the top and selling at the bottom of the market, as it is usually a forward measurement. It is used to trigger buy/sell signals as well as to detect periods where the market is either overbought or oversold.

Formulas require the raw or fast %K (number of time intervals) to be slowed internally by taking a moving average of the last three-day %K and the calculation of %D, which is smoothed again by using a three-day moving average of the slow %K.

$$\%K\ (\text{FAST}) = \frac{(\text{Current close}) - (\text{Lowest low of X period})}{(\text{Highest high of X period}) - (\text{Lowest low of X period})} \times 100$$

$$\%K\ (\text{SLOW}) = \frac{(\%K\ \text{FAST}\ 1 + \%K\ \text{FAST}\ 2 + \%K\ \text{FAST}\ 3)}{3}$$

$$\%D = \frac{(\%K\ \text{SLOW}\ 1 + \%K\ \text{SLOW}\ 2 + \%K\ \text{SLOW}\ 3)}{3}$$

Where X = user-defined period. For short-term trend identification, I use 14 days.

Interpretation

1. The market is overbought when the stochastic reading is over 80 percent and oversold below 20 percent.
2. Stochastic buy/sell rules:

   $\%K > \%D$ = Trend Bullish = Buy
   $\%K < \%D$ = Trend Bearish = Sell
3. Divergence occurs when the stochastic indicator diverges from price action. If price has gone up and the stochastic fails to exceed its previous corresponding high, this is indicative of a bearish divergence. On the other hand, if price has gone down and stochastic fails to make a new low, we have a bullish divergence. Divergences warn of an imminent trend reversal.

Proper Action

Applying Candlesticks with Stochastic

- **Stochastic > 80% (overbought).** Look for the Shooting Star, doji, Dark Cloud Cover, Hangman, Engulfing Bearish, Harami Line or Cross, Evening Star, and so on to sell or go short.
- **Stochastic < 20% (oversold).** Look for Tweezers Bottom, Hammer, doji, Engulfing Bullish, Morning Star, and so on to buy or go long.

Using the Rule of Multiple Techniques

- **In case of bullish trend (%K > %D).** Look for bullish candlestick patterns to buy or go long. If trend remains bullish, maintain longs. Ignore candlestick sell signals or at most close longs but do not short.
- **In case of bearish trend (%K < %D).** Look for bearish candlestick patterns to sell or go short. If trend remains bearish, maintain shorts. Ignore candlestick buy signals or at most cover shorts but do not go long.

Figure 7.7 shows an example of filtering with stochastic.

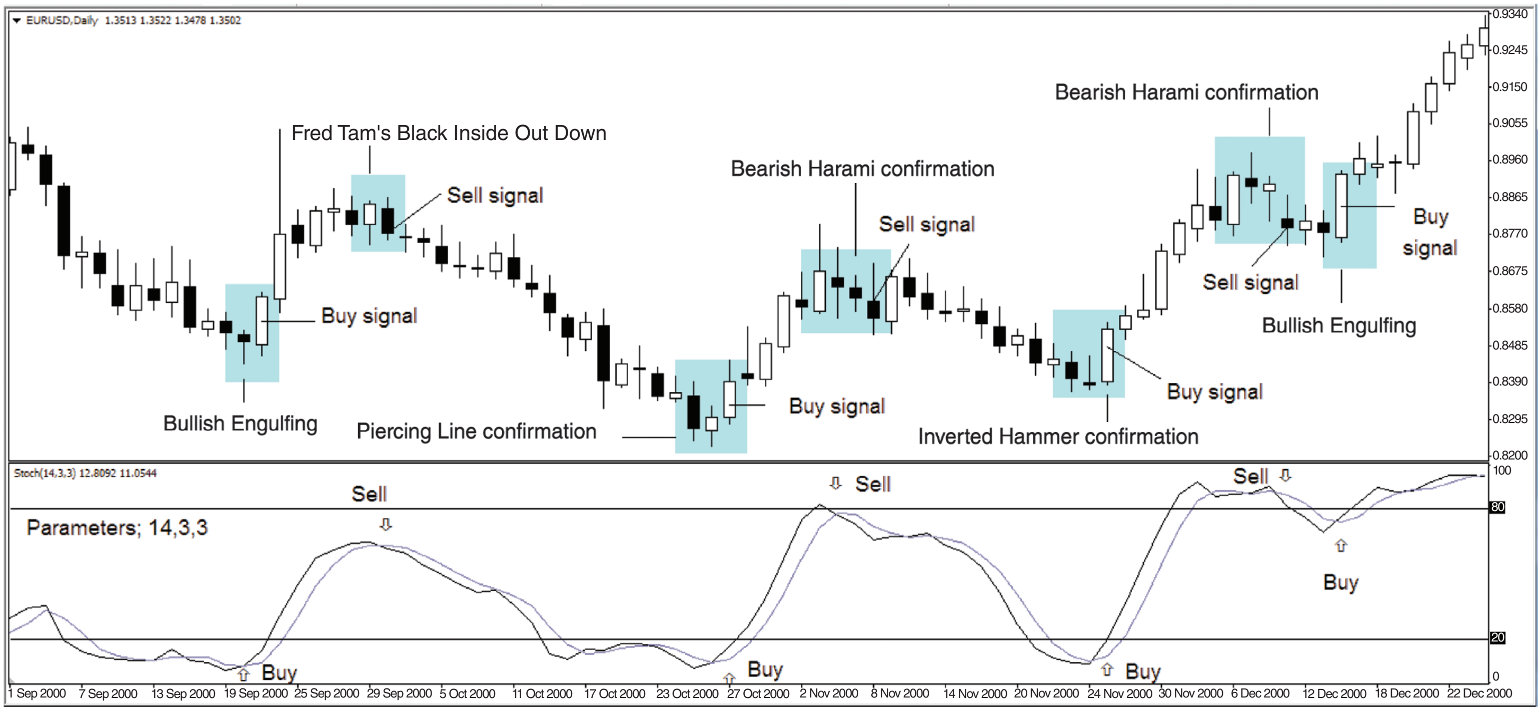


FIGURE 7.7 EurUsd Daily (2000)—Filtering with stochastic (buy if %K>%D) (sell if %K<%D)

Filtering with Momentum

Momentum is the most basic application of oscillator analysis. It is based on the concept that price movements do not progress at a constant rate at all times and that an increase in rate of movement shows the strength of the trend.

Momentum is used to monitor price movement by making direct comparisons between current and past prices on a continuing basis.

To construct a 10-day momentum line, simply subtract the closing price 10 days ago from the last closing price. The positive or negative value is then plotted against a zero line.

The formula is:

$$\text{Momentum} = ((\text{Closing price today}) - (\text{closing price of } n \text{ number of days ago}))$$

Where n = User-defined period. For short-term trend identification, I use 10 days.

Interpretation

The Momentum line oscillates around the zero line. Extremes in either direction warn of oversold and overbought situations. Signals are given by the crossings of the zero line in the direction of the trend.

Rule

Momentum > 0 = Trend Bullish = Buy
Momentum < 0 = Trend Bearish = Sell

Proper Action

Applying Candlesticks with Momentum

If momentum > 0. Look for Bullish Engulfing, Piercing Line, Morning Star, Hammer, Inverted Hammer confirmation, and so on to *buy*.

If momentum < 0. Look for Bearish Engulfing, Three Crows, Evening Star, Shooting Star, Hanging Man confirmation, and so on to *sell*.

Using the Rule of Multiple Techniques

In case of bullish trend (momentum > 0). Look for bullish candlestick patterns to buy or go long. If trend remains bullish, maintain longs. Ignore candlestick sell signals or at most close longs but do not short.

In case of bearish trend (momentum < 0). Look for bearish candlestick patterns to sell or go short. If trend remains bearish, maintain shorts. Ignore candlestick buy signals or at most cover shorts but do not go long.

Figure 7.8 and Figure 7.9 show some examples of filtering with momentum and candle patterns at momentum crossover points.

Filtering with Williams' Percentage Retracement

The Williams' Percentage Retracement (%R) was developed by Larry Williams. This oscillator closely resembles the Stochastic Oscillator. It is commonly used as a tool to indicate when to buy

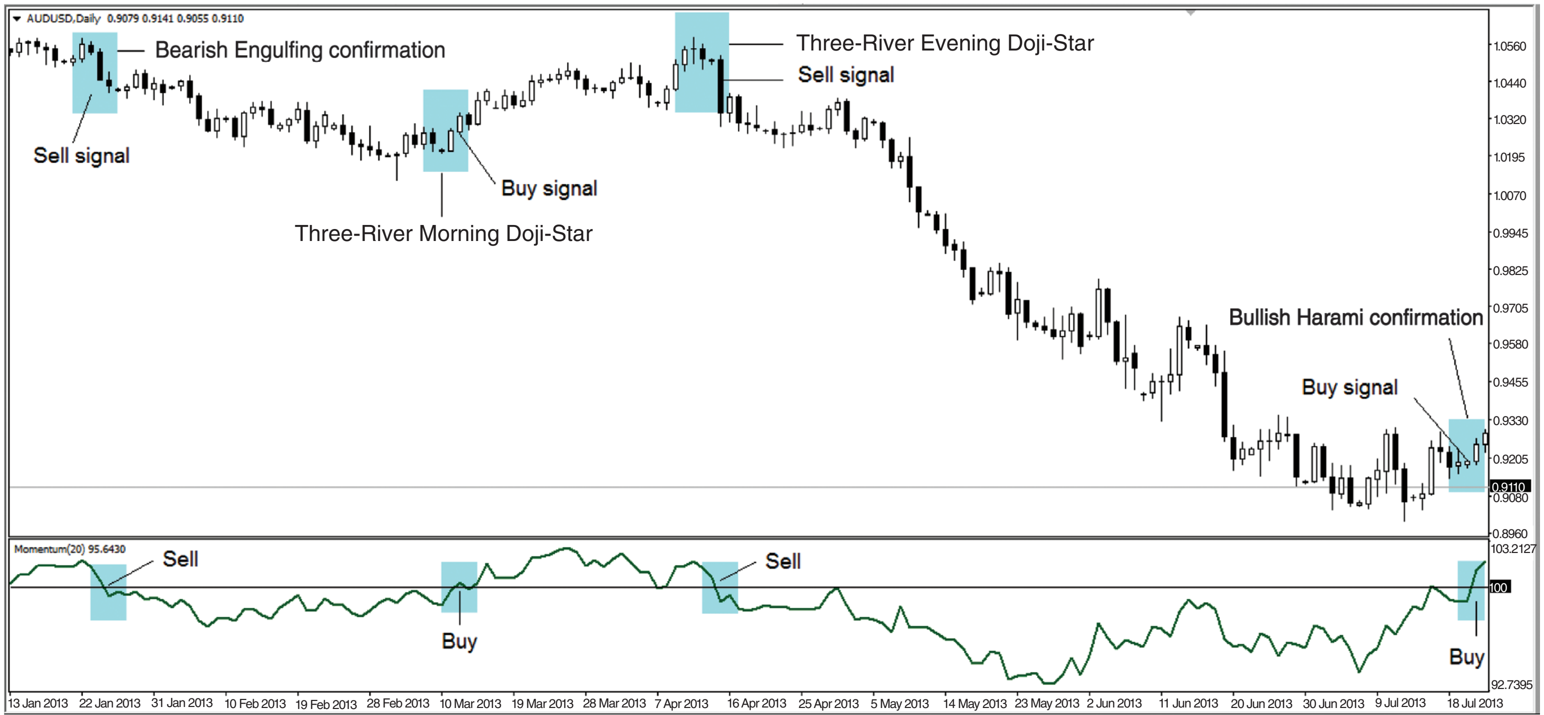


FIGURE 7.8 AudUsd Daily (2013)—Filtering with Momentum (buy if momentum>0) (sell if momentum<0)

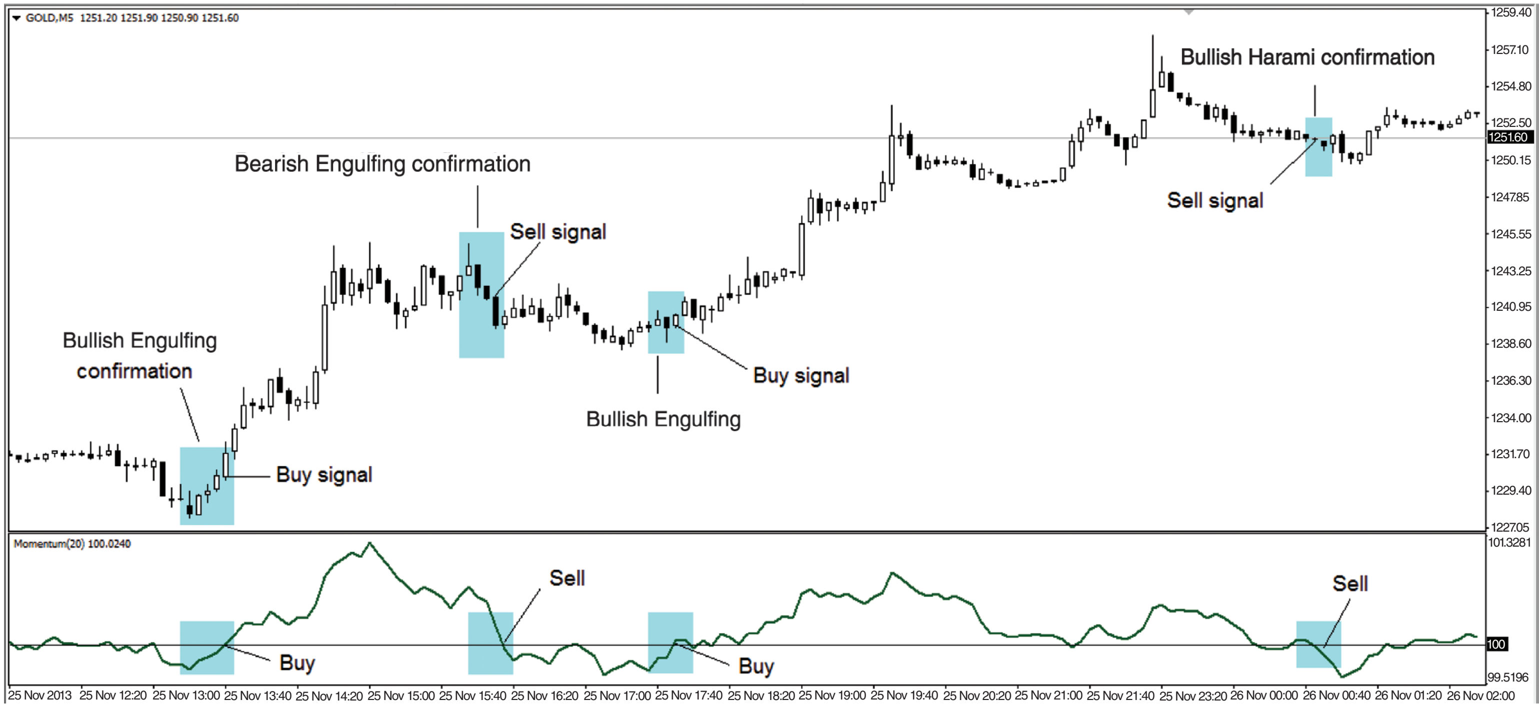


FIGURE 7.9 Gold 5-Minute (2013)—Look for candle patterns at momentum crossover points

on dips in a bull market and when to sell on rallies in a bear market. The short-term period is usually nine days. Williams' %R is plotted on a scale between 0 and 100.

Larry Williams' formula is:

$$\%R = \frac{(\text{Highest high of X period}) - (\text{Current close})}{(\text{Highest high of X period}) - (\text{Lowest low of X period})}$$

Where X = User-defined period, usually nine days.

Interpretation

1. The analysis of the %R is very similar to that of the Stochastic Oscillator except that %R is upside-down and the stochastic has internal smoothing. As such, readings in the range of 80 to 100 percent indicate that the market is oversold, while readings in the 0 to 20 percent range suggest that the market is overbought.
2. However, in some software, the %R is the inverse of Williams'. This was done to remain consistent with the standard practice that a high number for an oscillator indicates an overbought market and a lower number indicates an oversold market. Readings in the range of 80 to 100 percent in some software therefore indicate that the market is overbought while readings in the 0 to 20 percent range suggest that the market is oversold.
3. As with all overbought/oversold indicators, it is best to wait for the security's price to change direction before placing your trades. For example, if an overbought/oversold indicator (such as the Stochastic Oscillator or Williams' %R) is showing an overbought condition, it is wise to wait for the security's price to turn down before selling the security. It is not unusual for overbought/oversold indicators to remain in an overbought/oversold condition for a long time period as the security's price continues to climb/fall. Selling simply because the security appears overbought may take you out of the security long before its price shows signs of deterioration.
4. An interesting phenomenon of the %R indicator is its uncanny ability to anticipate a reversal in the underlying security's price. The indicator almost always forms a peak and turns down a few days before the security's price peaks and turns down. Likewise, %R usually creates a trough and turns up a few days before the security's price turns up. (See Figure 7.10.)

