

10 TOP CHART PATTERNS

THAT CAN MAKE YOU MONEY

Visual Clues to Help You Spot Trends and Reversals

Intro

However, nobody can predict exactly what a specific market will do at a precise time in the future. The true professional traders will tell you that market analysis is not a business of predictions but one of probabilities.

For many traders, going with the probabilities means analyzing charts to find patterns that reflect what people have done in similar situations in the past. Human behavior and price history tend to repeat themselves, and from the tracks that prices leave on a chart, one can extrapolate the probability of predictable patterns of price behavior.

The 10 chart patterns in this e-book are not the only patterns traders visualize on charts, of course. We don't say much about the various triangles or pennants or flags or rounding bottoms or cups and saucers or gaps or the patterns of the many technical indicators that some traders use to determine entry or exit points or to measure the potential extent of a move. We have just selected 10 chart patterns that we think provide some of the more reliable clues about the probabilities of future price action.

You'll note that all of these chart patterns can be spotted rather easily by the naked eye. Naturally, you'll want a computer to gather the data, generate the charts and compute some indicators quickly on the screen, but the computer in your head is the key to "seeing" these 10 chart patterns that can make you money.

Summary

With this complimentary eBook by Jim Wyckoff, Futures traders will be able to analyze charts to find patterns that reflect what traders have done in similar situations in the past to gain clues about the probabilities of future price action. This includes patterns like:

- The venerable trend line
 - Retracements
- Collapse in Volatility
- Trading range breakouts
- Support/resistance

Bio

Jim Wyckoff, a senior market analyst at <u>TraderPlanet.com</u>, 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.



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The venerable trend line

One of the most basic, yet most powerful, trading tools is the trend line. The first advice many new traders get is to identify the trend. "Trade with the trend," "The trend is your friend" and other reminders emphasize the importance trend-following as a trading strategy.

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."

Methodologies for drawing trend lines on the charts vary. Like much of technical analysis, it is more art than science. There really are no hard and fast rules, but a trend line is one of those things where you know one when you see one.

An uptrend is defined as a series of higher highs and higher lows. A downtrend is defined as a series of lower highs and lower lows. When drawing an uptrend line, you draw a straight line up to the right along successive "reaction" lows. A downtrend line is drawn to the right along successive rally peaks. The more times that rally highs or reaction lows touch the trend line, the more powerful the trend line becomes.

The key to trend line analysis is what the market does as it approaches trend line. The assumption is that a trend in motion will stay in motion – until it doesn't. Breaking through a trend line is an important signal that one trend may be ending and another beginning.

To negate a trend line, prices must penetrate the trend line resistance or support level and then see follow-through strength or weakness during 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.



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Support/resistance

Several chart points can provide support or resistance, but a favorite – and probably most accurate – method of determining support and resistance levels is to look at a chart and its past price history and then 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 time frame – intraday, 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, that area becomes a support or resistance "zone." Of course, to be a valid support or resistance zone, it cannot be so wide that it's virtually useless from a trading standpoint.

Major price tops and bottoms such as those indicated by the dashed lines on the crude oil futures chart above are also major resistance and support levels, especially those of a longer-term nature on weekly or monthly charts.

Unfilled price gaps on charts also qualify as very good support and resistance levels.

Trend line support and resistance is also very useful to the trader, and projecting these trend lines to determine future support and resistance areas is extremely effective.

Finally, "psychological" price levels can be significant support and resistance areas for some markets. These are usually round numbers that catch the attention of traders. For example, in crude oil, a psychological price level might be \$50 or \$100 per barrel. In soybeans, \$6 a bushel might have been a psychological level in the past. In cotton, 50 cents a pound would qualify. For gold, it might be \$1,000 an ounce.

From a trading perspective, the key to the support or resistance level is how the market acts as it approaches that level. Will the market respect that level and turn back from it, as you would expect if it is a strong support or resistance area? Or will the market run through that level, negating whatever influence that support or resistance might have had?

It's important to note that when a key support level or zone is penetrated on the downside, that level or zone then 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.



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Retracements

Another way to discover support or resistance areas is by looking at "retracements" of a significant price move – that is, price moves that are counter to an existing price trend. These moves are also called "corrections," and a retracement is that area where a correction can be expected to end and the primary trend to resume.

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 dropped by 50% and then moved back higher. The same holds true for downtrends and corrections to the upside.

