Investor Education Books series by TraderPlanet.com

US Retail: $19.95

by Jim Wyckoff

Bringing Your Trading Vision Into Focus

By Jim Wyckoff

Intro

To be a successful trader, you need to have vision – not some hallucinating state in which you "see" wild and weird things that exist only in your imagination but a clearly thought out picture and a plan for how you might approach buying and selling a particular market. Without some kind of roadmap, you are likely to become hopelessly lost. As a trader, lost means not only losing money but can also mean losing your sense of self-worth and identity if you do not succeed as a trader and become a loser in your own mind. Now we are not suggesting that reading this book – or any other book or any trading system – will guarantee trading success, lots of money and a positive self-image. What we do offer in this book are a number of trading ideas and concepts that you can put in your own toolbox to become a successful trader. You won't be able to adopt or implement everything presented in this book, but we provide a number of different tools from which you can choose for your own trading toolbox.

There are many possible routes to trading success, and you may find just the thing that will work for you in one of these chapters. But whatever appeals to you, keep in mind that this book provides just an overview of many different topics and that you should do more research on the tool or tools you select.

I have divided the material in this book into four major categories:

Analyzing markets starts with some of the basics of the cash markets on which derivative markets are based, seasonal trends in markets and the influence that markets have on each other.

- **Analyzing prices** looks at the effect that the fundamental factors have on the value of the market and how these values are reflected in price responses on charts.

- **Analyzing price tools** describes the major technical indicators, the secondary tools, and specialized techniques developed by different analysts in an attempt to probe deeper into past price action to produce clues for future price action.

- **Analyzing players** shows how the real factor responsible for price movement, the traders themselves and the mass psychology of the marketplace, can be portrayed and analyzed in different ways.

Reading through this overview of trading ideas will provide you with information about a number of trading tools available to you and can help you shape and sharpen your focus to develop your own trading vision. It includes some of the best ideas and techniques I picked up as a floor reporter for a wire service watching and talking to some of the best professional traders in the world in Chicago, New York and London and in my ongoing research as a market analyst. I hope you will find these ideas as useful as I did in learning them.

Summary

Don't have a trading plan yet? Jim Wyckoff is here to help you better understand what it takes to be successful with VantagePoint. The easy to read book covers:

- Analyzing markets starts with some of the basics of the cash markets on which derivative markets are based, seasonal trends in markets and the influence that markets have on each other.

- Analyzing prices looks at the effect that the fundamental factors have on the value of the market and how these values are reflected in price responses on charts.

- Analyzing price tools describes the major technical indicators, the secondary tools, and specialized techniques developed by different analysts in an attempt to probe deeper into past price action to produce clues for future price action.

- Analyzing players shows how the real factor responsible for price movement, the traders themselves and the mass psychology of the marketplace, can be portrayed and analyzed in different ways.

Bio

Jim Wyckoff, a senior market analyst at TraderPlanet.com, and the proprietor of an analytical, educational, and trading advisory service, "Jim Wyckoff on the Markets," is into his third decade of involvement with the stock, financial and commodity futures markets. As a financial journalist with *Futures World News* for many years, he spent day after day reporting from the futures trading floors in Chicago, New York and abroad. At one time or another, Jim has covered every futures market traded in the United States and several overseas.
Born, raised, and still residing in Iowa, Jim loves adventures, from driving a Jeep across the highest mountain pass in the continental U.S. to extreme winter camping in the Boundary Waters Wilderness in Minnesota to hiking the jungles of South America.

Analyzing Markets

Fundamental factors drive market prices, and it is the amount of money that one person or entity is willing to pay another person or entity for an actual product that determines the value of the market. But paying or selling in cash and receiving or delivering a quantity of physical goods often isn't an efficient or convenient way to do business in today's global markets.

So, over a span of many years, many industries have developed a number of derivative instruments as substitutes for exchanging cash and physicals. Prominent among these derivatives are futures and options contracts, which are based on cash values but sometimes serve as a guide to cash values on world markets.

Futures are a different type of instrument than equities. When you buy equities or shares in a company, you actually own a piece of the company. When you buy futures, you don't actually own anything other than a right to buy or sell a specified amount of a specified quality of a commodity at a specified price at a specified time in the future.

As a derivative instrument, futures are only a temporary substitute for a later transaction to fulfill the terms of the contract. The trader's incentive for holding that position, whether long or short, is participating in changes in value of that contract. Note that I said changes in value of the contract and not changes in value of the commodity, which may not be the same thing.

The first thing we will look at is the cash market and some of the things that affect how cash markets relate to derivatives.

Cash Markets and 'Basis'

The actual value of a commodity is established in the "cash" market, also called the "prompt" market, the "physical" market or the "spot" market. The underlying cash or physical market provides the real answer to the question, "How much is someone willing to pay to get the actual commodity they need, or at what price will someone sell a commodity they hold?"

All futures markets are based upon some type of underlying cash or physical market although a number of futures markets do not require actual delivery of the physical commodity being traded. A futures market must be tied to some type of physical market to keep the futures market price fairly valued and actively traded.

For corn futures, for example, there is the "cash" corn that farmers harvest and deliver to their local elevators. For crude oil futures, there is the physical crude oil that is refined into various industrial forms, such as gasoline. For gold futures, there is the world "spot" market and London cash fixings. The same situation applies to other raw commodities futures. All have some type of an underlying cash market.

U.S. Treasury bond futures also have a cash market, which is the actual debt sold at auction by the U.S. Treasury Department, via bonds, notes and bills. Stock index futures have a cash market based on the values of actual individual stocks that are bought and sold on stock exchanges.

Delivery ties

Many cash market products are actually deliverable at designated locations to offset an existing position in the futures market. Grain futures are one example of a deliverable commodity against existing futures market positions. Some futures markets only involve a cash-settlement based on the price at the contract's expiration, such as feeder cattle futures and the stock indexes.

In theory, prices for futures and cash will come together as the futures contract nears expiration. The lack of convergence became a serious issue in U.S. grain and soybean markets in the first few months of 2008 when a huge increase in speculation, attributed to hedge funds and money managers looking for diversification into another asset class, sent futures prices soaring on a separate track from cash prices and making it difficult to use futures for price discovery or to lay off risk, the primary functions of futures.

Under normal conditions, futures and cash prices are in general alignment with each other although a number of factors can have a bearing on either cash or futures prices. The difference between the cash price at a given location and the futures price for the same commodity is known as the "basis."

Basis can be positive or negative, depending on the factors that determine basis. These factors include local supply and demand for the raw commodity, supply and demand for transportation, variations in the commodity's quality and the futures contract specifications, and the availability of substitutes for the commodity. Generally, transportation expenses make up the largest portion of cash basis.

Shipping cost role

Changes in cash basis usually are not as volatile as changes in cash market or futures prices. Changes in basis tend to follow seasonal patterns (see next chapter). At harvest, grain supplies are generally more plentiful, resulting in a higher demand for transportation services and an increased cost to move grain (weaker basis). Post-harvest improvement in basis often occurs because of increased availability of transportation services at a better price and improvements in local supply and demand conditions.

Country grain elevators base the price they will pay farmers for their grain on the price of grain futures at the Chicago Board of Trade. For example, a grain elevator in central Nebraska will likely have a wider basis than will a grain elevator located on the Mississippi River in Dubuque, Iowa. Reason: Shipping costs to get grain from the elevator in central Nebraska to the Gulf of Mexico are more than the shipping costs of the elevator located in Dubuque sending grain to the Gulf of Mexico. The cash soybean price quote from a grain elevator in Nebraska might be "28 cents under the May futures contract" whereas the cash soybean quote from a Dubuque elevator might be "8 cents under the May futures contract."

At the Gulf of Mexico, cash soybeans could be quoted at "30 cents over the May contract." The basis "narrows" as the cash grain gets closer to its final shipping destination. The cash basis at the Gulf of Mexico includes the transportation costs of getting the grain to that major shipping destination. Much depends on how urgently an end-user wants supply.

Changes in cash basis levels are watched closely by futures traders. Commercials go to great lengths to keep history and study various cash basis levels for the markets in which they are involved. It is a laborious process because every location is likely to have a different "normal" basis level that fluctuates with local conditions as well as with the national and international supply-demand situation. Changes in cash basis levels signal changes in demand coming from the end-users and changes in supply coming from the producers of the raw commodity.

Seasonality in Markets: A Good Tool for your Toolbox

Two of my favorite trading subjects are cycles and seasonality. As the previous chapter on the cash market suggested, seasons are a fact of life in agricultural markets, and the cycle of planting, growing, harvesting leaves an obvious imprint on prices in those markets as supply and demand pressures change.

Let me start out by emphasizing that seasonality or cycles, by themselves, do not make good trading systems. Their sometimes broad time frames and sometimes subtle shifts in prices do not provide the specific trading signals that a good system requires. However, they are great "tools" to add to your “trading toolbox” because they tend to be dependable from one year to the next and provide at least some framework for price expectations.

Seasonality in agricultural markets is a function of supply and demand factors that occur at about the same time every year. For agricultural markets, supply stimuli can be caused by harvest, planting, weather patterns and transportation logistics. Demand stimuli can result from feed – and, increasingly, fuel – demand, seasonal consumption and export patterns. In normal circumstances, grains tend to follow the general rule of lower nearby futures prices at harvest more than other agricultural commodities.

Livestock futures, too, have seasonal tendencies. Hog and cattle seasonals tend to be caused by production and marketing numbers and, in the case of hogs, farrowing intentions and actual farrowings.

Awareness factor

Because seasonal patterns can play a crucial role in pricing, I believe it is important for every trader to have some knowledge of this underlying fundamental background. I follow seasonals, but I do not consider them one of my "primary" trading tools.

Keep in mind that some trading system vendors and brokerage firms use seasonals as part of their hype. For example, you may hear an anxious radio announcer saying that cold weather is just around the corner, and you should be buying heating oil futures or options now! If only futures trading were that easy!

Every professional trader and commercial firm knows that heating oil demand rises in the winter, and they usually have already factored that rise in demand into the prices of the farther-out (deferred) futures contracts. The same is true for other markets' seasonal price patterns. The professional traders and commercials all know about seasonals in the markets and position themselves accordingly.

If you are a speculator, it is always good to have as much information on markets as possible. Seasonal price patterns are just one more bit of information to factor into trading decisions.

Here is a brief summary of seasonals in the major agricultural markets. (If you are interested in a more complete study of seasonality, entire books have been written on the subject.)

Corn

This market's seasonality can be divided into three time periods: late spring to mid-summer, mid-summer to harvest and post-harvest. The most pronounced seasonal trend in corn is the decline of prices from mid-summer into the harvest period, assuming favorable growing weather that indicates new-crop supplies are assured. Prices are often near their highest level in July because of factors associated with the extent of old-crop supplies and uncertainty over new-crop production with the crop in the critical pollination period that will make or break yields.

Harvest adds large supplies to the marketing system, which normally pressures prices to their lowest levels of the crop year. Prices usually rise following harvest as the market tries to buy supplies out of producers' hands. However, the "February break" is a well-known phenomenon whereby corn prices usually show some degree of decline during late January-February as river transportation freezes up and reduces demand for shipments.

Soybeans

The July-August period is usually a bearish time for soybeans, again assuming adequate acreage and favorable weather. Closing prices during the last week in July are usually lower than those of the previous week in July. Closing prices at the end of August are also usually lower than those at the end of July. Also, soybean prices in late January are usually higher than those in late December.

Soybeans many times also succumb to the "February break" seasonality phenomenon. Soybean meal and oil have the same seasonal tendencies as soybeans.

Wheat

The seasonality of wheat prices works best when a trader is on the long side from the June/July harvest lows to October/November. On the short side, the stretch from winter into summer harvest tends to be the weakest price period although the market usually seems to kill off the winter wheat crop several times, causing rallies that interrupt the decline.

You might note that these two prominent seasonals in wheat are the opposite of the pattern in corn, prompting spread traders to be long wheat/short corn from the summer wheat harvest lows into late fall when corn is usually at its seasonal low price.

Live Cattle, Feeder Cattle

Seasonality in feeder cattle prices depends on the seasonality in live cattle prices, along with annual fluctuations in feeder cattle supplies. In general, feeder cattle prices are strong from late

winter through spring, drop during the summer as more calves come off pastures and stabilize at lower levels in the fall before turning up in December.

Live cattle prices normally trend higher from January through May. Prices for live cattle reach their seasonal peak in May as grocers stock up for the summer outdoor grilling season and then usually begin a downtrend that extends through the end of the year.

Lean Hogs

Seasonal marketing pressure increases during March and persists at increased levels during all or part of April. The reason for this is that August and September farrowings are usually larger relative to other farrowing months. Slaughter levels decline seasonally from March-April into July or August. Thus, prices can generally be expected to rise from March to May and decline from May into August.

Cocoa

The yearly seasonal low tends to occur in January with the Bahia (Brazil) main crop, rather than in May or June with the Temporao (Brazil) crop, because of consumer demand. Consumer demand tends to rise into late fall and early winter, which boosts prices during that timeframe. As demand peaks and then begins to decline, cocoa prices fall into January. It's important to note that seasonal tendencies in cocoa are not very strong.

Coffee

The frost season in Brazil runs from May through early-August period, and with this potential threat to supply, coffee prices tend to rise from January into June. This seasonal tendency is not very strong, however, because coffee can come from other producing countries, such as Mexico or Vietnam. Still, the potential for a Brazilian frost should be monitored. The other seasonal influence is during the winter, when U.S. coffee consumption tends to rise.

Cotton

Cotton is a market in which the "trade" has very heavy participation, and seasonals tend to be a function of heavy deliveries issued against the expiring futures contracts in December, March, May, July and, to a lesser degree, October. In November, the market tends to recover from harvest lows, and then in January the market tends to back off to lower levels.

Orange juice

Seasonal price movement of FCOJ (Frozen Concentrated Orange Juice) does not usually reflect the December-February freeze period in the southern United States, but there is always the risk of that one big frost that might make you cautious about being short FCOJ futures after November. Seasonal tendencies are caused by harvest, production (also called "pack") and demand ("movement"). With larger supplies of FCOJ coming from Brazil in recent years, the

most significant seasonal move is generally lower prices from November to January – when a Florida freeze does not seem to be a threat.

Sugar

Prices tend to peak in November because of a combination of supply and demand. Production at this time is not complete, as the European crop is not yet on the market. Demand in the Northern Hemisphere, however, is usually at its peak in the fall.

Intermarket analysis:
Markets Influencing Markets

Traders who use technical analysis to make trading decisions in the present realize how important past price patterns are in anticipating what could happen to prices in the future. But in addition to past, present and future, there is one other direction traders should be looking: Sideways.

What happens in related markets can have a significant bearing on price action in a target market. Intuitively, traders know that markets are interrelated and that a development that affects one market is likely to have repercussions in other markets. Typically, however, technical analysis has meant single-market analysis, which cannot keep up with structural changes that have occurred in financial markets as the global economy has emerged.

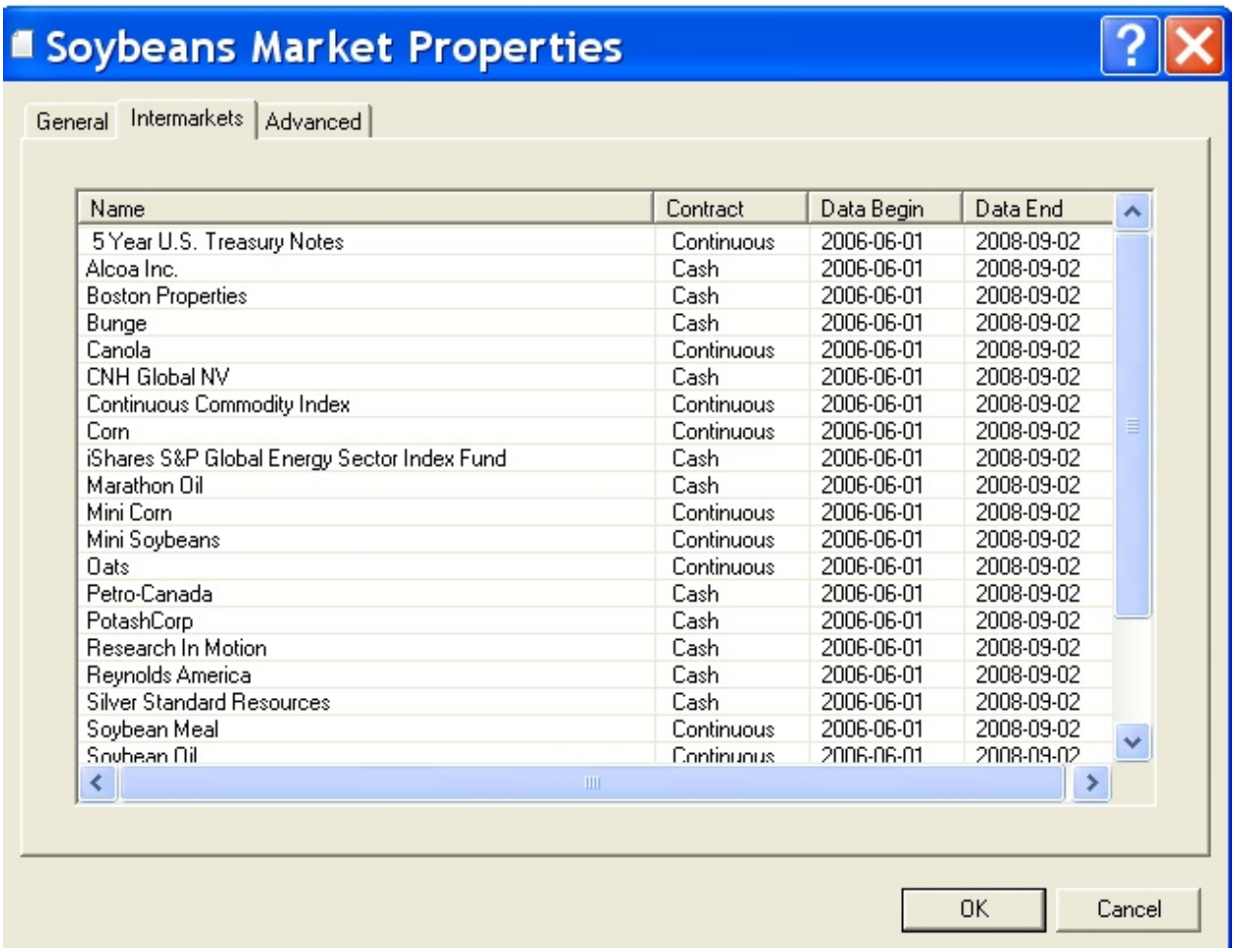
Nothing new

Intermarket analysis is certainly not a new concept. Equities traders have been comparing returns for a long time between small-caps and big-caps, one market sector versus another, a sector against a broad market index, international stocks versus domestic stocks.