Proper Action

Applying Candlesticks with %R

- **Above 20%R (overbought).** Look for the Dark Cloud Cover, Engulfing Bearish, Evening Star, Shooting Star, doji, and so on to *sell*.
- **Below 80%R (oversold).** Look for the Hammer, Engulfing Bullish, Piercing Line, Morning Star, Inverted Hammer, doji, and so on to *buy*.

Filtering with Directional Movement Index

The Directional Movement Index (DMI) system, developed by J. Welles Wilder Jr., deals with the trending quality of a market and provides timely buy or sell signals for longer-term investors. It is

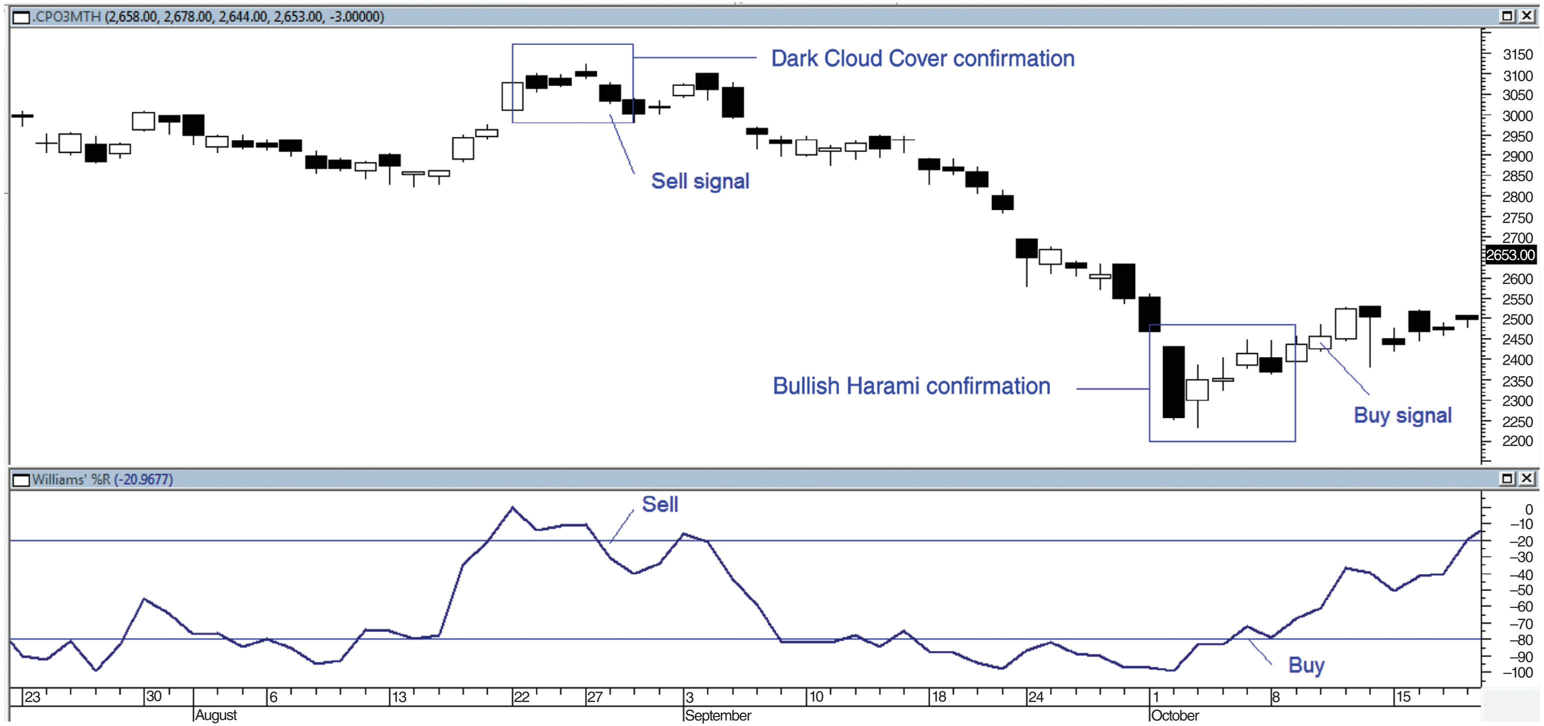


FIGURE 7.10 Crude Palm Oil Daily (2013)—Filtering with %R (look for reversal patterns at overbought/oversold areas)

explained thoroughly in his book *New Concepts in Technical Trading Systems*.

Interpretation

The basic DMI trading system involves plotting the 14-period +DMI and the 14-period –DMI on top of each other in the same inner window.

Positions should be taken by buying when the +DMI rises above the –DMI as this would indicate an upward-trending market. Positions should be sold when the +DMI falls below the –DMI.

Rule

+DMI > –DMI = Trend Bullish = Buy
+DMI < –DMI = Trend Bearish = Sell

In Wilder's book, he notes that this system works best on securities that have a high average Directional Movement Index (ADX) value, above 25. When the ADX drops below 20, do not use a trend-following system.

Additionally, therefore, for a buy signal to be considered valid, the ADX line must be rising at the time of crossover. If ADX is not rising when +DMI crosses –DMI some traders will consider the signal valid if ADX begins rising within a few bars. Preliminary exit signals can be interpreted if ADX begins declining or if +DMI and –DMI cross again in the opposite direction.

The Extreme Point Rule This rule is designed to prevent whipsaws and reduce the number of false trades. The extreme point rule requires that on the day the +DMI and –DMI cross, you note the "extreme" price. If you are long, the extreme price is the low price of the day the lines cross. If you are short, the extreme price is the high price on the day the lines cross.

The extreme point is then used as a trigger point at which you should implement the trade. For example, after receiving a buy signal (+DMI > –DMI), you should then wait until the security's price rises above the extreme point (the high price on the day that the lines cross) before buying. If prices fail to rise above the extreme point, you should continue to hold your existing position.

Proper Action

Applying Candlesticks with DMI

- **If +DMI > –DMI.** Look for Bullish Engulfing, Piercing Line, Morning Star, Hammer, Inverted Hammer confirmation, Fred Tam's White Inside Out Up, and so on to *buy*.
- **If +DMI < –DMI.** Look for Bearish Engulfing, Three Black Crows, Evening Star, Shooting Star, Hanging Man confirmation, Fred Tam's Black Inside Out Down, and so on to *sell*.

Using the Rule of Multiple Techniques

- **In case of bullish trend (+DMI >–DMI).** Look for bullish candlestick patterns to buy or go long. If trend remains bullish, maintain longs. Ignore candlestick sell signals or at most close longs but do not short.
- **In case of bearish trend (+DMI <–DMI).** Look for bearish candlestick patterns to sell or go short. If trend remains

bearish, maintain shorts. Ignore candlestick buy signals or at most cover shorts but do not go long.

Figure 7.11 shows an example of reversal patterns at DMI crossover points.

Filtering with Commodity Channel Index

Developed by Donald Lambert, the Commodity Channel Index (CCI) is calculated by first determining the difference between the mean price of a commodity and the average of the means over the time period chosen. This difference is then compared to the average difference over the time period (this factors in the commodity's own inherent volatility). The result is then multiplied by a constant that is designed to adjust the CCI so that it fits into a "normal" trading range of +/–100.

Interpretation

While the CCI was originally designed for commodities, the indicator also works very well with stocks and futures.

There are three ways of interpreting the CCI:

1. **Looking for divergences.**
   A popular method of analyzing the CCI is to look for divergences in which the underlying security is making new highs while the CCI is failing to surpass its previous highs. This classic divergence is usually followed by a correction in the security's price.
2. **As an overbought/oversold indicator.**
   The CCI usually oscillates between +/–100. Readings outside this range imply an overbought/oversold condition.
3. **As a signal indicator.**
   CCI > 0 = Bullish Trend = Buy
   CCI < 0 = Bearish Trend = Sell

Proper Action

Applying Candlesticks with CCI

- **CCI > 100 (overbought).** Look for bearish reversal patterns like the Shooting Star, Doji-Star, Evening Star, Bearish Engulfing, Dark Cloud Cover, and so on to *sell*.
- **CCI < 100 (oversold).** Look for bullish reversal patterns like the Hammer, Piercing Line, doji, Bullish Engulfing, Morning Star, and so on to *buy*.

Using the Rule of Multiple Techniques

- **In case of bullish trend (CCI > 0).** Look for bullish candlestick patterns to buy or go long. If trend remains bullish, maintain longs. Ignore candlestick sell signals or at most close longs but do not short.
- **In case of bearish trend (CCI < 0).** Look for bearish candlestick patterns to sell or go short. If trend remains bearish, maintain shorts. Ignore candlestick buy signals or at most cover shorts but do not go long.

Figure 7.12 shows an example of reversal patterns at overbought/oversold areas in CCI.

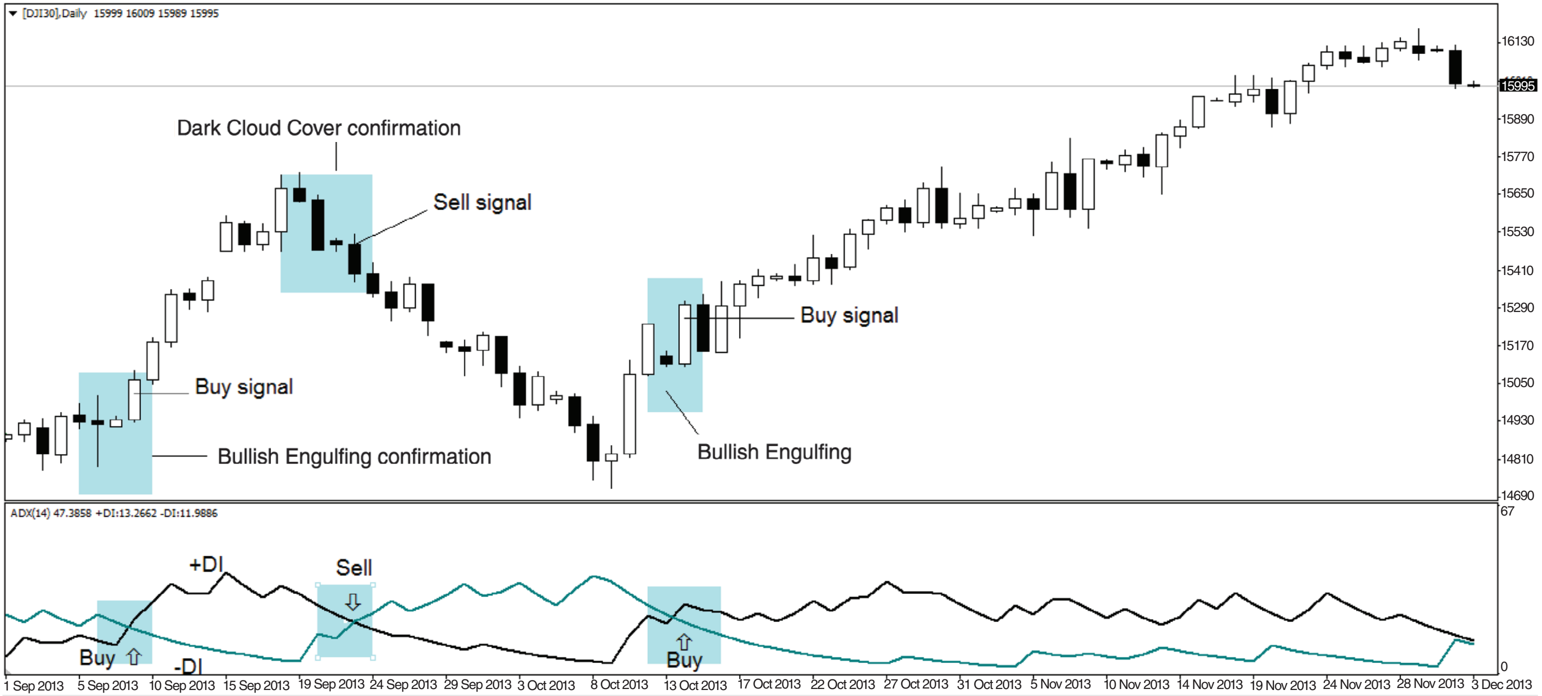


FIGURE 7.11 Dow Jones Industrial Average Daily (2013)—Look for reversal patterns at DMI crossover points

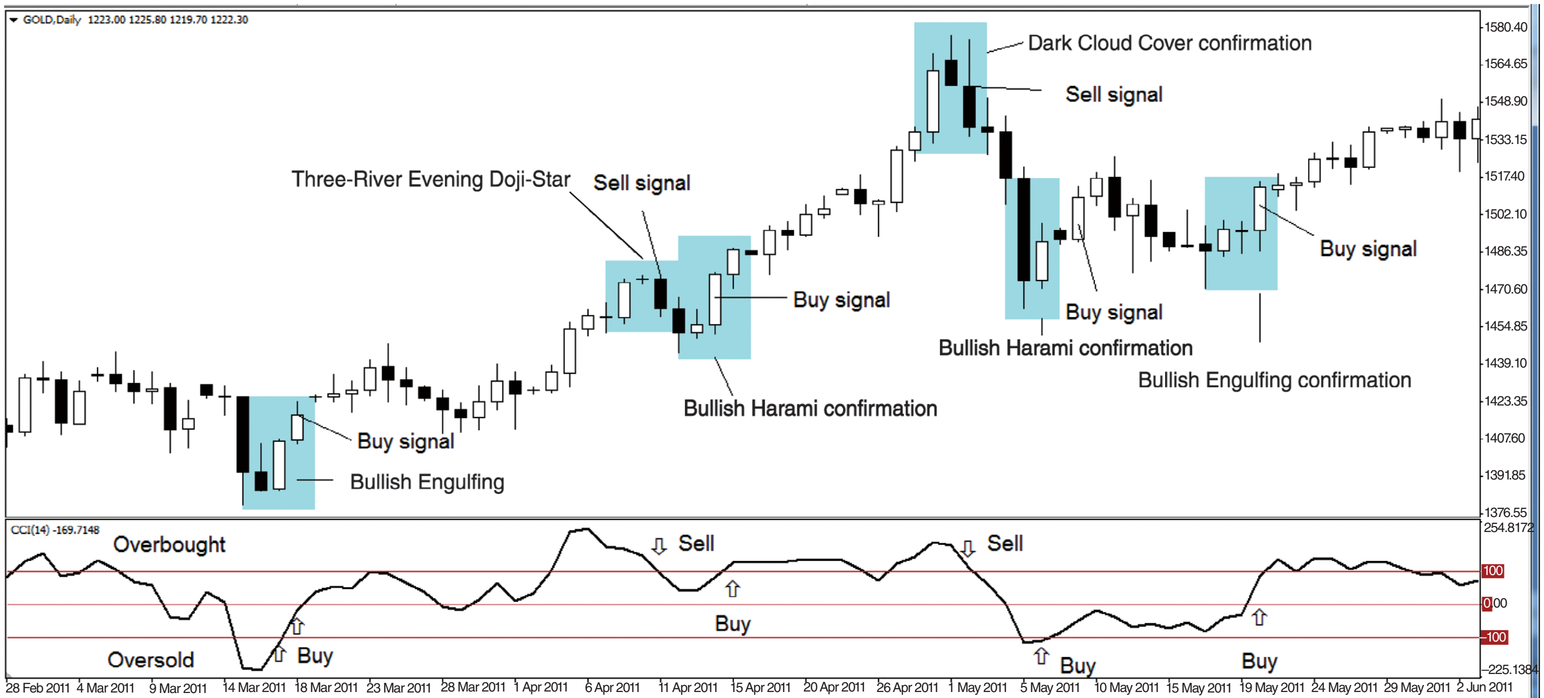


FIGURE 7.12 Gold Daily (2011)—Look for reversal patterns at overbought/oversold areas in CCI

Filtering with Volume

The greater the volume, the greater the force behind the move. Volume measures the intensity of a price move and is therefore used to confirm a move or breakout.

Interpretation

1. As long as volume increases, the current price trend should continue; if volume declines as a price trend progresses, the trend may not continue.
2. Volume can also be useful for confirming tops and bottoms. As price rises, volume should gradually increase. If after an extended rally volume suddenly spikes up, it could be a sign of the market's exhaustion. This phenomenon is called a *buying climax*.
3. Conversely, if after an extended decline volume suddenly increases by an unusually large amount, the market may be bottoming out. This phenomenon is called a *selling climax*.

Proper Action

- **When volume spikes up and price is up.** Look for bearish single candlestick patterns like the Shooting Star, doji, Hanging Man, Doji-Star, and so on to indicate a top.
- **When volume spikes up and price is down.** Look for bullish single candlestick patterns like the Hammer, Inverted Hammer, doji, Doji-Star, and so on to indicate a bottom.

Figure 7.13 shows an example of reversal patterns when volume is unusually large.

