

# Candles shed light on the market

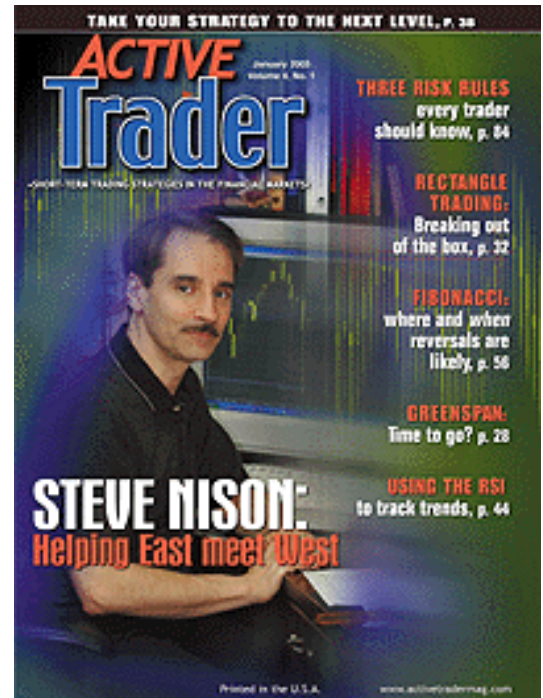
By KIRA MCCAFFREY BRECHT

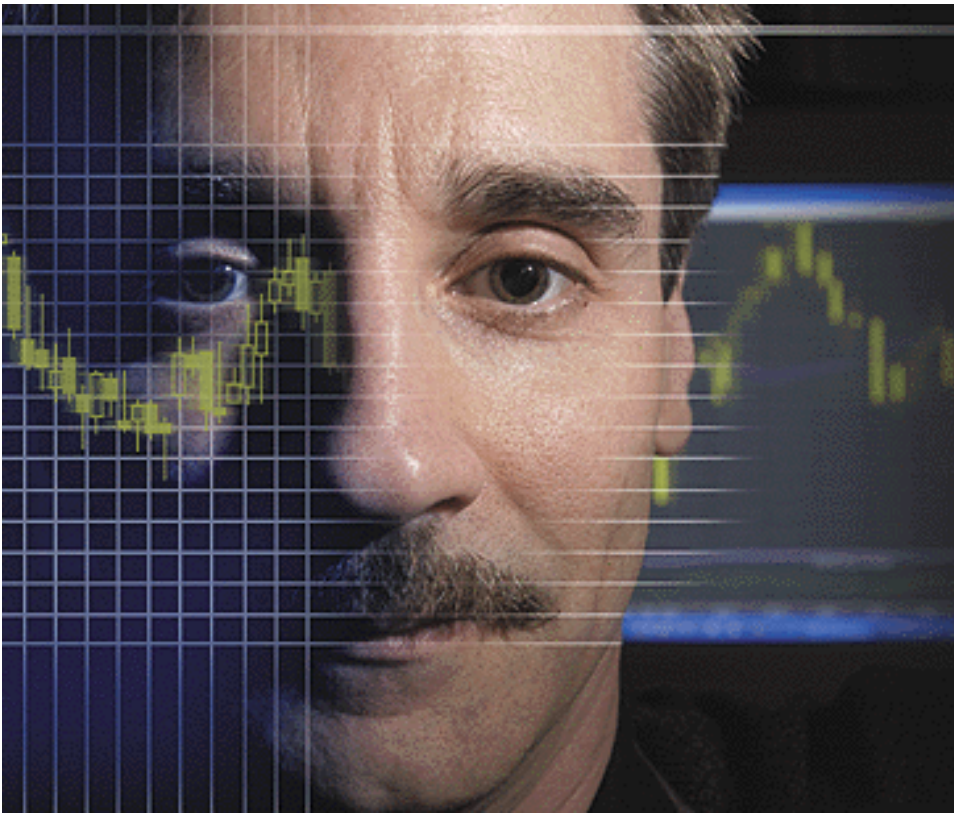
When Steve Nison provided trade recommendations to brokers at Shearson Lehman Hutton, where he worked in the futures research department more than 15 years ago, he didn't tell them he was using Japanese candlestick analysis.