"Hurricaneomics," a term coined by Louis B. Mendelsohn, a pioneer in developing intermarket analysis software, is another example of the inter-connectedness of events and markets and how nothing can be looked at in isolation. Hurricanes Katrina, Rita and Wilma damaged not only local economies along the Gulf Coast and Florida in 2005 but also created a ripple effect throughout many markets – as anyone who has gone to a gas pump or bought building materials can attest.

Commodities traders have spread one market against another for years, analyzing the price relationships of corn to soybeans or hogs to cattle or gold to silver or T-bonds to T-notes to trade intra-commodity and inter-commodity spreads – all products of intermarket analysis although they may not have thought of what they do in those terms.

VantagePoint Intermarket Analysis Software determines the 25 markets that are most closely related to a target market and then quantifies the influence of that relationship to produce intermarket data that can be used by technical indicators to turn them from lagging indicators into predictive indicators. For example, the list below of the markets most closely related to soybean futures includes ones that you would expect, such as corn, soybean meal and soy oil, to others that might seem a little strange, such as Alcoa or Research in Motion. Whatever the market choices, they are the ones that countless runs through a neural network process have determined have the most effect on soybean futures prices.



'Grass roots' analysis

When farmers calculate what to plant in fields where they have several crop choices – between corn and soybeans, for example – they typically consider current or anticipated prices of each crop, the size of the yield they can expect from each crop and the cost of production in making their decision. They do not look at one market in isolation but study the tradeoffs from the choices they have – intermarket analysis at the grass roots level, if you will.

What they decide will likely have a bearing on the price of the crop they do plant as well as the crop they don't, helping to keep the price ratio between the two crops somewhat in line on an historical basis when applied on a national scale.

Some analysts like to do correlation studies of two related markets, which measures the degree to which the prices of one market move in relation to the prices of the second market. Two markets are considered perfectly correlated if the price change of the second market can be forecasted precisely from the price change of the first market.

But this approach has its limitations because it compares prices of only two markets to one another and does not take into account the influence exerted by other markets on the target

market. Correlation studies also do not take into account the leads and lags that may exist in economic activity or other factors affecting a market. Their calculations are based only on the values at the moment and may not consider the longer-term consequences of market factors that may take time to show up in prices.

Gold and forex

In some cases, the correlation is inverse, especially for markets such as gold or oil that are priced in U.S. dollars in international trade. Studies on data from the last few years have shown a negative correlation between gold and the dollar of more than minus 0.90 – that is, they almost never move in tandem but almost always move in opposite directions.

The value of the euro versus gold prices, on the other hand, shows a high positive correlation – that is, the value of the euro and gold prices often go hand in hand, suggesting these markets are both beneficiaries when funds are flowing away from the U.S. dollar. That suggests gold prices are an important component in performing intermarket analysis of the forex market.

Although there are all kinds of geopolitical or natural shocks that make market analysis difficult for any trader, the more typical scenario usually involves subtle movements taking place in intermarket relationships that hint a price change may be coming. If you are not using intermarket analysis, you probably are not going to pick up on all those relationships and the effects they have on markets, as those clues may be hidden from obvious view.

Analyzing prices

Although fundamentals are the driving force behind prices, many traders find analyzing markets on the basis of fundamentals can be a daunting challenge for a number of reasons:

- Every market has its own fundamentals.
- Every market has lots of fundamentals that influence it, and it's hard to know all of them.
- Fundamentals from other markets can affect a market you are trading so you have to know fundamentals of related markets, too.
- Fundamental data can be difficult to get in a timely fashion to use in your trading – that is, getting it along with or ahead of the trading crowd.
- Fundamental data you receive may not be accurate or reliable.
- Fundamental data is always shifting.
- Even when you have the latest reliable fundamental data, you have to interpret its impact on prices.
- Even when you make your interpretation, you have to analyze how other traders will interpret and respond to the data.

So getting sound fundamental analysis is not an easy feat to accomplish. Instead, many traders turn to technical analysis, which focuses on only one thing, price. Price incorporates all of the fundamentals and the trading masses' reaction to those fundamentals into the current value of the market. Rather than many factors, you only need to monitor one factor.

To track prices over time and put them into historical perspective, technical traders use price charts. By looking at price action in the past during specific conditions and assuming those patterns will reoccur with similar conditions, technical analysts use chart patterns and other studies developed from prices to spot clues about future price direction.

Technical analysis is an art, not a science, but because prices reflect everything known about a market at a given time, many traders find it a more useful and convenient approach to analyzing and trading markets. Once you understand chart patterns and other technical factors, you can apply that knowledge to any market without having to learn a new set of data.

Clearly, technical analysis is an art and not a science so not all analysts see the same thing on a chart. The following chapters will describe some basic information about technical analysis, some of the tools and indicators technical analysts use and some of the specialized methods that legendary traders have developed to analyze markets.

The Importance of Basic Trading Tools Like the Venerable Trend Line

When I analyze markets, I have my "primary" trading tools and my "secondary" trading tools. Fundamental analysis is one of the primary tools. Another primary trading tool is basic chart patterns, such as triangles, double tops and bottoms, head-and-shoulders formations, flags, pennants, etc.

My "secondary" trading tools include the computer-generated technical indicators based on prices, such as moving averages, slow Stochastics, Moving Average Convergence-Divergence (MACD), Relative Strength Index (RSI), Directional Movement Index (DMI), etc. as well as several that are not price-related such as volume and open interest..

Keeping it simple

Generally, the more tools you have in your "trading toolbox," the better the odds for trading success, and I will discuss many of these indicators in this book. But futures and stock traders can be successful without the aid of computers and the latest hot new indicator. Some of the most famous and successful traders – Jesse Livermore or Richard Wyckoff, for example, whom we'll discuss later in this book – never touched a computer.

When I first got into this fascinating business, I had no computer to give me an RSI or DMI or moving averages. I had a weekly chart service that was mailed – U.S. Postal Service, not email! On the markets I was following, I plotted the daily high, low and close on the daily bar chart and drew trend lines with a ruler and pencil. For the longer-term monthly and weekly continuation charts for nearby futures, the chart service would send out updates about once a quarter.

I'm sure there are still some traders who use a chart service and trade successfully. Certainly, the evolution of computer trading and charting software in the last 20 years has made technical analysis much easier. But the point I want to make here is that, while computers have made the chore of technical analysis and charting easier, they have not made the achievement of trading success any easier.

Some of the computer-generated, whiz-bang, ultimate bells-and-whistles technical trading systems remind me of the Sears Robo-Grip pliers I got for Christmas a few years ago. These pliers were touted as a break-through wonder tool that does it all. However, in reality, when you've got a tough nut or bolt to loosen, you head for the toolbox and your trusty old box-end wrench or Vise-Grip.

Sticking with the basics

In trading, my box-end wrenches and Vise-Grips are the basic chart patterns that you can plot on a chart – by hand if necessary. One of the most basic – and yet most powerful – patterns is the venerable trend line.

Here is what respected technical analyst John J. Murphy says about trend lines in his excellent book, *Technical Analysis of the Futures Markets*: "The importance of trading in the direction of the major trend cannot be overstated. The danger in placing too much importance on oscillators, by themselves, is the temptation to use divergence as an excuse to initiate trades contrary to the general trend. This action generally proves a costly and painful exercise. The oscillator, as useful as it is, is just one tool among many others and must always be used as an aid, not a substitute, for basic trend analysis."

Source: VantagePoint Intermarket Analysis Software

When drawing trend lines on the charts, techniques vary. There are really no hard and fast rules as to how a trend line must be drawn. Like much of technical analysis, drawing trend lines is more art than science.

When drawing an uptrend line, you draw a straight line from left to right along the price bottoms marking successive "reaction" lows. A downtrend line is drawn from left to right along price highs marking successive rally peaks. It's important to note that the more times the rally peaks or reaction lows touch the trend line, the more powerful the trend line becomes.

The rule I use for negating a trend lines is that prices must penetrate the trend line resistance or support level and then produce follow-through strength or weakness in the next trading session. However, if prices make a big push above or below the trend line, then that trend line is negated without needing follow-through confirmation.

John Murphy's book mentioned above has much more detail on trend line analysis as well as other basic chart patterns.

Support and Resistance:
Key Levels to Identify

In addition to identifying trend lines, one of the most important basics of technical analysis is determining support and resistance areas on the charts. My favorite method – and I believe this is the most accurate method – of determining support and resistance levels is to look at a bar chart with its past price history and see at what price levels the highs, lows and closes seem to be touching the most. This method of determining support and resistance levels works on any bar chart time frame – hourly, daily, weekly or monthly.

Many times a bunch of highs or lows will be concentrated in a small price area but not at one specific price. If that's the case, I will determine that area to be a support or resistance "zone." Of course, you don't want your zone to be so wide that it becomes virtually useless from a trading standpoint.

Source: VantagePoint Intermarket Analysis Software

Major price tops and bottoms in markets are also major resistance and support levels. Unfilled price gaps on charts also qualify as very good support and resistance levels. Trend lines discussed in the previous chapter also provide support and resistance clues that are very useful to the trader. Projecting these trend lines to determine future support and resistance areas can be extremely effective.

It's important to note that when a key support level or zone is penetrated on the downside, that level or zone will likely become key resistance. Likewise, a key resistance level or zone that is penetrated on the upside will then likely become a key support level or zone if prices decline back to that area.

Retracement signals

Another way to discover support or resistance areas is by looking at "retracements" of a significant price move – price moves that are counter to an existing price trend. These moves are also called "corrections."

For example, let's say a market is in a solid uptrend. That uptrend began at the 100 price level and prices rallied to 200. But then prices backed off to 150, only to then turn around and continue to rally higher. This would be considered a 50% retracement of the move from 100 to 200. The 150 level proved to be solid support. In other words, the 50% retracement level proved to be a solid support level because prices retraced 50% of the rally and then moved back higher. The same holds true for downtrends and "corrections" to the upside.

A few retracement percentages that work well at determining support and resistance levels include 33%, 50% and 67%. Two other percentages – 38% and 62% – are known as Fibonacci numbers, which we will cover in a later chapter.

So, these five numbers are the best at determining retracement support and resistance levels. Many trading software packages have these five percentages calculated in a tool, so that all you have to do is click your mouse at the beginning of the price trend and then at the end of the trend, and the percentage retracements are laid out right on a price chart.

Angles and psychology

Still another way that support and resistance levels can be identified is through geometric angles from a certain key price point. W.D. Gann, a legendary stock and commodity trader who died in 1955, is the most noted proponent of this method. He also used the same five numbers mentioned above to calculate his angles. Again, some trading software will provide "Gann fans" to plot the angles on the charts.

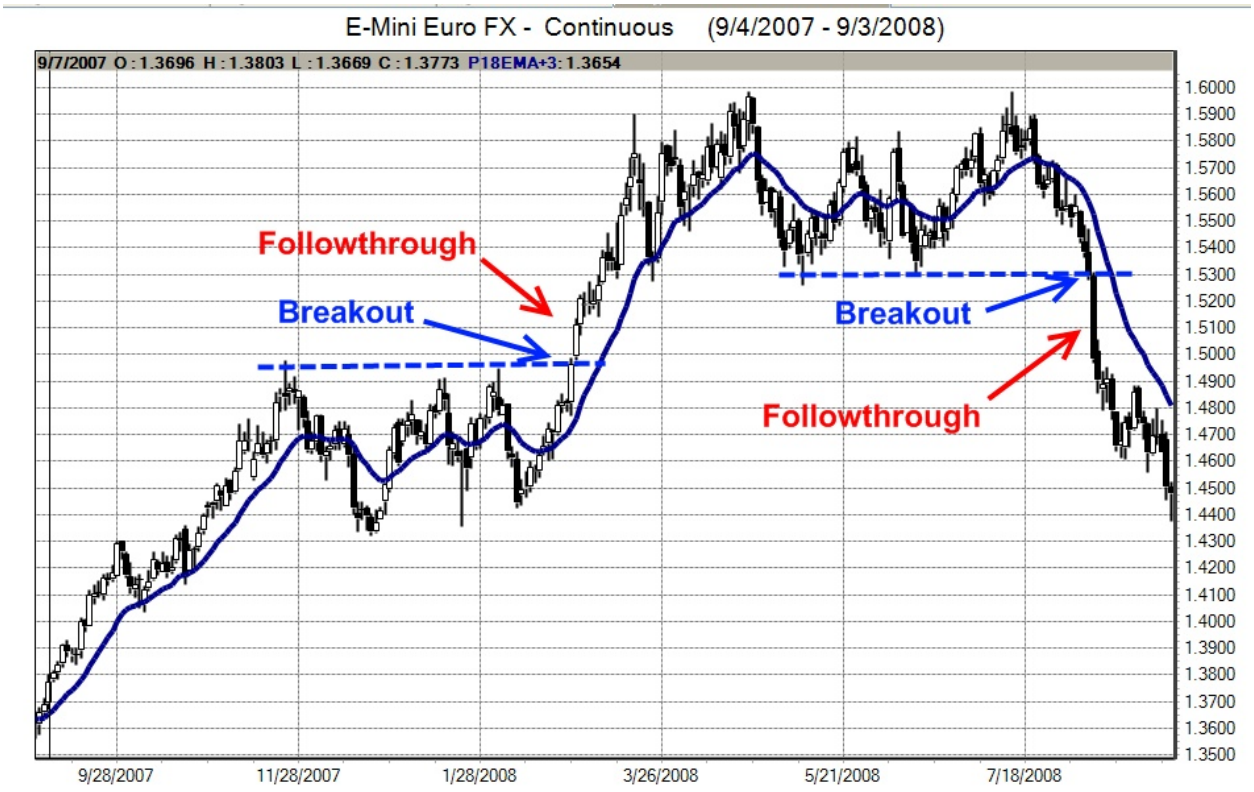
Finally, support and resistance levels for markets can be determined by "psychological" price levels. These are usually round numbers that are very significant in a market. For example, in crude oil, a psychological price level might be $100 per barrel or $80 or $150. In soybeans, a price of $15 or $6 or $10 per bushel would be a psychological level. In cotton, 60 cents or 70 cents a bale would qualify. Silver points might be $15 or $10 or $20 per ounce.

Traders use other methods to determine support and resistance levels, such as pivot points or VantagePoint's predicted next day's highs or lows, but those mentioned above are the most popular and widely followed. They tend to work because many traders are aware of these areas and react in a similar manner as prices approach them – sometimes making support and resistance areas a self-fulfilling prophecy.

‘Follow-Through’ Important To Verify Market Moves

Patience is a virtue in most endeavors in life, and it's certainly a valuable asset in futures and stock trading. I use the term "follow-through" many times when I discuss significant market moves such as price breakouts or trend changes.

Follow-through trading activity is really just a confirmation of the previous trading session's bigger price move. If one day's (or one price bar's) move is really that technically significant, then prices should be able to show some follow-through in the same direction the next trading session (or next trading bar on the chart).



Source: VantagePoint Intermarket Analysis Software

Many times that all-important follow-through price action does not occur. What happens many times is the market retraces much of the previous trading session's bigger gains or losses, and then, when all is said and done at the end of the day, prices are not that far from where they were two sessions (or two price bars) ago.

Learning a lesson

I am continually learning (or trying to learn!) from past trading missteps and can provide you with a specific example of a time when I did not wait for a market to show me that important

follow-through strength on what I thought to be an upside breakout but turned out to be a false breakout instead.

I had the corn market on my radar screen for several weeks and was waiting for the market to break above and negate a longer-term downtrend line. On a Wednesday, corn did make a strong upmove, and prices pushed just slightly above the longer-term downtrend line although it did not come close to negating it.

Well, I had to be out of the office for the next two days (Thursday and Friday) and would not have any access to my broker or price data. So I called my broker that Wednesday afternoon and put in a buy-stop order for corn at a price level far enough above the downtrend line so that, if the buy stop was hit, I thought it would be a strong enough price move to negate the downtrend line and signify an upside breakout on the daily bar chart.

I left town that night with a little gremlin in the back of my brain that was saying, "You are still not waiting for follow-through price strength the next trading day to confirm the upside breakout in corn!" Sure enough, corn futures moved high enough on the open Thursday morning to touch my stop and get me into the market on the long side – only to have that price level be the high for the month. Prices then reversed lower, and I was stopped out of the corn market about a week later.

Of course, hindsight is always 20/20. However, this particular trade reconfirmed to me the importance of having the patience to wait for a market to show follow-through price action to confirm a potential trading set-up. In waiting for follow-through strength or weakness, a trader does run the risk of missing out on some of a price move. But, more times than not, it is prudent to make a market confirm a bigger price move with follow-through activity the next session or the next price bar for intraday charts.

By the way, a market sometimes can exhibit a small trading range "rest day" after a bigger price move and then confirm that bigger move the next trading session. Usually, however, if follow-through strength or weakness is going to occur, it's going to take place the very next trading session

Eight Short-term Technical Tools That Can Make You Money

Several valuable technical trading tools that I use are designed for a shorter-term and even an intraday basis. Although I am not a day trader and consider myself more of an intermediate-term position trader, I do like to provide analysis and clues that will help out those readers of my analysis who use shorter trading time frames. Even for longer-term position traders, shorter-term trading tools can help refine all-important entry and exit strategies.

Below are some of my favorite shorter-term chart signals that I employ. You'll note that my favorite shorter-term trading signals are not computer-generated, in keeping with my philosophy that, while computers certainly aid traders in many ways, they may not be able replace the value of the human eye in examining a price chart.

Collapse in volatility

Market behavior can be predictable to a certain degree. However, nobody can predict exactly what a specific market will do or exactly when it will do whatever it does. True professionals in our business will tell you that market analysis is not a business of predictions but one of probabilities, and they realize that price history repeats itself. From price history they expect to extrapolate predictable patterns of price behavior.

One such pattern is what I call a "collapse in volatility." My friend Glen Ring, who is a respected trader, researcher and trading educator, introduced me to this phenomenon.

Source: VantagePoint Intermarket Analysis Software

A collapse in market price volatility occurs when trading ranges (the length of price bars) narrow substantially (circled areas on chart). This price pattern is evidenced by price chart bars – daily, hourly or minutes – that suddenly get smaller. The smaller price bars should number at least three in a row and do not necessarily need to get progressively smaller with each bar.

This "collapse in volatility" usually sets off a significantly bigger price move, either up or down. As the smaller price bars accrue on the chart, there is no set number of bars that will set off the bigger price move. It could be three bars, or it could be 10 bars or more before the bigger price action takes off. I don't know the direction a market will move coming out of this pattern. I just know that a bigger price move is likely forthcoming.

However, there are occasions when there is a collapse in volatility and at the same time other technical indicators are signaling a price move in one direction. With that additional information, one can determine that odds favor a bigger price move in a certain direction.