Filtering with Bollinger Bands

Bollinger Bands are a type of envelope developed by John Bollinger, founder of Bollinger Capital Management. This indicator refers to bands plotted above and below a simple moving average, usually a 20-day period. The bands plotted above and below this moving average are moving standard deviations. Their purpose is to measure the volatility of the market.

By using standard deviations rather than a fixed percentage, the bands adjust for volatility. During volatile periods the bands move further away from the average, while during market lulls the bands move closer to the average.

Interpretation

When displaying Bollinger Bands, you are prompted to enter the number of periods in the bands and the number of standard deviations between the bands and the moving average. Bollinger recommends default values of "20" for the number of periods, "simple" for the moving average method and "2" deviations. He notes that periods of less than 10 do not appear to work very well.

Because the spacing between Bollinger Bands is based on the standard deviation of the security, the bands widen when the security becomes more volatile, and contract when the security becomes less volatile.

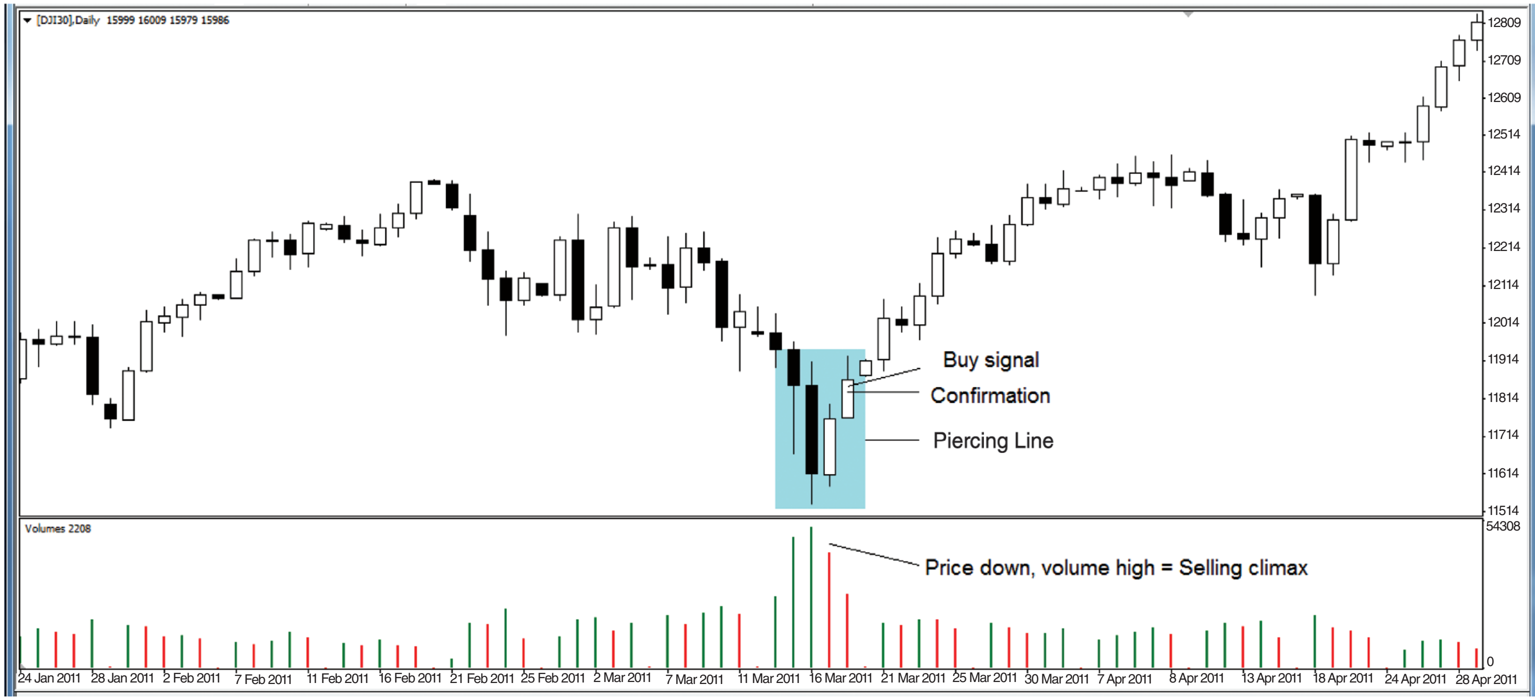


FIGURE 7.13 Dow Jones Industrial Average Daily (2011)—Look for reversal patterns when volume is unusually large

Bollinger notes the following characteristics of Bollinger Bands:

1. The bands narrow after a quiet period in the market. They will expand rapidly as the market becomes more volatile. Then rapid price moves usually occur.
2. When price moves outside the upper band, this is a sign of great strength, and a continuation of the uptrend is implied.
3. When price moves outside the lower band, this is a sign of great weakness, and a continuation of the downtrend is implied.
4. A sharp move outside the bands followed by an immediate retracement of the move is a sign of exhaustion.
5. Bottoms/tops made outside the bands followed by bottoms/tops made inside the bands call for reversals in the trend.
6. A move originating at one band tends to go all the way to the other band. This is useful in projecting price targets.

Proper Action

Applying Candlesticks with Bollinger Bands

- **Outside the upper band and re-enters band**. Look for bearish reversal patterns like the Doji-Star, Evening Star, Bearish Engulfing, Bearish Harami, Dark Cloud Cover, and so on to *sell*.

- **Outside the lower band and re-enters band**. Look for bullish reversal patterns like the Bullish Engulfing, Piercing Line, Morning Star, Bullish Harami, and so on to *buy*.

Figure 7.14 and Figure 7.15 show some examples of market exhaustion and reversal patterns if price moves outside and re-enters Bollinger Bands.

Filtering with Elliott Wave Theory

An accountant, Ralph Nelson Elliott, discovered the Wave Principle, more popularly known as the Elliott Wave Principle. The study of this principle requires many years before one can apply it reasonably well to predict the stock and futures markets. This section merely introduces the basic ideas of the Wave Principle and how it can be used in conjunction with candlestick techniques. Students keen on this subject should refer to the *Elliott Wave Principle* by A. J. Frost and Robert Prechter Jr.

Basics of the Wave Principle

R. N. Elliott discovered the Wave Principle at the turn of the twentieth century. He pointed out that in a bull market there should be a series of five waves known as Waves 1, 2, 3, 4, and 5. The bear market waves, on the other hand, should be made up of three waves, known as Waves a, b, and c, to form a complete cycle of eight waves.

Waves 1, 3, and 5 are called *impulse* waves, and Waves 2 and 4 *corrective* waves. Wave 2 corrects Wave 1, Wave 4 corrects Wave 3, and the entire sequence of Waves 1, 2, 3, 4, and 5 is corrected by the sequence Waves a, b, and c.

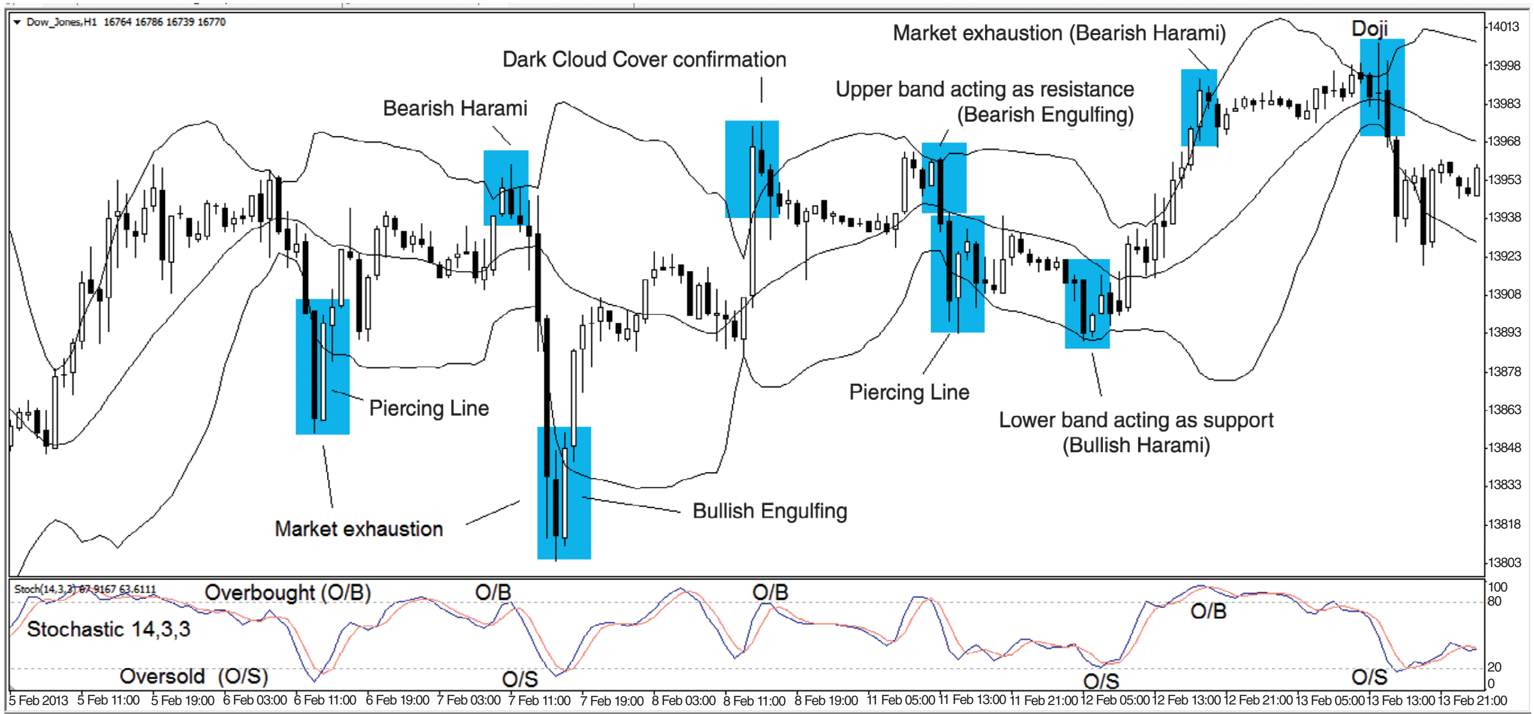


FIGURE 7.14 Dow Jones Industrial Average Daily (2013)—Market exhaustion if price moves outside and re-enters Bollinger Band

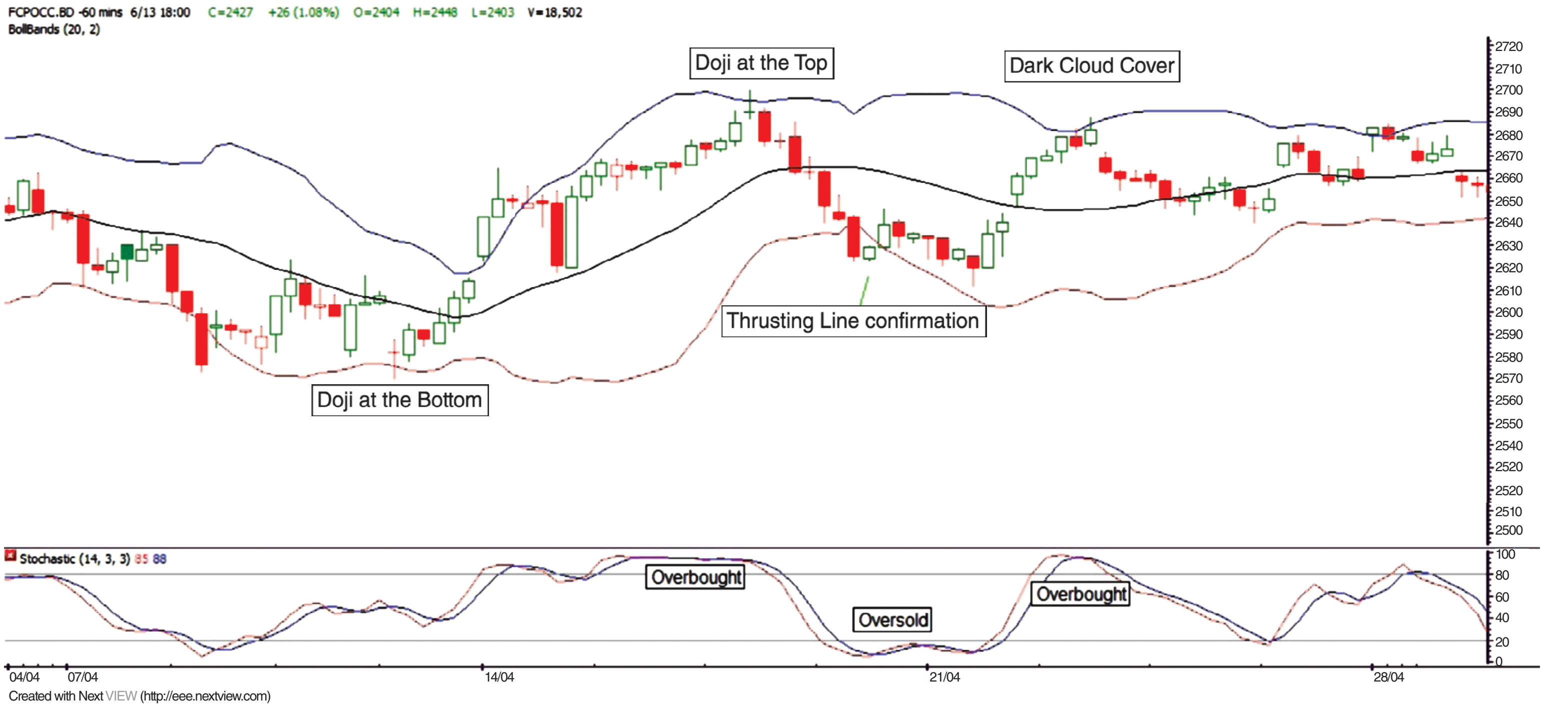


FIGURE 7.15 Crude Palm Oil Daily (2014)—Look for reversal patterns when price moves outside and re-enters Bollinger Band. Oscillators like Stochastic can help spot overbought and oversold areas.

Next, each impulse wave—1, 3, and 5—is further divided into five waves of a lesser degree that in turn can be subdivided into waves of an even lesser degree. The same goes for corrective Waves 2 and 4, which are subdivided into three, Waves a, b, and c.

The division goes on and on. Elliott categorises nine different degrees of wave magnitude, ranging from the Grand Super-Cycle spanning two hundred years to a subminute degree covering only a few hours.

Elliott Wave: The Basic Pattern

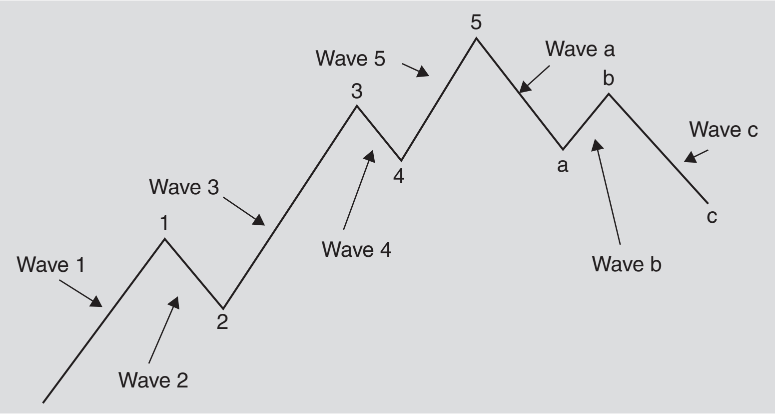


Figure 7.16 and Figure 7.17 show some examples on how to combine candlesticks with the Wave Principle.