Although technical analysis was more widely accepted in the futures industry than on the equity side of the business, candlestick charts were still virtually unknown in the West. At the time, Nison was not quite ready to reveal the intricacies of candles (he was still finalizing his research on them) and he also did not relish the thought of explaining a particular buy or sell signal was based on a "hanging man," "morning attack" or "three advancing soldiers" pattern.

While candle terminology may still sound like Greek to some traders, candlestick analysis is much more commonplace now than it was in the mid-1980s. In recent years, Western technicians, including stock traders and analysts, have come to appreciate the additional insights these visually distinct price charts can bring to market analysis.

Traders have Nison to thank for putting this 130-year-old form of price charting on the map in the Western Hemisphere. Nison authored the first article written on Japanese candlestick analysis in the U.S. (published in Futures magazine in 1989) and he is the author of the "bibles" of candle charting analysis: *Japanese Candlestick Charting Techniques* and *Beyond Candlesticks*. Today, he is president of Candlecharts.com ([www.candlecharts.com](http://www.candlecharts.com)), an independent advisory and educational firm he founded in 1996.



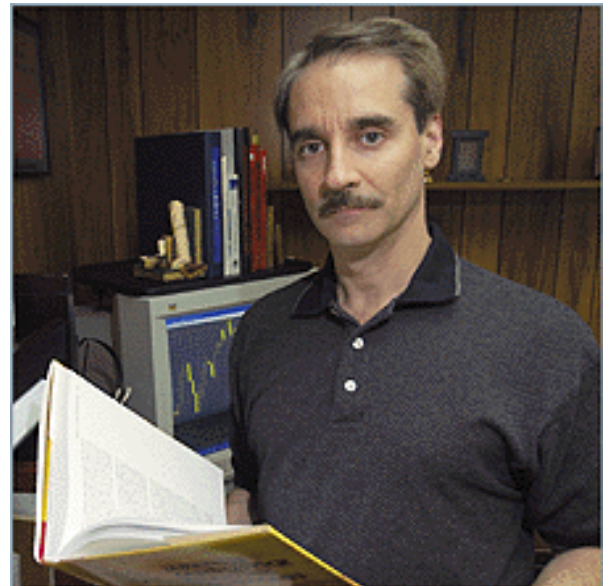


Although Nison is a strong advocate of candlestick patterns, he admits candles are just one of the weapons in his trading arsenal. In his educational seminars, Nison recommends using candles as a "tool, not a system"; he blends a variety of traditional Western technical tools with his candlestick analysis.

Nison first came across candlesticks in the mid-1980s when he noticed some odd-looking charts in the office of a Japanese broker who worked down the hall from him at Shearson. Nison was immediately interested in learning more.

"When I was doing my research, I found an American translator who was going to Japan," he says. "I told him to buy every book he could on candlesticks. He translated them for me, and then I spent a year synthesizing [the information] and putting it all together."

The bottom line for Nison was that candlestick analysis "improved my trade recommendations." He moved on to Merrill Lynch in the late 1980s and, while working as a senior technical analyst in the futures department, he wrote a 15-page booklet on candle charts. The firm eventually had 10,000 requests for the publication.



Futures traders were the first to pick up on the advantages of candlestick analysis, according to Nison.

