Therefore, such down days occurring in an overall bull market are commonly interpreted as temporary retracements or corrections rather than as significant indicators of future price movement.

**High Volume Trading on Down Days** – This is considered a bearish indicator for a stock, as it shows that major institutional traders are aggressively selling the stock.

**Low Volume Trading on Up Days** – This is another bearish indicator, although not as strong as high volume trading on down days. The low volume tends to peg the trading

action on such days as less significant and usually evidence of just a short-term counter-trend retracement upward in an overall, long-term bearish trend.

### Using Technical Indicators

In analyzing stock charts for stock market investing, traders use a variety of technical indicators to help them more precisely determine probable price movement, identify trends, and anticipate market reversals from bullish trends to bearish trends and vice-versa.

One of the most commonly used technical indicators is a moving average. The moving averages that are most frequently applied to daily stock charts are the 20-day, 50-day, and 200-day moving average. Generally speaking, as long as a shorter period moving average is above a longer period moving average, a stock is considered to be in an overall uptrend. Conversely, if shorter term moving averages are below longer term moving averages, then that indicates an overall downtrend.

Another commonly used indicator is the trendline. A trendline is drawn on a chart connecting the lowest price points in an uptrend or the highest price points in a downtrend. Price breaking substantially below the trendline in an uptrend indicates a possible market reversal to the downside, while price moving substantially above a downtrend line indicates a possible reversal to the upside.

### The Importance of the 200-Day Moving Average

The 200-day moving average is considered by most analysts as a critical indicator on a stock chart. Traders who are bullish on a stock want to see the stock's price remain above the 200-day moving average. Bearish traders who are selling short a stock want to see the stock price stay below the 200-day moving average. If a stock's price crosses from below the 200-day moving average to above it, this is usually interpreted as a bullish market reversal. A downside cross of price from above the 200-day moving average is interpreted as a bearish indication for the stock.

The interplay between the 50-day and 200-day moving averages is also considered as a strong indicator for future price movement. When the 50-day moving average crosses from below to above the 200-day moving average this event is referred to by technical analysts as a "golden cross". A golden cross is basically an indication that the stock is "gold", set for substantially higher prices. On the flip side, if the 50-day moving average crosses from above to below the 200-day moving average, this is referred to by analysts



as a “death cross”. You can probably figure out on your own that a “death cross” isn’t considered to bode well for a stock’s future price movement.

### Trend and Momentum Indicators

There is virtually an endless list of technical indicators for traders to choose from in analyzing a chart. Experiment with various indicators to discover the ones that work best for your particular style of trading and as applied to the specific stocks that you trade. You’ll likely find that some indicators work very well for you in forecasting price movement for some stocks but not for others.

Technical analysts often use indicators of different types in conjunction with each other. Technical indicators are classified into two basic types: trend indicators such as moving averages, and momentum indicators such as the MACD or the average directional index (ADX). Trend indicators are used to identify the overall direction of a stock’s price, up or down, while momentum indicators gauge the strength of price movement.

### Analyzing Trends

When reviewing a stock chart, in addition to determining the stock’s overall trend, up or down, it’s also helpful to look to identify aspects of a trend such as the following:

**How long has a trend been in place?** Stocks do not stay in uptrends or downtrends indefinitely. Eventually, there are always trend changes. If a trend has continued for a long period of time without any significant corrective retracement moves in the opposite direction, you want to be especially alert for signs of an impending market reversal.

**How does a stock tend to trade?** Some stocks move in relatively slow, well-defined trends. Other stocks tend to experience more volatility on a regular basis, with price making sharp moves up or down even in the midst of a general long-term trend. If you are trading a stock that typically evidences high volatility, then you know not to place too much importance on the trading action of any single day.

**Are there signs of a possible trend reversal?** Careful analysis of stock price movement often reveals signs of potential trend reversals. Momentum indicators often indicate a trend running out of steam before the price of

a stock actually peaks, giving alert traders the opportunity to get out of a stock at a good price before it reverses to the downside. Various candlestick or other chart patterns are also often used to identify major market reversals.

### Identifying Support and Resistance Levels

Stock charts can be particularly helpful in identifying support and resistance levels for stocks. Support levels are price levels where previously fresh buying has come in to support a stock's price and turn it back to the upside. Conversely, resistance levels represent prices at which a stock has shown a tendency to fail in attempting to move higher, turning back to the downside.

Identifying support and resistance levels can be especially helpful in trading a stock that tends to trade within an established trading range over a long period of time. Some stock traders, having identified such a stock, will look to buy the stock at support levels and sell it at resistance levels over and over again, making more and more money as the stock traverses the same ground multiple times.

For stocks that have well-identified support and resistance levels, price breakouts beyond either of those levels can be important indicators of future price movement. For example, if a stock has previously failed to break above \$50 a share, but then finally does so, this may be a sign that the stock will move from there to a substantially higher price level.

The chart of General Electric (GE) below shows that the stock traded in a tight range between \$29 and \$30 a share for several months, but once the stock price broke below the \$29 support level, it continued to fall substantially lower.



### Conclusion – Using Stock Chart Analysis

Stock chart analysis is not infallible, not even in the hands of the most expert technical analyst. If it were, every stock investor would be a multi-millionaire. However, learning to read a stock chart will definitely help turn the odds of being a successful stock market trader in your favor.

Stock chart analysis is a skill, and like any other skill, one only becomes an expert at it through practice. The good news is that virtually anyone willing to work diligently at analyzing stock charts can become, if not an outright expert, at least pretty good at it – good enough to improve their overall profitability in stock market trading. Therefore, it's in your best interest as a trader to begin, or continue, your education in stock chart analysis.

## Stock Investing – Value Investing

Since the publication of “The Intelligent Investor” by Benjamin Graham, what is commonly known as “value investing” has become one of the most widely respected and widely followed methods of stock-picking. Famed investor Warren Buffet, while actually employing a mix of growth investing and value investing principles, has publicly credited much of his unparalleled success in the investment world to following Graham’s basic advice in evaluating and selecting stocks for his portfolio.

However, as the markets have changed over more than half a century, so too has value investing. Over the years, Graham’s original value investing strategy has been adapted, adjusted, and augmented in a variety of ways by investors and market analysts aiming to improve on how well a value investing approach performs for investors in the 21<sup>st</sup> century. Even Graham himself devised additional metrics and formulations aimed at more accurately determining the true value of a stock.

Keep in mind that whenever you evaluate a company and its stock price, you need to *interpret* the numbers in light of things such as specific industry and general economic conditions.

In addition, good stock analysis requires that you always review past and current financial metrics with an eye to the future, projecting how well you think a company will fare moving forward, given its current finances, assets, liabilities, marketplace position, and plans for expansion.

It’s also important to avoid getting lost in a purely numerical analysis to the point where you lose sight of the forest for the trees, so to speak. Non-numerical “value” factors that investors should not overlook include things such as how effectively a company’s management is achieving goals and moving the company forward in a way that is consistent with pursuing its corporate mission statement. A company may be showing impressive profitability for the moment, but in today’s excessively competitive marketplace a company that is not carefully mapping, planning out, reviewing (and when needed, re-routing) its progress will nearly always eventually be eclipsed by a company that *is* doing those things.

### Value Investing vs Growth Investing

Before we move ahead to review traditional value investing and then look at some of the newer, alternative value investing strategies, it’s important to note that “value investing” and “growth

investing” are not two contradictory or mutually exclusive approaches to picking stocks. The basic idea of value investing – selecting currently undervalued stocks that you expect to increase in value in the future – obviously involves assessing probable future growth.

The differences between value investing and growth investing strategies tend to be more just a matter of emphasizing different financial metrics (and to some extent a difference in risk tolerance, with growth investors typically willing to accept higher levels of risk). Ultimately, value investing, growth investing, or any other basic stock evaluation approach has the same end goal: choosing stocks that will provide an investor with the best possible return on investment.

### **The Basics of Traditional Value Investing**

In “The Intelligent Investor”, Ben Graham proposed and explained a method for screening stocks that he developed to assist even the most inexperienced investors with their stock portfolio selections. In fact, that’s one of the major appeals of Graham’s value investing approach – the fact that it’s not overly intricate or complicated, and can, therefore, be easily utilized by the average investor.

Graham’s value investing strategy involves some basic concepts that underlie or form the foundation or basis for the strategy. For Graham, a key concept was that of intrinsic value – specifically, the intrinsic value of a company or its stock. The essence of value investing is using a stock analysis method to determine the stock’s genuine value, with an eye toward buying stocks whose current share price is below the stock’s genuine value or worth.

Value investors are essentially applying the same logic as careful shoppers in looking to identify stocks that are “a good buy,” that are selling for a price lower than the real value they represent. A value investor searches out and snaps up what they determine are undervalued stocks, with the belief that the market will eventually “correct” the share price to a higher level that more accurately represents the stock’s true value.

### **Graham’s Value Investing Approach**

Graham’s approach to value investing was geared toward developing a simple process for stock screening that the average investor could easily utilize. Overall, he did manage to keep things fairly simple, but on the other hand, classic value investing is a little more involved than just the often-recited refrain of, “Buy stocks with a price-to-book (P/B) ratio of less than 1.0.”

The P/B ratio guideline for identifying undervalued stocks is, in fact, only one of a number of criteria which Graham used to help him identify undervalued stocks. There's some argument among value investing aficionados as to whether one is supposed to use a 10-point criteria checklist that Graham created, a longer 17-point checklist, a distillation of either of the criteria lists that usually appears in the form of a four- or five-point checklist, or one or the other of a couple of single criterion stock selection methods that Graham also advocated.

In an attempt to avoid as much confusion as possible, we're going to present here the main criteria that Graham himself considered most important in identifying good value stocks, i.e., those with an intrinsic value greater than their current market price.

1. A value stock should have a P/B ratio of 1.0 or lower; the P/B ratio is important because it represents a comparison of the share price to a company's assets. One major limitation of the P/B ratio is that it functions best when used to assess capital-intensive companies, but is less effective when applied to non-capital-intensive firms.

**Note:** Rather than looking for an absolute P/B ratio lower than 1.0, investors may just look for companies with a P/B ratio that is relatively lower than the average P/B ratio of similar companies in the same industry or market sector.

2. The price-to-earnings (P/E) ratio should be less than 40% of the stock's highest P/E over the previous five years.
3. Look for a share price that is less than 67% (two-thirds) of the tangible per share book value, AND less than 67% of the company's net current asset value (NCAV).

**Note:** The share-price-to-NCAV criterion is sometimes used as a standalone tool for identifying undervalued stocks. Graham considered a company's NCAV to be one of the most accurate representations of a company's true intrinsic value.

4. A company's total book value should be greater than its total debt.

**Note:** A related, or perhaps an alternative, financial metric to this is examining the basic debt ratio – the current ratio – which should be greater than 2.0.



5. A company's total debt should not exceed twice the NCAV, and total current liabilities and long-term debt should not be greater than the firm's total stockholder equity.

Investors can experiment with using Graham's various criteria and determine for themselves which of the valuation metrics or guidelines they consider to be most essential and most reliable as indicators. There are some investors who still use only an examination of a stock's P/B ratio to determine whether or not a stock is undervalued. Others rely heavily, if not exclusively, on comparing current share price to the company's NCAV. More cautious, conservative investors may only buy stocks that pass every one of Graham's suggested screening tests.

We think you'll find that incorporating at least some of Graham's value investing principles into your portfolio selection process will improve your overall stock trading performance.

### Alternative Methods of Determining Value

Value investors continue to give Graham and his value investing metrics attention. However, the development of new angles from which to calculate and assess value means that alternative methods for identifying underpriced stocks have arisen as well.

One increasing popular value metric is the Discounted Cash Flow (DCF) formula.

### DCF and Reverse DCF Valuation

Many accountants and other financial professionals have become ardent fans of DCF analysis. DCF is one of the few financial metrics that take into account the time value of money – the notion that money available now is more valuable than the same amount of money available at some point in the future because whatever money is available now can be invested and thus used to generate more money.

DCF analysis uses future free cash flow (FCF) projections and discount rates that are calculated using the Weighted Average Cost of Capital (WACC) to estimate the present value of a company, with the underlying idea being that its intrinsic value is largely dependent on the company's ability to generate cash flow.