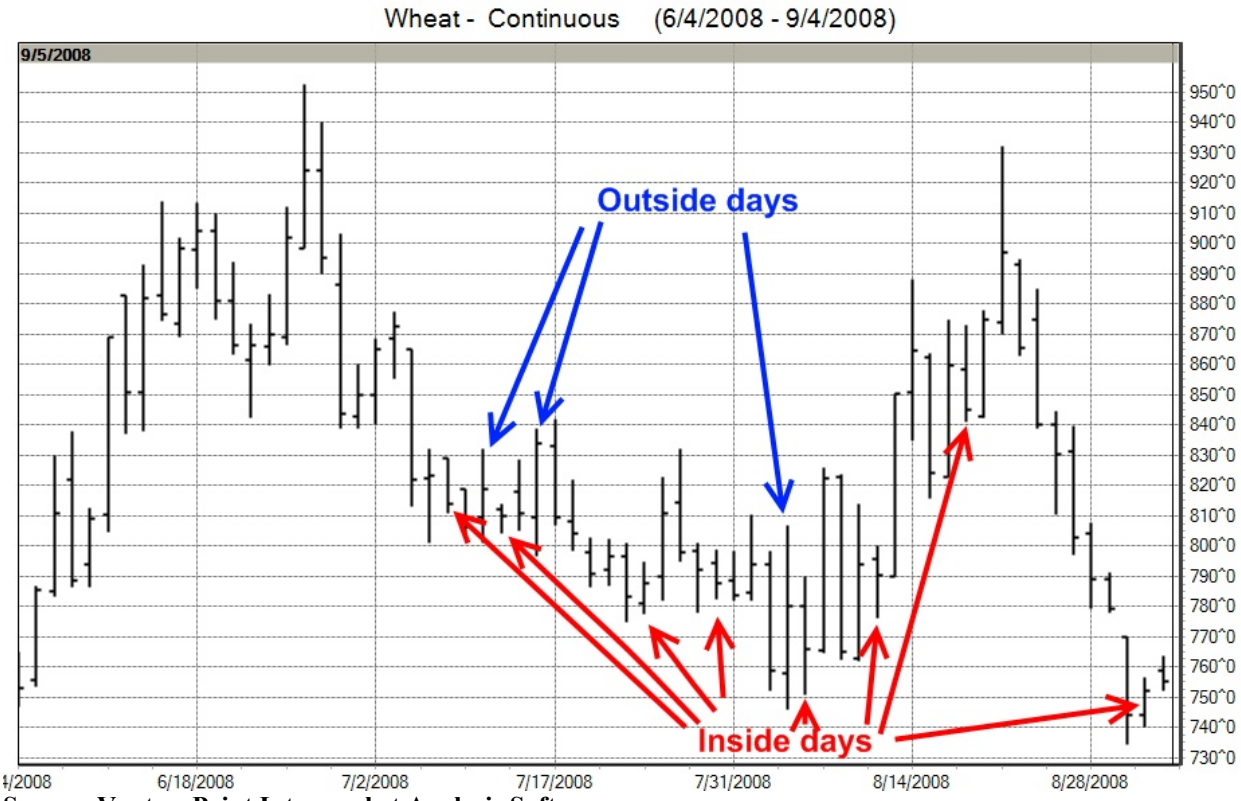
It is important not to confuse a collapse in volatility with a trading range or a "congestion area." A trading range or a congestion area on the price charts is defined as prices moving in a sideways pattern, usually bound by some stiff support and resistance levels. Trading ranges or congestion areas are longer in duration than a collapse in volatility and are also marked by trading bars that are not so narrow.

Remember, a collapse in volatility needs to show significantly narrower trading bars for at least three bars in a row. And if some slightly bigger price bars do form after several smaller price bars in a row, then a bigger price move is not likely to occur.

Outside days (or bars)

Outside days (or bars) occur when the last price bar is bigger (a bigger trading range) than the previous bar on the chart. If the close (or last trade of the bar's time frame) is higher than the previous bar's last trade, then that is considered a bullish "outside day" (or bar) up. A bearish "outside day" (or bar) down occurs when the close (or last trade of the bar's time frame) is lower than the previous bar's close.

Follow-through, discussed in the previous chapter, is important to confirm this signal.



Source: VantagePoint Intermarket Analysis Software

Inside days (or bars)

Inside days (or bars) occur when the last price bar is "inside" the previous bar, meaning the trading range is smaller and within the confines of the previous bar's trading range. In other words, the inside bar's high is lower and the low is higher than the previous bar's trading range.

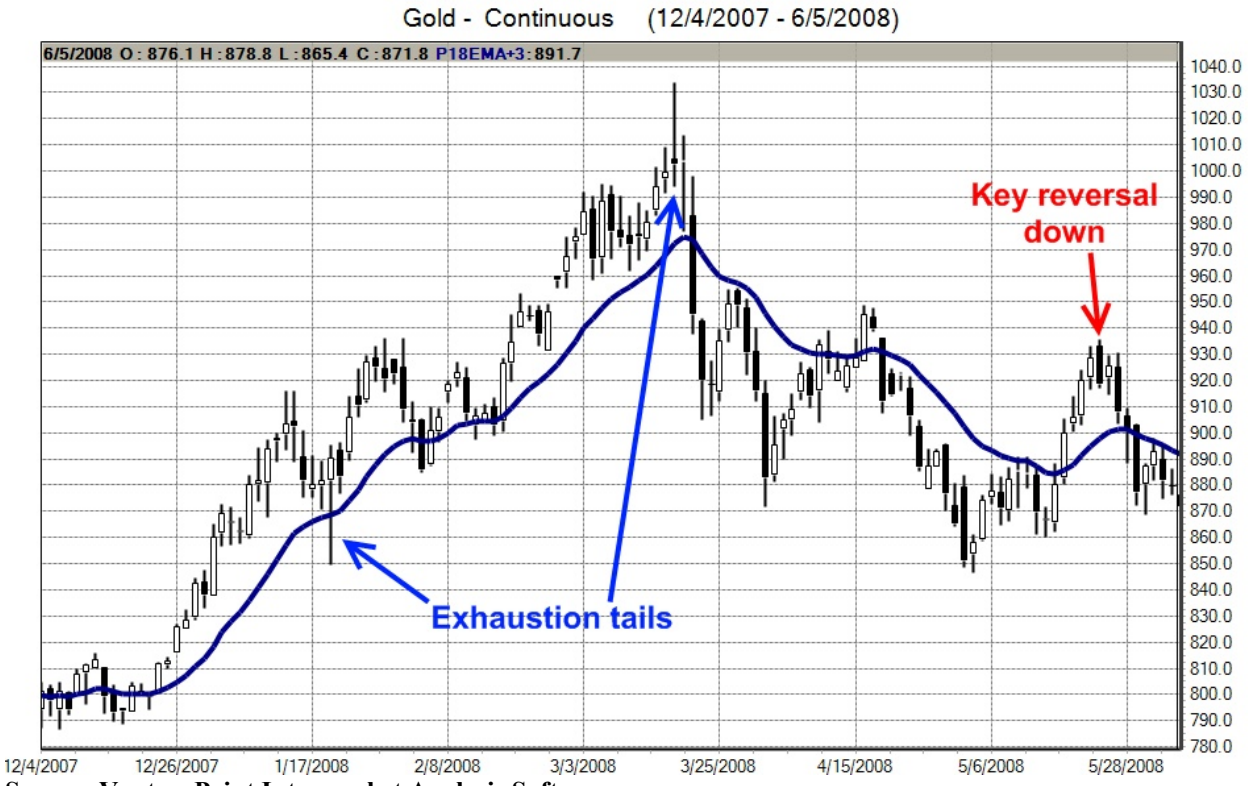
Inside days (or bars) signal that the market is taking a break after a busy period. Inside days can also be an indicator that a collapse in volatility may be setting up and that yet another bigger

price move could be on the horizon. After a big price bar and busy trading day, one can expect the next session could be an "inside" rest day. Again, look for follow-through.

Key reversals

Key reversals are one important signal of a potential market top or bottom. A key reversal occurs when a new-for-the-move high or low occurs and then during that same day (or trading bar), the price reverses direction sharply to form an "outside day" up or down.

Some analysts will call this move alone a key reversal. In my trading rules, however, a key reversal must be confirmed by follow-through strength or weakness in the next trading session (or trading bar). Follow-through greatly helps eliminate false signals and makes a market "prove itself" after a bigger move.



Source: VantagePoint Intermarket Analysis Software

Exhaustion tails

Exhaustion tails occur when either buying or selling apparently becomes exhausted after prices make a fresh-for-the-move high or low that creates a bigger price bar on the chart. Then prices reverse course to close at the other extreme of the bar's original price action. Thus, you get a bigger bar that creates a "tail." These tails become important guideposts because they indicate price levels that traders have rejected and become important resistance or support levels on the chart.

Closing price

Most traders agree that the most important price of the trading session is not the open, the high or the low but the closing price or the settlement price for a session. After an entire session of buyers and sellers doing business, this is the level at which they have agreed (voluntarily or involuntarily) on a price when they go home.

I place more emphasis on the position of a closing price below an important support level or above an important resistance level or above or below a trend line or chart pattern than I do on those prices that just probe above or below those levels during the session only to then pull back by the close. Intraday prices may test where the market might go, but it is the close that is most likely to indicate where professional traders see the real value.

Daily or weekly high or low closes

If a market closes near the daily session high or at the weekly high close, that's a sign of market strength and suggests there will be at least some follow-through strength the next trading session (or price bar). A close near the daily low or a weekly low close suggests market weakness and that follow-through selling could occur the next trading session or price bar.

Gaps

These chart formations occur when price bars push well above or below the previous bar to form a gap on the chart – a place where no trading occurs. The last bar's low is higher than the previous bar's high for a gap-higher move. The last bar's high is lower than the previous bar's low to form a gap-lower trade.

Gaps can be created on a minute, hourly, daily, weekly or monthly chart. Price gaps indicate a strong market move, and many times the gaps will then serve as important support or resistance levels on the chart.

Source: VantagePoint Intermarket Analysis Software

Swing Trading: Profiting In a Sideways Market

"The trend is your friend" is a tried-and-true market adage that is indeed one of the most valuable futures trading tenets. However, history shows that most markets tend to move in a non-trending, or "sideways" fashion more than they do in a trending mode.

Traders use several methods to trade non-trending markets. One popular method is called "swing trading." The basic principle for swing trading is finding a market that is confined in a sideways trading range or a congestion area or in an uptrending or downtrending channel on the chart. This band of trading activity must have some clear support and resistance levels that act as boundaries of the congestion area or channel.

Source: VantagePoint Intermarket Analysis Software

Maintaining the status quo

When prices approach the support or resistance boundary, the trader will establish a position: long if prices are moving lower and close to the support boundary and short if prices are moving higher and toward the resistance boundary. Instead of positioning for a breakout of the range, swing traders expect prices will continue to stay within the boundaries of the range.

Swing trading techniques can be used in any time frame – daily, weekly, monthly or intraday. However, the most popular time frame for swing trading is the daily bar chart.

Source: VantagePoint Intermarket Analysis Software

It's important to note that the strength of the support and resistance at the boundaries is usually determined by the number of times the market has pivoted at the boundaries. The more times a market has reached a support or resistance boundary and then reversed course, the more powerful that boundary is. Thus, a trader wants to find a well-established channel or trading range in which to attempt to swing trade.

An exception to this is a market that has been in a trading range but is bound by one or two powerful spike moves, which also indicate a strong support or resistance boundary. In other words, some congestion areas that may offer a good swing-trade opportunity do not require several pivot points. Instead, those one or two spike levels would be determined to be a potentially good pivot area for a market.

Staying protected

The swing trader should still use tight protective stops. A good area to place a protective stop is just outside of a support or resistance boundary that makes up the trading channel or congestion area. For example, if a market in a trading channel is nearing the upper boundary of that channel, the swing trader would establish a short position and would want to place a protective buy stop just above the resistance level that serves as the upper boundary of the trading channel.

If the market keeps moving higher and breaks out above the channel or congestion area, (stopping the swing trader out of the market) then that would likely be considered an upside

"breakout," which is a favorite trading setup for many veteran position traders and calls for a shift in strategy other than swing trading.

This setup would suggest establishing a long position on good follow-through buying strength in the session following the upside breakout from the congestion area or channel. The trader establishing the long position would place a protective sell stop just below the former upper boundary of the trading channel or congestion area that was just penetrated on the upside.

Analyzing price tools

I have mentioned many times that I like to take a “toolbox” approach to analyzing and trading markets. The more technical and analytical tools I have in my trading toolbox at my disposal, the better my chances for success in trading.

It doesn’t mean I will use every tool on every occasion, but having the right tool at hand and applying it at the right time can be very useful in evaluating what is behind price movement and forecasting what prices might do next, based on what they have done in similar situations in the past. Sometimes you need a hammer, sometimes you need a wrench, sometimes you need a saw . . . you get the picture.

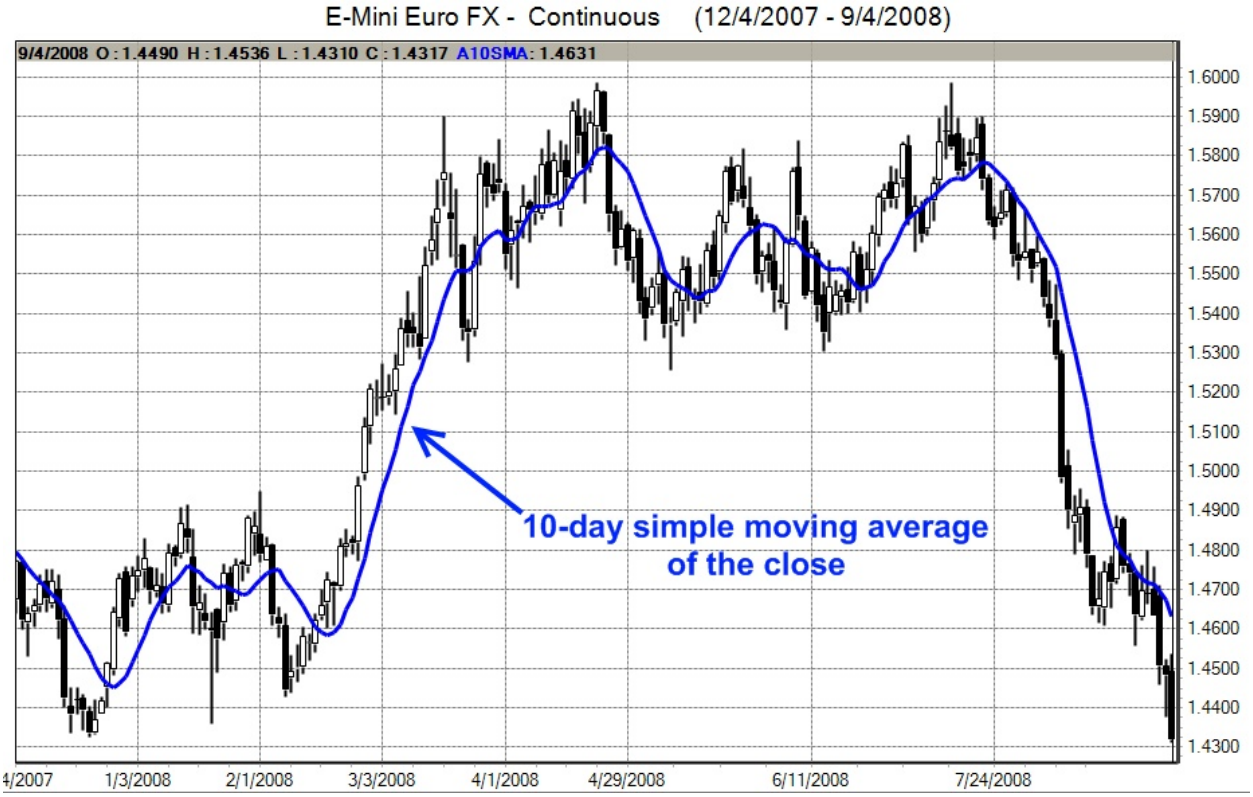
The indicators I examine in this section are what I consider “secondary” tools. You may recall that I consider fundamental analysis, trend lines and basic chart price patterns to be my primary or most important tools, but the secondary tools can be a valuable addition to my toolbox to shed a little more light and insight on what my primary tools are telling me.

Simple Moving Averages: Smoothing Price Action

One of my favorite "secondary" trading tools is moving averages. First, let me give you an explanation of moving averages, and then I'll tell you how I use them.

Moving averages are one of the most commonly used technical tools. In a simple moving average, the mathematical median of the underlying price is calculated over a specified observation period. Prices (usually closing prices) over this period are added and the sum is then divided by the total number of time periods. Every day of the observation period is given the same weighting in simple moving averages.

Some moving averages give greater weight to more recent prices in the observation period. These are called exponential or weighted moving averages, but we'll get to them in the next chapter after explaining some of the basic moving average trading tactics using simple moving averages for examples.



Source: VantagePoint Intermarket Analysis Software

Time sensitive

The length of time (the number of bars) calculated in a moving average is very important. Moving averages with shorter time periods normally fluctuate more quickly and sharply and are likely to give more trading signals. Slower moving averages use longer time periods and display

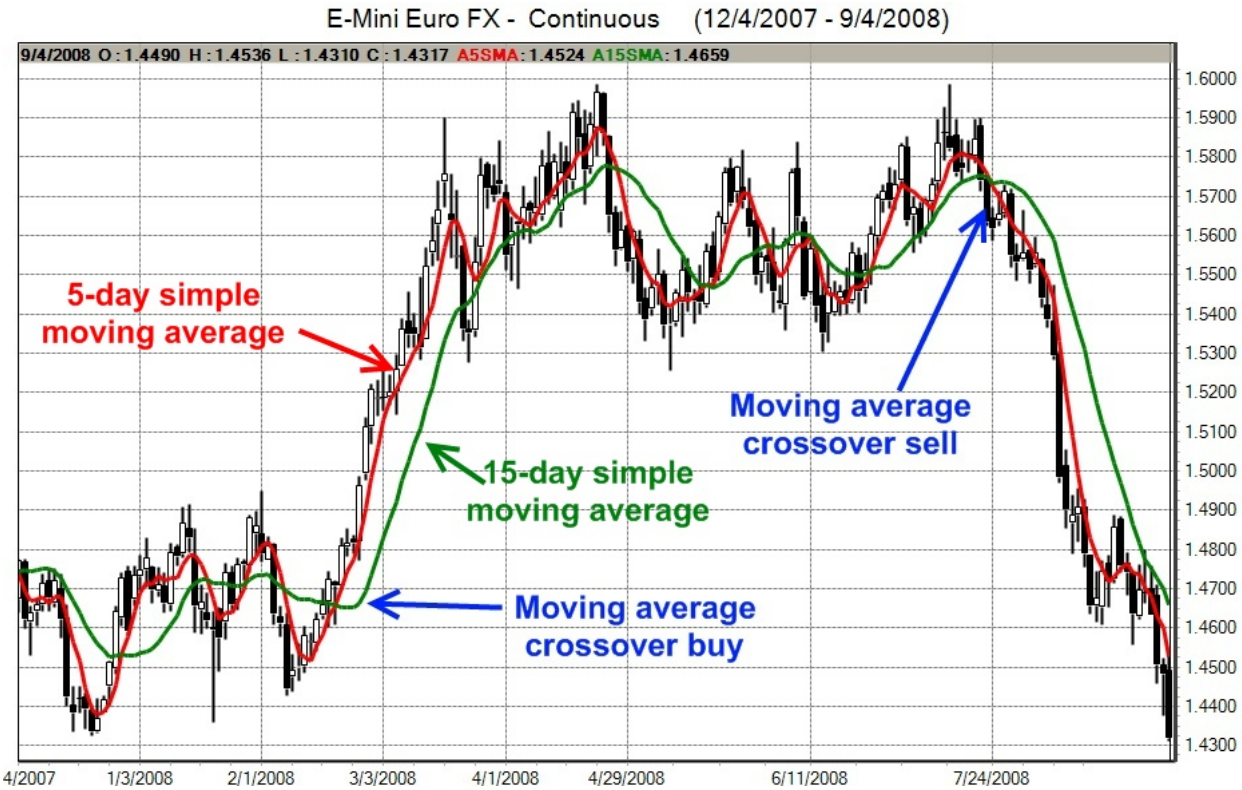
a smoother moving average. Depending on your trading style, however, the slower averages may be too slow to enable you to establish a long or short position effectively.