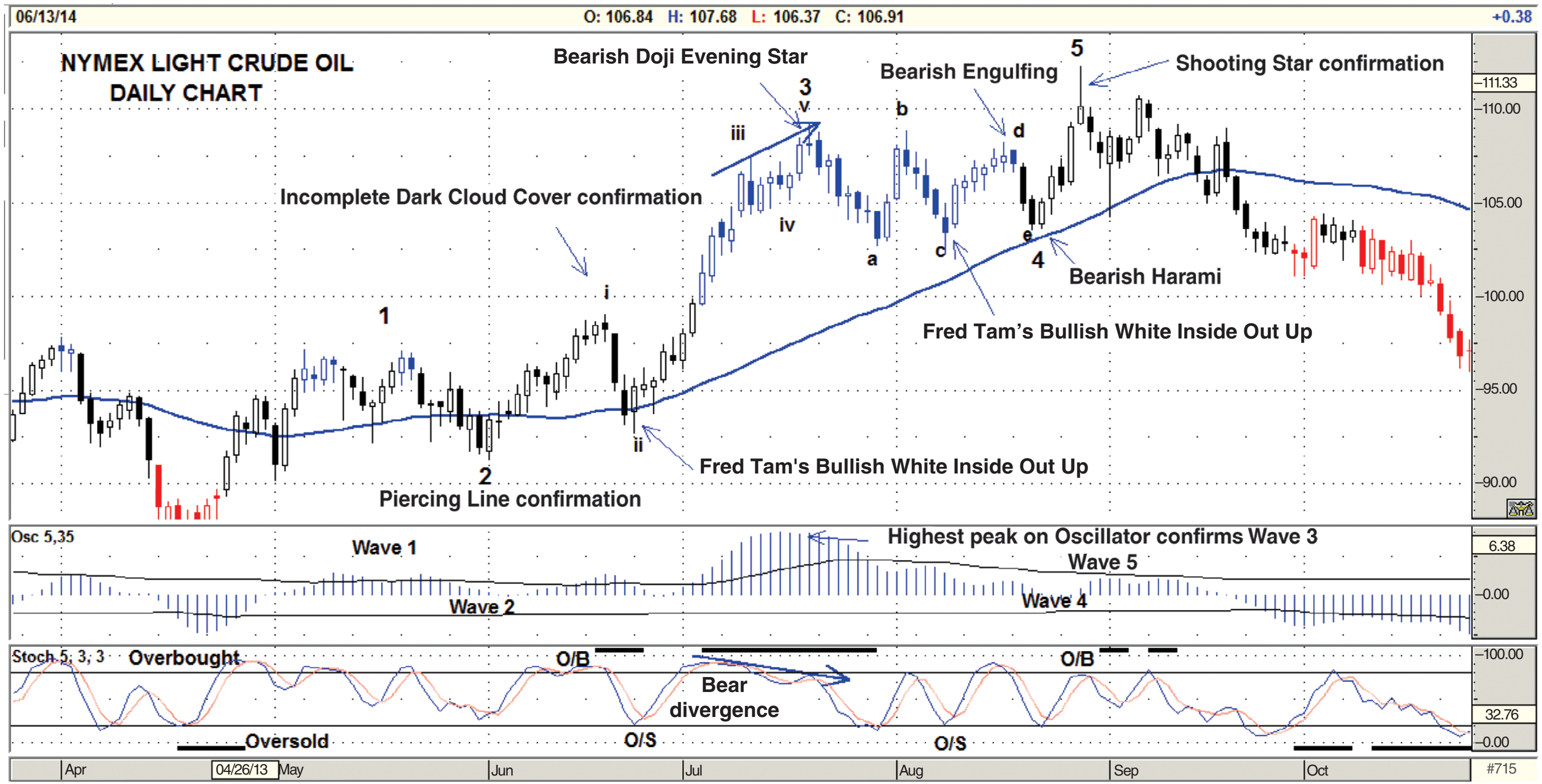


FIGURE 7.16 NYMEX Light Crude Oil Daily (2014)—Ride Wave 3 and sell on divergence and cross below displaced moving average

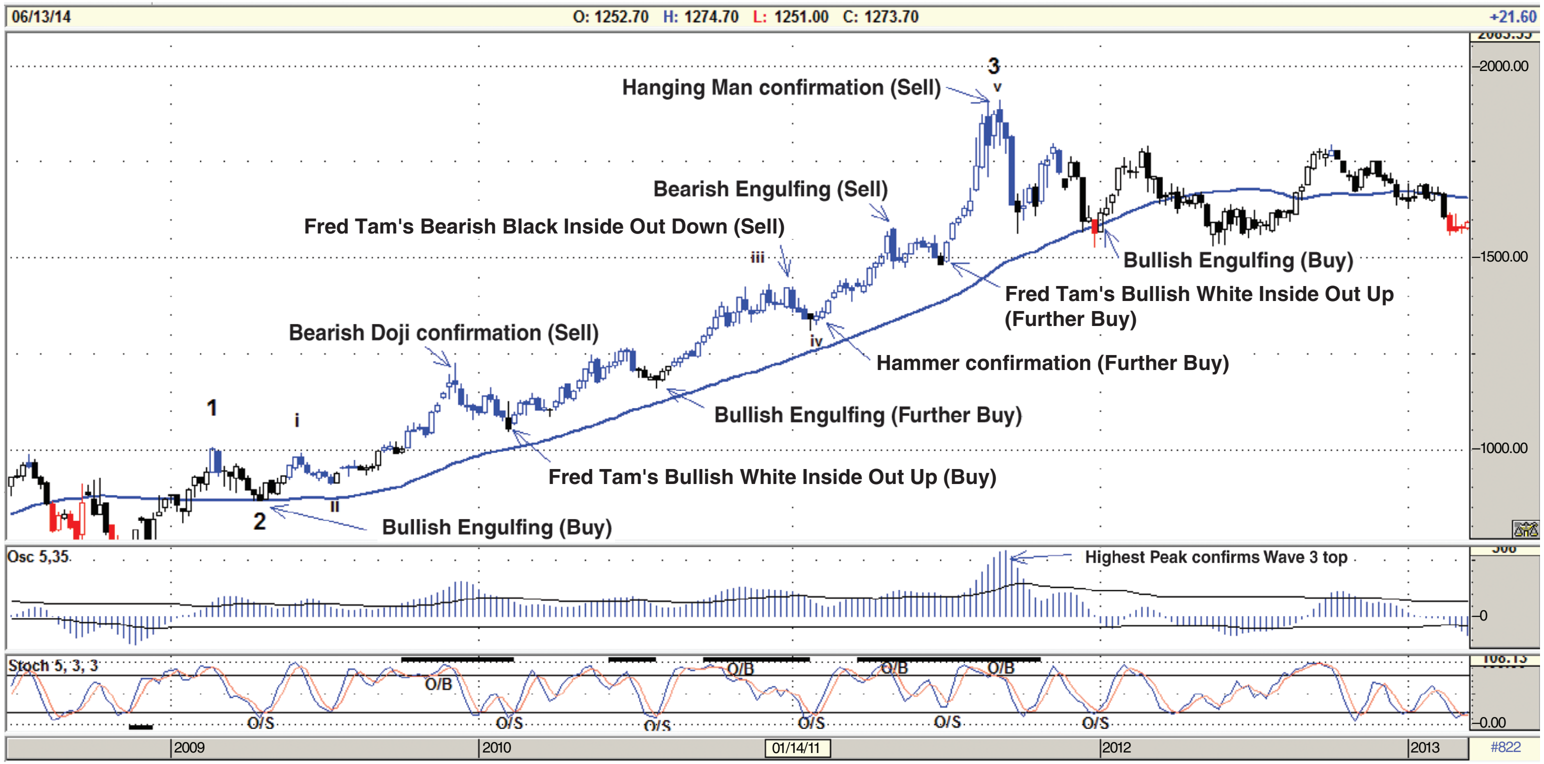


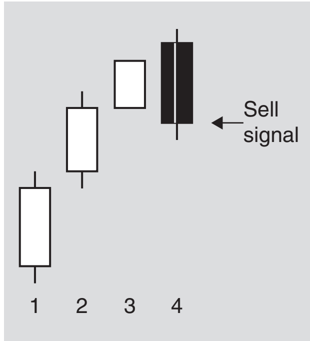
FIGURE 7.17 Gold Weekly (2009–2013)—Filtering with the Wave Principle (use MACD oscillator to spot top of Wave 3)

P.I. System Trader

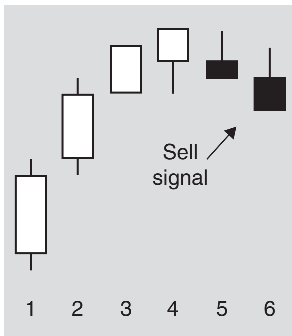
Candlestick patterns can be easy to identify at times, but at others they can be ambivalent.

The following example highlights the difficulty in identifying certain candle patterns. On this diagram, it is easy to spot the common two-day reversal pattern, the Bearish Engulfing, which calls for a sell signal on candle 4.

But the next diagram shows no obvious reversal patterns. Traders, especially those new to the candlestick technique, may not be able to spot a trend reversal in this example. Here is where my P.I. System Trader can help you spot buy or sell signals not apparent with the candlestick technique.



There is no problem in identifying a sell signal in this example. The Bearish Engulfing pattern clearly calls for a sell. One would sell on candle 4.



This sell signal is not so clear-cut, but with the help of the P.I. System Trader, a sell signal is automatically flagged out even if you fail to identify a candle pattern.

The P.I. System Trader Mimics Candlesticks

The P.I. System Trader, which I developed in 1998, will greatly alleviate the frustrations of a trader who sometimes finds it difficult to identify a particular candle reversal pattern. The P.I. System Trader essentially mimics the candlestick reversal patterns such that the timing of its buy or sell signals tends to coincide with that of candlestick patterns.

With the help of P.I. System Trader, you will not miss out on any reversal signals because they mimic candlestick reversal patterns. Note that the P.I. System Trader picks up candlestick reversal signals and not continuation signals. Having a system that can pick up reversal patterns as soon as the market turns is important because winning in the markets is all about buying low and selling high.

Using the Rule of Multiple Techniques

Using the P.I. System Trader as a standalone can give rise to false signals. To filter as many of these false signals as possible, I would recommend you use the 50-day simple moving average indicator or any of the oscillators mentioned in this book. The weekly P.I. System Trader can also be used to filter out false P.I. System Trader daily signals.

Figure 8.1 shows an example of P.I. System Trader that mimics candlesticks.

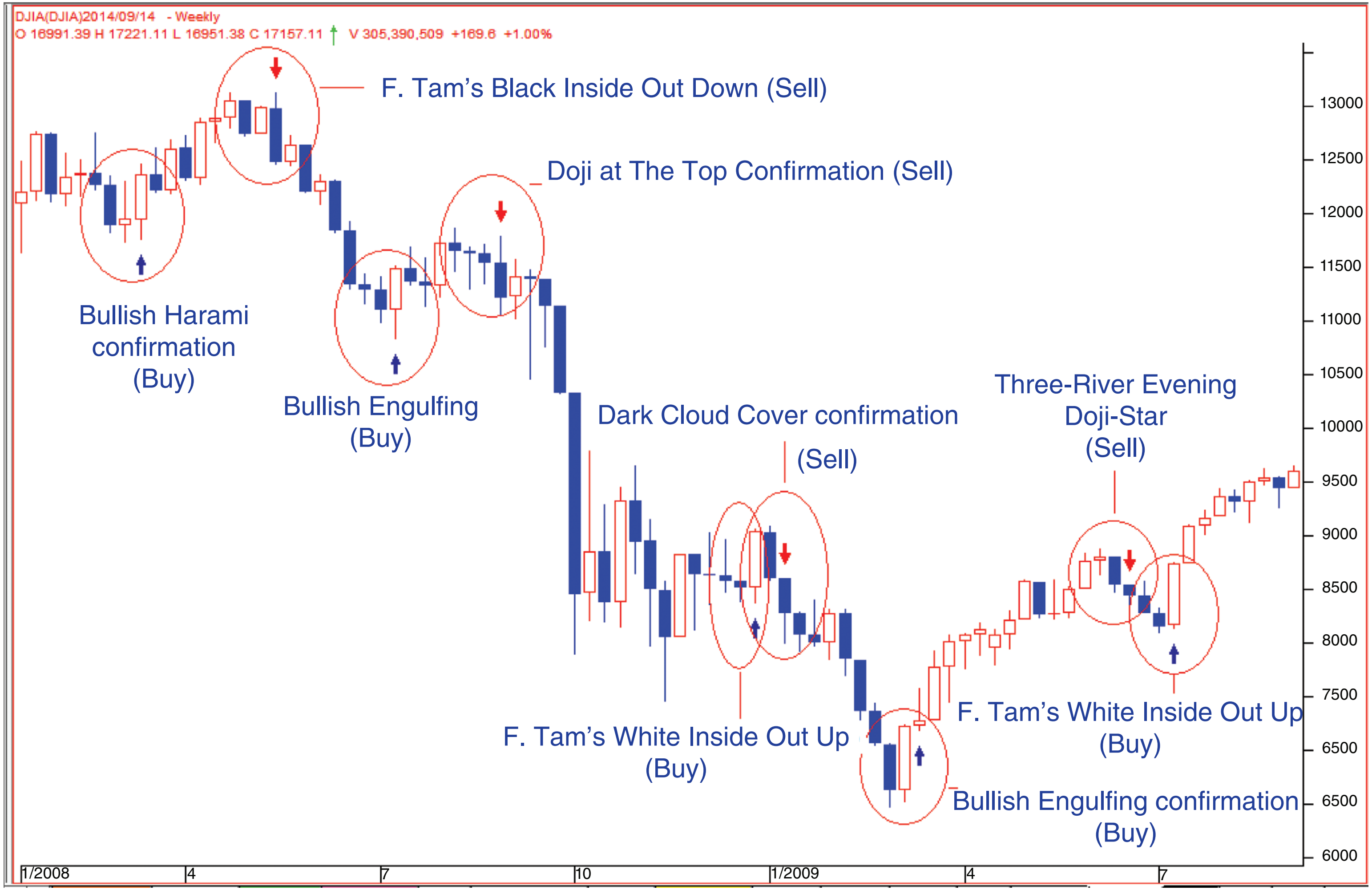


FIGURE 8.1 Dow Jones Industrial Average Weekly (2009)—P.I. System Trader mimics candlesticks

Trading Rules for P.I. System Trader

Step 1: Check out the 50-day moving average indicator for the longer-term trend.

Step 2: If the 50-day moving average indicator is bullish (Figure 8.2 and Figure 8.3), then:

a. Take all buy signals (arrows) on the P.I. System Trader (Daily).

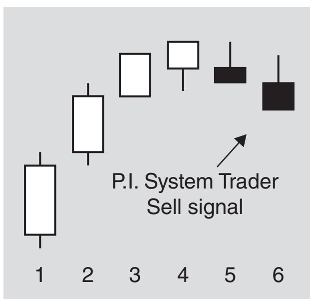
b. Ignore all sell signals (arrows) on the P.I. System Trader (Daily) or close longs but do not short.

Step 2A: If the 50-day moving average indicator is bearish (Figure 8.2 and Figure 8.3), then:

a. Take all sell signals (arrows) on the P.I. System Trader (Daily).

b. Ignore all buy signals (arrows) on the P.I. System Trader (Daily) or cover shorts but do not turn long.

Advantages of P.I. System Trader



In the example at the beginning of the chapter, this sell signal is not obvious if based on candlestick patterns, but the P.I. System Trader triggered a sell signal on candle 6.

With the help of the P.I. System Trader, the trader will not miss out on any reversal signals just because candle patterns did not show up clearly.

P.I. System Trader can be programmed into any software by applying the previous simple rules.

Note: Instead of using the 50-day moving average system to define trend in Step 1, the trader could use trend lines, daily RSI, DMI, Momentum, MACD, CCI, or the weekly P.I. System Trader to filter out false signals.

Then switch to Step 2 and use the P.I. System Trader daily signals to trade in the direction of the defined trend. The idea here is not to rely on candlesticks alone or the P.I. System Trader daily signals to execute trades. This concept of applying Western indicators in conjunction with Japanese candlesticks to spot reversals is known as filtering or the Rule of Multiple Techniques.

FIGURE 8.2 Hang Seng Index Daily (2014)—Take all P.I. System Trader buy signals when trend is bullish. Ignore sell signals or at most close longs but do not short.