The essential calculation of a DCF analysis is as follows:

<b>Fair Value = The company's enterprise value – the company's debt</b>
-------------------------------------------------------------------------

**(Enterprise value** is an alternative metric to market capitalization. It represents market capitalization + debt + preferred shares – total cash, including cash equivalents).

If the DCF analysis of a company renders a per share value higher than the current market share price, then the stock is considered undervalued.

DCF analysis is particularly well-suited for evaluating companies that have stable, relatively predictable cash flows since the primary weakness of DCF analysis is that it depends on accurate estimates of future cash flows.

Some analysts prefer to use reverse DCF analysis in order to overcome the uncertainty of future cash flow projections. Reverse DCF analysis starts with a known quantity – the current share price – and then calculates the cash flows that would be required to generate that current valuation. Once the required cash flow is determined, then evaluating the company's stock as undervalued or overvalued is as simple as making a judgment about how reasonable (or unreasonable) it is to expect the company to be able to generate the required amount of cash flows necessary to sustain the current share price.

An undervalued stock is identified when an analyst determines that a company can easily generate and sustain more than enough cash flow to justify the current share price.

### Katsenelson's Absolute P/E Model

Katsenelson's model, developed by Vitaly Katsenelson, is another alternative value investing analysis tool that is considered particularly ideal for evaluating companies that have strong, positive, established earnings scores. The Katsenelson model focuses on providing investors with a more reliable P/E ratio, known as "absolute P/E."

The model adjusts the traditional P/E ratio in accord with several variables, such as earnings growth, dividend yield, and earnings predictability. The formula is as follows:

$$\text{Absolute PE} = (\text{Earnings Growth Points} + \text{Dividend Points}) \times [1 + (1 - \text{Business Risk})] \times [1 + (1 - \text{Financial Risk})] \times [1 + (1 - \text{Earnings Visibility})]$$

Earnings growth points are determined by starting with a no-growth P/E value of 8, and then adding .65 points for every 100 basis points the projected growth rate increases until you reach

16%. Above 16%, .5 points are added for every 100 basis points in projected growth.

The absolute P/E number produced is then compared to the traditional P/E number. If the absolute P/E number is higher than the standard P/E ratio, then that indicates the stock is undervalued. Obviously, the larger the discrepancy between the absolute P/E and the standard P/E, the better a bargain the stock is. For example, if a stock's absolute P/E is 20 while the standard P/E ratio is only 11, then the true intrinsic value of the stock is likely much higher than the current share price, as the absolute P/E number indicates that investors are probably willing to pay a lot more for the company's current earnings.

### The Ben Graham Number

You don't necessarily have to look away from Ben Graham to find an alternative value investing metric. Graham himself created an alternate value assessment formula that investors may choose to employ – the Ben Graham Number.

The formula for calculating the Ben Graham Number is as follows:

**Ben Graham Number = the square root of [22.5 x (Earnings per share (EPS)) x (Book value per share)]**

For example, the Ben Graham Number for a stock with an EPS of \$1.50 and a book value of \$10 per share calculates out to \$18.37.

Graham generally felt that a company's P/E ratio shouldn't be higher than 15 and that its price-to-book (P/B) ratio shouldn't exceed 1.5. That's where the 22.5 in the formula is derived from ( $15 \times 1.5 = 22.5$ ). However, with the valuation levels that are commonplace these days, the maximum allowable P/E might be shifted to around 25 and acceptable P/B ratio to 3.0.

Once you've calculated a stock's Ben Graham Number – which is designed to represent the actual per-share intrinsic value of the company – you then compare it to the stock's current share price.

- If the current share price is lower than the Ben Graham Number, this indicates the stock is undervalued and may be considered as a buy.
- If the current share price is higher than the Ben Graham Number, then the stock appears overvalued and is not a promising buy candidate.

### The Bottom Line

Value investors are always looking to buy undervalued stocks selling at a discount to intrinsic value in order to make sizeable profits with minimal risk. There are a variety of tools and approaches that traders can use to try to determine the true value of a stock and whether or not it's a good fit for their investment portfolio.

The best stock evaluation process is never just a mathematical formula that one plugs numbers into and then in return receives a solid, guaranteed determination of a particular stock as a "good" or "bad" investment. While there are important stock valuation formulas and financial metrics to consider, the process of evaluating a stock is ultimately part art and part science – and partly a skill that can only be mastered with time and practice.

## Stock Investing – Growth Investing

Traders can take advantage of growth investing strategies in order to more precisely hone in on stocks or other investments offering above-average profit potential. When it comes to trading stocks, there are always a variety of approaches that can be taken. The goal, however, is generally always the same, regardless of the approach – grow your investments and increase your profits.

Growth investors are continually on the hunt for individual stocks or stock-related investments – such as mutual funds or ETFs – that are poised to grow and offer the potential for above average returns on investment. The trades you make should, of course, always fall in line with your short-term and long-term financial goals, risk tolerance, and a number of other factors. Still, there are basic techniques, principles, and strategies that growth investors follow that suit virtually any individual investing plan.

In this guide, we want to explain growth investing as a strategy itself, and then break down more specific approaches and strategies that growth investors can employ.

### The Basics of Growth Investing

Growth investing is essentially the process of investing in companies, industries, or sectors that are currently growing and are expected to continue growing rapidly over a substantial period of time. In the investment world, growth investing is typically looked at as more of an *offensive* rather than a *defensive* investing strategy. This simply means that growth investing is a more active attempt to generate the highest possible returns on the capital that you invest. Defensive investing, in contrast, tends more toward investments that generate passive income and work to protect the capital you've already earned – such as bonds or blue-chip stocks that offer steady dividends.

### Investing in Hot Sectors

One approach growth investors can take is to invest in stocks, mutual funds, or ETFs in specific sectors and industries. The success of businesses in various sectors changes over time. However, it's fairly easy to identify sectors that are “hot” in the sense of producing above average returns as compared to most publicly traded companies.

For example, two sectors that have been particularly hot for a couple of decades or more are healthcare and technology. Companies that deal with technology, technological advances, or

are constantly putting out new hardware, software, and devices are usually good picks for growth investors. The same is true for companies in the healthcare sector. Think about it logically: Everyone, at some point, needs to care for their health and there are companies that are constantly developing new medications, therapies, treatments, and places to go to access superior health care. The healthcare sector is likely to continue enjoying rapid growth as it serves an aging baby-boomer generation. In fact, these two sectors are related, as many recent technology developments have actually been advances in healthcare technology.

Growth investors can simplify sector investing by taking advantage of investment vehicles such as mutual funds and ETFs that contain a basket of stocks linked to specific sectors. As noted previously, ETFs are an increasingly popular investment option due to their superior liquidity and lower trading costs as compared to mutual funds.

### Understanding Earnings

For growth investors in stocks, understanding a company's net earnings is essential. This doesn't mean simply knowing their current earnings, but also considering their historical earnings as well, since this enables you to evaluate current earnings relative to a company's past performance. Also, reviewing a company's earnings history provides a clearer indication of the probability of the company generating higher future earnings.

A high earnings performance in a given quarter or year may represent a one-time anomaly in a company's performance, a continuing trend, or a certain point in an earnings cycle that the company continues to repeat over time.

Even companies with relatively low, or sometimes even negative, earnings may still be a good pick for a growth investor. Remember that earnings are what's left over after subtracting all production, marketing, operating, labor, and tax costs from a company's gross revenue. In many instances, smaller companies attempt to make a breakthrough by funneling more capital toward growing their business, which may negatively impact their earnings in the short run, but in the long run generate higher returns and greater profits for investors. In such a situation, smart traders consider other factors, such as the quality of a company's management, to ascertain clues to a company's true growth potential.



## Growth Investing through Value Investing

Growth investors are effectively value investors sometimes, in that they seek out companies whose stock may be currently undervalued due to reasons that may be as simple as the fact that the company is relatively new and has not yet caught the attention of many investment analysts or fund managers.

The goal for such investors is to grab up shares at a low price of a company that is well-positioned to enjoy a sizeable and continued surge in growth. There are a number of possible ways to approach identifying such companies, one of which we've already touched on – looking at companies in hot sectors. Investors who can identify a new, well-managed and well-funded company that is part of a hot sector can often reap substantial rewards. Another possible approach is to examine companies that are on the downslope, such as those that have gone through bankruptcy or reorganization, but that are likely to survive and recover.

## Using the Price-to-Earnings Ratio

The price/earnings (P/E) ratio is a financial metric that growth investors often favor to help them in choosing stocks. Generally speaking, a higher P/E ratio indicates that investors are willing to take greater risk on buying a stock because of its projected earnings and growth rate.

The P/E ratio is particularly useful for growth investors who are trying to compare companies that operate in the same industry. In established industries and sectors, there tends to be average P/E ratios for that particular industry or sector. Knowing such industry or sector averages makes a company's P/E ratio a much more useful number than simply looking at it in comparison to the market as a whole.

Looking at a company's P/E ratio remains a useful analytical tool for growth investors, but adding consideration of other fundamental financial metrics can help to fine tune your stock picks.

## Using the Price-to-Book Ratio

The price-to-book ratio – or P/B ratio – is often considered more the basic analytical metric of value investors as opposed to growth investors. However, the fact is that the P/B ratio can also be utilized as an effective tool in identifying stocks with high growth potential.

The P/B ratio is calculated by dividing a stock's per share price by the book value per share. In order to determine the book value of a stock, preferred stock that has been issued must be subtracted

from the total stockholder equity. The figure calculated from this takeaway must then be divided by all common shares still outstanding. The final number is the company's book value per share of common stock. It is often helpful for investors, especially growth investors, to compare a company's book value to its market value. This comparison can provide a good indication of whether a stock is undervalued or overvalued. Companies with high growth potential are frequently undervalued due to heavier debt loads and capital expenditures.

### High-Risk Growth Investments

Growth investing may also extend into investments beyond traditional stock market investing.

Investing in high-risk growth investments – also referred to as speculative investments – is an approach that is not suited for individuals with a low threshold for risk. This is a strategy best suited for individuals looking for maximum profits within a relatively short time frame and who have sufficient investment capital to sustain them during periods of losses.

High-risk investments include such things as futures, options contracts, foreign currency exchange (forex), penny stocks, and speculative real estate, such as land that hasn't been developed. These investments involve greater risk in that they offer no guaranteed return and their value tends to change quickly (in other words, they're subject to greater volatility). However, the draw for many investors is that when such investments do pay off, they often pay off big.

If you're considering any of these investments, remember that research is key to success. More so than the average stock or bond investor, you have to know the market you're investing in very well. Because success is based largely on speculation, we strongly recommend that only experienced investors roll the dice on investment assets such as these.

### A Concluding Note

The reality is that there is a multitude of ways that growth investors can find investments to complement their existing portfolio. In the end, it is always up to each individual to choose the methods that work best for them personally, but it is also always helpful to be aware of different approaches to identifying investments with the greatest potential for providing future profits.

## PART 03

# Technical Indicators and Trading Strategies



# Technical Indicators and Trading Strategies

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## Technical Analysis – A Basic Guide

Technical analysis is a tool, or method, used to predict the probable future price movement of a security – such as a stock or cryptocurrency pair – based on market data.

The theory behind the validity of technical analysis is the notion that the collective actions – buying and selling – of all the participants in the market accurately reflect all relevant information pertaining to a traded security, and therefore, continually assign a fair market value to the security through price action.

Technical traders believe that current or past price action in the market is the most reliable indicator of future price action.

### Charting on Different Time Frames

Technical traders analyze price charts to attempt to predict price movement. The two primary variables for technical analysis are the time frames considered and the particular technical indicators that a trader chooses to utilize.

The time frames shown on charts range from one-minute to monthly, or even yearly, time spans. Popular time frames that technical analysts frequently examine include:

- 5-minute chart
- 15-minute chart
- Hourly chart
- 4-hour chart
- Daily chart

The time frame a trader selects to study is typically determined by that individual trader's personal trading style. Intraday traders, traders who open and close trading positions within a single trading day, favor analyzing price movement on shorter time frame charts, such as the 5-minute or 15-minute charts. Long-term

traders who hold market positions overnight and for long periods of time are more inclined to analyze markets using hourly, 4-hour, daily, or even weekly charts.