Moving averages follow the price trend while smoothing the price movement. The simple moving average is most commonly combined with other simple moving averages to indicate buy and sell signals. Some traders use three moving averages typically including short-term, intermediate-term and long-term moving averages. A commonly used system in futures trading, for example, is a 4-, 9- and 18-period moving average.

Keep in mind that a time interval may be ticks, minutes, days, weeks or even months. Typically, moving averages are used in the shorter time periods and not on the longer-term weekly and monthly bar charts, but different markets may respond better to different time parameters.

Trading crossover signals

The normal moving average "crossover" buy/sell signals are as follows: A buy signal is produced when the shorter-term average crosses from below to above the longer-term average. Conversely, a sell signal is issued when the shorter-term average crosses from above to below the longer-term average.



Source: VantagePoint Intermarket Analysis Software

Another trading approach is to use closing prices with the moving averages. When the closing price is above the moving average, maintain a long position. If the closing price falls below the moving average, liquidate any long position and establish a short position.

Here is the important caveat about using moving averages: They lag current action because they are based on past prices and they do not work well in choppy or non-trending markets, as the charts illustrate. You can develop a severe case of whiplash using moving averages in choppy, sideways markets. On the other hand, as you might expect, in trending markets, moving averages can work very well.

Picking favorites

My favorite moving averages for futures markets are the 9-day and 18-day. I have also used the 4-day with the 9-day and 18-day moving averages on occasion. For VantagePoint users, the moving averages have been optimized for short-term, medium-term and long-term settings after countless runs through a neural network process to select the best moving averages. In most cases, letting a computer do the analysis to determine the moving average parameters will produce much better results than traders can do with their eyes.

While futures time frames for moving averages are relatively short, traders in the stock market tend to use longer-term moving averages such as the 100-day moving average to determine if a stock is bullish or bearish. If the stock is above the 100-day moving average, it is bullish. If the stock is below the 100-day moving average, it is bearish. I also use the 100-day moving average to gauge the health of stock index futures markets.

One more bit of sage advice: A veteran market watcher told me the commodity funds (the big trading funds that many times seem to dominate futures market trading) follow a 40-day moving average very closely, especially in grain futures. Thus, if you see a market that is getting ready to cross above or below the 40-day moving average, it just may be that the funds could become more active.

Exponential Moving Averages: Where They Fit in the Toolbox

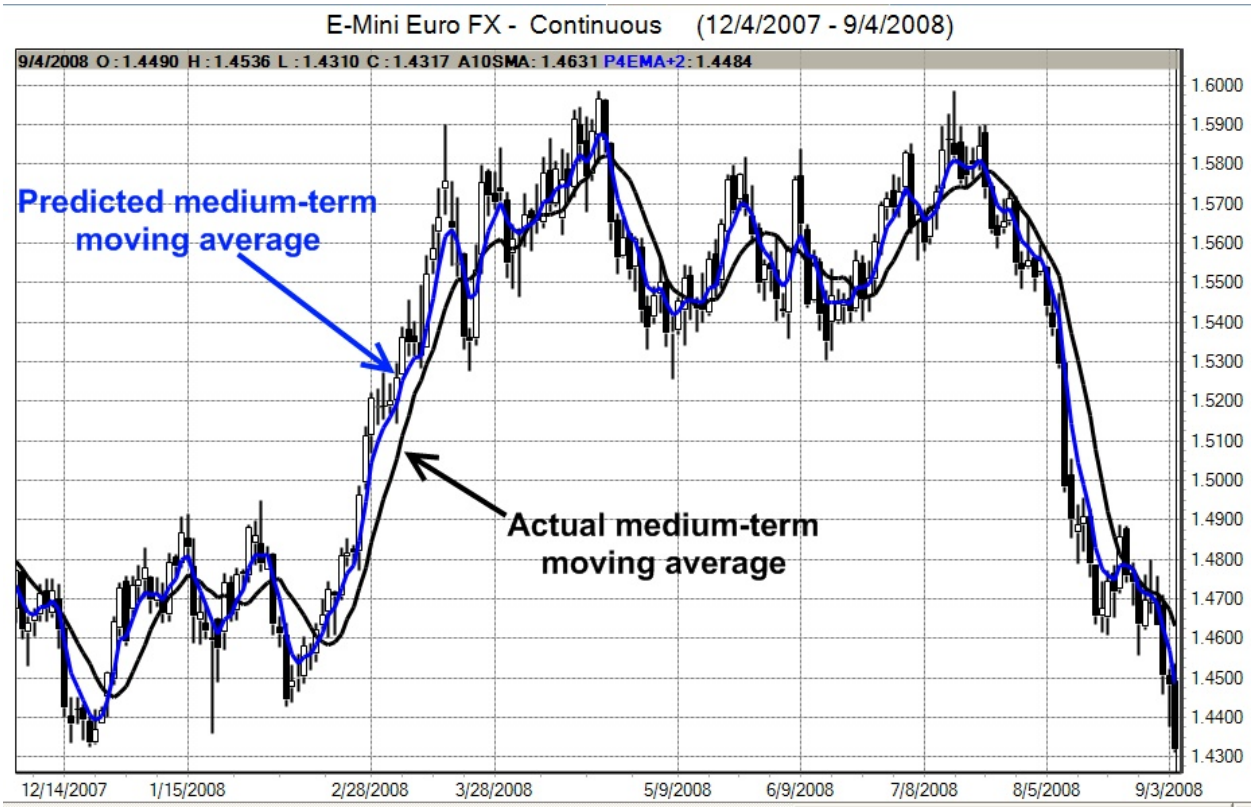
The exponential moving average (EMA) is a less popular but more sophisticated version of the simple moving average. EMAs place more importance on the recent price action, but all the price data for a market is used, not just those prices for a specified period. Because an EMA uses so much data, you need computer trading software to employ EMAs. Some software such as VantagePoint makes extensive use of EMAs in its analytical routines.

With a simple moving average, the price data have an equal weight in computing the average. Also, in a simple moving average, the oldest price is removed from the moving average as each new price is added to the computation.

The EMA assigns a weight to the price data as the average is calculated. Thus, the influence of the oldest price data in the EMA is never removed completely although the older prices have only a minimal impact on the moving average. The EMA calculation is achieved by subtracting yesterday's EMA from today's price. Adding this result to yesterday's EMA results in today's EMA.

The main value of the EMA indicator is its smoothing function as it reduces short-term fluctuations and leaves a clearer view of the prevailing trend. This can be important because simple moving averages tend not to work well in choppy trading conditions.

Many trading programs such as VantagePoint display the EMA as a crossover trading strategy. For a crossover system, you may insert three different exponential moving averages. Generally, the lengths for these moving averages are short-term, intermediate-term and long-term periods. Again, an interval may be in ticks, minutes, days, weeks or months. Many trading programs use the closing price in the EMA calculation, but some allow the user to specify a different price to use in the calculation (open, high, low, close, midpoint or average price) by changing the computation of the EMA. VantagePoint, for example, uses "typical prices" – the average of the day's high, low and close.



Source: VantagePoint Intermarket Analysis Software

If an EMA crossover trading system is used, a buy signal occurs when the shorter-term EMA crosses from below to above the longer-term average. Conversely, a sell signal is issued when the shorter-term average crosses from above to below the longer-term average.

Using intermarket data, VantagePoint is able to turn a moving average from a lagging indicator into a leading indicator that can forecast short-term trend direction before traditional moving averages do. On the VantagePoint chart above, note that the predicted medium-term moving average (blue line) tends to turn a few days earlier than the actual medium-term moving average (black line), providing an important early edge in getting positioned for the next trend.

Another trading approach with moving averages is to buy if the current price is above the EMA and to liquidate that position when the current price crosses below the EMA. For a short position, sell when the current price is below the EMA and liquidate that position when the current price rises above the EMA.

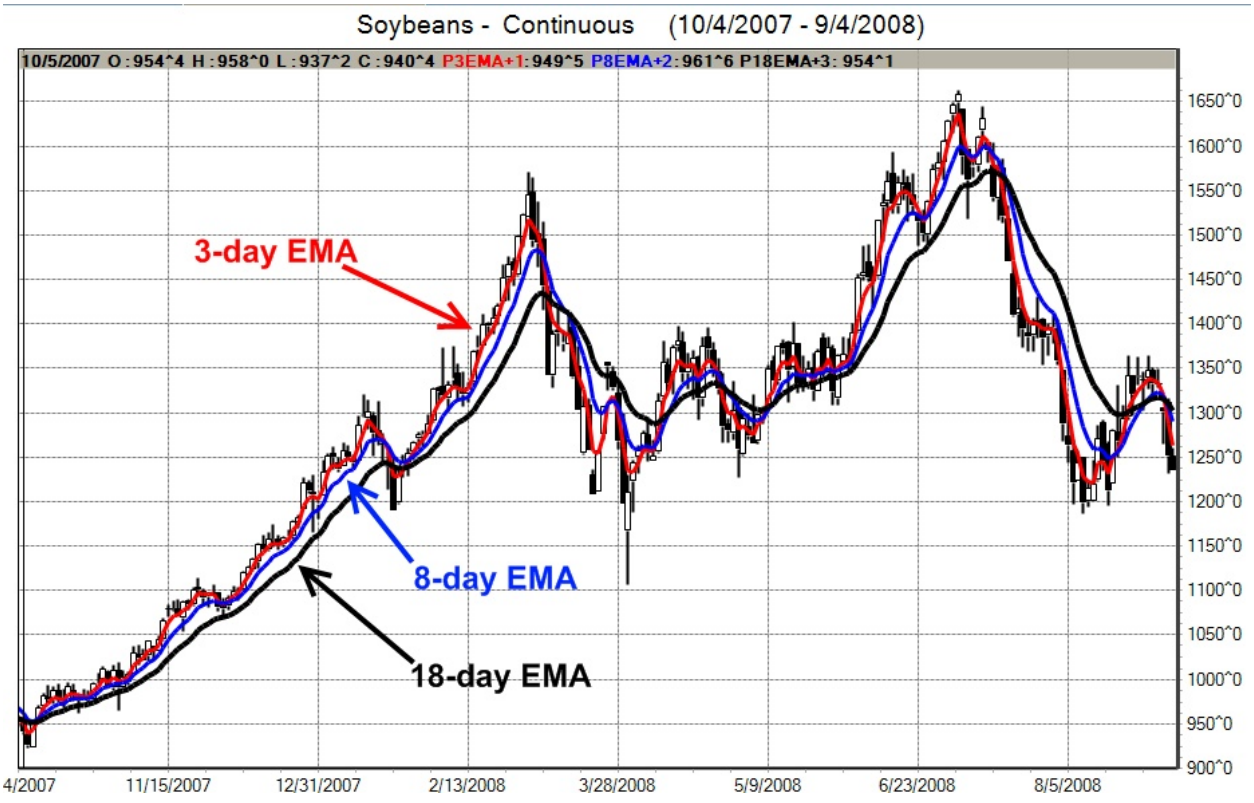
Triple Moving Averages Add Confirmation

Another method for using either simple or exponential moving averages is a triple moving average method involving a combination of a short-term, medium-term and long-term moving average. As with the moving average strategies described in the previous chapters, the signals depend on crossovers of the three moving averages and how the averages line up with each other.

A shorter-term moving average above a longer-term average indicates a bullish market. When the shorter-term moving average crosses below the longer-term moving average, the market is viewed as bearish and a sell signal is generated.

The relation of the three moving averages can help to better and more quickly define the strength of the trend and provide shorter-term trading clues. For example, if a 3-period moving average crosses above the 8-period average but the 8-period is still below the 18-period moving average, that signals a trend change may be on the horizon. However, it's best to wait for the 8-period to cross above the 18-period average for a better confirmation of the trend change.

The ideal lineup of moving averages for a long position is the 3-day on top, the 8-day between the two moving averages and the 18-day moving average beneath the other two. For a bearish condition, reverse the moving averages with the 18-day, 8-day and 3-day lined up in that order from top to bottom on the chart.



Source: VantagePoint Intermarket Analysis Software

A trader who uses shorter time frames to trade markets is better suited to using the triple moving average method because trading signals are given faster. But keep in mind, the shorter the moving average, the greater the potential for false signals.

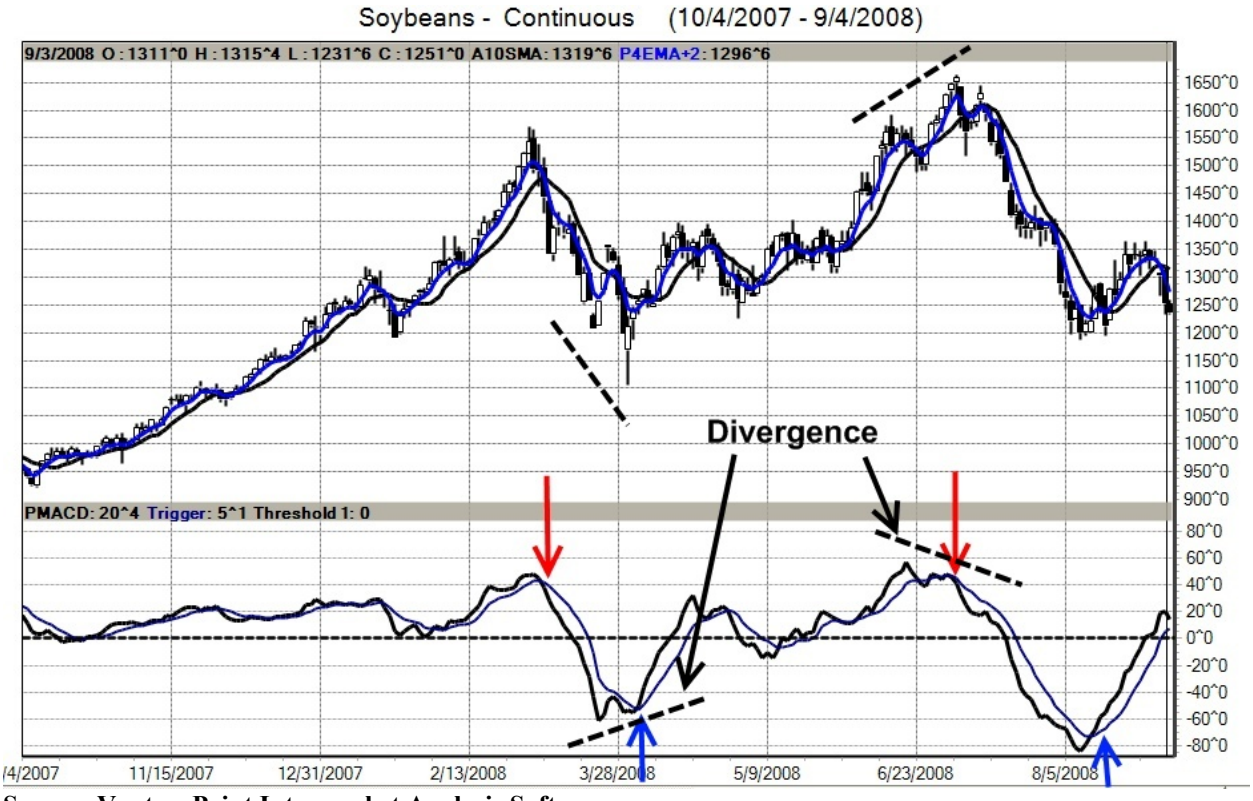
As with most moving average strategies, a triple moving average strategy does not work well in choppy or non-trending markets but can work very well in trending markets.

MACD Indicator:
A Twist on Moving Averages

The Moving Average Convergence Divergence (MACD) indicator has become one of the more popular computer-generated technical indicators. Developed by Gerald Appel, the MACD is both a trend follower and a market momentum indicator (an oscillator). I use the MACD to help me confirm signals that my primary indicators may be sending.

The MACD is the difference between a fast exponential moving average and a slow exponential moving average. An exponential moving average is a weighted moving average that usually assigns a greater weight to more recent price action. The name "Moving Average Convergence Divergence" originated from the fact that the fast exponential moving average is continually converging toward or diverging away from the slow exponential moving average.

A third exponential moving average of the MACD (the "trigger" or the signal line) is then plotted on top of the MACD.



Source: VantagePoint Intermarket Analysis Software

The MACD study can be interpreted like any other trend-following analysis: One line crossing another indicates either a buy or sell signal. When the MACD crosses above the signal line, an uptrend may be starting, suggesting a buy (blue arrows at main signals). Conversely, the MACD crossing below the signal line may indicate a downtrend and a sell signal (red arrows on main

signals). The crossover signals are more reliable when applied to weekly charts, though this indicator may be applied to daily charts for short-term trading.

The MACD can signal overbought and oversold trends, if analyzed as an oscillator that fluctuates above and below a zero line. The market is oversold (buy signal) when both lines are below zero, and it is overbought (sell signal) when the two lines are above the zero line.

The MACD can also help identify divergences between the indicator and price activity, which may signal trend reversals or a trend losing momentum. A bearish divergence occurs when the MACD is making new lows while prices fail to reach new lows. This can be an early signal that a downtrend is losing momentum. A bullish divergence occurs when the MACD is making new highs while prices fail to reach new highs.

Both of these signals are most serious when they occur at relatively overbought/oversold levels. Weekly charts are more reliable than daily for divergence analysis with the MACD indicator.

For more details on the MACD, Appel has a book in print, entitled: *The Moving Average Convergence-Divergence Trading Method*.