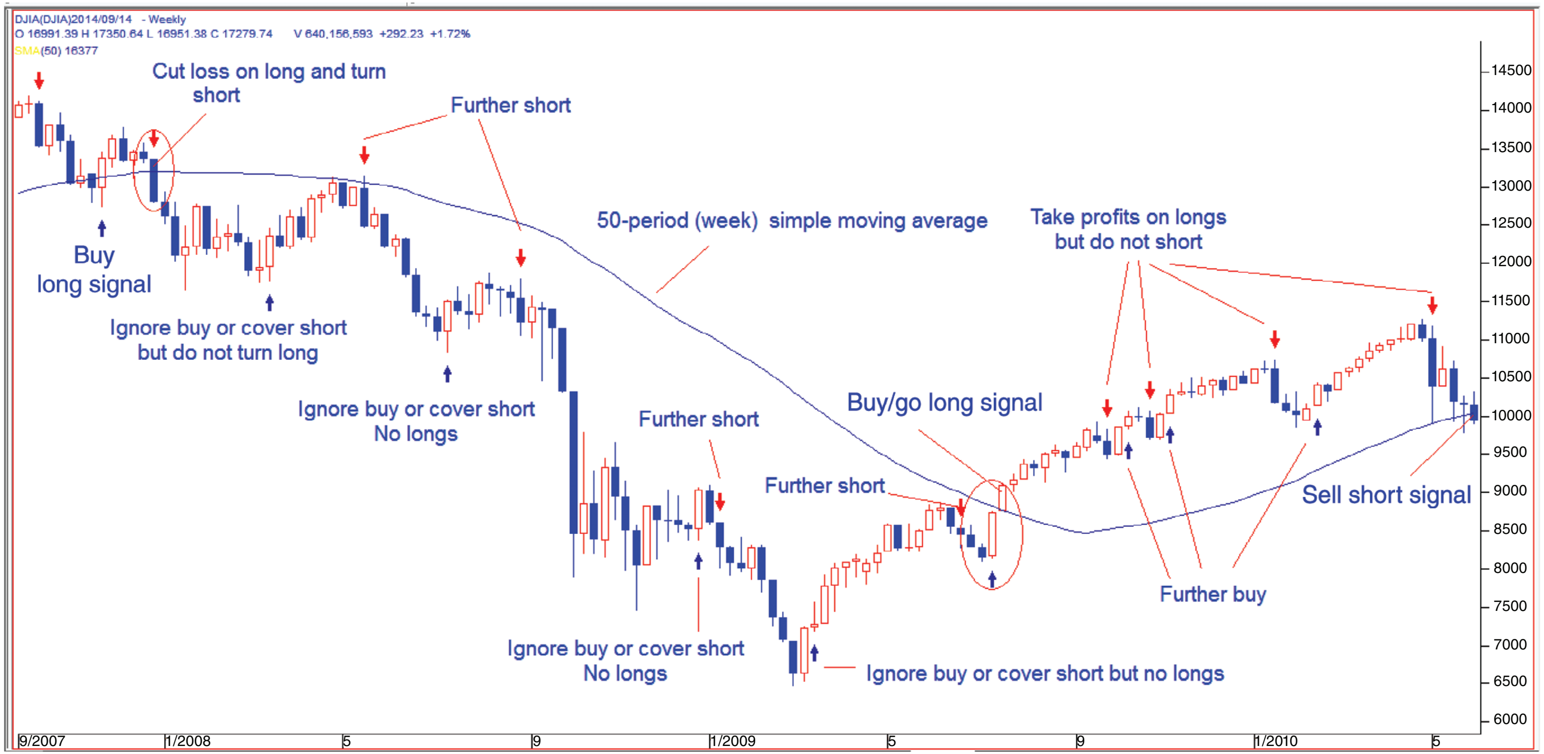


FIGURE 8.3 Crude Palm Oil Futures Daily (2014)—Take all P.I. System Trader sell signals if trend is bearish. Ignore buy signals or at most close shorts but do not go long.

Sakata's Five Methods

Sakata's Five Methods refers to a set of trading rules and methods originated by the great Japanese trader Munehisa Homma in the mid-eighteenth century.

Homma was revered by his contemporaries for his immense success in trading the Japanese rice markets and earned the title "god of the markets."

The word *Sakata* was used to refer to Homma's trading techniques because this is the city where Homma traded rice futures on the local exchange way back in the 1700s. Sakata is a port city in Dewa Province (now known as Yamagata Prefecture) on the west coast of northern Honshu.

Sakata's Constitution and Sakata's Five Methods

Sakata's Five Methods originated from the rules and methods that Homma first developed to trade, which were called Sakata's Constitution. During his time, the candlestick chart had not evolved yet and so it was not incorporated into Homma's technique. Later, after Homma began using the candlestick chart, Sakata's Five Methods were developed by fusing Sakata's Constitution with the advanced techniques of the candlestick chart. Homma's secret methods were divided into two groups and have been passed down through many generations of Japanese traders. The two methods are the *Soba Sani No Den* (Sakata's Constitution) and Sakata's Strategies.

Sakata's Constitution (*Soba Sani No Den*)

Rule 1. Without being greedy, think about the time and price ratio by looking at last price movements.

Rule 2. Attempt to sell at the top and buy at the bottom (see Figure 9.1).

Rule 3. One should increase one's position after a rise of 100 bags from the bottom or a fall of 100 bags from the top.

Rule 4. If one forecasts the market incorrectly, one should attempt to identify the error as soon as possible. As soon as the error is discovered, one should liquidate one's position and rest on the side for 40 to 50 days.

Rule 5. One should liquidate 70 to 80 percent of one's profitable positions, liquidating the remainder and changing directions once the price has reached its ceiling or bottom.

Note: Upon execution, all of these methods can be considered Sakata's Strategies. Strategies 4 and 5 are primarily trading principles used to limit one's losses and increase one's profits. Strategies 1, 2, and 3 require the use of a chart and are techniques designed to realistically enhance one's trading ability over time.

The Japanese Method of Three

There is a Japanese saying, "To consult the market about the market." This means that when we are observing the market, we should pay close attention to the market's movement itself rather than observing international affairs and economic policies that may or may not affect the market. The chart is a record of market price movements in a picture form. By studying the chart, one is able to identify the path the market has taken in the past and thus able to predict the future direction of the market.

As divulged by Seiki Shimizu in his book *The Japanese Chart of Charts*, the natural law of market price is the Three Level Fluctuations. This method teaches us that market prices move in three levels: moving up three levels, then moving down three levels, to form a zigzag pattern. The Three Level Fluctuations closely corresponds to the Elliott Wave Theory. There are many unforeseen circumstances that can alter or cause a breakdown in this pattern, such as recent news items, which may cause erratic price movements. We need to be able to adjust to the realities of the future by sorting through the various chart shapes and patterns that have formed and using only those with the highest probabilities. This is where we apply the candlestick technique. The charting technique's task is not to predict exact tops or bottoms, but to instantly assist in confirming market tops or bottoms when they form.

Very early in Japan's cultural history, the number three was considered a mysterious number, and it is thought that a divine power lives within it. This is more than likely where the Sakata Constitution and Sakata's Five Methods attained their mysticism. Sakata's Five Methods consists of *Sanzan* (Three Mountains),

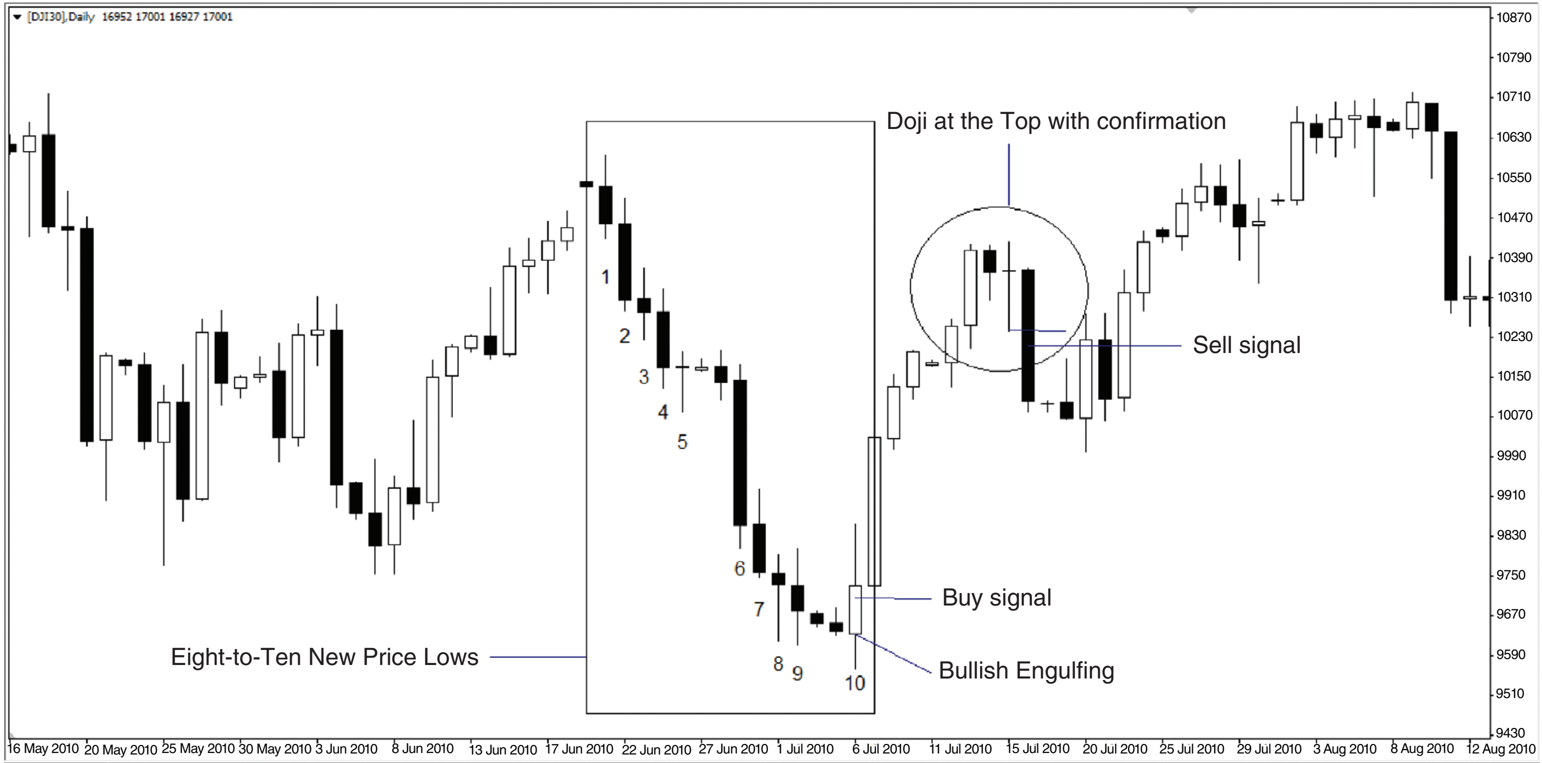
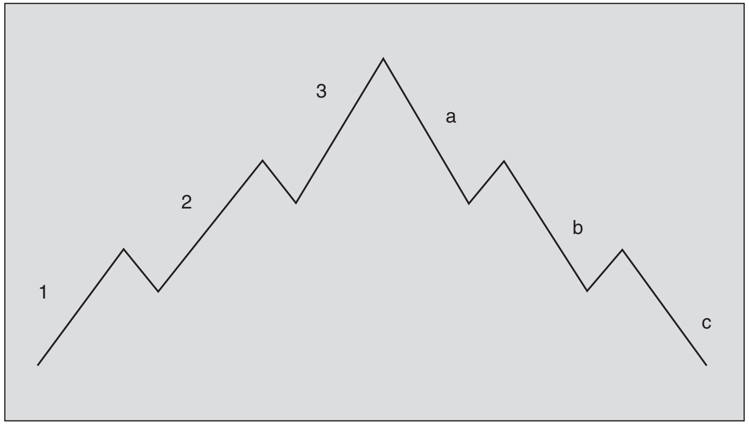


FIGURE 9.1 Dow Jones Industrial Average Daily (2010)—An example of rule 2: buy at the bottom and sell at the top

Sansen (Three Rivers), *Sanku* (Three Gaps), *Sanpei* (Three Parallel Lines), and *Sanpo* (Three Methods).

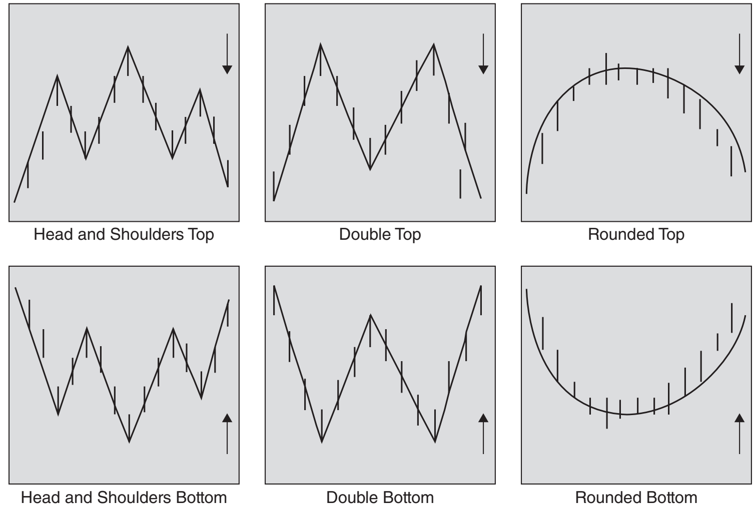


The Three Level Fluctuations Bears Some Resemblance to Elliott's Wave Theory

Figure 9.2 and Figure 9.3 show some examples of the Three Buddha Top and Inverted Three Buddha Top patterns.

Sanzan (Three Mountains)

The Three Mountains pattern consists of two groups, each with three individual shapes of market topping and bottoming formations (see previous diagrams). These two groups directly correlate to the three level fluctuations theory we have already discussed. The Three Mountains pattern is very similar to the Western Triple Top. If the middle mountain is higher than the mountains to its left and to its right, then this pattern is called a Three Buddha Top. Its western equivalent is the Head and Shoulders Top. The Japanese also consider the Double Top and Rounded Top as variations to the Three Mountains group. The Japanese call the Rounded Top a Dumpling Top.



The reverse of the three individual market top formations detailed previously is the second group of patterns that complete the Three Mountains. This group identifies market bottoms. They are the Inverted Three Buddha or Head and Shoulders Bottom, the Double Bottom and the Rounded Bottom or Saucer. The Japanese call the Rounded Bottom the Fry Pan Bottom.

The Japanese view these patterns from a broader perspective. These patterns are attuned to identifying major reversals of trend over a longer time frame. Often, we see these patterns as smaller pieces to a much larger puzzle. When we begin to piece together the puzzle, we can then begin to predict its outcome.

Figure 9.4 and Figure 9.5 show some examples of Fry Pan Bottom and Triple Top patterns.

FIGURE 9.2 Crude Palm Oil Futures Daily (2014)—Three Buddha Top (Head and Shoulders Top)

FIGURE 9.3 Kuala Lumpur Composite Index Weekly—Inverted Three Buddha Top (Head and Shoulders Bottom)