Price movement that occurs within a 15-minute time span may be very significant for a trader who is looking for an opportunity to realize a profit from price changes occurring during one trading day. However, that same price movement viewed on a daily or weekly chart may not be particularly significant or indicative for long-term trading purposes.

It's simple to illustrate this by viewing the same price action on different time frame charts. The following daily chart for silver shows price trading within the same range, from roughly \$16 to \$18.50, that it's been in for the past several months. A long-term silver investor might be inclined to look to buy silver based on the fact that the price is fairly near the low of that range.



However, the same price action viewed on an hourly chart (below) shows a steady downtrend that has accelerated somewhat just within the past several hours. A silver investor interested only in making an intra-day trade would likely shy away from buying the precious metal based on the hourly chart price action.



### Candlestick Charting

Candlestick charting is the most commonly used method of showing price movement on a chart. A candlestick is formed from the price action during a single time period for any time frame chart. Each candlestick on an hourly chart shows the price action for one hour, while each candlestick on a 4-hour chart shows the price action during each 4-hour time period.

Candlesticks are “drawn” / formed as follows: The highest point of a candlestick shows the highest price a security traded at during that time period, and the lowest point of the candlestick indicates the



lowest price during that time. The “body” of a candlestick (the respective red or blue “blocks”, or thicker parts, of each candlestick as shown in the charts above) indicates the opening and closing prices for the time period. If a blue candlestick body is formed, this indicates that the closing price (top of the candlestick body) was higher than the opening price (bottom of the candlestick body); conversely, if a red candlestick body is formed, then the opening price was higher than the closing price. The lines that extend above or below the candlestick body are referred to as wicks, tails, or shadows.

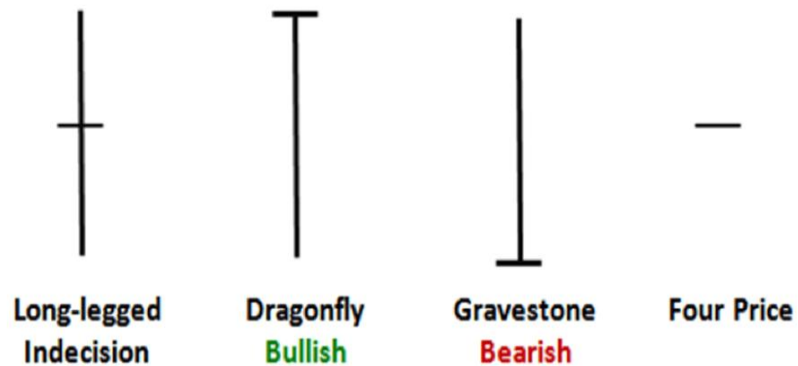
Candlestick colors are arbitrary choices. Some traders use white and black candlestick bodies; other traders may choose to use green and red, or blue and yellow. Whatever colors are chosen, they provide an easy way to determine at a glance whether price moved up or down during a given time period. Technical analysis using a candlestick charts is often easier than using a standard bar chart, as the analyst receives clearer visual cues to price action during any given time period.

### **Candlestick Patterns – Dojis**

Technical analysis using candlestick patterns, which are formed by either a single candlestick or by a succession of two or three candlesticks, are some of the most widely used technical indicators for identifying potential market reversals or trend changes.

Doji candlesticks, for example, indicate indecision in a market that may be a signal for an impending trend change or market reversal. The singular characteristic of a doji candlestick is that the opening and closing prices are the same, so that the candlestick body is a flat horizontal line. The longer the upper and/or lower shadows, or tails, on a doji candlestick, the stronger the indication of market indecision and potential reversal is considered to be.

There are several variations of doji candlesticks, each with their own distinctive name, as shown in the illustrations below.



The typical doji is the long-legged doji, where price extends about equally in each direction, opening and closing in the middle of the price range for the time period. As the illustration notes, this indicates indecision in the market. When a doji like this appears at the end of an extended uptrend or downtrend in a market, it is commonly interpreted as signaling a possible market reversal, a trend change to the opposite direction.

The dragonfly doji, when appearing after a prolonged downtrend, signals a possible upcoming reversal to the upside. Examination of the price action indicated by the dragonfly doji explains its logical interpretation. The dragonfly shows sellers pushing price substantially lower (the long lower tail), but at the end of the period price recovers to close at its highest point. The candlestick essentially indicates a rejection of the extended push to the downside.

The gravestone doji's name clearly hints that it represents bad news for buyers. The opposite of the dragonfly formation, the gravestone doji indicates a strong rejection of an attempt to push market prices higher, and thereby suggests a potential downside reversal may follow.

The extremely rare four price doji, where the market opens, closes, and in-between conducts all buying and selling at the exact same price throughout the time period, is the epitome of indecision, a market that shows no strong inclination to go anywhere in particular.

There are dozens of different candlestick formations, along with their respective variations. Probably the most complete resource for identifying and utilizing candlestick patterns is Thomas Bulkowski's pattern site, which thoroughly explains each

candlestick pattern and provides statistics on how often each pattern has historically given a reliable trading signal. It's certainly helpful to know what a candlestick pattern indicates – but it's even more helpful to know if that indication has proven to be accurate 90% of the time.

### Technical Indicators – Moving Averages

In addition to studying candlestick formations, technical traders can draw from a virtually endless supply of technical indicators to assist them in making trading decisions.

Moving averages are probably the single most widely-used technical indicator. Many trading strategies utilize one or more moving averages. A simple moving average trading strategy might be something like, "Buy as long as price remains above the 50-period exponential moving average (EMA); Sell as long as price remains below the 50 EMA".

Moving average crossovers are another frequently employed technical indicator. A crossover trading strategy might be to buy when the 10-period moving average crosses above the 50-period moving average.

The higher a moving average number is, the more significant price movement in relation to it is considered. For example, price crossing above or below a 100- or 200-period moving average is usually considered much more significant than price moving above or below a 5-period moving average.

### Technical Indicators – Pivots and Fibonacci Numbers

Daily pivot point indicators, which usually also identify several support and resistance levels in addition to the pivot point, are used by many traders to identify price levels for entering or closing out trades. Pivot point levels often mark where trading is contained within a range. If trading soars (or plummets) through the daily pivot and all the associated support or resistance levels, this is interpreted by many traders as 'breakout' trading that will shift market prices substantially higher or lower, in the direction of the breakout.

Daily pivot points and their corresponding support and resistance levels are calculated using the previous trading day's high, low, opening and closing prices. I'd show you the calculation, but there's really no need, as pivot point levels are widely published each trading day and there are pivot point indicators freely available that

you can just load on a chart that do the calculations for you and reveal pivot levels.

### Fibonacci Retracements

Fibonacci levels are another popular technical analysis tool. Fibonacci was a 12<sup>th</sup>-century mathematician who developed a series of ratios that is very popular with technical traders. Fibonacci ratios, or levels, are commonly used to pinpoint trading opportunities and profit targets that arise during sustained trends.

The primary Fibonacci ratios are 0.24, 0.38, 0.62, and 0.76. These are often expressed as percentages – 23%, 38%, etc. Note that Fibonacci ratios complement other Fibonacci ratios: 24% is the opposite, or remainder, of 76%, and 38% is the opposite, or remainder, of 62%.

As with pivot point levels, there are numerous freely available technical indicators that will automatically calculate and load Fibonacci levels onto a chart.

Fibonacci retracements are the most often used Fibonacci indicator. After a security has been in a sustained uptrend or downtrend for some time, there is frequently a corrective retracement in the opposite direction before price resumes the overall long-term trend. Fibonacci retracements are used to identify good, low-risk trade entry points during such a retracement.

For example, assume that the price of stock “A” has climbed steadily from \$10 to \$40. Then the stock price begins to fall back a bit. Many investors will look for a good entry level to buy shares during such a price retracement.

Fibonacci numbers suggest that price retracements will likely extend a distance equal to 24%, 38%, 62%, or 76% of the uptrend move from \$10 to \$40. Investors watch these levels for indications that the market is finding support from where price will begin rising again. For example, if you were hoping for a chance to buy the stock after approximately a 38% retracement in price, you might enter an order to buy around \$30-\$31. (The move from \$10 to \$40 = \$30; 38% of \$30 is \$9; \$40 – \$9 = \$31)

### Fibonacci Extensions

Continuing with the above example – So now you’ve bought the stock at \$31 and you’re trying to determine a profit target to sell at. For that, you can look to Fibonacci extensions, which indicate how much higher price may extend when the overall uptrend resumes. The Fibonacci extension levels are pegged at prices that represent

126%, 138%, 162%, and 176% of the original uptrend move, calculated from the low of the retracement. So, if a 38% retracement of the original move from \$10 to \$40 turns out to be the retracement low, then from that price (\$31), you find the first Fibonacci extension level and potential “take profit” target by adding 126% of the original \$30 move upward. The calculation goes as follows:

Fibonacci extension level of 126% =  $\$31 + (\$30 \times 1.26) = \$68$  – giving you a target price of \$68.

Once again, you never actually have to do any of these calculations. You just plug a Fibonacci indicator into your charting software and it displays all the various Fibonacci levels.

Pivot and Fibonacci levels are worth tracking even if you don’t personally use them as indicators in your own trading strategy. Because many traders do base buying and selling moves on pivot and Fibonacci levels, then if nothing else there is likely to be significant trading activity around those price points, activity that may help you better determine probable future price moves.

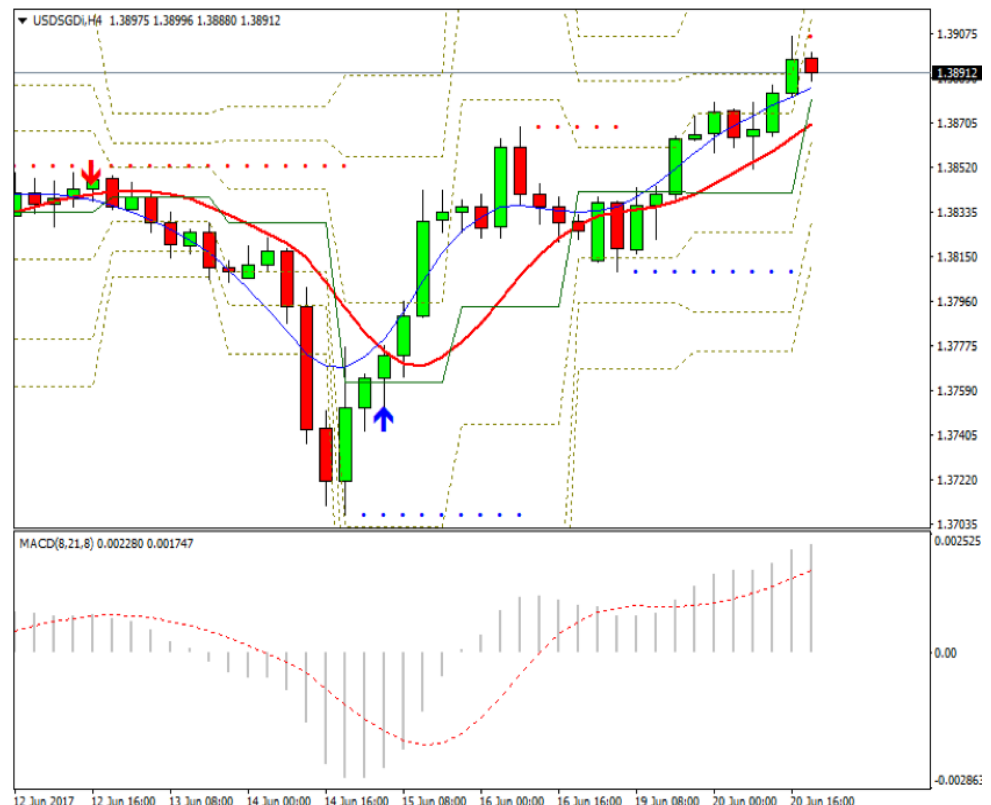
### Technical Indicators – Momentum Indicators

Moving averages and most other technical indicators are primarily focused on determining likely market direction, up or down. But there is another class of technical indicators, however, whose main purpose is not so much to determine market *direction* as to determine market *strength*. These indicators include such popular tools as the Stochastic Oscillator, the Relative Strength Index (RSI), the Moving Average Convergence-Divergence (MACD) indicator, and the Average Directional Movement Index (ADX).