Directional Movement Index: Illustrating 'Trendiness'

A technical indicator I use to determine the strength of a market trend is the Directional Movement Indicator (DMI), also called the Directional Movement System. The DMI is a trend-following system developed by J. Welles Wilder.

The Average Directional Movement index, or ADX, is part of the DMI and determines the market trend. When used with the up and down Directional Indicator (DI) values – Plus DI and Minus DI – the Directional Movement Indicator can be considered a trading system.

To use the Directional Movement Indicator, establish a long position whenever the Plus DI crosses above the Minus DI. Reverse that position – liquidate the long position and establish a short position – when the Minus DI crosses below the Plus DI. Traders have added other rules to help prevent getting whipsawed by choppy markets, but I won't touch on them here.

For some traders, the most significant use of the ADX line is the "turning-point" concept. First, the ADX line must be above both DI lines. When the ADX turns lower, the market often reverses the current trend. The ADX does not predict direction but serves as a warning for a market about to change direction. The main exception to this rule is a strong bull market during a blow-off stage. The ADX turns lower only to turn higher a few days later.

I use the DMI mainly to determine the strength of a market trend, either up or down. I look at the ADX line of the DMI. If the ADX line is trading above 30, then the market is in a strong trend. If the ADX line is below 30, it means the trend is not a strong one. If the market is in a solid trend and scoring new highs (or lows) and the ADX line shows divergence and turns down, then that is one warning signal that the market trend is losing power and that a market top or bottom may be close at hand.

Even if the ADX line is well above the 30 level and starts to turn down at the same time the market is trading near new highs or lows, that is also a signal the trend is losing some power. However, as long as the ADX line is above 30, you should still consider a strong trend to be in effect.

As mentioned above, some traders use the DMI as a complete trading system. Also, some traders use the RSI, Slow Stochastics, or other computer-generated technical indicators for determining entry and exit points. I don't, and here's why: I consider these computer-generated technical indicators to be secondary, yet still important, trading tools. I will use these "secondary tools" to help me confirm or reject ideas that are based on my "primary tools" – basic chart patterns, support and resistance levels, trendlines and fundamental analysis.

Momentum Indicator: Tracking Pace of Prices

When analyzing markets, I often use the term "momentum" when referring to the amount of strength the bulls or bears have at a given point in time. This market "momentum" is a key indicator regarding the strength of a trend or whether a trend is about to end or begin.

When I worked as a market reporter on the trading floors of the Chicago Board of Trade and the Chicago Mercantile Exchange, I (as well the floor traders) had a very keen sense of which camp (bulls or bears) had momentum on their side. This was especially true in the grain pits at the Board of Trade. One obtained this keen awareness by being right on the trading floor, talking with all the market-makers who helped determine prices.

Most of the trading in most of the markets now takes place electronically so the sense of the floor is being relegated to history. However, by examining charts, cycles, seasonality and other technical indicators – and near-term fundamentals – one can get a good reading on whether the bulls or the bears have the edge in any given market. I must admit, though, that when trying to gauge market momentum, there is no substitute for working right on the trading floor and talking face-to-face with the market-makers.

Very few people ever got the opportunity I had and even fewer do today, so other tools have to be employed. One such technical tool is the momentum indicator.

Measuring Change

The momentum indicator is a popular technical study. It is easy to calculate and can be applied in various ways. Momentum can be calculated by dividing today's closing price by the closing price "X" number of days ago and then multiplying the quotient by 100.

The momentum study is an oscillator-type indicator that is used to interpret overbought/oversold markets. It assists in determining the pace at which price is rising or falling. This indicates whether a current trend is gaining or losing momentum, whether or not a market is overbought or oversold and whether the trend is slowing down.

Momentum is calculated by computing the continuous difference between prices at fixed intervals. That difference is either a positive or negative value, which is plotted around a zero line. When momentum is above the zero line and rising, prices are increasing at an increasing rate. If momentum is above the zero line but is declining, prices are still increasing but at a decreasing rate.

The opposite is true when momentum falls below the zero line. If momentum is falling and is below the zero line, prices are decreasing at an increasing rate. With momentum below the zero line and rising, prices are still declining but at a decreasing rate.

The normal trading rule is: Buy when the momentum line crosses from below the zero line to above the zero line. Sell when the momentum line crosses from above the zero line to below the zero line.

Getting into a zone

Another possibility is to establish bands at each extreme of the momentum line. Initiate or change positions when the indicator enters either of those zones. You could modify that rule to enter a position only when the indicator reaches the overbought or oversold zone and then exits that zone.

You can specify the length of the momentum indicator so you need to determine a value that is suitable to your trading needs and methods. Some technicians argue the length of the momentum indicator should equal the normal price cycle. The best method is to experiment with different lengths until you find the length that works best for the particular commodity you are trading.

Like most other "secondary" trading tools in my trading toolbox, I do not use only the momentum indicator to generate buy and sell signals or to gauge the overall technical situation in a market. I use the momentum indicator to help confirm or refute general ideas I have developed by using my primary trading tools, such as trend lines, chart patterns and fundamental analysis.

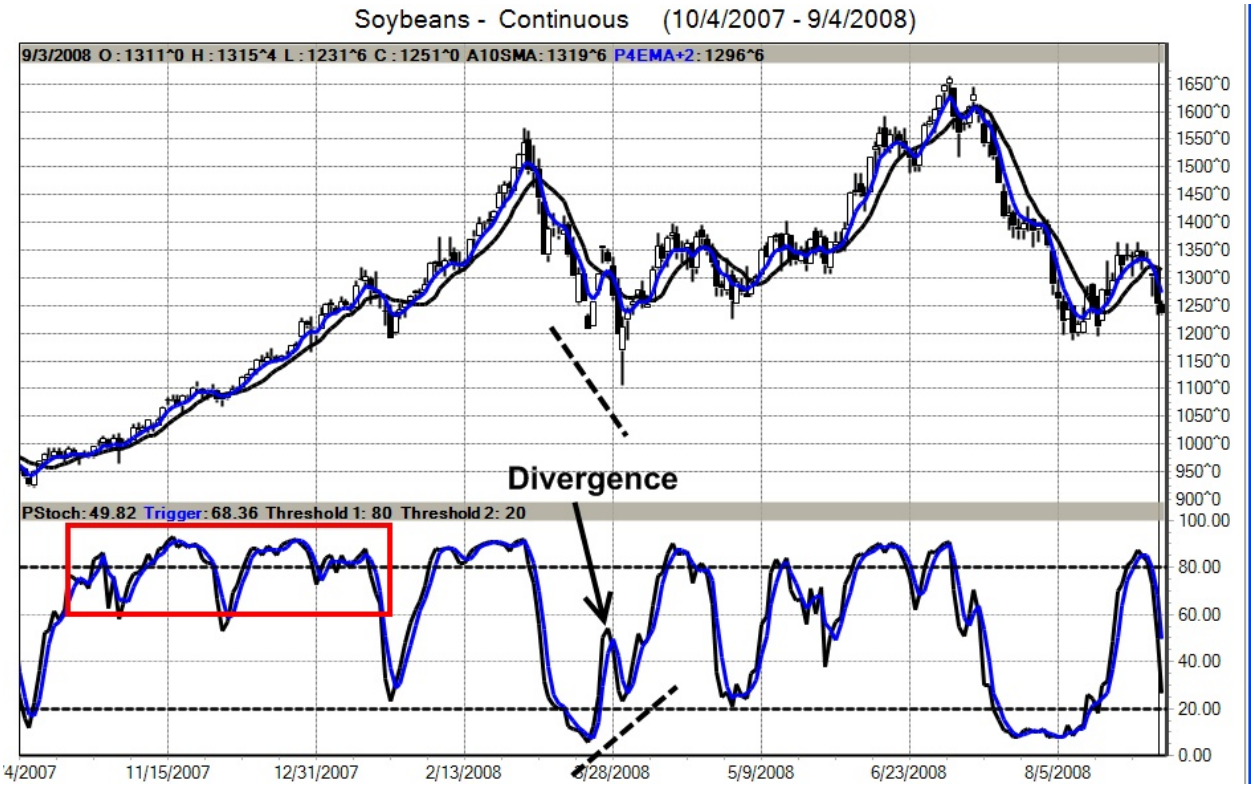
Slow Stochastics, Relative Strength: Most Popular Oscillators

Two of the more popular computer-generated technical indicators are the Slow Stochastics and Relative Strength Index (RSI) oscillators. An oscillator, defined in market terms, is a technical study that attempts to measure market price momentum, such as a market being overbought or oversold.

Slow Stochastics

George Lane has been called the father of the stochastic indicator. The basic premise that Lane developed is that, during periods of price decreases, daily closes tend to accumulate near the extreme lows of the day and that, during periods of price increases, closes tend to accumulate near the extreme highs of the day. The stochastic study is an oscillator designed to indicate oversold and overbought market conditions.

I am among those technical analysts who prefer the slow stochastic rather than the normal stochastic. The slow stochastic is simply the normal stochastic smoothed via a moving average technique. The slow stochastic, like the normal stochastic study, generates two lines, %K and %D. Lane suggested using 80 as the overbought zone and 20 as the oversold zone. Some technicians prefer 75 and 25. I like to use the 80-20 figures.



Source: VantagePoint Intermarket Analysis Software

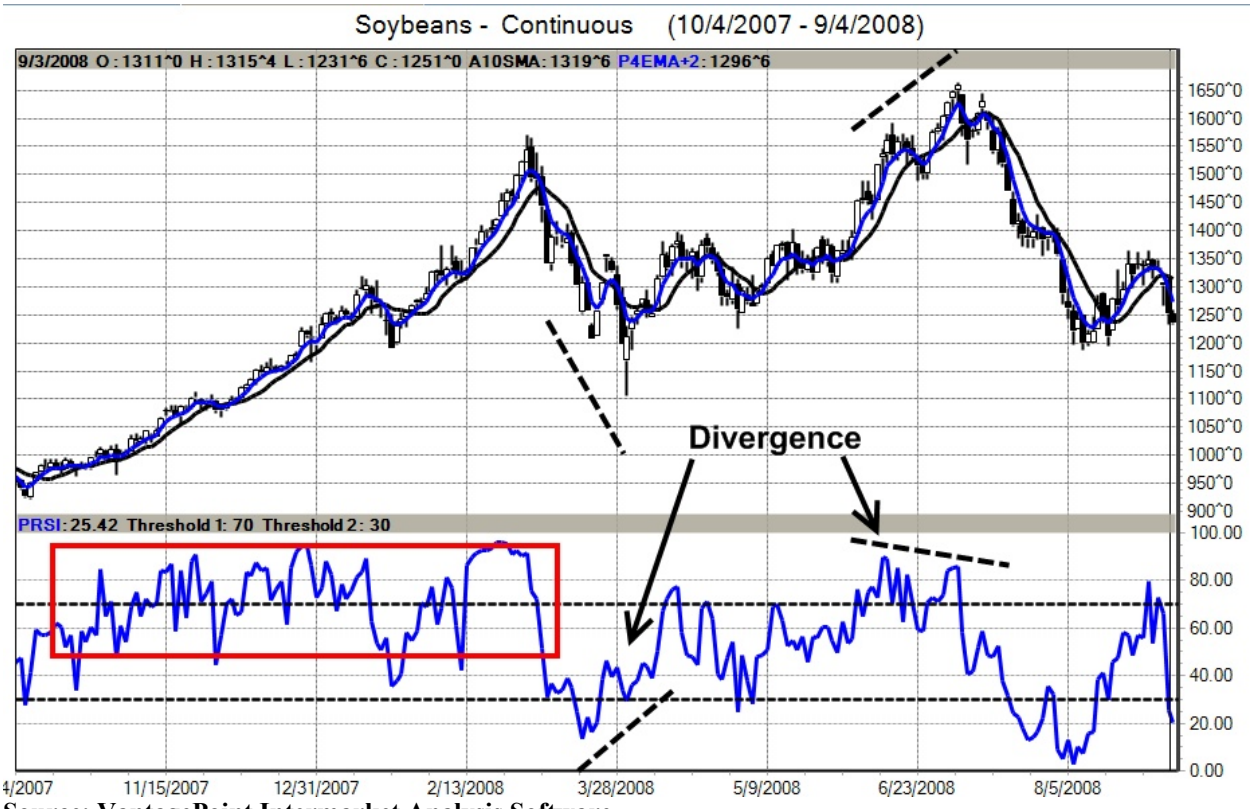
Lane also contended that the most important signal is divergence between %D and the market's price. He explained divergence as the process where the stochastic %D line makes a series of lower highs while market prices make a series of higher highs. This signals an overbought market. An oversold market exhibits a series of lower lows while the %D makes a series of higher lows.

When one of the above patterns appears, anticipate a market signal. Initiate a market position when the %K crosses the %D from the right-hand side. A right-hand crossover is when the %D has bottomed or topped and is moving higher or lower and the %K crosses the %D line. According to Lane, the most reliable trades occur with divergence and when the %D is between 10 and 15 for a buy signal and between 85 and 90 for a sell signal.

Relative Strength Index

The Relative Strength Index (RSI) is another J. Welles Wilder Jr. trading tool. The main purpose of this study is to measure the market's strength or weakness. A high RSI, above 70, suggests an overbought or weakening bull market. Conversely, a low RSI, below 30, implies an oversold market or dying bear market.

Although you can use the RSI as an overbought and oversold indicator, it works best when a failure swing occurs between the RSI and market prices. For example, the market makes new highs after a bull market setback, but the RSI fails to exceed its previous highs.



Source: VantagePoint Intermarket Analysis Software

Another use of the RSI is divergence. Market prices continue to move higher/lower while the RSI fails to move higher/lower during the same time period. Divergence may occur in a few trading intervals, but true divergence usually requires a lengthy time frame, perhaps as much as 20 to 60 trading intervals.

Selling when the RSI is above 70 or buying when the RSI is below 30 can be an expensive trading system. A move to those levels is a signal that market conditions are ripe for a market top or bottom. But it does not, in itself, indicate a top or a bottom. A failure swing or divergence accompanies the best trading signals.

The RSI exhibits chart formations as well. Common bar chart formations readily appear on the RSI study including trend lines, head and shoulders and double tops and bottoms. In addition, the study can highlight support and resistance zones.

(For information on how Andrew Cardwell uses RSI, see the next chapter.)

Employing Stochastics, RSI

First of all, these two oscillators, especially the RSI, tend to be over-used by many traders. Some traders use these oscillators to generate buy and sell signals and even as an overall trading system. However, I treat the RSI and Slow Stochastics as just a couple more trading tools in my trading toolbox, using them in certain situations but only as secondary tools.

As I have mentioned several times, oscillators tend not to work well in markets that are in a strong trend, as the red boxes on the charts above illustrate. They can show a market at either an overbought or oversold reading while the market continues to trend strongly.

Another example of oscillators not working well is when a market trades into the upper boundary of a congestion area on the chart and then breaks out on the upside of the congestion area. At that point, it's likely that an oscillator such as the RSI or Slow Stochastics would show the market as being overbought and possibly generate a sell signal when, in fact, the market is just beginning to show its real upside power.

I do look at oscillators when a market has been in a decent trend for a period of time but not an overly strong trend. I can pretty much tell by looking at a bar chart if a market is "extended" (overbought or oversold) but will employ the RSI or Slow Stochastics to confirm my thinking. One of the signals that can be particularly helpful in tipping off a trend change is divergence – the indicator moves in one direction and prices in another. In most cases it pays to go with the indicator, although it may be a little early.

I also like to look at the oscillators when a market has been in a longer-term downtrend. If the readings are extreme – say, a reading of 10 or below on Slow Stochastics or RSI – that is a good sign the market is well oversold and could be due for at least an upside correction. However, I still would not use an oscillator, under this circumstance, to enter a long-side trade in straight futures, as that would be trying to bottom-pick.

These two oscillators are not perfect and are certainly not the “Holy Grail” that some traders continually seek. However, the RSI and Slow Stochastics are useful tools to employ under certain market conditions.

RSI: Cornerstone of Andrew Cardwell's Trading Model

The ideal technical indicator, according to Andrew Cardwell, Jr., is one that offers the capability to identify and monitor the current trend, highlight overbought and oversold extremes and give early warnings of a trend change.

"The Relative Strength Index (RSI) is such an indicator, offering the best of all worlds," claimed Cardwell, president of Cardwell Financial Group, Inc., at a conference I attended. Cardwell called RSI "the cornerstone of my trading model."

Cardwell showed how the RSI can be used as either a completely independent trading model or as an addition to and enhancement of a trader's current technical approach. He used it as a completely independent model to identify trend, support and resistance, overbought/oversold levels, divergence, trend change, reversal and price targeting.

RSI more than divergence

Cardwell said most traders who use the RSI focus their attention on trying to identify bullish and bearish divergences. He said basic price and momentum divergence can and do help to identify extreme overbought or oversold conditions in market momentum.

However, he said most traders fall prey to the concept of divergence and see it as the end or reversal of the prevailing trend of the market. All would be right in the world if markets were to reverse from simple divergence. But there are times when sentiment and momentum are so strong that the market continues to make new highs (or lows), which will keep the RSI at overbought (or oversold) levels for extended periods of time.

Momentum and price corrections, when they do materialize, are usually sharp and swift, Cardwell noted. After these brief respites, the market is then ready to resume its normal upward (downward) trend. With each successive new high (low) and divergence formed, anxious traders are ready to call for a top (bottom) and reversal of trend. However, in strongly trending markets, multiple divergences can and do develop, which only lead to corrections of the overbought (oversold) condition of the market.

"If a trader attempted to take positions based solely on divergences, he or she would need deep pockets and would eventually exhaust his or her trading capital," Cardwell said.

Although Cardwell takes note of divergence, he said that only shows the market is overextended and needs to correct the overbought or oversold condition. Even though the RSI is considered a momentum oscillator, he said it has more value as a trend-following indicator.

Shifting ranges

One of the guidelines Cardwell established for himself is to identify a range for uptrends as well as downtrends. As the market trends higher or lower he adjusts the normal range of RSI (70-30) to account for the shift in market momentum and bullish or bearish sentiment on the part of the traders. The fact that this adjustment needs to be made in the range of RSI is one of the first indications that the market is undergoing a trend change.

The ability of a trader to recognize a trend change quickly, reverse a position and trade in the direction of that next trend is the skill that traders must develop to be successful, Cardwell noted. By having a position in tune with the trend, the trader will have the opportunity to participate in the bigger market moves, which generate larger profits.

Cardwell sums up what he calls three keys to success: Have a trading program, patience and discipline.

Percent ‘R’ Indicator: Making It Work for You

The Percent Range (%R) technical indicator was developed by renowned futures author and trader Larry Williams. This indicator attempts to measure overbought and oversold market conditions, using a scale that always puts the %R between a value of 100 and 0. Two horizontal lines represent the 20% and 80% overbought and oversold levels.

In his original work, Williams' method focused on 10 trading days to determine a market's trading range. Once the 10-day trading range was determined, he calculated where the current day’s closing price fell within that range.