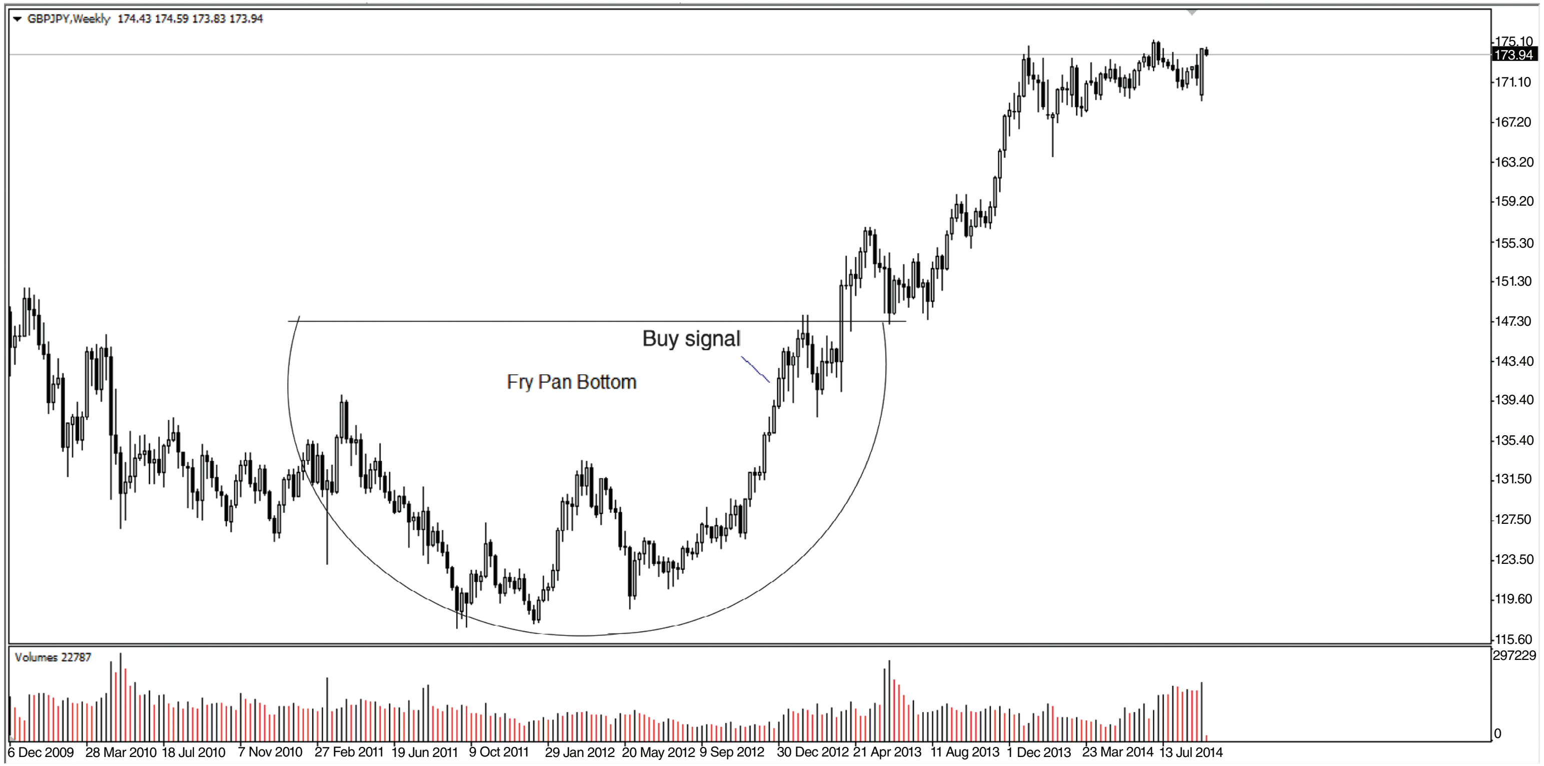


FIGURE 9.4 GbpJpy Weekly (2012)—Fry Pan Bottom

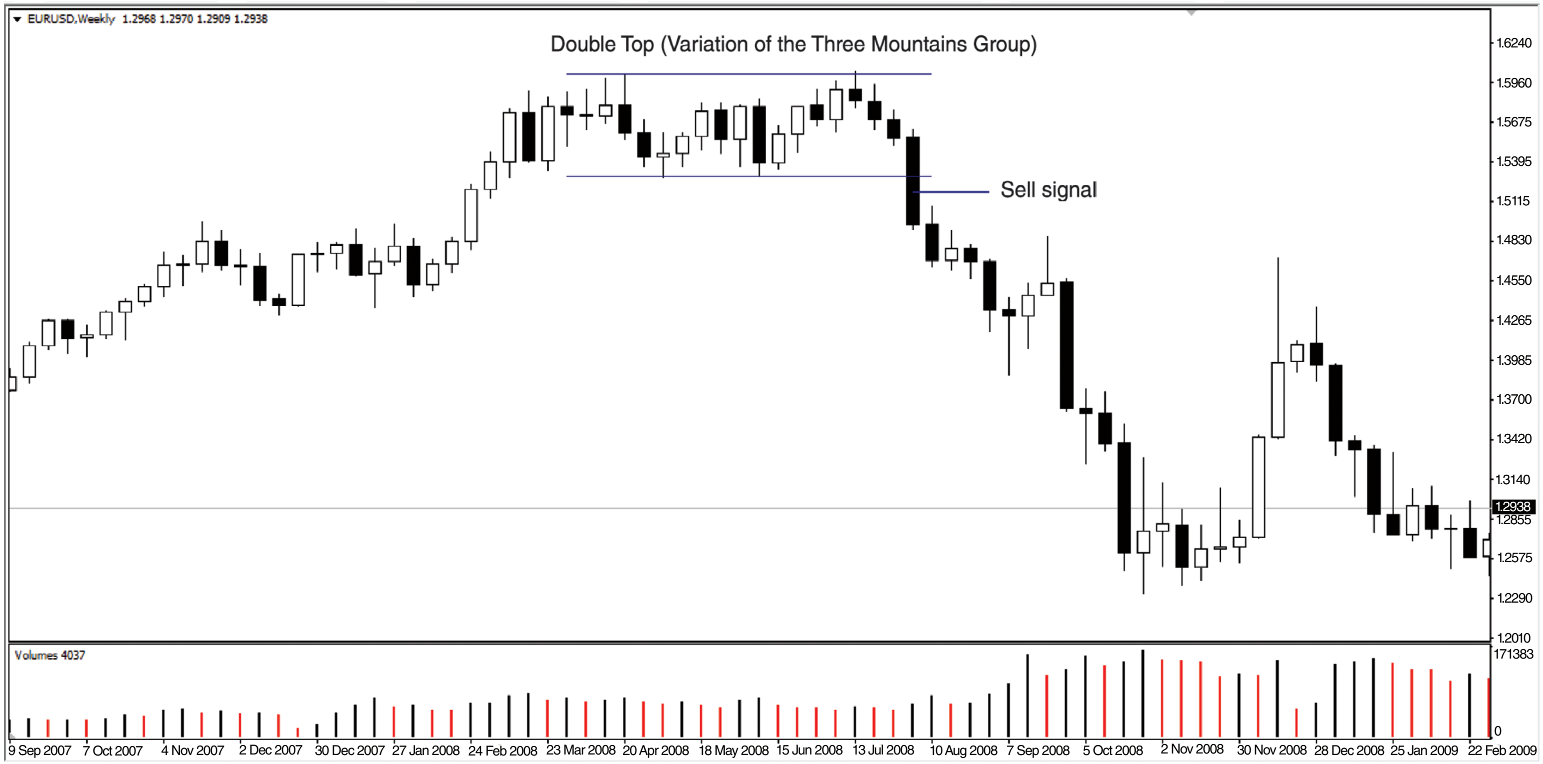
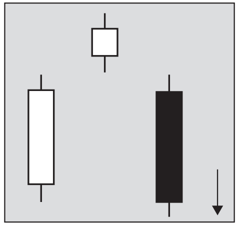
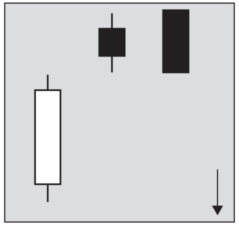
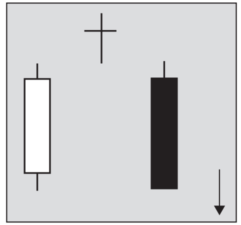


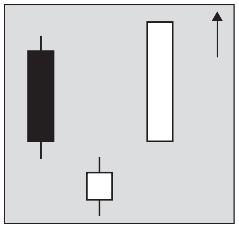
FIGURE 9.5 EurUsd Weekly (2008)—Double Top

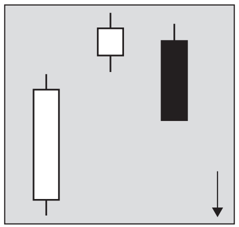
Sansen (Three Rivers)

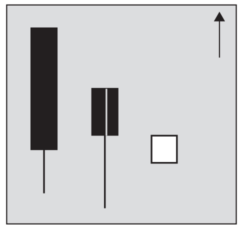

Three-River Evening Star


Upside Gap Two Crows


Evening Southern Crows


Three-River Morning Star


Two Crows


Unique Three-River Bottom

The Three Rivers pattern is based on the theory of using three candles to predict a market's turning point. It forewarns of a complete reversal of price direction. They form in either Morning or Evening positions with many variations. The Three-River Morning Star pattern reflects a bullish reversal of trend or a possible market bottom, whereas the Three-River Evening Star pattern reflects a bearish reversal of trend or a possible market top.

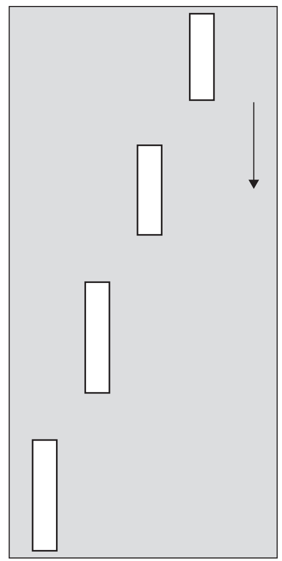
The common formations, as shown in the previous diagrams, often consist of very strong candle types (such as Doji, Bozu, or Marubozu lines). These individual candle types represent some of the strongest single candle types to identify price direction or lack of it. For example, the Doji Line that separates the other two candles within this pattern identifies that the market is unable to continue its current trend. The third candle that completes this pattern confirms the fact that the market trend has reversed.

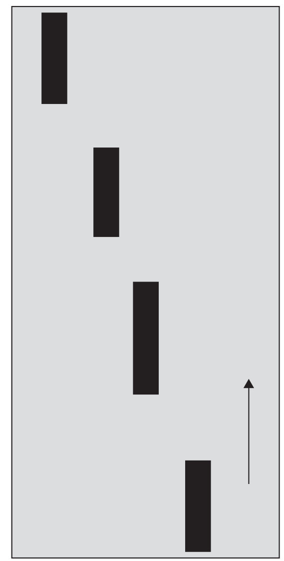
The variations of the Three Rivers include the Upside Gap Two Crows, the Evening Southern Cross (also called Three-River Evening Doji-Star), the Two Crows, and the Unique Three-River Bottom. Although these variations may appear visually completely different, they reflect the same intention of the market to reverse.

Some literature refers to the Three Rivers to mean the Head and Shoulder bottom, the Double Bottom and the Triple Bottom, but this is not correct.

Figure 9.6 and Figure 9.7 show some examples of Two Crows and Unique Three-River Bottom patterns.

Sanku (Three Gaps)


Three Upside Gaps


Three Downside Gaps

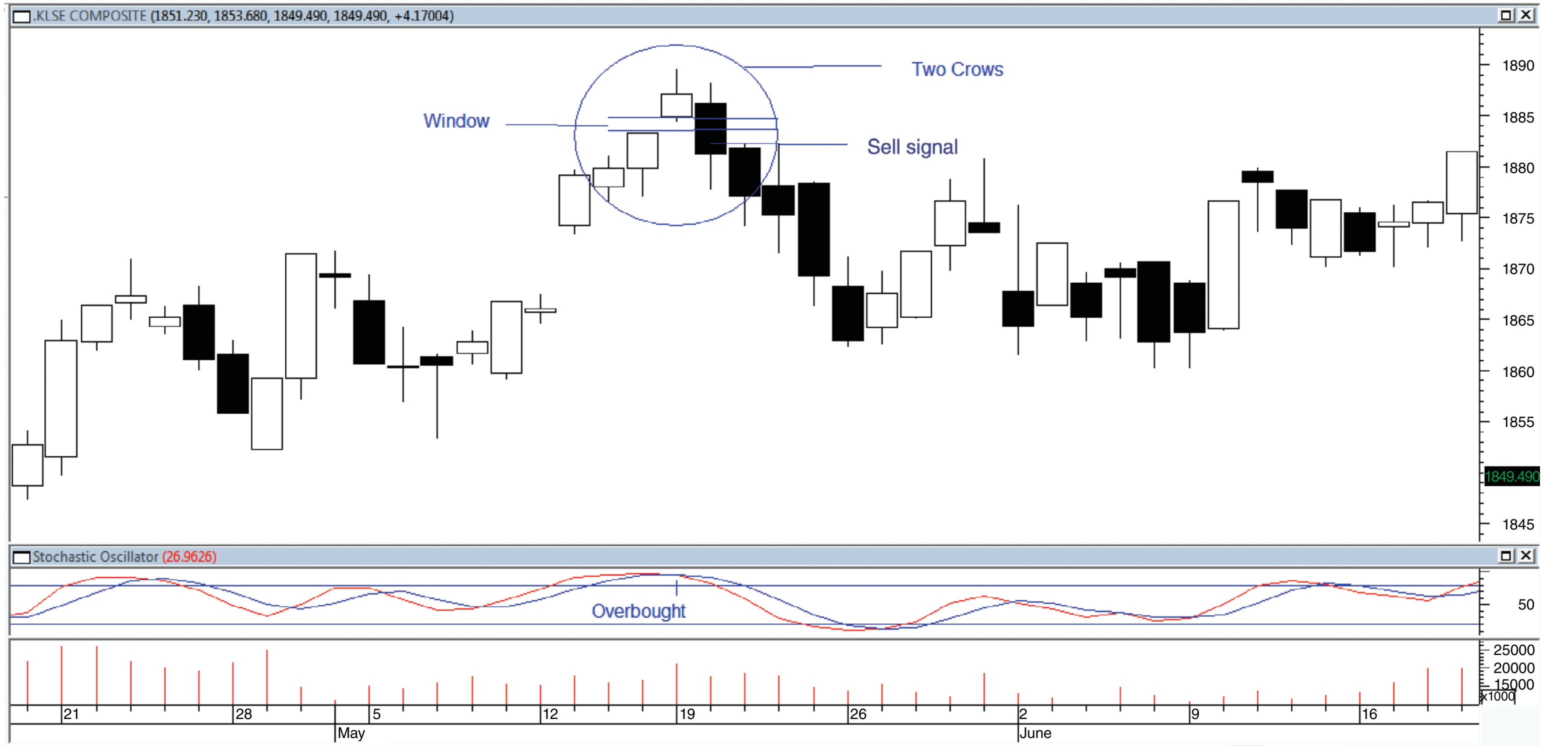


FIGURE 9.6 Kuala Lumpur Composite Index Daily (2014)—Two Crows

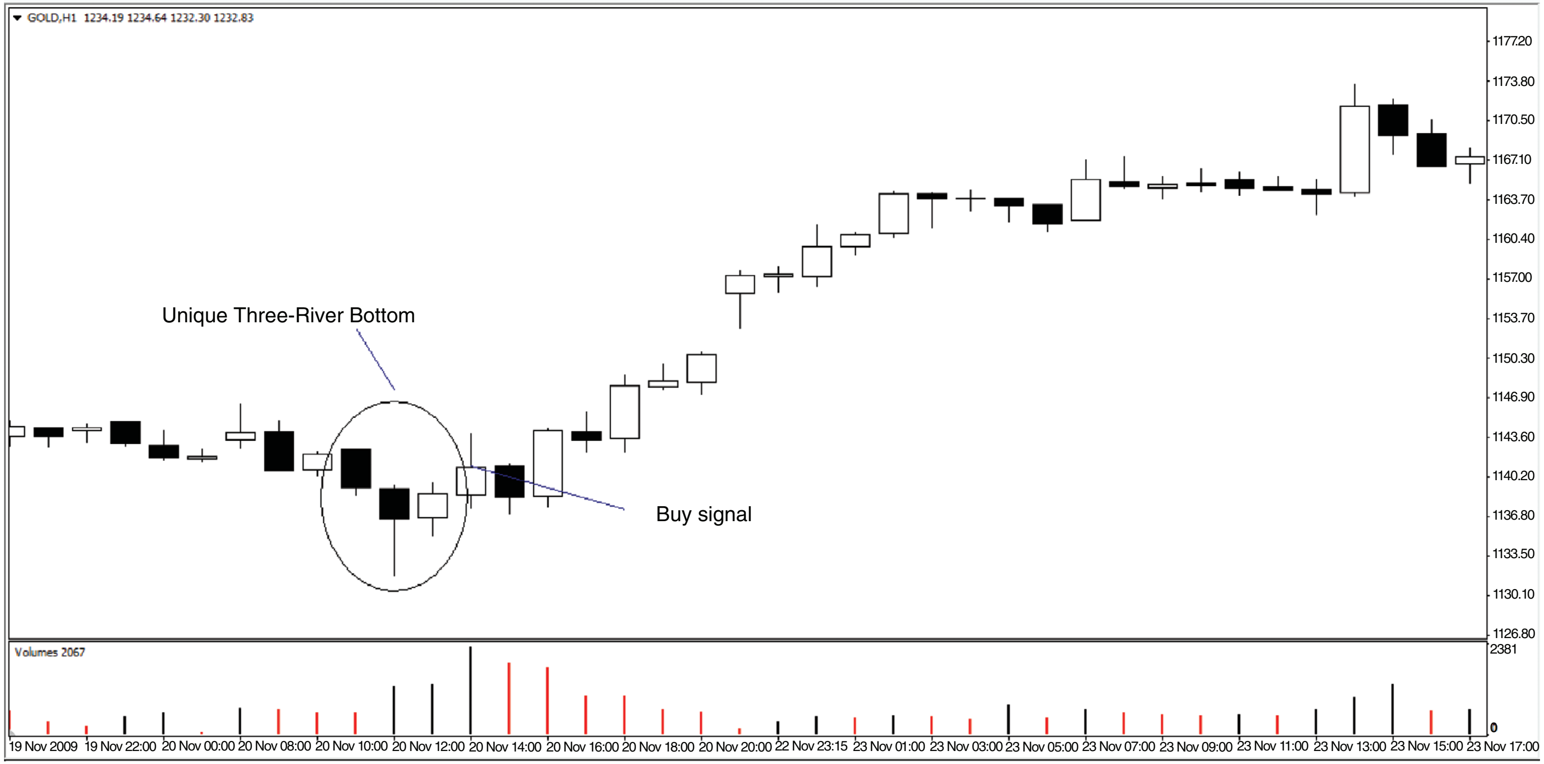


FIGURE 9.7 Gold Hourly (2009)—Unique Three-River Bottom

The Three Gaps pattern consists of three individual gaps in price that occur during a defined trend. The gaps do not need to be consecutive; they may form throughout many days of trading. This pattern signifies that the market has gotten ahead of itself too fast and too soon and the current trend is about to end. The Three Gaps pattern can help to identify trend reversals. Remember that this pattern has a specific correlation to the Three Level Fluctuations theory. The gaps may form during the three individual price advances or declines that support the Three Level Fluctuations theory.

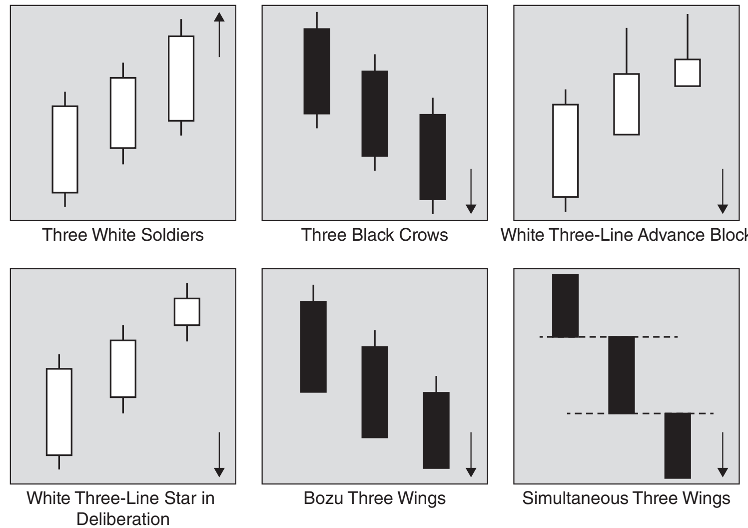
When a Bullish Three Gaps is formed, the Japanese call this *Sanku Fumiage*. It represents a price ceiling, and one should start selling. When a Bearish Three Gaps is formed, the Japanese call this *Sanku Nage Owari* or *Sanku Tatakikomi*, and one should start to buy.