By measuring the strength of price movement, momentum indicators help investors determine whether current price movement more likely represents relatively insignificant, range-bound trading or an actual, significant trend. Because momentum indicators measure trend strength, they can also serve as early warning signals that a trend is coming to an end. For example, if a security has been trading in a strong, sustained uptrend for several months, but then one or more momentum indicators signals the trend steadily losing strength, it may be time to think about taking profits.

The 4-hour chart of USD/SGD below illustrates the value of a momentum indicator. The MACD indicator appears in a separate window below the main chart window. The sharp upturn in the

MACD beginning around June 14<sup>th</sup> indicates that the corresponding upsurge in price is a strong, trending move rather than just a temporary correction. When price begins to retrace downward somewhat on the 16<sup>th</sup>, the MACD shows weaker price action, indicating that the downward movement in price does not have much strength behind it. Soon after that, a strong uptrend resumes. In this instance, the MACD would have helped provide reassurance to a buyer of the market that (A) the turn to the upside was a significant price move and (B) that the uptrend was likely to resume after price dipped slightly on the 16<sup>th</sup>.



Because momentum indicators generally only signal strong or weak price movement but not trend direction, they are often combined with other technical indicators as part of an overall trading strategy.

### Technical Analysis – Conclusion

Keep in mind the fact that no technical indicator is perfect. None of them give signals that are 100% accurate all the time.

The smartest traders are always watching for warning signs that signals from their chosen indicators may be misleading. Technical analysis, done well, can certainly improve your profitability as a trader. However, what may do more to improve your fortunes in



trading is spending more time and effort thinking about how best to handle things if the market turns against you, rather than just fantasizing about how you're going to spend your millions.

## The ADX Indicator

The average directional movement index (ADX) was developed by the famed technical analyst, Welles Wilder, as an indicator of trend strength. As a commodity trader, Wilder developed the indicator for trading commodity futures. However, it has since been widely applied by technical analysts to virtually every other tradeable investment, from stocks to forex to ETFs.

### What is the ADX?

The ADX is calculated to reflect the expansion, or contraction, of the price range of a security over a period of time. The traditional setting for the ADX indicator is 14 time periods, but analysts have commonly used the ADX with settings as low as 7 or as high as 30. Lower settings will make the average directional movement index respond more quickly to price changes but tend to generate more false signals. Higher settings will minimize false signals but make the ADX a more lagging indicator.

Wilder calculated the ADX by first calculating both a positive directional movement index (+DMI) and a negative directional movement index (-DMI) that compare current high and low prices to the previous time period's high and low prices. The ADX itself is then calculated as the sum of the differences between +DMI and -DMI over a given time period.

All the necessary calculations are a bit complex. Fortunately there's no need to do them yourself. All you have to do is apply the average directional movement index indicator to a chart, with all the necessary calculations done for you, according to whatever time period setting you choose. Again, the default number of time periods is 14.

### The ADX on a Chart

The ADX, like momentum indicators such as the MACD or RSI, is typically shown in a separate window above or below the main chart window that shows price movement. The ADX is shown as a line representing values that range from zero to 100.

It's important to keep in mind that the ADX is not a trend direction indicator, but an indicator of trend strength. A strong uptrend or a strong downtrend will both result in high ADX values.

Some versions of the average directional index will also show the +DMI and -DMI lines. In Wilder's original conception of the ADX, he envisioned using the +DMI and -DMI lines to determine trend

direction and the ADX line to determine trend strength, thus, in effect, making the ADX a combination trend indicator and momentum indicator.

However, since then many technical analysts have preferred just seeing the ADX line itself, for two reasons: (1) the three lines intermingled can sometimes be visually confusing and (2) crossovers of the +DMI and -DMI lines have been found to frequently generate false signals. In short, the average directional movement index trading system that Wilder designed has generally been found to be more reliable as a trend strength indicator and less reliable as a trend direction indicator.

### Using the ADX Indicator

The ADX is used first of all to determine whether a market is trending at all, as opposed to merely trading back and forth within a range, and secondly to determine the strength of a trend in a trending market. Finally, the ADX is also often used, as other momentum indicators are, to indicate a potential market reversal or trend change.

When the value of the ADX line is below 25 a market is considered to be ranging rather than trending. Some analysts peg only ADX readings below 20 as indicative of the absence of a trend, and readings between 20 and 25 as possibly, but not conclusively, indicating the presence of a trend.

Any ADX reading above 25 is interpreted as indicating the existence of a genuine trend. Readings between 25 and 50 indicate a beginning or moderate strength trend. Readings between 50 and 100 represent increasingly strong trends. The chart shown below shows the ADX indicating an increasingly strong uptrend as average directional index readings rise from below 10 to nearly 50.



The direction of trend strength – increasingly or decreasingly strong – can easily be determined simply by looking at the slope of the ADX line. An upsloping ADX line shows a strengthening trend, while a downsloping ADX line indicates a weakening trend. A steeper angle of slope indicates a stronger trend, while a shallower angle indicates a trend with less strength.

NOTE: A change in the direction of the ADX slope can serve as an early indicator of a developing trend even before ADX readings go above 25. Referring to the chart shown above, you can see that the ADX slope turned upward well before the ADX reading rose to 25 and indicated the existence of a trend. But before you go buying a security every time the ADX slope turns from downward to upward, keep in mind that the ADX line might just as easily have turned back to the downside before a genuine uptrend became established – in other words, you might get caught jumping the gun a bit.

### Price and the ADX

Analysts and investors rarely use the ADX indicator alone. Since it does not indicate trend direction, it is commonly used in conjunction with trend indicators such as moving averages or support and resistance areas which are used to analyze price movement.

For example, an ideal application of using trend indicators in combination with the ADX would be an instance where the price of a security has traded within a range, with clearly defined support and resistance price levels, but then breaks out of that trading range by trading through a support or resistance level. If the price breakout is accompanied by rising ADX readings that indicate the

presence of a trend, then that would constitute a confirming indication of the validity of the breakout, and an analyst would project a trend continuing in the direction of the breakout.

### **The ADX as a Divergence Indicator**

The ADX is also sometimes used, as other momentum indicators are, as a divergence indicator that can signal an impending trend change or market reversal.

ADX values will rise to increasingly high levels along with price in a market that is trending strongly higher. But if ADX levels begin to decline even as price rises higher, this divergence between price movement and the ADX may signal that the market is losing momentum and therefore may be due for a turn to the downside. In such a situation, analysts will carefully monitor price movement for any further indications of a possible trend change, the ADX decline having served as a sort of early warning signal.

### **Conclusion – the Value of the ADX**

The ADX has been found by technical analysts to be a very helpful indicator and has become one of the most frequently used technical tools around. It is one of the most reliable trend strength indicators and has helped many analysts to correctly identify ranging markets and thus avoid being lured into buying false breakouts or buying into markets that are basically just flat and going nowhere.

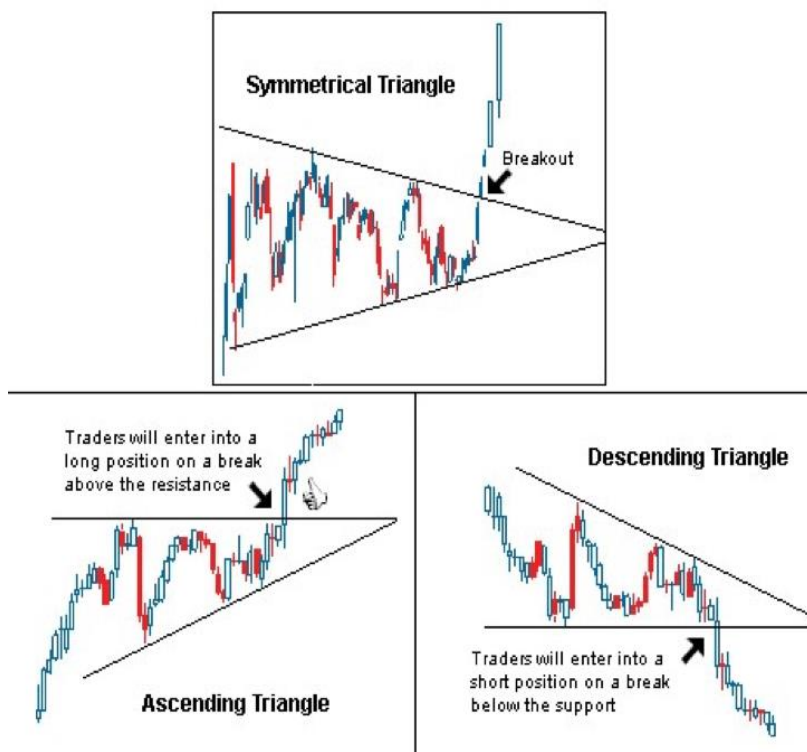
Wilder developed a number of technical indicators, but always maintained that the ADX was his best creation. You may well wish to consider adding the ADX indicator to your technical analysis arsenal.

## Triangle Patterns

It's important for every technical trader to recognize patterns as they form in the market. Patterns are vital in a trader's quest to spot trends and predict future outcomes so that they can trade more successfully and therefore more profitably. Triangle patterns are important because they help indicate the continuation of a bullish or bearish market. They can also assist a trader in spotting market reversals.

There are three types of triangle patterns: ascending, descending, and symmetrical. The picture below depicts all three. As you read the breakdown for each pattern, you can use this picture as a point of reference, a helpful visualization tool you can use to get a mental picture of what each pattern looks like. And here is the short version on triangle patterns:

- Ascending triangles are a bullish formation that anticipates an upside breakout.
- Descending triangles are a bearish formation that anticipates a downside breakout.
- Symmetrical triangles, where price action grows increasingly narrow, may be followed by a breakout to either side, up or down.





## Ascending Triangle Patterns

Ascending triangle patterns are bullish, meaning that they indicate that a security's price is likely to climb higher as the pattern completes itself. This pattern is created with two trendlines. The first trendline is flat, along the top of the triangle, and acts as a resistance point which – after price successfully breaks above it – signals the beginning or resumption of an uptrend. The second trendline – the bottom line of the triangle that shows price support – is a line of ascension formed by a series of higher lows. It is this configuration formed by higher lows that forms the triangle and gives it a bullish characterization. The basic interpretation is that the pattern reveals that each time sellers attempt to push price lower, they are increasingly less successful.

The ascending triangle pattern forms as a security's price bounces back and forth between the two lines. Prices move to a high at a resistance level that leads to a drop in price as securities are sold. Although price may fail to overcome the resistance several times, this does not lead to increased power for sellers, as evidenced by the fact that each sell-off after meeting resistance stops at a higher level than the previous sell-off attempt.

Eventually price breaks through the upside resistance and continues in an uptrend. In many cases, price is already in an overall uptrend and the ascending triangle pattern is viewed as a consolidation and continuation pattern. In the event that an ascending triangle pattern forms during an overall downtrend in the market, it is typically seen as a possible indication of an impending market reversal to the upside.

## Indications and Using the Ascending Triangle Pattern

Because the ascending triangle is a bullish pattern, it's important to pay close attention to the supporting ascension line because it indicates that bears are gradually exiting the market. Bulls (buyers) are then eventually capable of pushing the security price past the resistance level indicated by the flat top line of the triangle.

As a trader, it's wise to be cautious about making trade entries *before* prices break above the resistance line because the pattern may fail to fully form or be violated by a move to the downside. There is less risk involved by waiting for the confirming breakout. Buyers can then reasonably place stop-loss orders below the low of the triangle pattern.

### Using Descending Triangle Patterns

Based on its name, it should come as no surprise that a descending triangle pattern is the exact opposite of the pattern we've just discussed. This triangle pattern offers traders a bearish signal, indicating that price will continue lower as the pattern completes itself. Again, two trendlines form the pattern, but in this case the supporting bottom line is flat, while the top resistance line slopes downward.

Just as an ascending triangle is often a continuation pattern that forms in overall uptrend, a descending triangle is a common continuation pattern that forms in a downtrend. If it appears during a long-term uptrend, it is usually taken as a signal of a possible market reversal and trend change. This pattern develops when a security's price falls but then bounces off the supporting line and rises. However, each attempt to push prices higher is less successful than the one before, and eventually sellers take control of the market and push price below the supporting bottom line of the triangle. This action confirms the descending triangle pattern's indication that prices are headed lower. Traders can sell short at the time of the downside breakout, with a stop-loss order placed a bit above the highest price reached during the formation of the triangle.