The %R study is similar to the Stochastic indicator except that the Stochastic has internal smoothing and the %R is plotted on an upside-down scale, with 0 at the top and 100 at the bottom, with %R oscillating between those two levels. A value of 0% shows that the closing price is the same as the period high. Conversely, a value of 100% shows that the closing price is identical to the period low.

Reverse scale

The Williams %R indicator is designed to show the difference between the period high and today's closing price within the trading range of the specified period, showing the relative situation of the closing price within the observation period. Williams %R values are reversed from other studies, especially if you use the Relative Strength Index (RSI) as a trading tool.

The trading rules for %R are simple. Sell when %R reaches 20% or lower (the market is overbought) and buy when it reaches 80% or higher (the market is oversold). However, as with all overbought/oversold indicators, it is wise to wait for the indicator price to change direction before initiating any trade.

Williams’ trading rules for %R include: Buy when %R reaches 100% and five trading days have passed since 100% was last reached and after which the %R again falls below 85/95%. Sell when %R reaches 0% and five trading days have passed since 0% was last reached and after which the Williams %R again rises to about 15/5%.

On specifying the length of the interval for the Williams %R study, some technicians prefer to use a value that corresponds to one-half of the normal cycle length. If you specify a small value for the length of the trading range, the study is quite volatile. Conversely, a large value smoothes the %R, but it generates fewer trading signals. Some computer trading programs use a default period of 14 bars.

Waiting game

The %R works best in trending markets. Likewise, it is not uncommon for divergence to occur between the %R and the market. It is just another hint of the market’s condition.

What is important is that when overbought/oversold indicators, such as Stochastics or Williams %R, show an overbought level, the best action is to wait for the futures contract's price to turn down before selling. Selling just because the contract seems to be overbought (or buying just because it is oversold) may take a trader out of the particular market long before the price falls (or rises) because overbought/oversold indicators can remain in an overbought/oversold condition for a long time, even though prices continue to rise or fall.

Therefore, you may want to use another technical indicator in conjunction with the %R, such as the Moving Average Convergence Divergence (MACD).

More information on the Williams %R indicator can be obtained from Williams' book, *How I Made $1,000,000 Last Year by Trading Commodities*.

Commodity Channel Index: Donald Lambert's Trend Detector

The Commodity Channel Index (CCI) was developed by Donald Lambert and is an indicator that follows market trends. The CCI was designed to detect beginning and ending market trends.

This indicator measures the distance between the market price and its moving average and, thus, allows a measurement for the trend strength and/or intensity. Values of +100 to -100 indicate a market with no trends. According to Lambert, 70%-80% of all price fluctuations fall within +100 and -100, as measured by the index.

The CCI is calculated as the difference between the mean price of a market and the average of the means over a chosen period, commonly 20 or 14 bars. This difference is then compared with the average difference over the time period.

Buy and sell signals occur only when the +100 line (buy) and the -100 line (sell) are crossed. The way this indicator works is almost the opposite of how you would use an oscillator (overbought/oversold) such as the Relative Strength Index (RSI) or Slow Stochastics.

Here are the specific trading rules for CCI: Establish a long position when the CCI exceeds +100. Liquidate when the index drops below +100. For a short position, sell when the CCI value is less than -100 and liquidate your short position when CCI rises above -100.

True Range, Average True Range: Getting a More Precise Reading

Respected trader and educator J. Welles Wilder developed "Average True Range" (ATR) as a tool for a more precise and realistic calculation of market's price activity and volatility.

The ATR is useful when calculating the directional movement of a market. Wilder defined the "True Range" of a market to be the greatest of the following periods:

- The distance from the session's high to its low.
- The distance from the previous session's close to the next session's high.
- The distance from the previous session's close to the next session's low.

A good example of a situation where True Range would be significantly larger than the normal daily trading range would be when price gaps occur on bar charts.

Measuring volatility

True Range measures market volatility and is an integral part of indicators such as Average Directional Movement (ADX) and several others to identify the directional movement of a market. The ATR is the basic unit of measurement for Wilder's Volatility System.

Average True Range is a moving average of the True Range values over a period of time. The periods are the number of bars (daily, weekly or whatever period is used) in a bar chart. Wilder used 7 periods for a default setting. Other common periods for calculating the Average True Range are 14 and 20.

The Average True Range indicator identifies periods of high and low volatility in a market. High volatility describes a market with ongoing price fluctuation; low volatility is used to define a market with smaller price range activity.

When a market becomes increasingly volatile, the ATR tends to peak, rising in value. During periods of little volatility, the ATR bottoms out, decreasing in value. A market will usually keep the direction of the initial price move, though this is certainly not a rule. Analysts, therefore, tend to use Average True Range to measure market volatility and other technical indicators to help identify market direction.

Capitalizing on panic

Wilder has found that high ATR values often occur at market bottoms following a panic sell-off. Low Average True Range values are often found during extended sideways periods, such as those found at tops and after consolidation periods.

Measuring market volatility can help to identify buy and sell signals and, additionally, risk potential. Markets with high price fluctuation offer more short-term risk/reward potential because prices rise and fall in a shorter time frame.

Wilder's book, *New Concepts in Technical Trading Systems*, contains more information on True Range and the ATR indicator.

Bollinger Bands:
Measuring Volatility

The Bollinger Bands (B-Bands) technical study, created by John Bollinger, president of Bollinger Capital Management Inc., is generally used to determine overbought and oversold zones, to confirm divergences between prices and other technical indicators and to project price targets.

B-Bands are lines plotted on a chart at an interval on either side of a moving average. They consist of a moving average and two standard deviations charted as one line above and one line below the moving average. The line above is two standard deviations added to the moving average. The line below is two standard deviations subtracted from the moving average. The wider the B-bands on a chart, the greater the market volatility; the narrower the bands, the less market volatility.

Some traders use B-Bands in conjunction with another indicator, such as the Relative Strength Index (RSI). If the market price touches the upper B-band and the RSI does not confirm the upward move – that is, there is divergence between the indicators – a sell signal is generated. If the indicator confirms the upward move, no sell signal is generated and, in fact, a buy signal may be indicated.

If the price touches the lower B-band and the RSI does not confirm the downward move, a buy signal is generated. If the indicator confirms the downward move, no buy signal is generated and, in fact, a sell signal may be indicated.

Another strategy uses the Bollinger Bands without another indicator. In this approach, a chart top occurring above the upper band followed by a top below the upper band generates a sell signal. Likewise, a chart bottom occurring below the lower band followed by a bottom above the lower band generates a buy signal.

B-Bands also help determine overbought and oversold markets. When prices move closer to the upper band, the market is becoming overbought; as prices move closer to the lower band, the market is becoming oversold. The market's price momentum should also be taken into account. When a market enters an overbought or oversold area, it may become even more so before it reverses. You should always look for evidence of price weakening or strengthening before anticipating a market reversal.

Bollinger Bands can be applied to any type of chart, although this indicator works best with daily and weekly charts. When applied to a weekly chart, the Bands carry more significance for long-term market changes. John Bollinger says periods of less than 10 days do not work well for B-Bands. He says that the optimal period is 20 or 21 days.

Like most computer-generated technical indicators, I use B-Bands as mostly an indicator of overbought and oversold conditions or for divergence but not as a specific generator of buy and sell signals for my trading opportunities. It's just one more secondary trading tool.

Keltner Channel: Another Envelope Concept

The Keltner Channel was developed in the early 1960s by Chester Keltner, a well-known commodity trader, especially in grains.

The Keltner Channel is a volatility-based indicator that makes use of the "envelope theory." Moving average bands (or channels), such as Bollinger Bands or the Keltner Channel, fall into the general category of envelopes. These envelopes consist of three lines: a middle line, typically based on a moving average, and two outer lines on either side of the middle line.

Envelope theory states that the market price will generally fall between the boundaries of the envelope (or channel). If prices move outside the envelope, it is a trading signal or trading opportunity. Some have used the Keltner Channel as a trading system.

Variety of uses

The Keltner Channel can be used to help identify overbought and oversold conditions in a market. When a market's price is close to the upper band, the market is considered overbought. Conversely, when a market's price is close to the bottom band, the market is considered oversold.

This study can also be used to help determine the strength of a price trend. Some traders use a market price move and price close that is above the upper band of the Keltner channel as a buy signal and use a push below and price close below the lower band as a sell signal.

An advantage of Keltner Channels compared to other channel indicators is that market lag is not as pronounced because Keltner Channels are extremely sensitive to fluctuations in volatility. The Keltner channel is not as well-known any more as other channel methods, such as the more recently introduced Bollinger Bands or Commodity Channel Index (CCI).

To calculate the center-line moving average of the Keltner Channel, use a moving average, usually 10 periods. Multiply that moving average price by a number, such as 1.5, to plot the upper and lower bands.

Raschke's Keltner rules

Well-known and respected trader and educator Linda Bradford Raschke has relied upon Keltner Channels in her trading methods. She says Keltner Channels can serve as buy and sell stops by which to enter or exit a position. Keltner's original system was traded on a stop-and-reverse basis, which was mildly profitable, Raschke notes.

By varying the bands on the most recent average daily price range, the channels will naturally be a greater distance from the market when the price swings are wide than when they are narrow. However, they will stay at a much more constant width than other envelope methods.

“You can see how you would have participated in the majority of a trend if you used Keltner's rules,” Raschke observes. “Unfortunately, you would have experienced many whipsaws, too, because the system's intentions are to keep you in the market all of the time.”

Raschke uses Keltner Channels set at 2.5 times the 20-day moving average daily range, centered around the 20-period moving average. This is wide enough so that it contains 95% of the price action. In flat trading markets, as indicated by flat moving averages, it serves as a realistic objective to exit positions.

However, she finds the greatest value of Keltner Channels is functioning as a filter to signal runaway market conditions, much as a rising ADX (Directional Movement Index, which helps determine market trend) would do. Keltner Channels will identify runaway markets caused by a large standard deviation move or momentum thrust. Thus, they can provide an alert to unusual volatility conditions much earlier than the ADX, which has a longer lag. On the other hand, Keltner Channels will not capture the slow, creeping trend market that an ADX will indicate.

Raschke’s rule for defining trending markets: "If the bar on the bar chart has a close outside the Keltner Channel or 50% of its range trades outside the band with a close in the upper half of its trading range, the market should not be traded in a counter-trend manner.”

Andrews Pitchfork:
Trend Lines Indicator

The Andrews Pitchfork is a trend line study developed by Dr. Alan Andrews a few decades ago. It is also called the Median Line Study. It consists of three parallel trend lines drawn on a chart. The lines resemble a farmer's pitchfork. The upper and lower lines of the pitchfork provide a channel of support and resistance levels.

Basically, to use this study, you wait for a significant "correction" from an overall price trend and then measure that correction and draw and project trend lines from it. Remember that trend lines can be applied to all markets in all time frames. An uptrend finds prices bouncing up off the supporting uptrend line. A downtrend finds prices bouncing down from its resisting downtrend line. In an uptrend, the trend line provides a possible buying point at each potential bounce.

If the market is still trending higher (meaning the uptrend line has not been negated), then there is no signal given as to when to sell. But by drawing parallel lines to the trend line, as the Andrews Pitchfork study does, a channel can be created that contains short-term rallies and setbacks within the general trend.

Buy, sell points

The bottom trend line can be used to buy into the rally and the top trend line can be used to take short-term profits. After selling, the trader would then wait for the market to hit the bottom trend line to buy again. This is very similar to the swing trading method covered in an earlier chapter.

With the Andrews Pitchfork technical study, a trader picks an extreme low or high on a chart to define a "pivot point" and then draws a trend line, called the median line. Then the trader bisects a line drawn through the next corrective phase on the chart that occurs after the pivot point. Lines parallel to the median line are drawn through the high and low points of the corrective phase, hence the look of a pitchfork

Pitchforks can also help identify trading channels before simple parallel trend lines can be drawn. By using an already established market move (correction) as the width of the channel, the median and parallel lines can be constructed, giving the trader early targets for short-term trading within the new trend. These market retracements generally occur at Fibonacci levels (see a later chapter), so a Pitchfork can almost be considered to be Fibonacci lines on an angle.

The double channels of the Andrews Pitchfork serve to identify a longer-term trend at the same time as the shorter-term trend. As long as counter-trend moves are smaller than the overall channel width, the primary trend will remain intact. Trading from one sideof the channel to the other may present short-term trading opportunities. But breakouts from the overall channel may indicate true trend changes. The latter should be combined with simple trend line analysis for a more reliable signal.

Pitchfork rules

Dr. Andrews' rules state that the market will do one of two things as it approaches the Median Line:

1. Prices will reverse at the Median Line.
2. Prices will trade through the Median Line and head for the upper or lower parallel lines and then reverse.

He suggested that prices make it to the median line about 80% of the time while the price trend is in place. This means that, as long as the basic long-term price trend remains intact, Andrews believed that the smaller trends in price would gravitate toward the median line to maintain the larger price trend. When that does not occur, it may be evidence that a reversal in the larger price trend may be under way.

When prices fail to make it to the median line from either side, it is often an expression of the relative bullish or bearish psychology of buyers and sellers and may predict the next major direction of prices. If prices fail to reach the median line while above the median line, it is a bullish signal. If prices fail to reach the median line from below that line, then that is a bearish signal.

Drawing the parallel lines can often be subjective because markets do not trade up and down in neat channels most of the time. Market noise and overlapping short-term and long-term cycles often make price action appear irregular. To better measure a trading channel, the Andrews Pitchfork can help by building it around real, objective market activity that is a countertrend move (retracement or correction).

Just as with horizontal support and resistance levels, markets tend to trade within one range and then move to another similar range and back again. The Andrews Pitchfork measures a larger trading channel. It is common for a market to trade in the lower end of channel and then jump to the upper end and then move back to the lower side of the channel again. During all of this activity, the general trend is still intact. When prices move outside of the larger channel, the overall market trend may have changed.

Richard Wyckoff:
Charting Price, Volume Relationships

Richard D. Wyckoff was another famous trader during the early 20th century. And, before you ask, no, I am not related to Richard D. Wyckoff. However, I always tell folks it's not a bad last name to have in the trading business.

I derived much of my information on Richard Wyckoff from two good books:

- *How I Trade and Invest in Stocks & Bonds* by Wyckoff, first published in 1924 by *The Magazine of Wall Street*.
- *Charting the Stock Market: The Wyckoff Method*, first published in 1986 by Jack Hutson, publisher of *Technical Analysis of Stocks & Commodities* magazine.

Like Jesse Livermore, another trading legend from that era, Wyckoff was a Wall Street stock trader in the early 1900s. Wyckoff's first job in 1888 was as a 15-year-old stock runner on Wall Street. By the age of 25, he had his own brokerage office. He also published his own market magazine and advisory newsletter.

Wyckoff's basic trading methodology was to chart price, volume and their relationships over time. He would then search for "turning points" in the stocks or other markets. He also grouped stocks into sectors and then charted the sectors.

Wyckoff called these "wave charts." He believed that stock price action consists of waves of buying (or selling) that last just as long as they can attract buyers (or sellers). When that following is exhausted, the wave stops and a counter-wave begins. His theory is not unlike the Elliott Wave theory. What is notable is that Wyckoff's method for determining critical turning points was based not on mathematical formulas but on investor psychology.

Below are some valuable “nuggets” I gleaned from the two books mentioned above. Many of these nuggets are direct quotes from Wyckoff himself.

- “Anyone who buys or sells a stock, a bond or a commodity for profit is speculating if he employs intelligent foresight. If he does not, he is gambling.”
- Wyckoff's goals were to select only stocks that move soonest, fastest and farthest in bull or bear markets. He limited losses and let profits run.
- “Stock market technique is not an exact science. Stock (and commodities) prices are made by the minds of men (and women).” Mechanical trading methods or mathematical formulas cannot compete with good human market judgment.
- Whenever you find hope or fear warping judgment, close out your position.
- Being in the market at all times is not the key to profits. Being in the market when there is a clear, unconfused technical signal and when the trader's judgment is not swayed by emotion is the method for trading success.

- “I have yet to find a man, in or out of Wall Street, who is able to make money in (markets) continuously or uninterruptedly. Like anyone else, I have good and bad periods.”
- “Success in trading means excess of profits over losses. If anyone tells you they can almost be invariably successful, put him down as trying to impose on your credulity.”
- “While I have made it a practice to limit my risk in most cases, I can trace most of my principal losses to my failure to place stop orders when the trades were made.”
- “Whenever a (market) situation is not entirely clear to me, I find I can clarify it by putting down on paper all the facts, classifying them as favorable and unfavorable. In thus writing it down on paper, I not only have time to reason out each point as I go along, but when I get it all down, it can be looked over and analyzed to much better advantage.”
- “People are successful in business because, while they make mistakes at first, they study these mistakes and avoid them in the future. Then by gradually acquiring a knowledge of the basic principles of success, they develop into good businessmen. But how many apply this rule to investing and trading? Very few do any studying at all. Very few take the subject seriously. They drift into the market, very often get 'nipped,' as the saying is, avoid it for a while, return from time to time with similar results, then gradually drift away from it, without ever having given themselves a chance to develop into what might be good traders or intelligent investors. This is all wrong. People go seriously into the study of medicine, the law, dentistry, or they take up with strong purpose the business of manufacturing or merchandising. But very few ever go deeply into this vital subject (of trading and investing) which should seriously be undertaken by all.”

Analyzing the players

Technical analysts pay a lot of attention to charts and chart patterns and perform an assortment of mathematical computations to develop technical indicators, meaning they spend a lot of time looking at a piece of paper or, more likely, a computer screen. It's easy to forget what is producing the prices that result in all those patterns and indicators. In reality, everything in technical analysis is a reflection of the actions of traders who are responsible for what you see on a chart.

Whether they are responding to some fundamental information or to the penetration of a trend line or are just trying to transfer risk, traders as a collective body are continually determining where they believe the value of the market is at any given moment. As all of the bids/asks and all the buy-sell orders from the masses are matched, the market discovers a price that is disseminated to the world.

As conditions change, the cumulative reaction of the trading crowd will move prices accordingly in the direction where traders believe the new value is. In short, trading is really a game of mass psychology, and it is the sentiment of the crowd that is reflected in prices.

Although many of the technical studies and systems available on today's trading software are based on prices, some techniques take their cue from the crowd's actions that produce a price and project how that crowd is likely to act in the future. This section looks at some unique approaches that have been developed to analyze markets by focusing on how traders respond to changing conditions.

Volume, Open Interest: Clues from Non-Price Data

Volume and open interest are significant factors to monitor when trading futures for several reasons. First, let's define the two terms.

Open interest is the total number of futures or options on futures contracts that have not yet been offset or fulfilled by delivery. It is an indicator of the depth or liquidity of a futures market, which influences the ability to buy or sell at or near a given price.