Figure 9.8 and Figure 9.9 show some examples of Three Upside and Downside Gaps pattern.

Sanpei (Three Parallel Lines)

The classic formation of the Three Parallel Lines occurs when three of the same colour candles appear with no price gaps between them. If they are all bullish candles (white), they create the Three White Soldiers pattern. If they are all bearish candles (black), they create the Three Crows pattern. These common types of Parallel Lines are viewed as a continuation of the current market trend.

The variations of the bullish (white) Three Parallel Lines are different in shape and meaning from the classic formations. The White Three-Line Advance Block (*Sakizumari*) differs slightly from the Three White Soldiers, and it represents the possible end of a current bullish price move. It depicts a continuing bullish price move that is diminishing in strength and likely to reverse. Another variation is the bearish Three Line Star in Deliberation (*Akasansen Shianboshi*). It indicates that the current rally is stalling and is likely to reverse. Often, this pattern may form into a Bearish Engulfing or a Three-River Evening Star indicating strong selling in the market.



The bearish variations of the Three Parallel Lines are a little more complicated. The first is the Bozu Three Wings. It varies from the Three Crows because of a gap between the first and the second candle and the requirement that all three candles be of the Bozu or Marubozu type. This pattern represents strong bearish price action. The second variation occurs when the second candle's opening price is equal to the first candle's closing price and the third candle's opening price is equal to the second

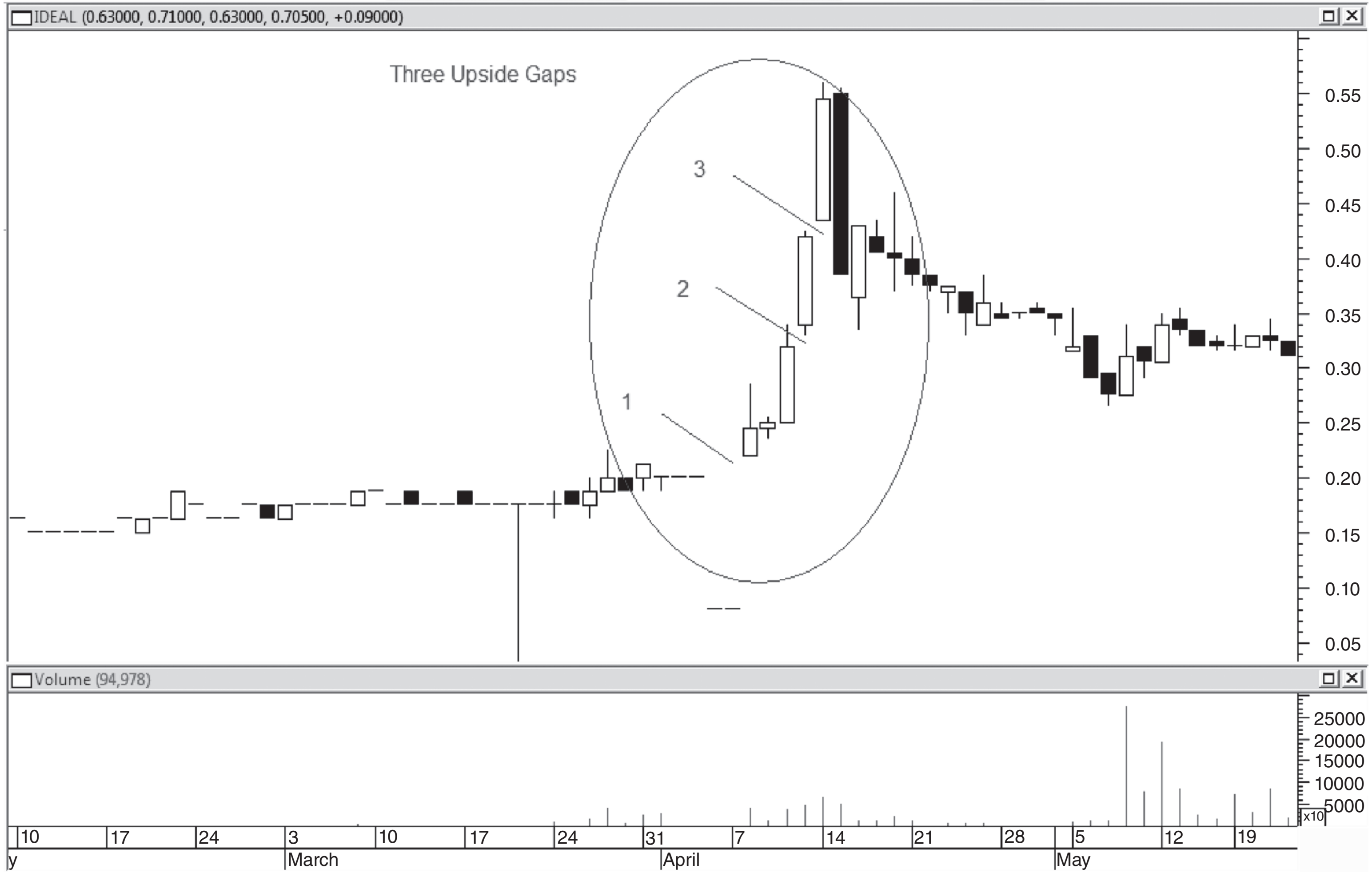


FIGURE 9.8 Ideal Malaysia Daily—Three Upside Gaps

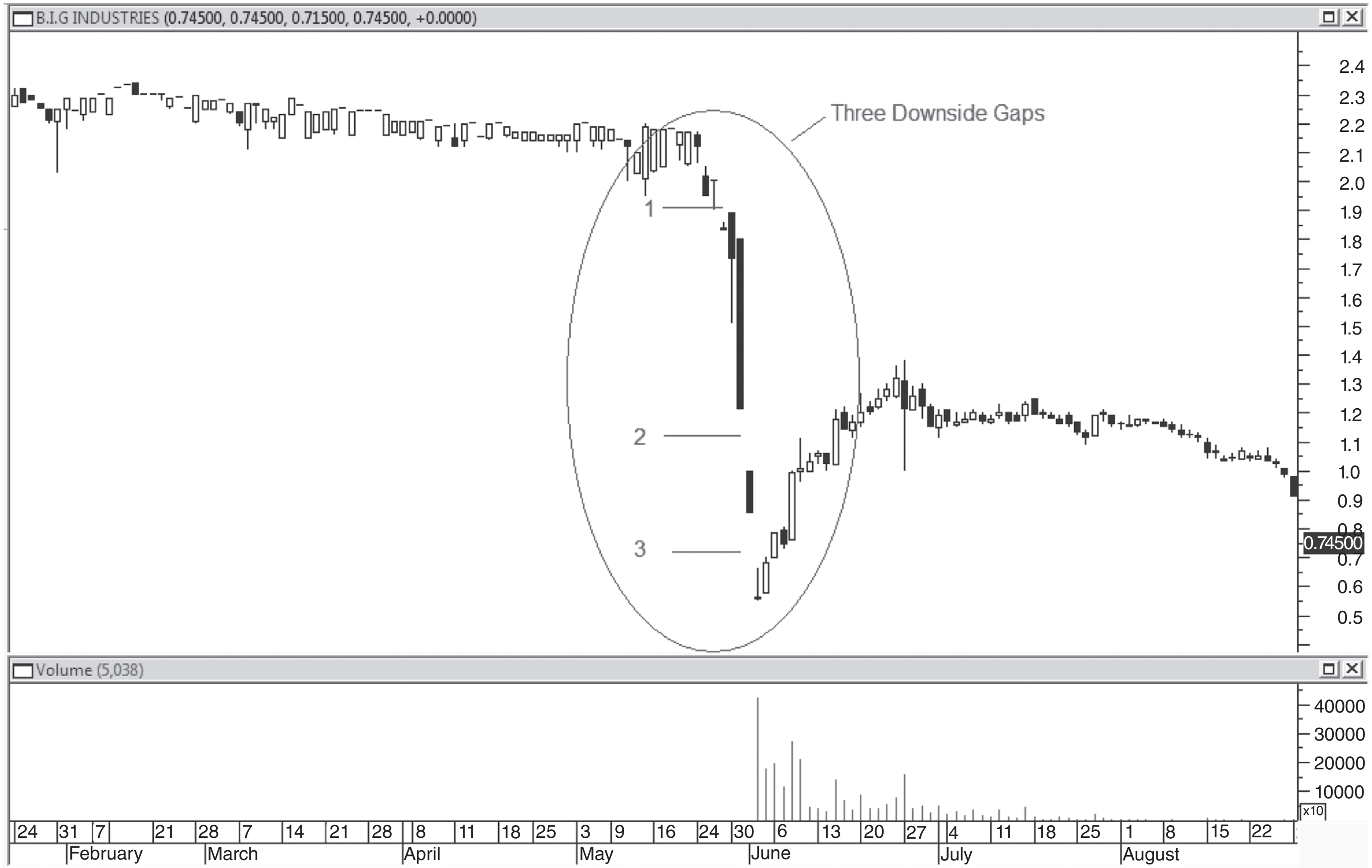
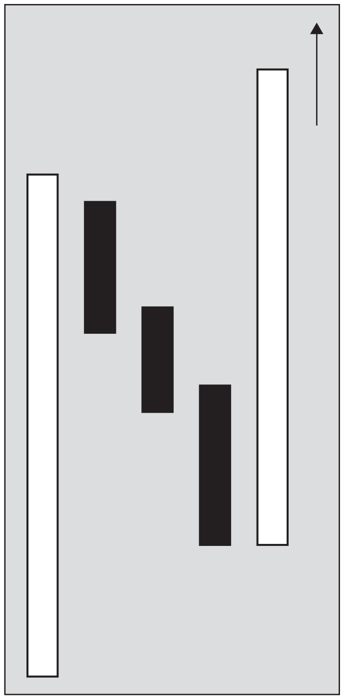


FIGURE 9.9 B.I.G. Industries Daily (2005)—Three Downside Gaps

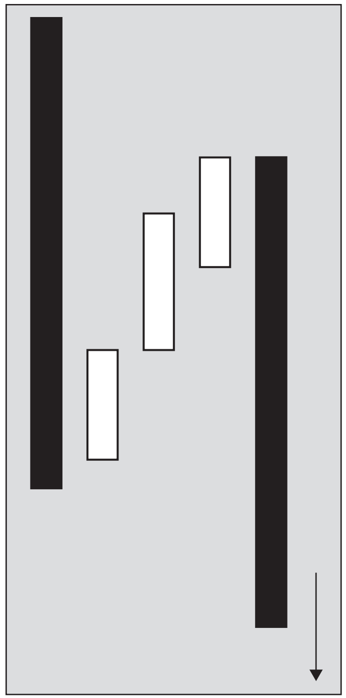
candle's closing price. In other words, each new candle opens on the previous candle's close. This is called the Simultaneous Three Wings, and is an indication of continued bearish price action.

Figure 9.10 shows an example of the Simultaneous Three Wings pattern.

Sanpo (Three Methods)



Rising Three Methods



Falling Three Methods

The Three Methods patterns relate to a resting period. These pattern groups indicate a congestion period within the market, and one should wait for confirmation of a new trend, usually in the direction of its prior trend. They are also known as continuation patterns in Western charting theory. *Sanpo* in Japanese means "to take a rest or cease fire in market action."

The two continuation patterns are the Rising Three Methods and the Falling Three Methods. If the Rising Three Methods appears in a rising market, one should expect a short rest before a further climb in price. The opposite is true for the Falling Three Methods. If it appears is a declining market, one should expect a short rebound before a further fall.

The Western chart pattern equivalents of these two Japanese patterns are the Bullish Flag and Bearish Flag.

Figure 9.11 and Figure 9.12 show some examples of the Rising and Falling Three Methods patterns.

Conclusion

Sakata's Five Methods are intended to group frequently recurring price patterns to help the trader discern the next market direction. Western classical charting theories have also grouped frequently recurring patterns, but under continuation and reversal patterns.[1]

What is interesting to note is that traders from two entirely different parts of the world and over two different time periods (the

[1] Detailed coverage of Western continuation and reversal patterns can be found in Robert Edwards and John Magee, *Technical Analysis of Stock Trends*, 6th ed. (Boston: John Magee, 1991).