### Using Symmetrical Triangle Patterns

Traders and market analysts commonly view symmetrical triangles as consolidation patterns which may forecast either the continuation of the existing trend or a trend reversal. This triangle pattern is formed as gradually ascending support lines and descending resistance lines meet up as a security's trading range becomes increasingly narrow. Typically, a security's price will bounce back and forth between the two trendlines, moving toward the apex of the triangle, eventually breaking out in one direction or the other and forming a sustained trend.

Regardless of whether a symmetrical triangle breakout goes in the direction of continuing the existing trend or in the direction of a trend reversal, the momentum that is generated when price breaks out of the triangle is usually sufficient to propel the market a significant distance. You can imagine the increasingly narrow trading range as a phenomenon that gradually builds up more and more pressure until finally price "explodes" out in one direction or the other. Thus, the breakout from a symmetrical triangle is usually considered a strong signal of trend direction which traders can follow with some confidence. Again, the triangle formation offers

easy identification of reasonable stop-loss order levels: below the low of the triangle when buying, or above the triangle high if selling short.

### **The Bottom Line**

In the end, as with any technical indicator, successfully using triangle patterns really comes down to patience and due diligence. While these three triangle patterns tend toward certain signals and indications, it's important to stay vigilant and remember that the market is not known for being predictable and can change directions quickly. This is why judicious traders eyeing what looks like a triangle pattern shaping up will wait for the breakout confirmation by price action before adopting a new position in the market. Also keep in mind that triangle patterns don't usually form as clearly as shown in the example illustrations above. The lines that form a triangle pattern may be a bit more ragged, not quite so straight.

## The TRIN Indicator

The TRIN indicator, also known as the ARMS index because it was developed by Richard Arms, is functionally an oscillator type indicator that is primarily used to identify short-term overbought or oversold conditions in the overall stock market. It does this by comparing advancing versus declining stocks, along with advancing versus declining volume. TRIN is short for "TRading INdex".

The TRIN indicator is referred to as breadth indicator because it gives an indication of how widely spread, in terms of advances versus declines, stock market price movement is as reflected in a major stock market index such as the S&P 500 Index or the NASDAQ 100 Index.

Because the TRIN indicator factors in both price advances or declines and volume figures, it is seen as indicating both the velocity (advances/declines) and mass (volume figures) of the stock market's overall price movement.

### Calculating the TRIN Indicator

Looking at the calculation for the TRIN indicator makes it very easy for a trader to understand what the TRIN reflects. The calculation for the TRIN is as follows:

$$\text{(advances/declines)} / \text{(advancing volume/declining volume)}$$

The TRIN first divides the number of advancing stocks for the day by the number of declining stocks for the day. It then divides the volume of advancing stocks by the volume of declining stocks. Finally, it divides the result of the first calculation by the result of the second calculation.

So, for example, if on a given day the number of advancing stocks was 2,275 and the number of declining stocks was 764, then the advance decline ratio would be 2.98. If the total volume of advancing stocks was 1,176 and the total volume of declining stocks was 164, then the advance decline volume ratio would be 7.17. The TRIN would then be calculated as

$$2.98/7.17 = 0.42$$

### Interpreting TRIN Values

Successfully using TRIN levels to indicate temporary overbought or oversold levels in a market can be a bit tricky. First of all, TRIN values appear to be inverse, in that higher values indicate increased selling while lower values indicate increased buying.

Generally speaking, TRIN values below 0.50 are considered to indicate overbought conditions in which analysts may anticipate an impending corrective retracement downward. TRIN values above 3.00 are typically interpreted as indicative of oversold conditions that may give rise to an upside rally. A TRIN value of 1.00 indicates a balanced stock market that is neither overbought nor oversold.

One can quickly see that there's a wide middle range of possible TRIN values between overbought values below 0.50 and oversold values above 3.00. In order to make the TRIN indicator more useful, analysts look not just at the basic TRIN values but also at how the TRIN value changes throughout a trading day or over a longer period of time such as during a trading week. By doing so, analysts can more precisely pinpoint what constitute extreme levels, to one side or the other, in the TRIN under whatever the current market conditions are.

For example, the market might go through a period where TRIN values go no lower than 0.75 and no higher than 2.25. In such market conditions, analysts may determine that those two extreme values accurately reflect overbought and oversold conditions for the market during that specific time period, even though they fall short of what are typically the TRIN value levels that are considered to indicate overbought/oversold conditions.

Some traders and analysts who watch the TRIN indicator focus on the TRIN's equilibrium value of 1.00 and consider any readings significantly below 1.00 as potential indications of overbought conditions and any readings significantly above 1.00 as potential indications of oversold conditions.

### **Volatility Shortcoming of TRIN**

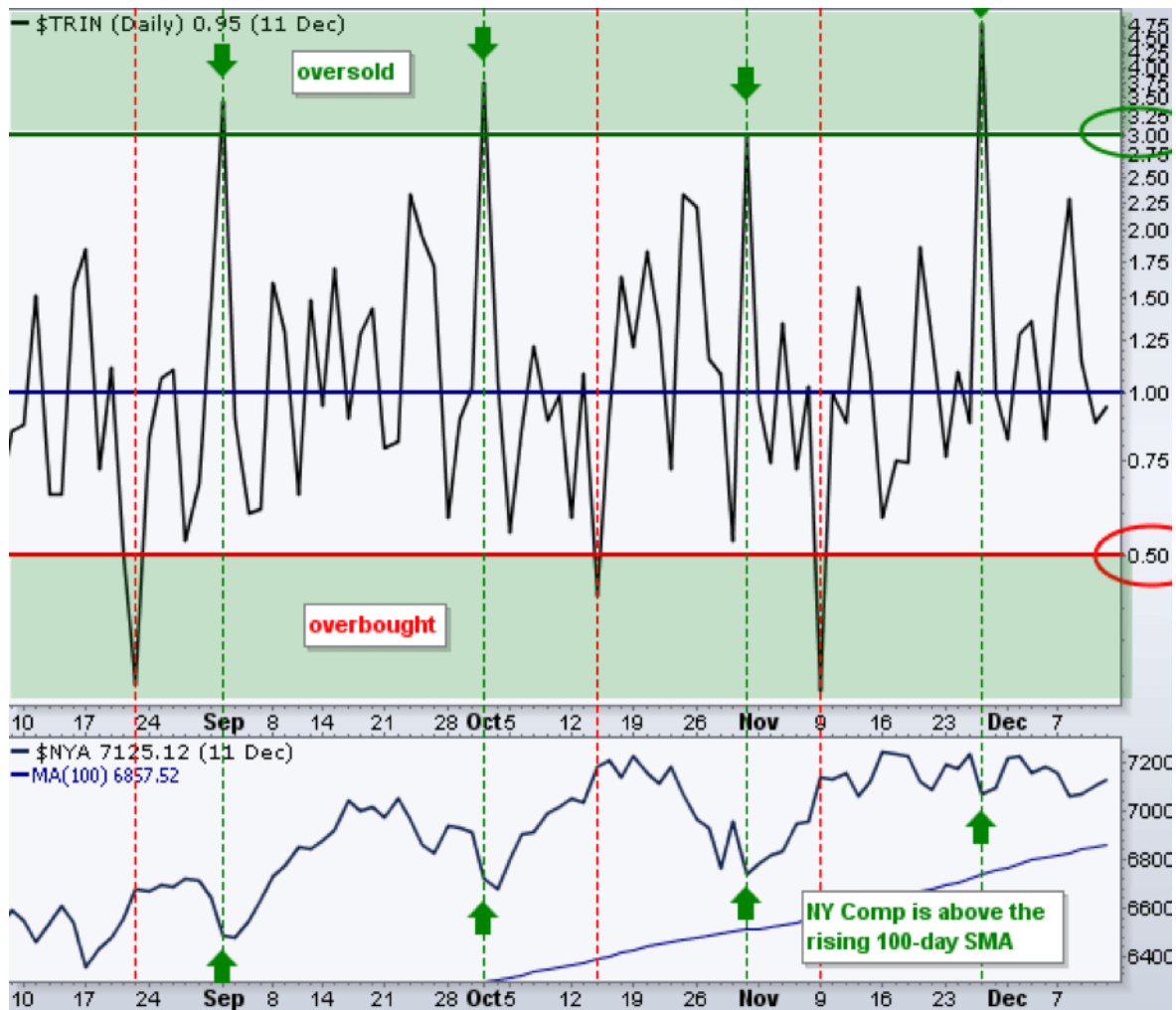
One of the shortcomings of the TRIN indicator is that its value can fluctuate significantly either intraday or from one trading day to the next even under overall market conditions that would not usually be described as volatile. In order to smooth out some of the inherent volatility in the TRIN indicator, some traders and analysts prefer to look at a 10-day moving average of the TRIN value.

### **Using the TRIN**

Analysts commonly use the TRIN indicator to identify market conditions under which the short-term market trend may soon shift from bullish to bearish (when the market is temporarily overbought) or from bearish to bullish (when the market is

temporarily oversold). Traders may use the TRIN to identify potentially profitable buying or selling price levels.

The chart below shows that traders who bought into the market when the TRIN showed values above 3.00, indicating oversold conditions at the market levels indicated by the green up arrows, would have fared very well. However, traders who sold the market based on TRIN values below 0.50 indicating overbought conditions would not have been so profitable over the same time period.



The TRIN is typically a leading indicator – one that projects a market turn before it happens. Looking at the above chart, one can easily see that the TRIN often anticipated an actual turn in stock market direction by a day or two. While this may afford a trader an opportunity to “sell the top” or “buy the bottom”, most traders will look for confirming price action in stock market index values before trading based on an anticipated market reversal.



When TRIN values are relatively steady and around the 1.00 equilibrium level, many traders will stand aside and wait for further market action before making or adjusting any investments. Market activity that occurs without moving the TRIN indicator very much one way or the other is more likely to prove insignificant for the trading day.

### Conclusion

The TRIN indicator can be very useful to traders of stock indexes who aim to catch and profit from overall stock market reversals; however, because of its capacity for extreme volatility it is one of the technical indicators that are known for being prone to generating false signals.

## The MACD Indicator

The Moving Average Convergence Divergence (MACD) oscillator is one of the most popular and widely used technical indicators that traders and analysts use to gauge momentum in markets.

### Understanding the MACD

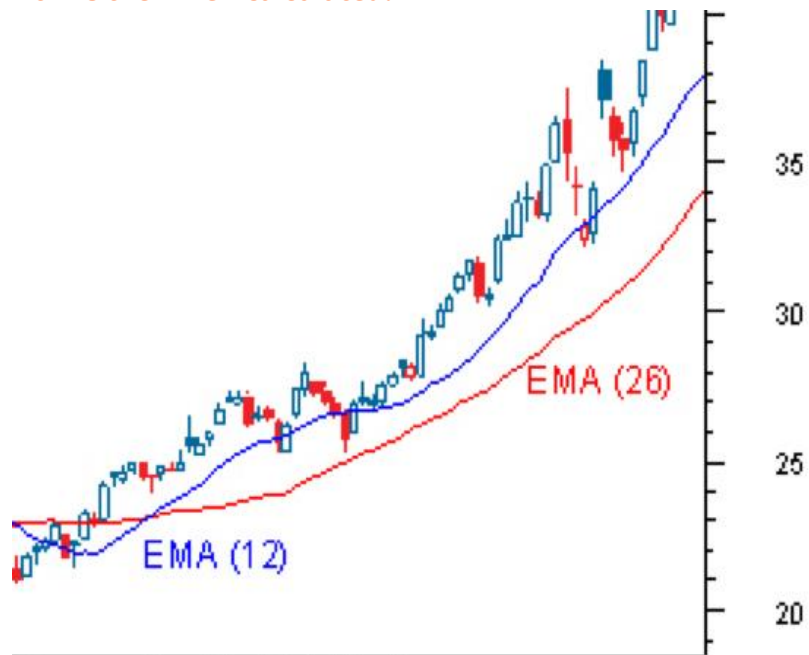
The popularity of the MACD indicator can be directly linked to its ability to accurately indicate rapid short-term momentum increases.

Gerald Appel developed the Moving Average Convergence Divergence in the latter part of the 1970s. While the name seems long and complicated, the MACD is one of the least complicated indicators to actually calculate and put into practical application.