You can see on the cotton futures chart above that the 50 percent retracement between the low of 46 cents and high of 64 cents supported prices at the 55-cent level.

In addition to 25%, 50% and 75%, some of the most popular retracement levels are tied to Fibonacci ratios, such as 38.2% and 61.8%, which are expected to act as support or resistance. After a move from a low to a high or vice versa, a correction may retrace 25% of the original move. If it exceeds that level, then traders look for the correction to retrace 38.2% of the original move. If 38.2% is exceeded, the next target is 50% of the primary move. And so on.

These retracement calculations provide traders with projections for key chart points where a market may turn or they may provide clues about the strength of the correction. When there is no other evidence of support or resistance on a chart, they may act as "magnets" to pull prices toward them. If these retracement calculations coincide with previous highs or lows or some other support/resistance area or key chart point, they reinforce the likelihood that that is the next area where the market will have to make a decision about going higher or lower.



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Moving average crossovers

Next to trend lines, moving averages are probably the most commonly used technical tools to analyze trends. Whether you use a simple moving average – the sum of prices, usually closes, for a period divided by the number of prices – or weighted or exponential moving averages, which put greater weight on the most recent prices and incorporate more price history, the concept of moving average crossovers is the same.

When prices are above the moving average, you should be long; when prices are below the moving average, you should be short.

When a shorter-term moving average is above a longer-term moving average, you should be long; when a shorter-term moving average is below a longer-term moving average, you should be short. The red circled areas on the wheat chart above show some examples using VantagePoint's predicted medium-term moving average (blue line) and the actual medium-term moving average (black line). Note that the predicted average tends to move a few days before the actual moving average.

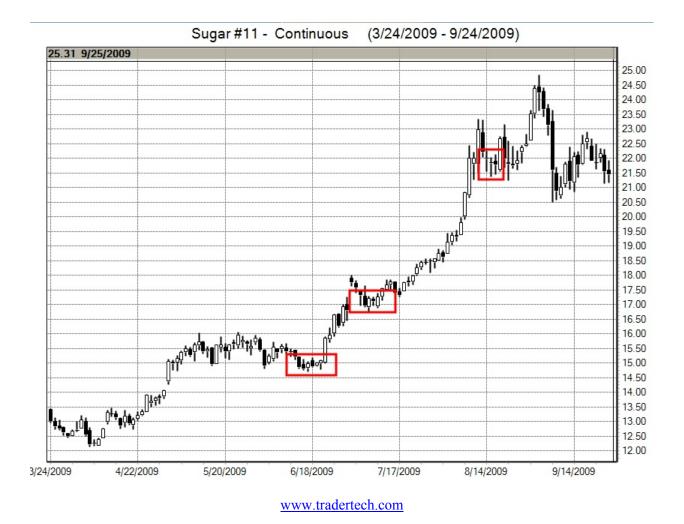
Crossovers of the moving averages provide the signal to act because they indicate the momentum is shifting from one direction to another.

One of the most important decisions in using moving averages is the length of time (the number of bars) calculated in a moving average. Moving averages with shorter time periods normally fluctuate more actively and are likely to give more trading signals. They also tend to produce whipsaws that can cause losses. Slower moving averages with longer time periods display a smoother moving average but may be too slow to enable you to establish a long or short position effectively.

Moving averages follow the trend while smoothing the price movement to reduce the effect of price jabs and false penetrations of a trend line. Some traders use three moving averages. A commonly used combination in futures trading is 4-, 9-, and 18-period moving averages. When the shortest moving average crosses the medium moving average, you have your first signal, which is confirmed when both the short and medium moving averages move above or below the longer moving average.

One important caveat about using moving averages is that they lag market action and do not work well in choppy or non-trending markets. Many traders use exponential moving averages that include all of the market's price history to smooth out the choppy movements. In trending markets, strategies based on moving averages can work very well.

Stock traders tend to use longer time periods such as 40-day, 100-day or 200-day moving averages to determine if a stock is bullish or bearish. If you see a stock or stock index that is getting ready to cross above or below one of these popular longer-term moving averages, it may set off more active trading including participation by funds or institutions.



Collapse in Volatility

A collapse in market price volatility occurs when trading ranges narrow substantially. This price pattern is evidenced by price chart bars or candles (daily, weekly, monthly, hourly or minutes) that suddenly get smaller such as areas marked by the red boxes on the VantagePoint sugar futures chart. The smaller price bars should number at least three in a row and do not necessarily need to get progressively smaller with each bar.