Open interest can be a tricky concept, especially for beginners. In a nutshell, here's how open interest is calculated: If a new buyer (a long) and new seller (a short) enter a trade, open interest increases by one. However, if a trader already holding a long position sells to a new trader wanting to initiate a long position, open interest remains the same. And if a trader holding a long position sells to a trader wanting to get rid of an existing short position, open interest decreases by one.

Volume is the number of transactions in a futures or options on futures contract during a specified period of time. It is usually recorded for a daily trading session.

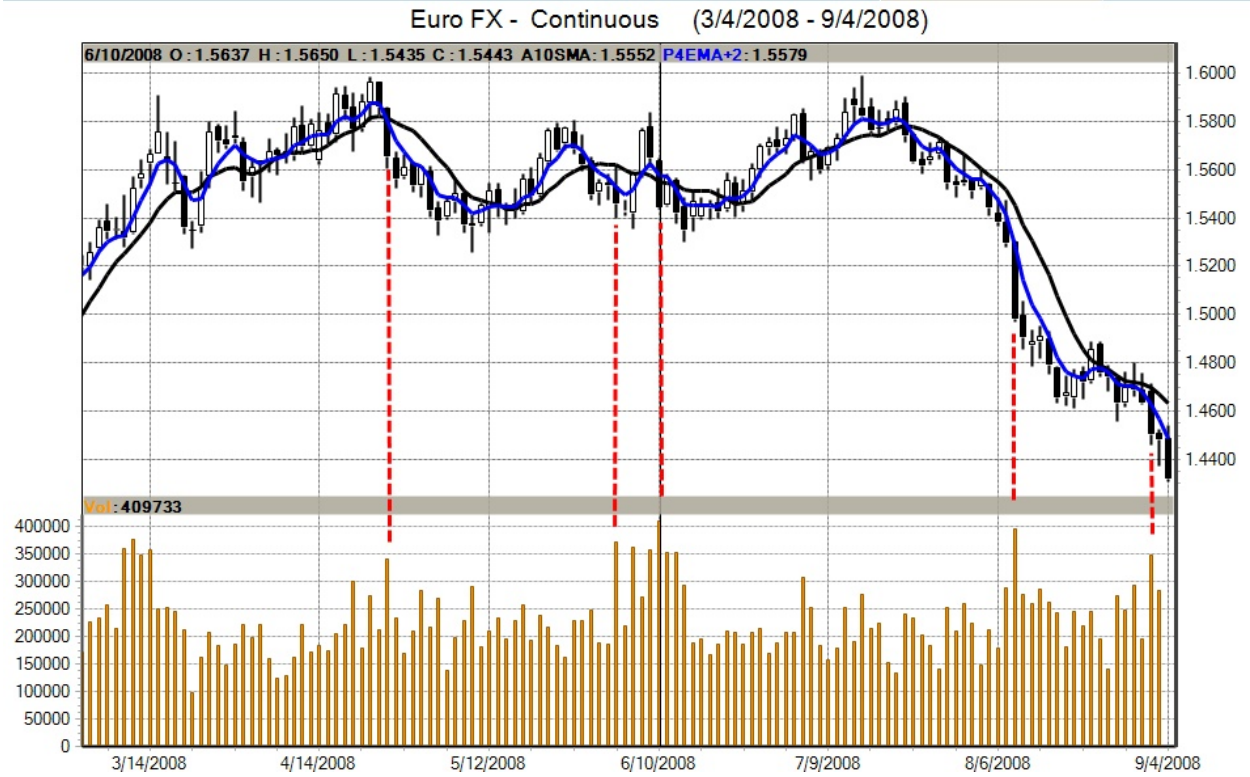
You will want to exercise extra caution when attempting to trade a market with very low volume and open interest – in other words, an illiquid market. Good, timely fills (order execution) may be hard to obtain if trading activity is low. Also, markets with lots of liquidity are less likely to be manipulated by traders.

Confirming indicators

Most veteran futures traders agree that volume and open interest are secondary technical indicators that help confirm other technical signals on the charts. In other words, traders won't base their trading decisions solely on volume or open interest figures but will instead use them in conjunction with other technical signals or to help confirm signals.

For example, if there is a big upside price breakout in a market that is accompanied by heavy volume, then that only makes the upside move a stronger trading signal. Also, a big upside move or a move to a new high that is accompanied by light volume makes the move suspect. Big price moves (up or down) accompanied by heavy volume are powerful trading signals. If prices score a new high or new low on lighter volume, then that is an indication a top or bottom may be near or in place. Also, if volume increases on price moves against the existing trend, then that trend may be nearing an end. This is called divergence.

As a general rule, volume should increase as a trend develops. In an uptrend, volume should be heavier on up days and lighter on down days within the trend. In a downtrend, volume should be heavier on down days and lighter on up days, as the euro chart below bears out.



Source: VantagePoint Intermarket Analysis Software

Changes in open interest also can be used to help confirm other technical signals. Open interest can help the trader gauge how much new money is flowing into a market or if money is flowing out of a market. This is helpful when looking at a trending market.

Another general trading rule is that, if volume and open interest are increasing, then the trend will probably continue in its present direction – either up or down. And if volume and open interest are declining, this can be interpreted as a signal that the current trend may be about to end.

Monitoring seasonal patterns

A notable difference between open interest and volume is that open interest has seasonal tendencies in many markets – higher at some times of the year and lower at other times of the year. The seasonal average of the open interest is important in analyzing open interest figures. If prices are rising in an uptrend and total open interest is increasing more than its seasonal five-year average, new money is considered to be flowing into the market, indicating aggressive new buying, and that is bullish.

However, if prices are rising and open interest is falling by more than its seasonal average, the rally is being caused by the holders of losing short positions liquidating (short covering) and money is leaving the market. This is usually bearish, as the rally will likely fizzle.

The same holds true in a downtrend. Open interest increasing more than its seasonal average on the downmove means aggressive new sellers entering the market, which is bearish. But if open

interest is declining more than the seasonal average on the downmove, then it's likely holders of long positions are liquidating their losing trades (long liquidation), and the downtrend may be near an end.

Here are two more rules for open interest:

- Very high open interest at market tops can cause a steep and quick price downturn.
- Open interest that is building up during a consolidation, or "basing" period, can strengthen the price breakout when it does happen.

Many seasoned traders like to examine the Commodity Futures Trading Commission's (CFTC) *Commitments of Traders* (COT) reports for changes in open interest and to see what the big speculators and commercial traders are doing. The COT reports are covered in a later chapter or you get more information about the COT reports and current data free at the CFTC's website (www.cftc.gov).

Using Joe Granville's 'On Balance Volume'

Still another secondary trading tool in my trading toolbox is the On Balance Volume indicator (OBV) developed by Joe Granville, the respected stock market trader and analyst.

OBV is calculated as the continuous consecutive sum of volumes, whereby the entire volume of a day is added to the volume of the previous trading session's OBV if today's closing price is above that of thenumber previous session. Should the closing price be below that of the previous session, the day's volume is subtracted. Unchanged closing prices have no effect on the OBV – the volume is neither added nor subtracted.

The OBV study indicates whether money is flowing into or out of a market. Based on Granville's principle, changing trends in the price of the underlying market are anticipated by trend changes in the OBV indicator. The theory is that one can see the flow of "smart money" into a market by an increase in the OBV. As soon as the public moves into the market, both the market and the OBV will surge ahead.

The OBV indicator shows an upward trend whenever a new high or low exceeds the previous one. In the opposite case, a lower high or low indicates a downtrend. The changing in the OBV from an upward to a downward trend is called a breakout. Importantly, in OBV analysis, it is assumed that OBV breakouts precede market breakouts but that there is very little time for a trader to react.

This study is not a timing tool. Rather, it monitors market sentiment, and it can alert you to a changing market situation. This alert may be used as a signal to take a long position on upside breakouts and sell short when the OBV makes a downside breakout. Traders usually hold the position until the trend changes.

Once a trend has been established, it remains until it is broken. This happens when a downward trend changes to an upward trend or vice versa, or when a trend changes to a choppy, sideways movement for more than three days. If a market changes from an uptrend to a sideways trend and remains non-trending for two only days and then reverses to an uptrend again, the market is considered to be in an uptrend as before.

It should be noted that the OBV indicator does not work on intraday charts. Granville's book, *The New Commodity Trading Systems and Methods*, has more details on this and other indicators.

Tracking the 'Big Boys' With the COT report

The chapter above discussed how volume and open interest can be used to help identify and confirm market situations and trading opportunities. The *Commitments of Traders* (COT) report, issued by the Commodity Futures Trading Commission (CFTC), takes a more detailed look at the breakdown of the participants in the open interest.

The COT report is released weekly every Friday afternoon and provides a breakdown of each Tuesday's open interest for futures and options on futures markets in which 20 or more traders or hedgers hold positions equal to, or above, reporting levels established by the CFTC.

The COT report breaks down by open interest large trader positions into "Commercial" and "Non-Commercial" categories. Commercial traders are required to register with the CFTC by showing a related cash business for which futures are used as a hedge. The Non-Commercial category is comprised of large speculators – namely, the commodity funds. The balance of open interest is qualified under the "Non-reportable" classification that includes both small commercial hedgers and small speculators.

Looking for changes

Reports are available in long or short formats. Supplemental reports show aggregate futures and option positions of non-commercial, commercial, and index traders in 12 selected agricultural commodities.

What is most important for individual traders is the actual positions of the categories of traders, specifically the net position changes from the prior report. To derive the net trader position for each category, subtract the short contracts from the long contracts. A positive result indicates a net-long position (more longs than shorts). A negative result indicates a net-short position (more shorts than longs).

My friend, Steve Briese, is one of the world's foremost experts on COT data on how to interpret it for various markets. He publishes *Bullish Review*, which comes out right after each COT report. It is from conversations with Steve through the years and reading some of his material that I learned about the COT report and its value to traders.

The most important aspect of the COT report for most traders is the change in net positions of the commercial hedgers. Why? Because studies show that commercials have a better record than other trading groups in forecasting significant market moves. Large commercials are generally believed to have the best fundamental supply and demand information on their markets and thus position their trades accordingly. Along with the advantage of having the best fundamental supply and demand information on their markets, large commercials also trade large size, which in itself moves markets in their favor. They are the “smart money,” the trading insiders.

Analyzing the participants

It's important here to note that whether a particular trader group is net long or net short is not important in analyzing the COT report. For example, commercials in silver are the producers, and they have never been net long because they hedge their physical sales. In gold, however, the commercial mix is more heavily weighted toward fabricators who buy long contracts as a hedge against future inventory needs.

Again, you need to look at the net change in positions from the previous report or several of the recent reports. Individual traders may want to consider positioning themselves on the same side of the market as the large commercials, when the large commercials become one-sided in their market view, or they may want to take the opposite side of what the small traders (non-reportable positions) in the COT reports are doing. Small speculative traders in futures markets are usually undercapitalized and/or on the wrong side of the market.

Also, some traders follow the coat-tails of the large speculators, thinking the large specs must be good traders or they would not be in the large trader category.

Briese says that, contrary to what some believe, divergences from seasonal open interest averages in COT report data are not reliable trading indicators. This is even true with agricultural markets, where one would suspect that hedging would be a seasonal consideration.

For more information on COT reports, see www.cftc.gov or www.bullishreview.com.

Understanding Those 'Big, Bad' Commodity Funds

How many times do you read or hear "the commodity funds (or just the "funds") did this or that" when there is a large market move? And it seems like these big bullies are always on the opposite side of the market from the smaller speculator.

To the less-experienced traders, the "funds" may seem like the CIA or the Mafia – a powerful and secretive force that has a reach far and wide. The influence of funds on prices and trends in many markets has clearly increased in recent years, and it's important to get a clearer picture of this growing segment of the marketplace – and maybe dispel some myths regarding these newer trading participants.

Just what are the funds? They can come in several forms, but usually it involves a large pool of investor money (funds) that is managed by a single entity, designated as a Commodity Pool Operator (CPO) or Commodity Trading Advisor (CTA). The CPO or CTA then trades futures contracts with the goal of gaining the best possible annual return on that money – better than any other funds or "managed accounts."

Most wealthy investors do not put a big portion of their investment portfolio into futures trading. But some may put 10% or less of their portfolios into managed futures trading accounts. Still, given that it's usually the wealthier investors (and not the smaller investors) that put a small percentage of their portfolio in the futures market, even that small percentage coming from many wealthy investors can add up to a lot of speculative cash pouring into the futures markets. Thus, the "funds" can and do have the weight to move markets.

Generally speaking, the commodity fund operators are trend-following traders who use a shorter-term time frame to trade futures. Many tend to use moving averages as a major trading tool or employ some type of mechanical trading system. Either way, these traders rely on technical analysis for the vast majority of their trading decisions. The funds like to see a market start to lean one way and then pile on positions in favor of the way the market is leaning.

This push adds to the market's directional inclination and is why markets tend to become overbought and oversold on a technical basis. The fund buying or selling causes markets to over-react or become over-extended.

Probably the one commodity group where the funds have gained the most notoriety is the grains complex. The grains provide an excellent medium for the funds because of the liquidity (high volume and open interest). Given that the funds usually take big trading positions, it would be more difficult for them to dabble in futures markets where the liquidity is thin, such as lumber or platinum, where few traders may be willing to take the other side of their orders. Also, the higher-liquidity markets allow the funds to get into and out of positions more discreetly.

Even with the big pools of cash that the commodity funds possess, they can't stand up to the "big brother" of futures markets – the commercials (the hedgers). The major food processors such as Cargill or Pillsbury have the huge clout and very deep pockets to keep the funds honest and keep

futures markets fairly priced at most times. Still, the funds do have enough power to more than jiggle markets once in a while. Here's an analogy: The funds are like a fly and the commercials like a horse: A biting fly can still make a horse wince.

Contrary Opinion:
Trading Against the Grain

I have emphasized that one of the best methods to trade a market is to jump on board when prices break out of a congestion or basing area on the charts and begin a new trend. I have also stressed to readers that one of the most risky and least successful trading methods is trying to pick tops and bottoms in markets.

Now, I'm going to muddy the waters just a bit and discuss “contrary opinion.” In the trading business contrary opinion is defined as going (trading) against the popular or most widely held opinions in the marketplace. This notion of "going against the grain" of popular market opinion is difficult to undertake, especially when there is a steady drumbeat of fundamental information that seems to corroborate the popular opinion.

To help you understand why contrarian thinking is used successfully by some traders, consider these questions: When is a market most bullish? When is a market most bearish? The answers: A market is most bullish when the highest price on the chart is scored – it's downhill for prices from there – and a market is most bearish when the lowest low is reached on the chart before the market turns up.

What everyone thinks

It's no wonder many novice traders lose their assets quickly in the futures trading arena. Traders are most bullish at market tops and most bearish at market bottoms! Because nobody has discovered the Holy Grail of trading markets to discern those points, the best traders can do is to seek out clues to those tops and bottoms, using charts and technical analysis, fundamental analysis and possibly some contrary thinking.

Essentially, the rationale behind contrarian strategies is that, if everyone thinks the market is headed higher, it is likely they have positioned themselves for that move already. Who is left to buy to keep the market moving up? If the consensus view is that a market is headed lower, most traders are likely to have short positions already. Who is left to sell to push the market lower?

If you've read books on trading markets, most will tell you to have a trading plan and to stick with it throughout the trade. A main reason for this trading tenet is to keep you from being swayed or influenced by the opinions of others while you are in the middle of a trade. Popular opinion is many times not the right opinion when it comes to market direction.

Trading the concept

I'll give you an actual example of how contrarian thinking and trading can be successful. The year was 1988, a big drought year in the Midwest when corn and soybean prices skyrocketed. On a Friday in July, corn and bean prices traded sharply higher, based on ideas that the hot, dry weather would continue in the Corn Belt. Then, after the close, the National Weather Service issued its 6-10 day forecast that, sure enough, called for more hot, dry weather for the Corn Belt.

Bulls confidently headed home for the weekend. Even local traders on the Chicago Board of Trade floor went home long, something most never do, especially over a weekend.

Well, come Monday morning, the updated weather forecasts had changed a bit, but more importantly, trader psychology had changed immensely. The drought and resulting poor yield prospects had all been factored into the market with prior price gains, culminating with Friday's big push higher. Corn and bean markets traded limit down on Monday and recorded very sharp losses for around three days in a row.

I know of one trader who used contrary opinion thinking and bought put options on corn that Friday when prices were pushing higher. He made a good deal of money that next week. But isn't that top-picking? Yes, technically it is. But this trader used a low-risk put options trade based on contrary opinion to score a winning trade.

Contrarian trading is not for everyone, but some traders are successful in employing it. For further reading on using contrary opinion in trading, read a book called *Contrary Opinion* by R. Earl Hadady, the founder of Market Vane's "Bullish Consensus." This is a weekly report that provides traders' degree of bullishness or bearishness in the major markets. Traders use this report to help them gauge when a market is overbought or oversold.

K-Wave Cycles:
Big View of Human Action

If markets are acting and reacting in a longer-term framework, you can't get a bigger picture than the Kondratieff cycle. Also called the "K-Wave," this analysis is based on the study of nineteenth century price behavior that included wages, interest rates, raw material prices, foreign trade, bank deposits, wars, technological discoveries, public opinion, politics, weather and other available data.

Nikolai Kondratieff (1892-1938) was a Russian economist who believed the interaction of current events produced a repetitive pattern over a long period of time. He believed public reaction was influenced directly by the ebb and flow of economic prosperity and, therefore, vital to the economy. He viewed public response as waves of change, with its measurement and its effect on the future forming the basis of his theory.

54-year cycles

Kondratieff proposed that economic trends tend to repeat themselves approximately every 54 years. An alternating "long wave" from prosperity to depression, complemented by many shorter cycles within the longer pattern, creates a dynamic trend to the economy that becomes predictable. His work became known in the early 1930s, when he gained recognition for accurately predicting not only the Great Depression but also the 1920s' stock market boom that preceded it.

Like Ralph Nelson Elliott of Elliott Wave Theory fame, Kondratieff was convinced that his studies of economic, social and cultural life proved that a long-term order of economic behavior existed and could be used for the purpose of anticipating future economic developments. Kondratieff detailed the number of years the economy expanded and contracted during each part of the half-century-long cycle. Industries suffer the most during the downwave, and a new advance in technology plays a role in leading the way out of the contraction into the next upwave.

According to most who have studied this long-term economic cycle thoroughly, the most recent revolution of the Kondratieff Wave began after the global economy pulled out of a deflationary depression in the 1930s. Prices began to accelerate upward after World War II and reached the commodity price blow-off stage in 1980. Since that time, and then after the recession of 1990-1991, the global economy has been experiencing a "secondary plateau."

During this period, consumers and investors become aware that inflation is not accelerating and disinflation becomes visible. Paper assets such as stocks and bonds tend to do well during these periods because neither inflation nor deflation hurts the marketplace. During the secondary plateau, the first signs of economic problems become evident. Isolated economies fall into deflationary contraction, and signs such as declining gold prices begin to take hold.