The MACD utilizes two different trend tracking indicators – moving averages – and creates a momentum oscillator from them by subtracting the moving average of the longer time period from the moving average of the shorter time period. In a sense, this makes the MACD a double-edged technical indicator in that it offers traders and analysts the ability to identify and follow trends in the market, as well as to gauge the momentum of price movements and trends.

The calculated moving averages used in the MACD will inevitably converge, cross over one another, and then proceed to diverge, or move away from each other, making the MACD jump over or under the zero line as this happens. Traders are then able to watch for these signaling crossovers and divergences in order to help them spot changing market trends, either bullish or bearish.

### How is the MACD calculated?



Source: Chart by MetaStock

The picture above illustrates how shorter term and longer term moving averages come closer together (converge), move further apart (diverge), and cross over one another. The MACD reflects the changing relationship of short-term exponential moving averages to long-term exponential moving averages.

The equation used to calculate the MACD is as follows:

$$(12 \text{ day EMA} - 26 \text{ day EMA}) = \text{MACD}$$

Traders and analysts typically use closing prices for 12-day and 26-day time periods to generate the EMAs used to calculate the Moving Average Convergence Divergence. Following this, a 9-day moving average of the MACD itself is then plotted alongside the indicator to serve as a signaling line to help illuminate when a market may be turning.



The picture above clearly indicates the MACD line, the signal line, and the MACD histogram which is a representation of the difference between the 9-day moving average of the MACD and the current MACD reading. When the oscillator line crosses above the 9-day average (signal line), the histogram reads as positive (above the zero line that is indicated on the right hand side of the MACD window). Conversely, the histogram is negative when the MACD line dips below the signal line.

As mentioned earlier, 12-period and 26-period values are the default settings used to calculate the MACD. Changes in the time periods used for the MACD calculation can be made to accommodate a trader's specific trade goals or their particular style of trading.

### How to interpret the MACD

The MACD is built on movement – the movement of moving averages either towards one another (convergence) or away from one another (divergence). The MACD fluctuates, or oscillates, over and under the zero line, otherwise known as the centerline. This fluctuation is a crossover which signals to traders that the shorter moving average price has crossed over the path of the longer moving average price.

The MACD is seen as positive when the 12-day moving average crosses above the 26-day average. As the shorter term moving average diverges and moves further and further from the longer term moving average, the positive values of the MACD increases.

This reflects the fact that upside momentum is increasing. With this in mind, it's not a stretch to understand that when the opposite happens – the 12-day average dips below the 26-day average – the oscillator turns negative and as the shorter term moving average moves further downward and away from the longer term moving average, an increase in downside momentum is indicated.

### Crossing the Signal Line

Crossovers of the signal line by the MACD line are one of the MACD's staple signals. The signal line, as we've covered already, is the 9-day moving average of the MACD itself. The signal line is an estimated valuation for the movement of the oscillator that makes bullish and bearish MACD turns easier to see.

When a trader sees that the MACD turns north, crossing over the signal line and staying above it, a bullish crossover has occurred. This is a signal that a security's price is on the rise.

The exact opposite is true when the MACD line crosses down over the signal line. This is a bearish crossover and if the oscillator continues to drop below the signal line, it's a good indication that the bears are taking over. Depending on the steepness of the drop and the number of days the drop continues, many traders holding long (buy) positions may prefer to sell before they lose a significant amount of value. This can also be an opportunity for savvy traders to pick up undervalued securities during a temporary downside retracement that occurs in an overall uptrend.

### Moving Average Divergence

The MACD is frequently watched by analysts for signs of divergence from the movement of price. When price continues rising to a new high level but the MACD does not follow suit – instead turning south – this divergence from price action is commonly interpreted as a sign of impending trend change. In fact, many traders use the MACD solely as a possible trend change indicator, always watching for such divergence from price action.

### The Bottom Line

Any time the signal line is crossed over at either extremely high or extremely low points, be cautious before you act. Similarly, if a crossover seems shallow, or seems to move either up or down but then plateau, be vigilant but don't make a move in haste. The volatility in an underlying security can be deceptive and cause the MACD to move in unusual ways.

As with anything, putting the MACD into practice and working with it on a regular basis will allow you to get a feel for its common patterns and movements and help you sharpen your eye when it comes to extreme or uncommon fluctuations. The longer you work with this oscillator, the easier it will be to interpret its signals accurately and trade successfully.

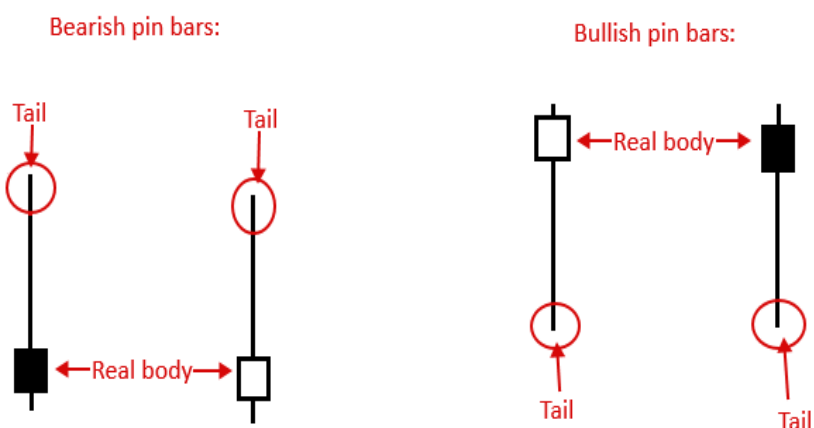


## A Pin Bar Scalping Strategy for Day Traders

This is a simple scalping strategy for day traders, one that uses the pin bar indicator, one of the most reliable candlestick formations, to identify market reversals.

The pin bar, also known as a hammer, is a single candlestick indicator that signals a strong rejection of further price movement in one direction and a reversal in the opposite direction. Pin bar candlesticks are characterized by having long wicks, or tails, that indicate rejection of price in the direction of the tail, and short candlestick bodies that indicate an impending market reversal.

### Pin Bar Patterns



A bearish pin bar indicates a reversal to the downside, and a bullish pin bar indicates a reversal to the upside. The critical feature of a pin bar candlestick is the elongated tail which shows that during the formation of the candlestick price moved significantly in one direction but then dramatically back in the opposite direction so that the candlestick closes back near its open. The pin bar candlestick body is very short and the candlestick tail at least two to three times longer than the candlestick body. The wick on the opposite side of the candlestick body from the long tail should either be very short or non-existent, no wick at all.

### Trading Pin Bars on the Five-Minute Chart

The five-minute chart time frame is a favorite of scalpers looking to quickly make small profits. However, sometimes you can catch a reversal on the five-minute time frame that turns out to be the

beginning of a major trend reversal that enables you to bank major profits.

The setup for trading with pin bars on the five-minute chart uses two moving averages, a 10-period exponential moving average and a 21-period exponential moving average. The trading strategy is as follows:

- Price should be noticeably above or below both moving averages. The position of price away from the moving averages when the pin bar formation occurs lends some confirmation to a possible market reversal by virtue of the fact that it indicates that price may have become a bit overextended.
- The possibility of the market becoming temporarily overbought or oversold – and therefore due for a reversal and correction – is strengthened if there have been several candlesticks in a row moving price in one direction immediately preceding the formation of the pin bar. This is illustrated in the chart below where, just to the left of the middle of the chart, five consecutive down candlesticks precede a pin bar formation that accurately signals a market reversal to the upside.



- When a pin bar candlestick is formed, traders should enter in the direction of the indicated reversal immediately following the close of the pin bar. Do not enter before then because a candlestick may appear to be forming a pin bar, only to have a sudden price move just before the close of the candlestick negate the pin bar formation.
- A stop-loss order should be placed just beyond the extreme tail of the pin bar candlestick (in the example shown in the photo above, a stop-loss order would be placed just below the low of the bullish reversal pin bar). This is one of the best features of this trading strategy – the fact that it is very low risk, allowing traders to reasonably run a very tight, close stop. When this strategy works, price does not usually move

beyond the extreme low or high represented by the tail end of the pin bar.

- A profit target can be price moving back to touch or crossover one of the moving averages. More aggressive traders can aim for larger profits by continuing to stay in the trade, looking for the reversal trend to continue, but moving their stop-loss order to breakeven, their trade entry point, in order to guard against taking a loss.

### Conclusion

The pin bar reversal indication is stronger, more likely to be accurate, when it occurs at a previously identified support or resistance price level, since price is more likely to reverse at such levels. Support or resistance levels may be any price levels where the market has previously reversed direction from, such as pivot points, weekly highs or lows, or Fibonacci retracement levels.

This trading strategy is very popular with forex traders, but can also be applied to stock or commodity trading.

## The Three Simplest Trend Following Strategies

Here are three of the simplest trend-following trading strategies around. But don't mistake "simple" for "not-very-good". While these are indeed simple trading strategies, they are also among the most reliable trading strategies for consistent profits with low risk. These strategies are designed primarily for long-term traders who trade using analysis of the daily time frame charts; however, they can also be applied to shorter time frame charts such as the four hour and one hour charts.

Each of these strategies is designed to enable a trader to ride a long-term trend for maximum profitability. They will not work well in range-bound or extremely volatile markets, but in a trending market, either up or down, should allow you to capture most, or at least a substantial part of, any long-term trend move.

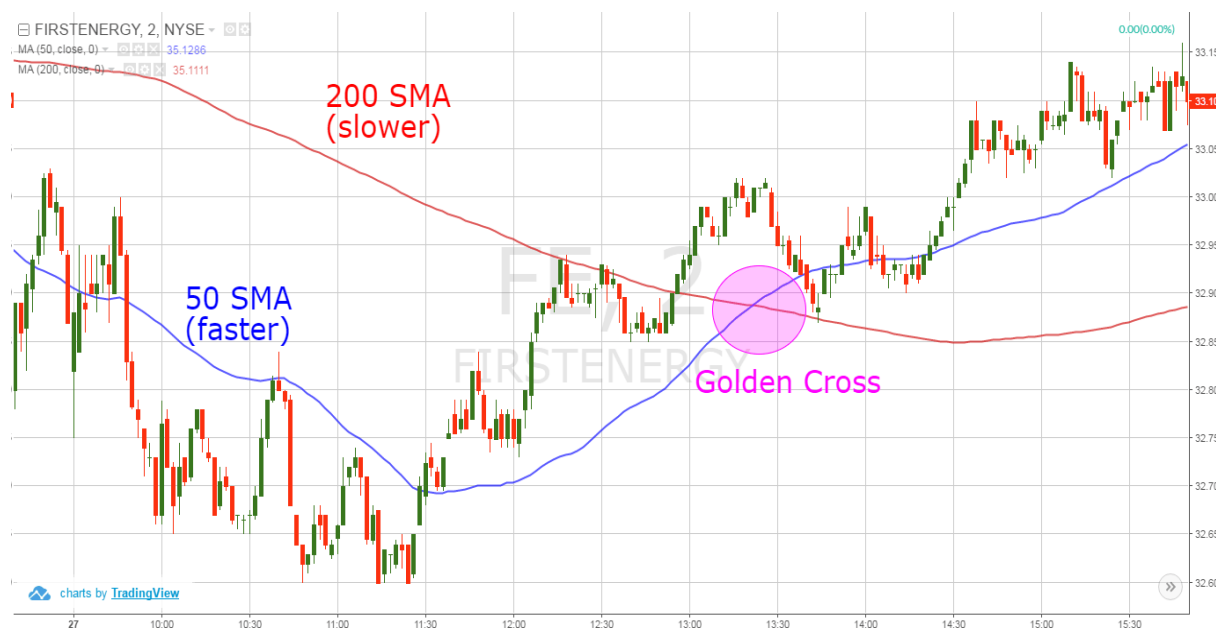
### 1 – The Golden Cross/Death Cross Strategy

Let's start with possibly the simplest strategy, one that utilizes just two simple moving averages, the 50-period moving average and the 200-period moving average. This strategy is a favorite of many stock market traders, applied to both individual stock prices and to market indexes, and it's as simple as this:

- Be a buyer (long) as long as the 50 MA is above the 200 MA
- Be a seller (short) as long as the 50 MA is below the 200 MA

As noted earlier in this book, the crossover of the 50-period moving average from below to above the 200-period moving average is referred to as the "golden cross", basically meaning that a security is "gold" once this occurs. Such a crossover is considered a very bullish long-term trend signal. The 50-period moving average crossing from above to below the 200-period moving average is known as the "death cross" because it is considered a strong signal of a bear market downtrend.