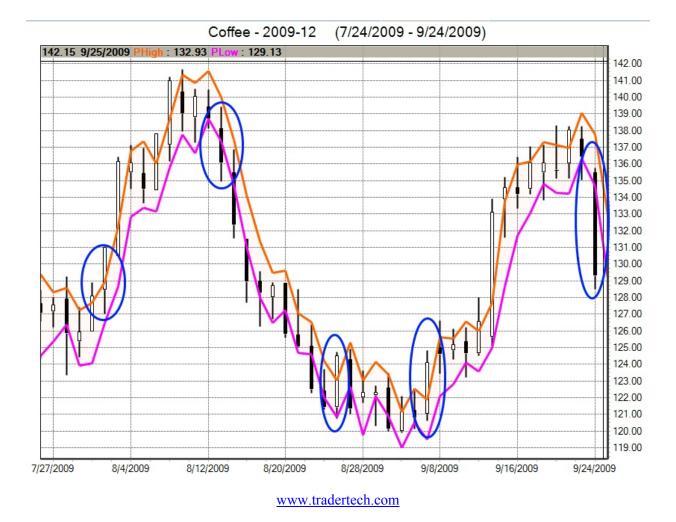
Importantly, this "collapse in volatility" from wider ranges to a series of narrower ranges usually sets off a significantly bigger price move, either up or down. As the smaller price bars accrue on the chart, there is no set number of bars that will set off the bigger price move. It could be three bars or it could be 10 bars or more before the bigger price action takes off.

When traders spot a collapse in volatility in a market, they often ask, "In which direction will the big price move occur?" No one knows. History just suggests that a bigger price move is likely to follow the tightening range. However, there are occasions when a collapse in volatility occurs at the same time that other technical indicators are signaling a price move in one direction. On these occasions

one can determine that odds favor a bigger price move in a certain direction.

It's also 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 as likely to occur.



Trading range breakouts

The trading signal for many of the chart patterns discussed in this book occurs when prices break out of some zone that has contained price activity for some time or is expected to contain price movements.

Some candidates for a breakout strategy include a sideways trading range, where the duration of the range provides clues to the amount of energy built up and the potential strength of a price move after a breakout; a trend line channel, where the trend line and a parallel channel line mark the boundaries of the range, or a breakout of the various triangles, pennants or flags that traders see on charts.

One example of a breakout strategy involves VantagePoint's predicted next day highs (gold line on the coffee futures chart above) and predicted next day lows (pink line). These predicted highs and lows indicate the probabilities for the trading range the next day and form a type of channel as each day's data is added.

These channels can be used in several ways. For the swing trader who likes to hold positions for a few days or at least overnight, breaking out above the predicted high can be a buy signal and breaking out below the predicted low can be a sell signal. You can see how well a breakout tactic like this worked in the blue circled areas on the chart as stops placed just outside the predicted range caught some nice trending trades.

This strategy does require other parameters such as how large a breakout should be to provide a signal, how many contracts to trade on the breakout, where stops should be placed, whether to use profit targets, etc., but these breakouts can provide some very reliable trading signals.

For the intraday trader, another way to use VantagePoint's predicted highs and lows is to assume that prices will not break out of the predicted range during the trading session – the anti-breakout strategy. As prices move toward the predicted high, for example, a trader uses a limit order to sell, a type of fade that assumes the market will not exceed that day's predicted high and will remain in the predicted range. Again, of course, this strategy requires parameters about how much to fade the predicted highs or lows, where stops should be placed, when to take profits, etc.



'M' tops, 'W' bottoms

One of the more reliable signals of a market top is price action that looks like an "M" on the chart while a "W" pattern signals a market bottom. Sometimes these patterns manifest themselves as a double top or double bottom or they may be part of what traders call a head-and-shoulders pattern.

Market advances tend to get carried away with themselves sometimes as traders scramble to get onboard the uptrend while they can. Eventually, the market absorbs most of the buying interest and hits a peak, then starts to lose steam as there aren't enough buyers left to propel the market higher. Those holding long positions may also decide to take some profits, adding to the downward pressure and creating the first leg of the "M".

Prices drop back until they reach a point where buying comes back and the market begins to climb higher again after posting an interim low. If this new rally moves above the first high, the market may be on its way to forming the head of a head-and-shoulders formation. In many cases, however, the second high is below the first high or perhaps at about the same price level as the first high. Then, buying fades and prices begin to sink again, starting the second leg of the "M".