During the 1990s, it was the Japanese economy that slid first into deflationary contraction. The stock market decline since 2000 and, more recently, the housing and banking crises, are other signals that the period of economic growth along the secondary plateau is ending.

Troughing action

In the very informative book, *Elliott Wave Principle* by A.J. Frost and Robert Prechter, the authors write, "Kondratieff noted that 'trough' wars – wars near the bottom of the cycle – usually occur at a time when the economy stands to benefit from the price stimulation generated by a war economy, resulting in economic recovery and an advance in prices."

Indeed, many analyses of the Kondratieff cycle suggest that the cycle will "trough" in the present time frame. The U.S. war against terrorism and in Iraq/Afghanistan could be construed as a "trough" war.

Studying this longer-term economic cycle does seem to have some merit, just as do many shorter-term cycles. However, this is not the type of cycle where traders can rush out and buy or sell commodities. Remember, timing is the key in successful futures trading. Longer-term cycles, while valuable in gaining a "bigger-picture" perspective of the marketplace, have wide enough parameters that they do not make for good short-term timing methods for trading.

What the Kondratieff wave does is combine with and corroborate other studies and other cycles that suggest periods of low inflation and weak raw commodities prices will not last forever, as we have witnessed the last few years. And the same is true on the other side as well: High prices will not continue forever.

Based on the premises of the Kondratieff wave, pricing of markets based on people's response to economic conditions may be as much a factor of timing and environment as the supply-demand fundamentals normally credited with moving prices up or down.

Elliott Wave Theory: Demystifying the Mystique

R.N. Elliott, an accountant whose frail health pushed him into analyzing markets in great depth, discovered the wave theory that bears his name in the 1930s. Elliott found that human emotions and actions caused stock and futures market prices to move in wave patterns that repeat themselves again and again and could help traders predict the extent of future price moves.

The Elliott principle states that, in general, a market will move in five waves in a given direction followed by what is usually termed an A-B-C correction or three waves in the opposite direction. These waves have a rather precise relationship to each other in terms of price and time and may be based on Fibonacci ratios (see next chapter).

In Wave One, the market makes an initial move upward. This is usually caused by a relatively small number of traders that all of a sudden feel the previous price of the market was cheap and, therefore, worth buying, causing the price to go up. This is where bottom-pickers come into the market.

In Wave Two, the market is considered overvalued. At this point enough people who were in the original wave believe it moved too high and decide to take profits. This causes the market to go down. However, in general, the market will not make it back down to its previous lows before it is considered cheap again and buyers re-enter the market.

Wave Three is usually the longest and strongest wave. More traders have found out about the market; more traders want to be long the market and more traders buy it at a higher and higher price. This wave usually exceeds the tops created at the end of Wave One.

In Wave Four, traders again take profits because the market is again considered expensive. This wave tends to be weak because usually many traders are still bullish and selling is generally light after some profit-taking.

Wave Five is the point most traders get long the market, and the market is now driven mostly by emotion. Traders will come up with lots of reasons to buy the market and won't listen to reasons not to buy it. At this point, contrarian thinkers will probably notice the market has very little negative news and will start shorting the market. At this point the market becomes the most overpriced.

As the end of Wave Five plays out, the market will move into one of two patterns, either going into an A-B-C correction or starting over with another Wave One. An A-B-C correction occurs when the market goes down/up/down in preparing for another five-wave cycle.

It is not possible to do justice to the Elliott Wave theory and all of its potential patterns in this short chapter, but I do believe there is merit to the tenets of the theory. Importantly, the basics of the wave movement show us how much human psychology plays a part in the way traders trade and the way markets move.

Beyond the basic elements of five waves in one direction and three waves in the opposite direction, grasping the intricacies of Elliott Wave theory can be rather complex. Those who want to study the connection between human behavior and price action should study the complexities of Elliott Wave analysis more thoroughly in some of the many resources available.

Fibonacci Numbers And Golden Ratios

Support and resistance levels on bar charts are a major component in technical analysis studies. Many traders, including myself, use support and resistance levels to identify entry and exit points when trading markets. When determining support and resistance levels on charts, some key points are based on what are known as Fibonacci percentage "retracement" levels.

Leonardo Fibonacci da Pisa was a famous 13th century mathematician. He helped introduce European countries to the decimal system, including the positioning of zero as the first digit in the number scale. Fibonacci also discovered "the Fibonacci sequence," a sequence of numbers that adds the two previous numbers in the sequence to come up with the next number – 1 + 1 = 2, 1 + 2 = 3, 2 + 3 = 5, 3 + 5 = 8 and so on, producing a sequence of 1,1,2,3,5,8,13,21,34 to infinity.

Golden ratios

Importantly, after the first several numbers in the Fibonacci sequence, the ratio of any number to the next higher number is approximately 0.618, and the next lower number is 1.618. These two figures (0.618 and 1.618) are known as the Golden Ratio or Golden Mean. Its proportions are pleasing to the human eyes and ears and appear throughout biology, art, music and architecture.

Here are just a few examples of shapes that are based on the Golden Ratio: playing cards, sunflowers, snail shells, the galaxies of outer space, hurricanes and even DNA molecules.

William Hoffer wrote in *Smithsonian Magazine* in 1975: "The continual occurrence of Fibonacci numbers and the Golden Spiral in nature explain precisely why the proportion of 0.618034 to 1 is so pleasing in art. Man can see the image of life in art that is based on the Golden Mean."

I could provide more details about the Fibonacci sequence and the Golden Ratio and Golden Spiral, but a better suggestion is to read the book *Elliott Wave Principle* by A. J. Frost and Robert Prechter. Indeed, much of the basis of the Elliott Wave theory is based upon Fibonacci numbers and the Golden Ratio.

Retracement, extension targets

Two Fibonacci technical percentage retracement levels that are most important in market analysis are 38.2% and 61.8%. Most market technicians will track a retracement of a price uptrend by measuring the distance from the trend's beginning to its most recent peak and then expecting a correction off the price high. For example, if a price trend starts at zero, peaks at 100 and then declines to 50, it would be a 50% retracement.

The premise of a trading strategy based on retracements is that, as an uptrend peaks, a correction target would be, say, 38.2% of the uptrend. If that level is penetrated, the next target would be 50% of the uptrend, which is the most common target. If the 50% Fibonacci level is penetrated, the next target is 61.8% of the uptrend.

The same levels can be applied to a market that is in a downtrend and then experiences an upside correction. Other important retracement percentages include 75%, 50% and 33%.

Fibonacci ratios can also used to calculate extensions to project price targets. For example, as the market moves up after a 50% correction, multiply the length of the previous uptrend by, say, 1.618 and add that figure to the price at the 50% correction level to get a projected target for how far the resumed uptrend might go.

The element I find most fascinating about Fibonacci numbers, the Golden Ratio and the Elliott Wave principle, as they are applied to technical analysis of markets, is that these principles are a reflection of human nature and human behavior. The longer I am in this business and the more I study the behavior of markets, the more I realize human behavior patterns and market price movement patterns are deeply intertwined.

‘Vibrating Prices’ And Philosophies of W.D. Gann

William Delbert (W.D.) Gann is regarded as one of the pioneers of technical analysis and market behavior in the 1920s. He wrote several books on stock and commodity trading and developed the well-known "Gann angles" and "Gann Fans."

Gann was born on a farm near Lufkin, Texas, in 1878. His rise to trading fame is a remarkable story. He was the oldest of many children on the farm and did not even finish grade school. Back then, it was not uncommon for the oldest boy to quit school at a relatively young age and stay at home to help out on the farm.

However, Gann did not want to be a farmer. He wanted to be a businessman. For a short period of time he worked for a brokerage firm in Texas while attending business school at night. He then set out for New York City in 1903.

Remarkable market forecasts

In 1919, at the age of 41, Gann quit his job with a stock brokerage firm and set out on his own. He began publishing a daily market newsletter called *Supply and Demand Letter*. The newsletter covered both stocks and commodities and provided traders with his annual market forecasts.

In 1924, Gann's first book, *Truth of the Stock Tape*, was published. A pioneering work on chart reading, it is still regarded as one of the best books ever written on the subject.

Gann's market forecasts during the Roaring Twenties were reportedly 85% accurate. The stock market in the 1920s was skyrocketing, but Gann didn't think the bull run would last. In his forecast for 1929, Gann predicted the stock market would hit new highs until early April, then experience a sharp break, and then resume with new highs until early September. Then it would top and afterward would come the biggest stock market crash in history.

After around 20 years in New York City, Gann moved to Miami, Fla., for both health and personal preference reasons. His *How to Make Profits in Commodities* book came out shortly thereafter.

It would be impossible to go into great detail on Gann’s specific methods in this e-book, but I’ll cover some of the general tenets of his trading philosophies and methods. If you want to learn more details about Gann's trading methods, I suggest you read his books or books written about Gann.

Angles match price and time

Gann designed several unique techniques for studying price charts. His main theory uses three parameters to project changes in price trend and market direction. These parameters are pattern,

price and time. These parameters can exert their influence individually, with one or the other being more determinate under different conditions. But they are best applied in a balanced manner. The basic idea is that specific geometric price patterns and angles have special properties that can be used to predict future prices.

He believed the markets are geometric in design and in function, and they follow geometric laws when they're charted. All of Gann's techniques require that equal time and price intervals be used on the charts. Thus, a rise of one price unit over one period of time (1 x 1) will always equal a 45-degree angle. Gann believed that the ideal balance between time and price exists when prices rise or fall at a 45-degree angle relative to the time axis. This is called a 1 x 1 angle.

Gann angles are drawn between a significant bottom and top (or vice versa) at various angles. Deemed the most important by Gann, the 1 x 1 trend line signifies a bull market if prices are above the trend line or a bear market if below the trend line. Gann concluded that a 1 x 1 trend line provides major support during an uptrend, and when the trend line is broken, it signifies a major reversal in the trend. Gann identified nine significant angles, with the 1 x 1 being the most important.

Gann said each of his predetermined angles provide support and resistance, depending on the trend. For example, during an uptrend the 1 x 1 angle tends to provide major support. A major reversal is signaled when prices fall below the 1 x 1 angle trend line. Prices should then be expected to fall to the next trend line (the 2 x 1 angle). As one angle is penetrated, expect prices to move and consolidate at the next Gann angle.

Law of Nature

Prices have a way of repeating themselves – or "vibrating," as Gann put it. One can think of vibration in terms of periodic oscillation or the theory of waves, or cycles, as in cycle theory.

“Through the law of vibration, every stock and commodity in the market place moves in its own distinctive sphere of activities, as to intensity, volume and direction,” Gann described his theory in his own words. “All of the essential qualities of its evolution are characterized in its own rate of vibration. Stocks and commodities, like atoms, are really centers of energy, and therefore, they are controlled mathematically. They create their own field of action and power – power to attract and repel – which explains why certain stocks and commodities at times lead the market and turn dead at other times.

“Thus, to speculate scientifically,” Gann continued. “it is absolutely necessary to follow Natural Law. Vibration is fundamental; nothing is exempt from its law. It is universal, therefore, applicable to every class of phenomena on the globe. Thus, I affirm, every class of phenomena, whether in nature or in the markets, must be subject to the universal laws of causation, harmony and vibration."

Working, studying

There is no question that Gann's track record in trading in the 1920s was truly remarkable. And his trading methodology certainly has merit. However, I think the most important tenets of Gann's success were stated in a paper published by Gann's grandson that includes the following edited excerpts:

“Delbert Gann of Lufkin, Texas, started with nothing. He and his family had no money, no education, and no prospects. But less than 40 years after overhearing businessmen talk on railroad cars in Texas, W.D. Gann was known around the world.”

“Hard work pays. W.D. Gann rose early, worked late, and approached his business with great energy. Virtually all his education was self-administered. This teacher, writer, and prescient forecaster had a third-grade formal education. But he never stopped reading.”

"Unconventional thinking may have its merits. W.D. was intellectually curious to an extraordinary degree. He was unafraid of unorthodox ideas, whether in finance or in other areas of life. He wasn't always right – none of us are – but he dared to pursue a better idea.”

"And finally, the only lesson for traders I will venture to offer is W.D. Gann never stopped studying the market. Even after his forecasts happened, even after he achieved international acclaim. Although he believed in cycles, he also knew that markets are always changing and that decisions must be made based on today's conditions, not yesterday's."

Gann's personal characteristics, as related by his grandson, are strikingly similar to two other famous traders of his era, Jesse Livermore and Richard Wyckoff.

Howe's Limit Rule: Making It Work for You

One of the most important tenets of successful futures trading is survival. To enjoy those winning trades that will make you successful, you must survive the losing trades that all traders encounter. Even the most successful futures traders usually have more losing trades than winning trades in any given year.

The key is that the successful traders' losing trades result in much smaller losses than their winning trades' profit gains. Surviving the more numerous losing trades to catch the fewer big-winner trades requires the use of prudent buy and sell stop placement.

However, some home-run-type trades – those that we all dream about – may require even more protection for you than stops. If you are in the middle of a potential home-run trade and are accruing very nice profits, you may not want to exit the trade because you envision even more profit potential by staying in the trade. But you also have a substantial profit in place and don't want to lose it if the market becomes highly volatile, which is many times the case in big home-run-type market moves.

I've emphasized that the placement of buy and sell stops in your trading plan is very important. However, when market movements become extreme as in a home-run trade, stops can be far less effective. The gap between bid and ask prices can get so large that a stop level gets bypassed by a large degree. When a market locks limit up or limit down, stops are virtually ineffective. Indeed, limit price moves in futures markets can be the best of times and the worst of times for a futures trader.

Options solution

In situations like this, the purchase of options on futures can lock in trading profits for you, yet allow you to remain in a trade that could result in even more profits. I'll provide an example, but first I want to present some observations about limit moves.

Steve Moore of Moore Research Center (www.mrci.com) in Eugene, Ore., pointed out "Howe's Limit Rule" to me many years ago, and I want to share it with you.

Robert Howe, a market and technical analyst, suggests that a futures price at the limit of a tradable daily range, once reached, becomes an objective which the market will again test and ultimately exceed, at least briefly, and usually sooner rather than later. Why? A primary function of any market is to explore and discover value. A market artificially interrupted in its pursuit of current value is unsatisfied and leaves critical questions, such as how far and how urgently the market would continue searching for fair "value."

Unlike objectives derived from chart formations and mathematical formulas, which approximate a target range, Howe's Limit Rule identifies precise price targets which can be valuable to both short-term and position traders.

For instance, if a market trades at a limit up price:

1. Short-term traders may more confidently buy into any pullback (whether intraday or during subsequent trading days).
2. Traders already long may be encouraged to maintain their positions.
3. Prospective short-sellers may be discouraged from taking immediate action.

Understanding the principles of Howe's Limit Rule, each of the above market participants would expect a decline, if any, to be minor unless and until that limit price is exceeded by at least one tick. However, if after a prolonged trend, a limit price is exceeded only briefly and tentatively, a failure that ultimately constitutes a reversal may be imminent (as the market exhibits exhaustion).

As a corollary, an unexpected limit move in the direction opposite the prevailing trend can be an early warning of a trend reversal (as everyone changes their minds at the same time).

Finally, an abrupt limit move from out of accumulative or distributive congestion can signal the beginning of a powerful new trend (as everyone tries to go through the same door at the same time).

On the rare occasion when a lead futures contract leaves a traded limit price "hanging" (not exceeded prior to its expiration), that limit price is carried over as a future objective for subsequent lead contracts. As such, it can become a target for intermediate-term or long-term trend exhaustion. In other words, the prevailing trend may be maintained and/or a new trend suppressed until that "hanging" limit is exceeded, often creating a double top or double bottom.

The lead contract is the most cash-connected, and those prices later become significant support/resistance points on weekly/monthly charts. Limits left hanging in deferred contracts are specific to them only and become irrelevant at expiration.

Hedging with options

Okay, let's get back to an example of hedging some decent futures profits with options. Let's say a trader established a long position at 7.00 cents in one contract of New York sugar futures just after prices broke out above a resistance area. The trader participates in a nice uptrend that takes prices up to 8.50 cents, but then the market pauses.

The trader already has a profit of $1,680 (150 points) but thinks the bull run may not be over. The trader purchases a put option on sugar futures with a strike price of 8.50 cents for a cost of 45 points, or $504, locking in a profit of $1,176, and is still in the market and long sugar. If the trader stayed in the market for a rally that took prices to a high of 10.81 cents and exited the long position at, say, 10.50 cents, that's another 200-point gain, or $2,240 more in profit. Thus, the trader pockets a total profit of $3,416 ($1,680 plus $2,240 minus the $504 cost of the option).

Double-edge sword

Another point I want to make is that when markets move toward price extremes, you have a double-edge sword. The profit potential is likely the highest during these big price moves, but the high volatility means the market can turn against you very quickly – and your protective stop may not be effective. If you have purchased an option to hedge your profits, you have also limited your potential losses if the market makes a sudden and violent turn against you.

Here are some important caveats about hedging your futures profits with options: Make sure the market you are trading has a liquid options market. Some markets, such as lumber or the U.S. Dollar Index, have adequate open interest to trade straight futures, but trading in options on the futures contract is thin and are not good candidates for hedging profits.

Also, you want to make sure you have a substantial profit accrued before hedging your winning position. You probably don't want to take a bigger bite out of your trading profits by purchasing an option than you have profit left after purchasing that option.

Wrapping Up . . .
Keep Learning

Many readers have asked me whether purchasing a trading system for several hundred or even a few thousand dollars is worth the investment. Would a system be the solution to their trading problems?

When I say "trading system," I mean some type of mechanical trading system that usually requires one to be in the market (either long or short) all or much of the time or refers to some specific trading method that an “expert” trader has devised and deems to be profitable. My answer to these readers usually is: Although some trading systems or specific methods may be useful or profitable, why not spend that kind of money for software that helps you develop your own trading strategies that can be adjusted to market conditions or why not attend a quality trading seminar or workshop?

It’s like that expression that it’s better to learn how to fish than it is to subsist on a constant handout of fish from someone else.

Working with sophisticated software that can analyze market relationships and give you clues ahead of the trading crowd can give you a tremendous edge in short-term trading. Intermarket analysis software can produce predictive indicators that forecast probabilities and show you trading opportunities. You don’t want to become dependent on someone else’s precise signals, but you want to learn how to trade to fit your own individual situation.

Attending a trading seminar or trading workshop allows you to hear some of the best traders and trading educators in the world share their knowledge. Furthermore, the smaller trading workshops allow you to not only learn from the trading instructor but also likely learn something from your peers who are also attending the workshop.

A trader should never stop striving to learn more about markets and trading. The more knowledge traders can attain, the better their chances for trading success. That is the premise of this e-book – helping you learn about and understand a variety of trading tools that you can add to your toolbox to become a successful trader.