Here's an example of the golden cross trading signal in action, applied to First Energy stock:



## 2 – The 5,8,13 Fibonacci Strategy

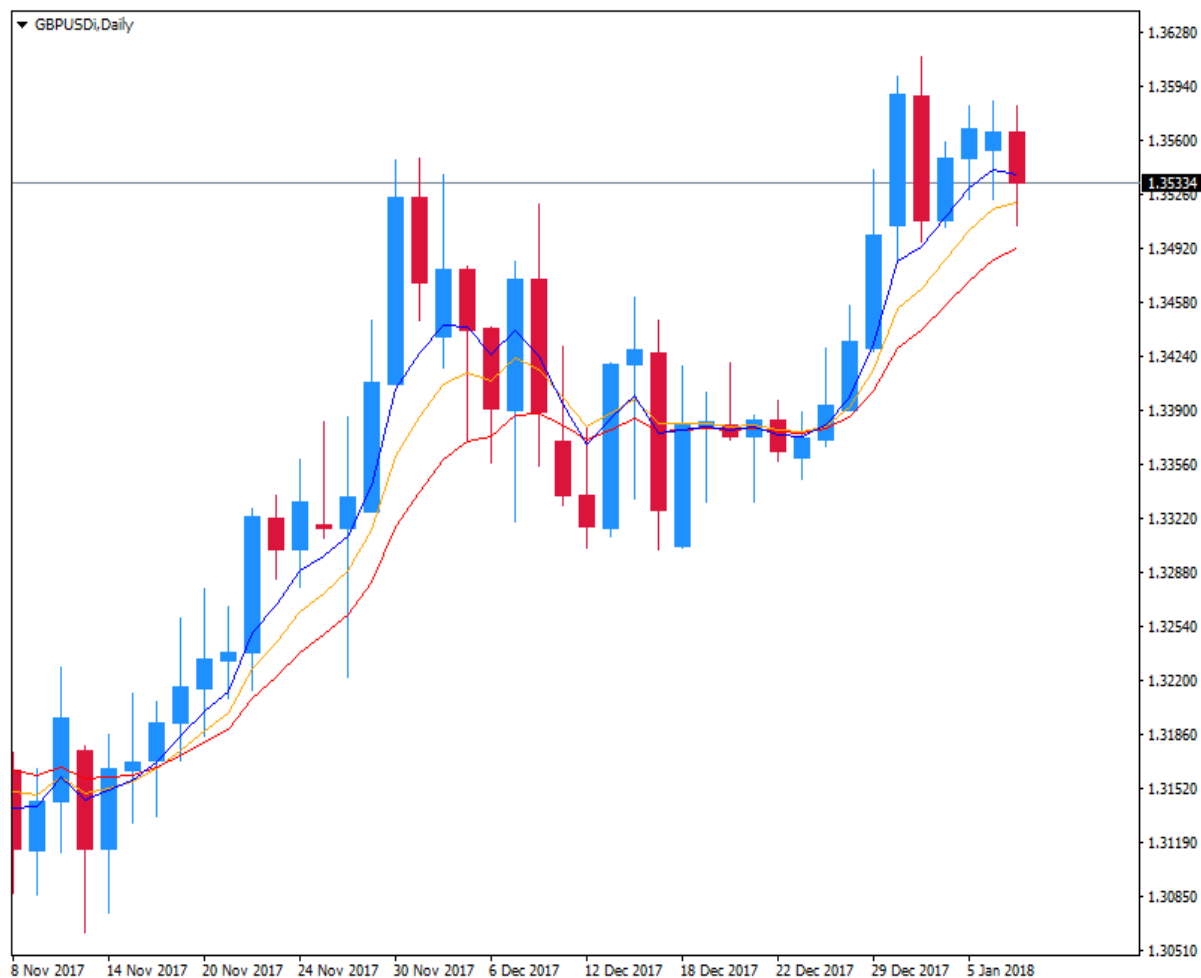
The 5,8,13 Fibonacci strategy (so called because it utilizes the Fibonacci number sequence of 5, 8, and 13) can work well for a trader on a couple of levels. First of all, it will often clue a trader in near the start of a long-term trend. Secondly, it gives clear signals to both a strong trend and to a range-bound or consolidating market.

This trading strategy is implemented as follows: Plot a 5-period, 8-period, and 13-period exponential moving average on your chart. The buy/sell signal for this strategy occurs when the 5-period moving average crosses above or below the 13-period moving average. When a strong trend is in place, traders will see two indications of this. First, the space between the three moving averages will widen or fan out. Secondly, in an uptrend candlestick closes will usually remain above the highest – the 5-period – moving average. (Conversely, in a downtrend candlestick closes will tend to remain below the 5-period moving average line.)

When the three moving averages converge and flatten out, all of them packed tightly together and appearing roughly horizontal rather than as upsloping or downsloping lines, this indicates a market that is either range-bound or in a consolidation period.

You can see in the chart below where, on the left hand side of the chart, an uptrend forms coincident with the 5-period moving average crossing above the 13-period moving average. As the bullish trend continues and strengthens, the space between the moving averages widens out and the 5-period moving average (the

blue line) provides support for price during the trend. In the middle of the chart, the moving averages come together and flatten out, indicating a consolidation period that is then followed by a resumption of the uptrend.



### 3 – The Simple ADX Trading Strategy

This trading strategy is based solely on price action and a single momentum indicator – the Average Directional Movement Index, known simply as the ADX, discussed in an earlier section.

(Just a passing note purely for the sake of entertainment: For all his brilliance as a technical analyst, Wilder still managed to lose more than one fortune in the course of his trading. He was less adept at applying his technical indicators than he was at creating them, and suffered from the bad habit of many traders – overtrading.)

Are you ready for simple? – *This* is simple. Apply the ADX indicator, which appears in a separate window below the main chart window, to your chart.

- When the ADX reading is above 25, which indicates the existence of a trend, and price is generally moving higher, be a buyer or hold a long position.
- When the ADX reading is above 25, and price is overall declining, be a seller or hold a short position.
- When the ADX reading falls below 25, this indicates a trendless, ranging, or consolidating market. Exit existing positions and remain out of the market until the ADX reading again rises to a reading of 25 or higher.
- More aggressive traders can use an ADX reading above 20, rather than above 25, as indicative of a trend.

That's it. (I told you it was simple.)

### Conclusion

You can, of course, aim to refine any of these trading strategies by using supplemental confirming indicators. But the fact is that many of the most successful trading strategies are relatively simple, and that adding indicator after indicator often results more in confusion than clarity. There's no reason to make generating trading profits any more complicated than necessary, so you may well wish to at least try out one or more of these very easy technical trading strategies. They may be all you need to help you become a highly successful trader.



## The Psychology of Trading: Winning Mindset

Being a trader is not just about formulating better strategies and performing more extensive analysis. It's also about developing a winning mindset. According to many studies of traders, what separates a winning trader from a losing one -

- Is NOT that winning traders have better trading strategies
- Is NOT that winning traders are smarter
- Is NOT that winning traders do better market analysis

***What separates a winning trader from a losing trader is their psychological mindset.***

Most traders, when they first begin trading mistakenly believe that all they need to do is find a great trading strategy. After that, they'll be able to just come to the market each day, plug in their great trading strategy, and the market will immediately start pumping money into their account.

Unfortunately, as any of us who have ever traded have learned, it's not that easy. There are plenty of traders who use intelligent, well-designed trading strategies and systems who still regularly lose money rather than make money.

**The few traders who do consistently win the game of trading are those who have developed the appropriate psychological mindset that enables them to be consistent winners.** There are certain beliefs, attitudes, and psychological characteristics that are essential to conquering the world of trading.

### **Attitudes about the Markets and about Yourself**

Attitudes and beliefs about the market include things such as believing that the market is rigged against you. Such negative – and erroneous – beliefs can have a significant impact on your ability to trade successfully. If you're looking at the market as being out to get you, then you're not looking at it properly, in accord with reality, and therefore you can't hope to be able to objectively evaluate market opportunities. The market is completely neutral – it doesn't care whether you make money or lose money.

Our beliefs about ourselves are critical elements of trading psychology. **One personal characteristic that most all winning traders share is that of self-confidence. Winning traders possess a firm, basic belief in their ability to BE winning**

**traders** – a belief that is not seriously shaken by a few, or even several, losing trades.

In contrast, many losing traders have serious, nagging self-doubt. Unfortunately, if you see yourself as a losing trader, cursed with bad luck or whatever, that belief tends to become a self-fulfilling prophecy. Traders who doubt their ability often hesitate to push the button and initiate trades, and thereby often miss out on good trading opportunities. They also tend to cut profits short, overly fearful that the market will turn against them at any moment.

Winning traders have a healthy respect for the fact that even their best market analysis may sometimes not match up with future price movements. Nonetheless, they possess an overall confidence in their ability as traders – a confidence which enables them to easily initiate trades whenever a genuine opportunity arises.

### Key Characteristics of a Winning Trader

Psychologically, the very best of traders share the same key characteristics, including the following:

- **They are comfortable with taking risks;** People with very low risk tolerance, those who cannot accept losing trades, are not cut out to be winning traders, since losing trades are simply part of the game of trading. Winning traders are able to emotionally accept the uncertainty that is inherent in trading. Trading is not like investing your money in a savings account with a guaranteed return.
- **They are capable of quickly adjusting to changing market conditions** (They don't fall in love with, and "marry", their analysis of a market – If price action indicates that they need to change their viewpoint on probable future price movements, they do so without hesitating).
- **They are disciplined in their trading and can view the market objectively,** regardless of how current market action is affecting their account balance.
- **They don't give in to being excessively excited about winning trades or excessively despairing about losing trades.**
- **They make the necessary effort and take the necessary steps to be self-disciplined** traders who operate with strict money and risk management rules.

One of the most important psychological characteristics of winning traders is the ability to accept (1) risk and (2) the fact that you may well be wrong more often than you are right in initiating trades. Winning traders understand that **trade management is actually a more important skill than market analysis**. What determines profits and losses is often not so much a matter of how or when you enter a trade, but more a matter of how you manage a trade once you're in it.

### Understanding How Trading Works

Winning traders know the difference between a "bad trade" and a trade that loses money. This is a critical point to understand. Just because you end up losing money on a trade, that doesn't mean it was a bad trade – it just means that it didn't work out profitably. ***What makes a trade a good trade is not whether it wins or loses – a trade is a good one as long as it offers greater potential reward than risk, and the odds or probabilities of it being successful are in your favor, regardless of how it turns out.*** If you took the trade for good reasons and managed the trade well once you were in it, then it's a good trade, even if you ended up getting stopped out for a loss. (Conversely, even if a trade happens to make money, if it wasn't initiated for good reasons and with a favorable risk/reward ratio, then it's a bad trade even though it may have happened to turn out profitably).

Winning traders operate on the premise that if they continue to make "good trades" as defined above, that they will ultimately be profitable. Losing traders incorrectly identify any trade that loses money as a "bad trade" and any trade that makes money as a "good trade," regardless of whether there was a reasonable basis for making the trade – and that leads to bad, losing trading in the long run. Evaluating trades solely on the basis of whether they happen to win or lose is doing nothing more than looking at random rewards similar to playing a slot machine.

### The Upside-Down Mental Attitude of a Winning Trader

One reason that losing is so common among traders is that many attitudes and principles that serve us well in life do not work well at all in the profession of trading. Unaware of this fact, many traders lack a basic understanding of what trading is all about.

For example, in our ordinary, daily lives, we are taught to avoid risky situations. But trading is all about taking risks.

### Trading is an inherently risk-filled endeavor.

Winning traders who genuinely accept the risk of trading have the ability to enter a trading opportunity without hesitation and to just as easily close a trade when it isn't working. They are not burdened with the emotional pain that causes them to lose their focus or self-confidence as a result of a trade not working.

Traders who have not learned this attitude toward trading are driven by emotional reactions to winning or losing trades and have not truly accepted the fact that trading is a risk-filled business. Because they are not acting in harmony with reality, they do not make the best possible trading decisions.