When prices drop below the interim low, that usually – but not always – confirms a top is in place and signals the likelihood that the trend is reversing.

That describes an "M" market top. Just reverse all of that price action and you have the description of a "W" market bottom. Prices hit a low, rally to an interim high, drop back to a second low, then move back up again. The bottom is confirmed when prices rise above the interim high.

One important point to note is that, after staging a breakout, prices often do come back to the breakout point as if the test whether the breakout is real. This "kickback" area usually gives traders time and a place to enter positions for the next market direction.





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Key reversals, engulfing patterns

Although most chart patterns involve a number of bars (or candles), sometimes only one bar provides a meaningful message. However, just as intermarket analysis emphasizes that no market acts in isolation, no price bar acts in isolation. Where the bar appears on the chart is an important consideration in interpreting its meaning, and the bars before and after the bar under consideration play a role in determining the significance of that bar.

The key reversal is one bar that can signal a top or bottom on its own on a bar chart (left chart). On a candle chart, the same price action shows up as an engulfing pattern (right chart).

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, alone, a key reversal. But to be valid, a key reversal should 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.

As a bearish engulfing pattern on a candle chart, the market opens higher than the previous close or, even better, above the previous high. Prices then tumble during the trading session to close much lower or, even better, below the low of the previous bar. On many candle traders' charts the bearish engulfing pattern is a big, black candle body that engulfs the previous day's price range and indicates

the market outlook has suddenly turned bearish.

A bullish engulfing pattern appears after an extended downtrend when the market opens below the previous close, then rallies sharply higher to close above the previous high to form a candle with a big white body that engulfs the previous day's price range. It is important for the market to continue to move to the upside to validate the bullish engulfing pattern signal.



Dojis

Another single candle that gives an indication that the market may turn is known as a doji. After an extended trend in one direction, the market opens at a specific price, then trades above and below that price during the trading session but is unable to push the prevailing trend any further before coming back to close at or near the open price.

A doji indicates uncertainty as traders try to take prices both higher and lower but are unable to mount either enough buying or selling power to get the market to commit to a direction for that period. Dojis require corroboration from follow-through price action to signify a reversal from the previous trend.

You can see a number of dojis on the corn chart above, but not all mark a market turn, as dojis 5 and 6 illustrate. The key to a valid doji signal is where it appears on the chart and what prices do after the doji. Note especially dojis 1 and 7 on the chart, which appear after a trend and then feature strong follow-through reversal action on the next candle.

A stop below the low of the doji would catch the downmove after doji 1, but if the market continued higher, you would not have had a short position. Likewise, a stop above the high of doji 7 would have caught the up move but would not have given you a long position if the market continued to trend lower as it did with doji 5.

Using dojis is not quite that automatic, but the doji's key value is to act as an alert for a potential price reversal. The following candle is where the trading action occurs. Although dojis can mark both highs and lows, they tend to be more reliable at indicating market tops after an extended uptrend.

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

A doji with a closing price below an important support level or above an important resistance level or above or below a trend line or chart pattern carries more weight than prices that just probe above or below those levels during the session, only to pull back by the close of the period. Of course, in a global market such as Forex, which trades around the clock, a close does not have the same impact because it may just be the close of some arbitrary intraday time period.



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Exhaustion tails

Another chart pattern that is more visible on a candlestick chart is the exhaustion tail. These occur when either buying or selling apparently is exhausted after prices make a fresh-for-the-move high or low that crzeates a longer candle on the chart. When prices reach an extreme high or low, enthusiasm may run out and prices reverse course to close at the other extreme of the bar's earlier move.

The result of this price activity is a candle that has a relatively small body but a long "tail." Some examples are marked by the green circles on the corn chart above. Although much of the important trading during the session is denoted by the body of the candle, which defines the open and close, the tails are important guideposts because they then become an important resistance or support level on the chart. The tail is a price area that traders have tested, but the market has turned back their attempts for some reason.

Some traders dismiss the tails and use only the candle bodies to draw trend lines or only the closing

prices for indicators such as moving averages. But the tails indicate where the market has tried to go and failed. That can indicate a trend change, or the highs or lows marked by the end of the tail can become targets that the market has to overcome to move higher or lower. Note on Candle 1 that an exhaustion tail formed after the market couldn't take prices higher than \$3.45. When prices rallied (Candle 2), the high of the tail on Candle 1 acted as a resistance area that the market was unable to overcome.