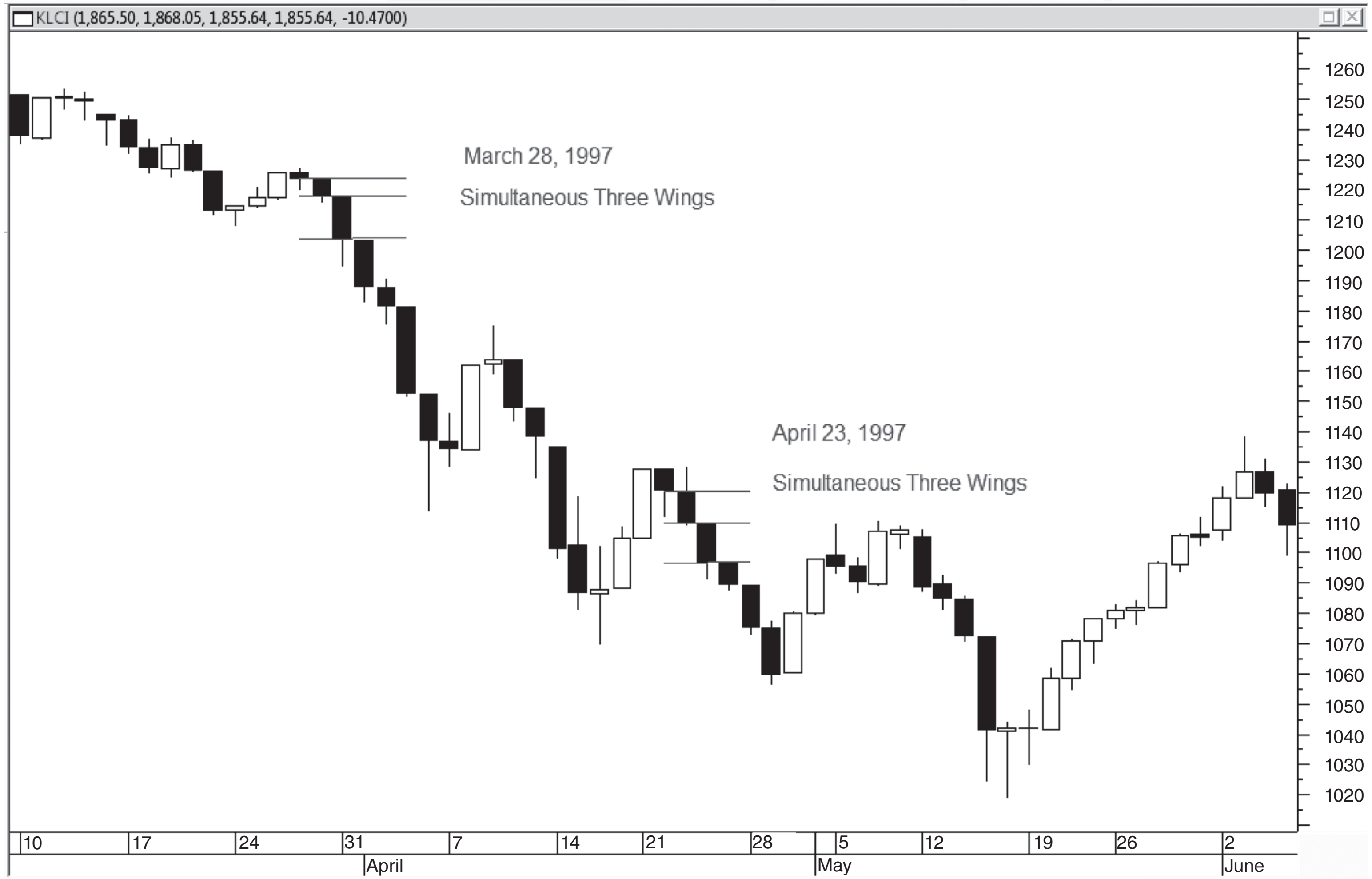


FIGURE 9.10 Kuala Lumpur Composite Index Daily (1997)—Simultaneous Three Wings

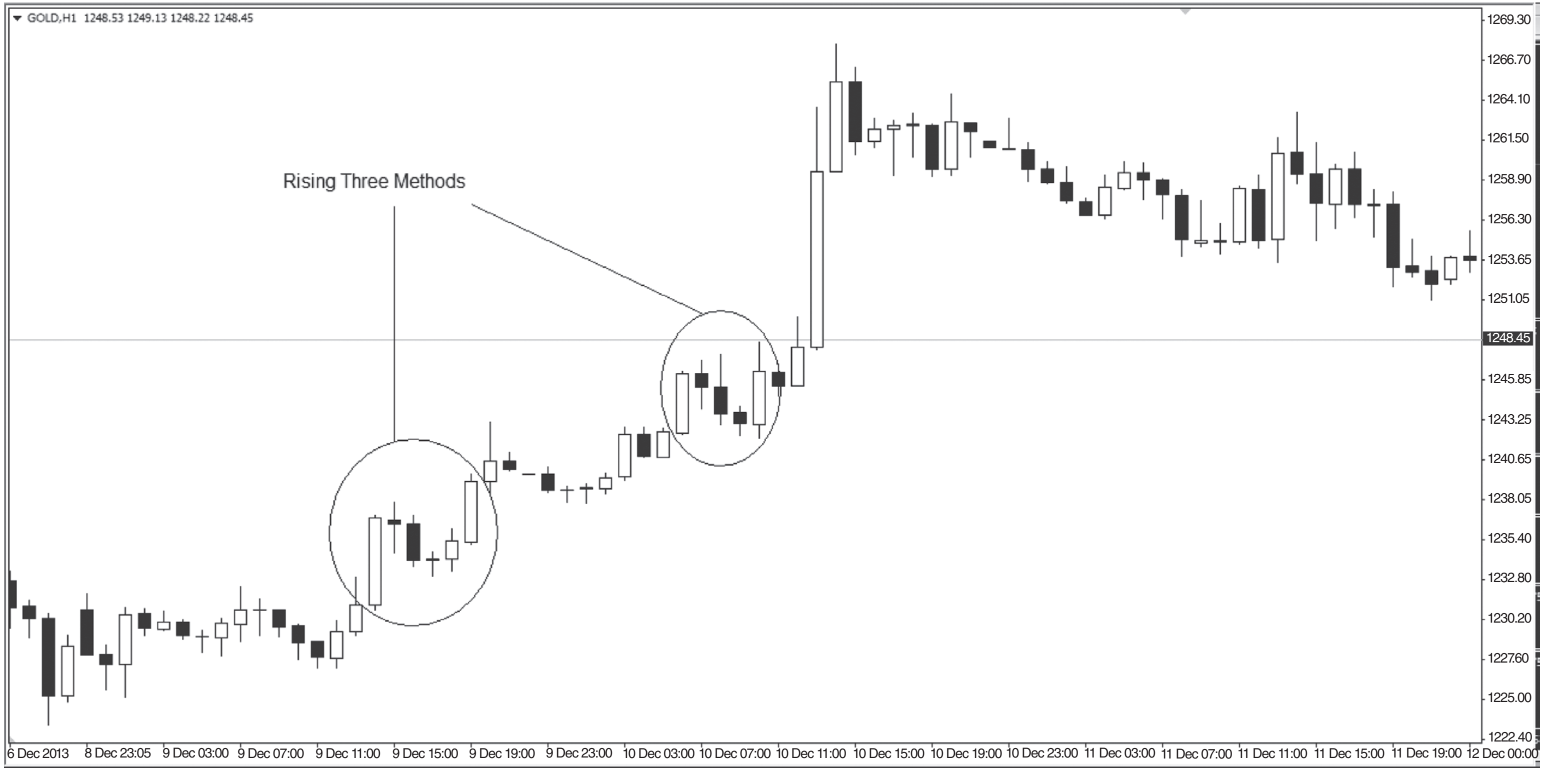


FIGURE 9.11 Gold Hourly (2014)—Rising Three Methods

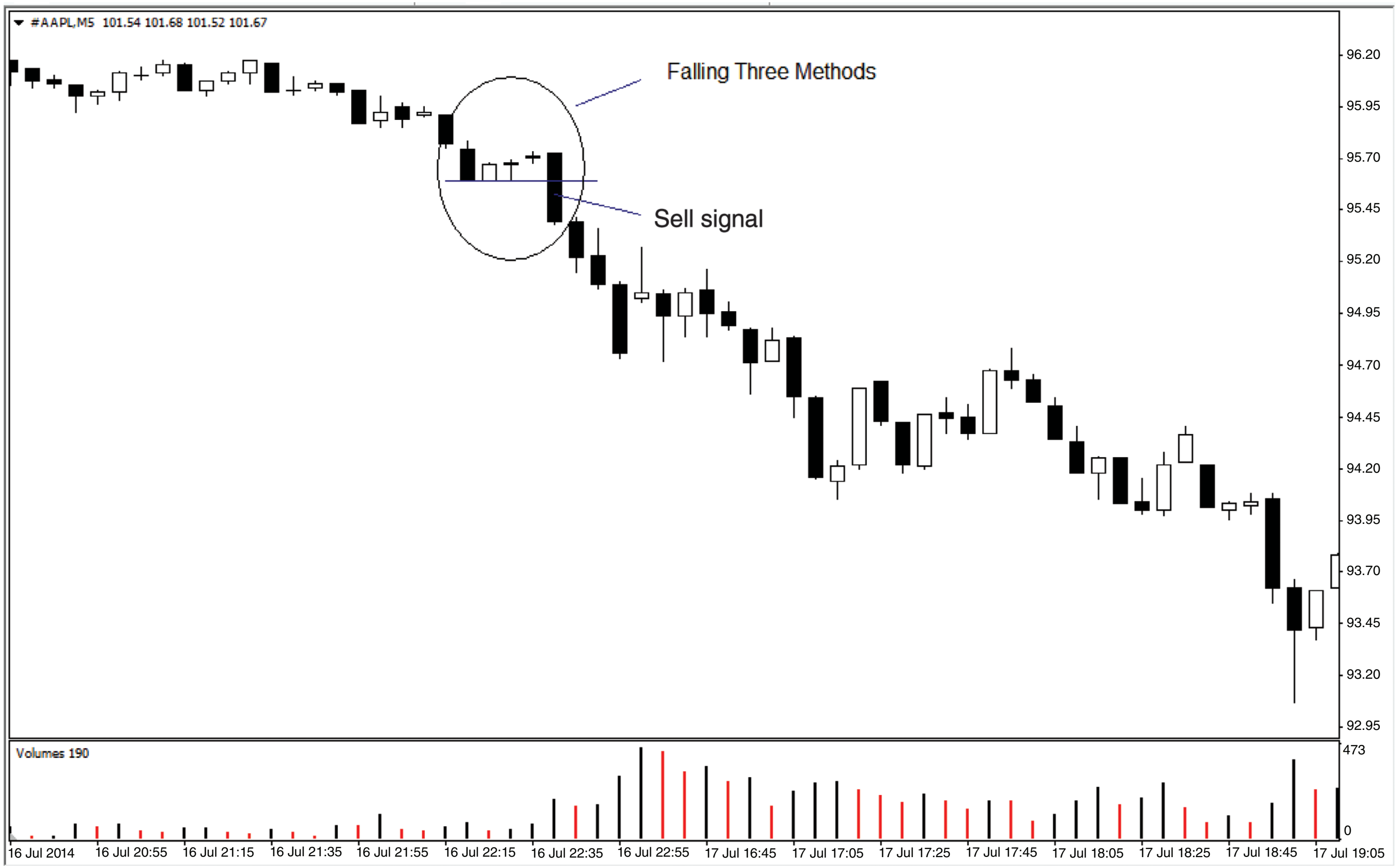


FIGURE 9.12 Apple 5-Minute (2014)—Falling Three Methods

Japanese in the 1700s and the West in the early 1900s) discovered the predictive values of these frequently recurring patterns sufficiently to the extent of documenting them.

These pattern groups, found in both the Eastern and Western techniques, confirm the technician's belief that price patterns on the charts are a mere reflection of the market's psychology. Correct interpretation of the market's psychology through reading the charts, therefore, holds the key to success in making money in the markets.

As these patterns recur over time and across all markets, the chart can be universally applied, either to predict market turning points or to define market direction.

Computerized Candlestick Forecasting

For over a century, the Japanese candlestick technique was hidden from the Western world until an American analyst, Steve Nison, revealed it in his first book, entitled *Japanese Candlestick Charting Techniques,*[1] in 1991.

Nison's book is credited with revolutionizing technical analysis in the West "by igniting the flames of interest in candles." Before this book, few had ever heard about candlestick charts, except in Japan. Now, the candlestick charting technique is one of the most popular around the world.

Steve Nison is the acknowledged Western authority on the subject of candlestick charting. His two internationally bestselling books, *Japanese Candlestick Charting Techniques* and *Beyond Candlesticks*,[2] have

[1]Steve Nison, *Japanese Candlestick Charting Techniques: A Contemporary Guide to the Ancient Investment Techniques of the Far East* (Paramus, NJ: New York Institute of Finance, 1991).

[2]Steve Nison, *Beyond Candlesticks* (New York: John Wiley & Sons, 1994).

been translated into six languages. Nison holds an MBA in finance and investments. He was among the first to receive the Chartered Marked Technician designation from the Market Technicians Association (MTA) and was nominated for the MTA's "Best of the Best" for price forecasting and market analysis.

Nison's work has been highlighted in several finance publications including the *Wall Street Journal*, *Barron's*, *Institutional Investor*, and *Euroweek*. As a sought-after speaker, Nison has presented his trading strategies to thousands of traders and analysts in 16 countries and, by request, the World Bank and the Federal Reserve. He has also been a lecturer at four universities.

Steve Nison is now known worldwide as the father of modern candlestick charting. He not only introduced this exciting and powerful charting method to Western traders, but he also continues training thousands of traders every year. His proven techniques and strategies are ideal for every type of trader.

In the beginning, Nison only offered his expertise through customized technical advisory and on-site seminars to institutional traders and analysts at top trading firms. His clients included J.P. Morgan; Fidelity; Bank of New York; Goldman Sachs; Spear, Leeds & Kellogg; Morgan Stanley; hedge funds; and OTC and NYSE market makers. Currently, Nison is helping individual traders with methods that can help them win in any market conditions. That's because he has proven time and again that candlestick charts are the best tool to see what's going to happen in the market—faster than old-fashioned bar charts. In addition, Nison is an acclaimed Western technical analyst. By combining candle charts with the best Western technical indicators, he teaches his students how to get the most out of every trade and how to trade with more confidence than they ever imagined.

Until recently, practitioners of Japanese candlestick charting were only able to spot candle reversal or continuation patterns manually, even as the candlestick chart is now the de facto standard and the most popular mode of recording price action since 1991, surpassing the popularity of the Western bar chart.

The Era of Computerized Candlestick Scanning

One of the main complaints about learning and interpreting candlestick charts is the large number of reversal and continuation patterns. In this book I have described 10 single black-and-white candles, 7 doji, 4 in the umbrella group, 53 reversal patterns, and 14 continuation patterns. Even so, this is not an exhaustive list of patterns available in candlestick literature.

With such a large number of patterns it would be a challenging task, especially for the newbie, to identify them. Even for the professional practitioner of candlesticks, it would be a demanding task to spot candle patterns when you are trading several markets at once and on several time frames.

Even after the Japanese candlestick technique's popularity exploded in 1991, few candlestick analysis programs are currently available in the market to cater to this fast-growing thirst for automatic candle pattern analysis.

Nison recognized it was a challenge for traders to browse through multiple markets on several time frames just to find profitable trade setups. That is when he came up with the idea of computerizing his favorite candle patterns with candle-pattern recognition software to reduce the time needed to find profitable trades from hours to just minutes.

To help meet this challenge, he designed the innovative Nison Candle Scanner in 2013, using the NinjaTrader Platform.[3] NCS is also available on the Trade Navigator and Tradestation platforms. For users of MetaTrader 4, Nison Candle Highlighter is available.

Features of the Nison Candle Scanner

The Nison Candle Scanner has several features that are useful in candlestick pattern analysis.

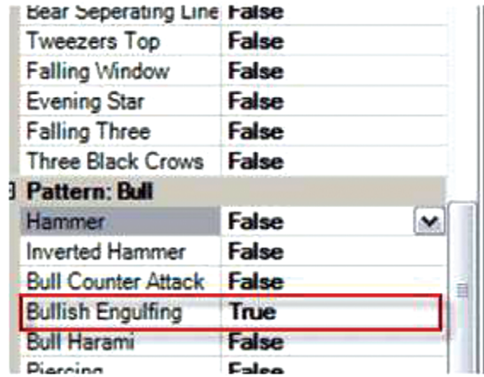


FIGURE 10.1 Picking Bullish Engulfing Pattern in the List of Signals

Candlestick Pattern Filtering

With the Nison Candle Scanner, you can filter a universe of markets (stocks, indexes, forex, futures, etc.) for any specific candlestick signal—and then watch as all the markets with that pattern are listed. You will be able to click on a market to view the chart.

Here are the simple steps:

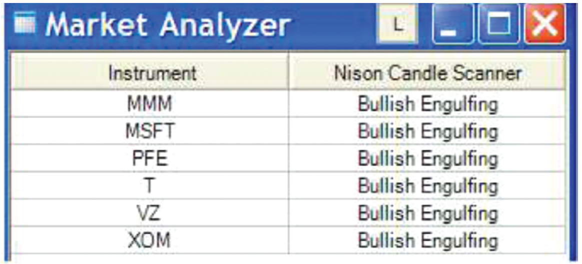
Step 1: Pick one or more of Steve's 28 favorite candle signals. These signals are all preprogrammed and ready to use. In Figure 10.1, the Bullish Engulfing Pattern is selected.

Step 2: Choose a single market or a market group for which you want to find the patterns, such as the S&P 500. You can even put in your own list of markets to filter (i.e., the 10 markets you track most closely). For this example, the Dow stocks have been selected to filter for a Bullish Engulfing Pattern.

Step 3: All of the markets that are currently in the pattern selected show up in this quick and easy pick list (see Figure 10.2).

Step 4: When you view the chart (in this case MMM), the pattern's signal is highlighted for you to see instantly (see Figure 10.3).

[3] See www.ninjatrader.com. NinjaTrader Platform is a free technical analysis platform (down to daily charts), which the Nison Candle Scanner rides on. It is market independent and analyses the world's leading stocks, futures, and forex markets. It can be upgraded into a trading platform for a small fee.



Market Analyzer

Instrument	Nison Candle Scanner
MMM	Bullish Engulfing
MSFT	Bullish Engulfing
PFE	Bullish Engulfing
T	Bullish Engulfing
VZ	Bullish Engulfing
XOM	Bullish Engulfing

FIGURE 10.2 Quick and Easy Pick List

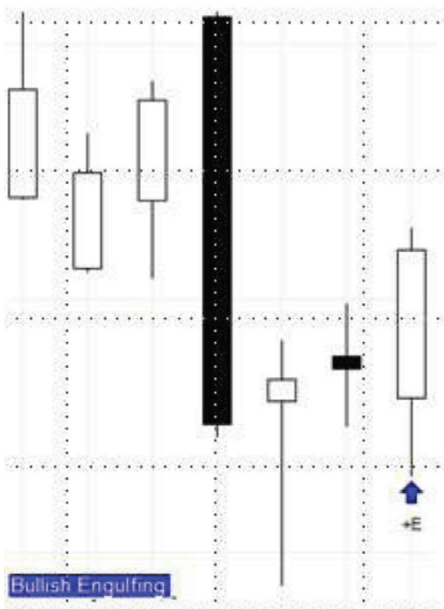


FIGURE 10.3 The Pattern Is Highlighted on the Chart

Highlighting the Patterns on Your Charts

In addition to finding all of the markets that are currently in a particular candlestick pattern, you can also use the Nison Candle Scanner to quickly identify all of the different candlestick patterns that appear in a specific time frame for any individual stock or market.

There are two ways to have the Nison pattern displayed: the full name of the pattern, or as an abbreviation of the pattern name (see Figures 10.4 and 10.5). If you use the abbreviation of the pattern name, all you need do is click on the abbreviation and the full name is displayed at the lower left.

Custom Chart Alerts

Select a market—or a group of markets—and you will be alerted in real time when any of those markets hit the Nison candle patterns you want to follow. It works in any time frame and is a great time saver.

Step 1: Pick any (or all) of the preprogrammed Nison candle signals to automatically track your market (see Figure 10.6).

Step 2: Customize your alerts with a pop-up window, special audio alerts, and more (see Figure 10.7).

Step 3: Choose the markets you want NCS to automatically track for you and you're ready to go (see Figure 10.8).

Step 4: When any of your Nison candle signals occur on any of your markets, you'll be alerted immediately (see Figure 10.9).

You can also set up your Alert Window to notify you in real time when any of the candle signals and markets you're following hit a candle signal.

In Figure 10.10, the alert is set to show bull candle signals as green and bear signals as red.