Engaging in trading – and being successful at it – puts a huge demand on us, namely the demand that we maintain confidence while dealing with the continual uncertainty of trading the markets.

In the profession of trading, facing the truth about what we're engaged in is one of the key elements to success.

### Habits of Winning a Trader

- **Winning traders regularly review and evaluate their trading performance.** They understand that trading is a skill that is only mastered through rigorous practice over time. Winning traders keep a record of their trades and examine them after-the-fact to learn from both their wins and their losses.
- **Winning traders are flexible.** They aren't ego-invested in their trades. They are able to always view the market objectively and easily cast aside trade ideas that aren't working.
- **Winning traders do not hesitate to risk money when they see a genuine profit opportunity** based on their market analysis and trading strategy. However, they do not risk money recklessly. Always aware of the possibility of being wrong, they practice strict risk management by putting small limits on their losses.

### Understanding that the Market can't be Predicted

Winning traders are aware of, *and accept*, the fact that the market is ultimately unpredictable, that there is no sure-fire market analysis technique or strategy that will infallibly predict price movements. Because they are keenly aware of this fact, they carefully watch for

signs that their analysis is mistaken, and if they see such signs, they quickly adjust their trading position.

In contrast, losing traders, once they have put a trade on, tend to only look for market action that confirms that they are right, and minimize or rationalize away any market action that seems to contradict their analysis. Thus, they often end up staying in losing trades too long and taking unnecessarily large losses.

### Freedom and Discipline of Being a Trader

Trading is basically without boundaries, the markets a completely free environment. You are free to buy or sell, enter or exit, at any point in time. There are basically no rules that require you to either open or close a trade at any given price or time. Despite the fact that one of the primary attractions of trading is the complete freedom to make our own decisions – to basically do whatever we want, whenever we want – the only way to consistently succeed in trading is to self-impose a set of rules to govern our trading and to practice strict discipline in following those rules.

What's the problem? The problem is that we all instinctively love having the freedom to do whatever we want and hate having any rules and restrictions placed on us, even those of our own creation.

**Self-discipline is critical to winning trading.** Unfortunately, self-discipline is typically the hardest discipline to come by. Most of us do a better job of abiding by rules imposed on us from outside ourselves, i.e., a “No Parking” sign, than we do of abiding by the rules we create for ourselves. Our attitude tends to be one more of, “Well, I made the rule, so I’m free to break it”. While that’s technically true, it’s not an attitude that will serve you well in trading.

### The Solution is Within Yourself

Losing traders mistakenly believe that mastering the market itself is the key to winning. They fail to face the reality that the market itself can’t really be mastered. You can’t control the market.

**What you can control is yourself, what you do in relation to the market’s actions. Winning traders realize this fact and put greater effort into mastering themselves and their trading actions than they put into trying to master market analysis.** It’s not that market analysis isn’t useful. It’s just that the amount of available information available to consider, as well as the number of different technical or fundamental indicators, is virtually endless.

Plus, what's significant at one point in time may be utterly insignificant at another point in time.

It's all just too much information to sort out and ultimately impossible to deal with perfectly. A trader's time is better spent on mastering themselves and their trading skills.

### Summary of Being a Winning Trader

Trading is a difficult game to master. Very few people become highly successful at it. However, it is possible for virtually anyone to become a master trader as long as they are willing to make the necessary effort.

Attaining the proper psychological mindset for winning trading requires rigorous self-examination and self-discipline. You have to learn to cultivate good trading habits because they aren't things that come naturally to most people. Making the necessary changes in yourself that will enable you to become a consistently profitable trader will more than likely affect how well you deal with life overall, not just how well you deal with trading.

**Bottom line: Make the commitment to becoming a winning trader and that will enable you to become a winning trader. You can do it – but it's up to *you*, not the market, to put money in your pocket.**

## Six Essential Skills of Master Traders

Just about anyone can become a trader, but to become a master trader takes more than investment capital and a three-piece suit. Keep in mind: there is a sea of individuals looking to join the ranks of master traders and bring home the kind of money that goes with that title. Very few of them make the grade or even come close to it. Consistently winning traders are about as rare as multi-million dollar winning lottery tickets.

One of the prerequisites of becoming a master trader is an adequate education in fundamental economics, financial markets, and technical analysis. But there are plenty of well-educated, well-informed, very intelligent individuals who won't qualify as master traders. The critical difference between winning traders and losing traders is more dependent on acquiring the essential skills that master traders share. Master these skills and then you'll have a genuine shot at being a trading master.

### Skills #1 and #2 – Research and Analysis

The ability to do good quality research and solid market analysis is fundamental to trading success. Master traders develop their skills in being able to thoroughly research information relevant to the securities they trade – and then, more importantly, being able to accurately determine the likely impact of that information on a particular market.

Master traders learn, and perfect, utilizing market information – both fundamental economic information and market information in the form of trading and price action that occurs – to adapt and approach the market in the most effective ways possible. (By “effective,” we mean with favorable risk/reward ratios, high probabilities of success, and low levels of risk.)

Analytical skills are vital because they enable a trader to better understand, identify, and use market trends (or the lack thereof) – both as applied to price action on individual charts of various time frames, and in the market as a whole.

As you analyze a market and spot patterns and trends, it's also necessary to determine what technical trading approaches are called for. We suggest that focusing less on the money to be made, and more on taking the right action at the right time, is a major attitude necessary for developing and perfecting your analytical skills. **Focusing on the market, not on the money in your trading account, enables you to make the best, objective**



**trading decisions in each situation – and doing THAT enables you to ultimately make the wisest and most profitable trades.**

Nearly all of the “Market Wizards” interviewed by Jack Schwager in his famous book on winning trading stated that they focus on the market and on their trades, not on their account balance. They’re solely concerned with trying to get the market right, regardless of whether doing so makes them a dollar or a million dollars.

### **Skill #3 – Adapting Your Market Analysis to Changing Market Conditions**

Over time, master traders develop strategies and trading techniques that they use over and over again. Over time, every trader puts together his own personal toolkit of methods, maneuvers, strategies, and trading tactics. That’s a good thing. It’s important that you have your own individual trading style and trading edge, such as specific combinations of technical indicators that signal high probability trades.

Having your own tried and true trading style is a good thing. A better thing, a master trader sort of thing, is having your most ingrained habit be the habit of continually monitoring the market for signs and indications that the market is changing or forming a new pattern, thereby signaling to you that you need to adapt to those changing conditions by adjusting your trading approach and strategy accordingly.

### **Skill #4 – Staying in the Game**

Regardless of the industry, company, or particular profession, everyone faces peaks and valleys in their career. If you are a full-time trader, you will inevitably be met with considerable gains and, at other times, significant losses. Sticking with it – staying in the trading game – is an irreplaceable and vital skill that every master trader must possess.

Of course it’s easy to become excited and overly eager to make hasty trades when favorable price movements benefit your bank account. Human nature bids us to continue acting in certain ways when the outcomes are good. But there will also be days when the market all but completely turns against you. Rather than being filled with excitement about trading, you just want to turn off your computer monitor or close out your trading platform and slink away and lick your financial wounds.

A master trader understands that neither extreme will last forever, and, that sticking it out – through the good *and* the bad – is a skill that enables you to learn, grow and profit.

A significant part of being able to stay in the game is practicing good risk management and money management. Always use stop-loss orders and never risk too much on any one trade.

Don't take trades unless they have positive risk/reward ratios, in other words, if what you'll make if you're right is significantly more than what you'll lose if you're wrong. Why risk a possible \$50 loss if the most you'll likely make even if your market analysis is perfectly correct is only \$10? Those numbers are not in your favor. Instead, only take trades when being right stands to make you a lot more than being wrong can cost you. Even when there seems to be a good trade opportunity, such as a major market reversal, if you can't get a favorable, low-risk entry point, just let that opportunity go by, and instead wait for one to materialize where you *can* get a good, low-risk entry.

### **Skills #5 and #6 – Discipline and Patience**

Discipline and patience are two very closely related skills that every master trader needs – in abundance. As mentioned above, staying in the game is important because it allows you to experience both the highs and the lows, learning from them and making the necessary adjustments to your trading. A master trader must be both patient and disciplined in order to stick with it, especially on days when profit is non-existent.

A patient and disciplined trader knows, for example, that quite often the very worst trading sessions or days are followed by significantly better ones. Keep in mind that a fundamental part of market behavior is its up-and-down, give-and-take fluctuations. Sessions that run flat and see very little volume may continue for several days, but the disciplined trader understands that patience will be rewarded, so he waits until the market begins to make a truly significant move before entering and risking his hard-earned money.

One of the most common mistakes of losing traders is trading when the market isn't presenting any genuine profit opportunities. Many traders just put on a trade out of sheer boredom. Such actions nearly always cost you money.

A master trader simply takes it in stride if an entire trading session passes by in which no good, low-risk profit opportunities arise. Master traders know that the market will be open again tomorrow and that there will always be new trading opportunities.

Don't let markets that are going basically nowhere trick you into abandoning good trading discipline and strategy. Be patient, wait,

and when a favorable opportunity does present itself, don't hesitate – pull the trigger and enter the market, with confidence your trading ability.

### **Bonus Skill #7 – Record Keeping**

Master traders learn from their trading mistakes. Losing traders rarely do. One of the critical habits that create winning traders is that of keeping a trading journal. A trading journal provides you with a record of each trade as it happened: your entry point and your initial reason for buying or selling; where you put your stop-loss order and your take-profit order; what happened in the market after you initiated your trade, and how you reacted to the market action; finally, the amount of your win/loss.

Keeping a trading journal and regularly reading back through it provides one of the quickest and easiest ways to identify both what you're doing right and what you're doing wrong.

### **In the End**

The primary message we hope you take away from this section is that every master trader needs to develop the essential skills for successful (i.e., profitable) trading. Make the necessary effort to become a genuinely skilled trader, and the market will reward you for your diligent efforts.

Becoming a master trader isn't easy, but it is possible and well worth making the necessary effort. If you start working in that direction today, rather than putting it off until tomorrow, then you're one day closer to making your financial dreams a reality.

## Inspiration for Trading: Quotes from the Masters

We'd like to send you on your way to being a hugely successful trader with some inspirational quotes from those who managed to master the markets and amass a fortune - May you soon do the same.

*"In investing, what is comfortable is rarely profitable."* - Robert Arnott

"Every once in a while, the market does something so stupid it takes your breath away." - Jim Cramer

"Bull markets are born on pessimism, grow on skepticism, mature on optimism, and die on euphoria. The time of maximum pessimism is the best time to buy, and the time of maximum optimism is the best time to sell...If you want to have a better performance than the crowd, then you must do things differently from the crowd." – Sir John Templeton

"In this business, if you're good, you're right six times out of ten. You're never going to be right nine times out of ten." – Peter Lynch

"I have a problem with too much money. I can't reinvest it fast enough, and because I reinvest it, more money comes in. Yes, the rich do get richer." – Robert Kiyosaki

"One of the funny things about the market is that every time one person buys, another sells, and both think they are astute." – William Feather

"No profession requires more hard work, intelligence, patience, and mental discipline than successful speculation." - Robert Rhea

"The goal of a successful trader is to make the best trades. Money is secondary." - Alexander Elder

"The game taught me the game. And it didn't spare me the rod while teaching." - Jesse Livermore

"Michael Marcus taught me one other thing that is absolutely critical: You have to be willing to make mistakes regularly; there is nothing wrong with it. Michael taught me about making your best judgment, being wrong, making your next best judgment, being wrong, then making your third best judgment and doubling your money." - Bruce Kovner

*"A loss never troubles me after I take it. I forget it overnight. But being wrong and not taking the loss – that is what does the damage to the pocket book and to the soul." - Jesse Livermore*

"Beginners focus on analysis, but professionals operate in a three dimensional space. They are aware of trading psychology, their own feelings and the mass psychology of the markets." - Alexander Elder

*"I have two basic rules about winning in trading as well as in life: 1. If you don't bet, you can't win. 2. If you lose all your chips, you can't bet."*  
– Larry Hite

"Good opportunities come infrequently. When it rains gold put out a bucket, not a thimble." – Warren Buffet

*"All you need is one pattern to make a living."* – Linda Raschke

Okay, that's it – we're done. Go make your fortune!

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