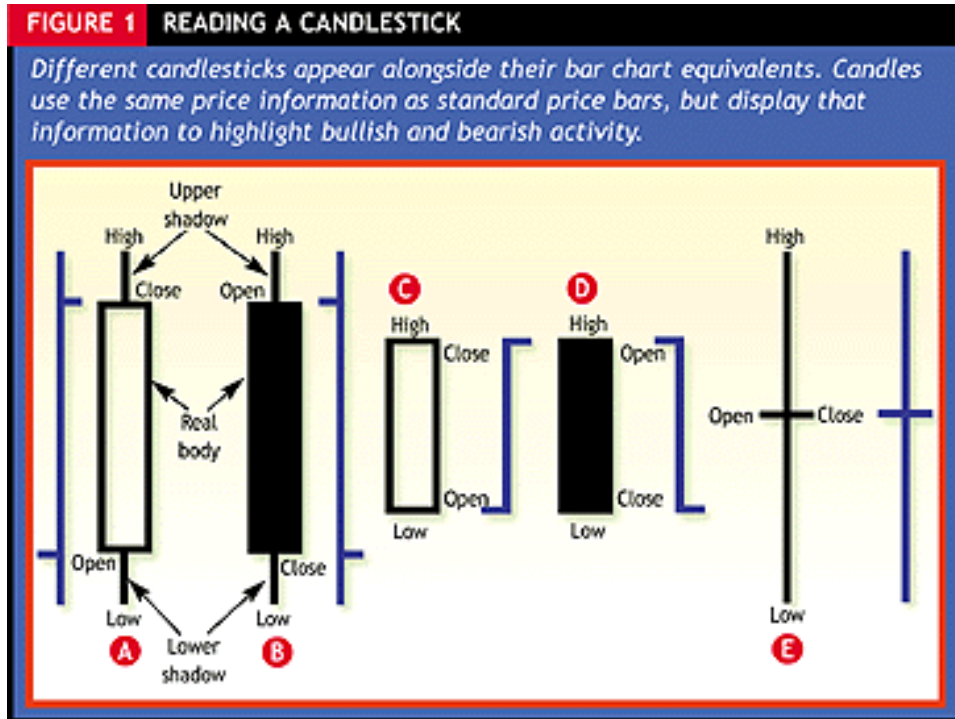
"Back then, the futures traders were the most technically savvy,"he says. "The equity markets were relatively quiet in the early '90s —there wasn't online trading back then and there weren't as many active day traders. Futures traders picked up on candlesticks because they are very short-term oriented. [These traders] need quick reversal signals."

That immediacy is at the heart of candlestick analysis.

"In my opinion, technicals become much more important as you compress the time frame,"Nison says. "Fundamentals are more important on the longer time frame. Short-term, there are less fundamentals and more emotionalism. The only way to gauge the emotional aspect of the market is through technicals."

Candlesticks are comprised of the same data points as a bar chart — the open, high, low and close. In a candlestick chart, however, Nison says, "the main difference is that the Japanese place a lot of importance on the opening and closing prices."

A candlestick is composed of a real body and shadows. The real body represents the range between the session's opening and close. If the close is lower than the open, the real body is black (or shaded some other color). If the close is higher than the open, the real body is white (or hollow). The thin lines above and below the real body are the shadows. The peak of the upper shadow is the high of the session and the bottom of the lower shadow is the low of the session (see Figure 1, below). The length of the real body and whether the close is higher or lower than the open reveals whether the bulls or the bears are in charge.



AT: What advantages do candlestick charts have over bar charts?

SN: On a candle chart, you can use all forms of Western charting analysis. Whatever tools you use on a bar chart, you can use on a candle chart – moving averages, trendlines, oscillators, retracements.

But in addition to Western signals, you will see unique signals only available on a candle chart. For example, a doji occurs when the open and the close are the same. If the market is overextended and a doji appears, the Japanese would say the market is tired – and that's a potential reversal signal.

Candle charts reveal reversal signals earlier. On a bar chart, think about how long it takes to get a reversal confirmation using trendlines or moving averages – it can take weeks. With a candle chart you can get a reversal in one or two sessions. For example, the week of May 14, 2001, an evening star pattern (see explanation on p. 76) formed on the Nasdaq composite chart (see Figure 2, below). Using Western techniques, you would have said a head-and-shoulders top was forming. But it took weeks for that formation to build and for price to break through the neckline for bearish confirmation. The market formed the bearish candlestick pattern at the high of the "head." But it wasn't until June 11, 2001, that the bearish confirmation from the break of the neckline occurred.

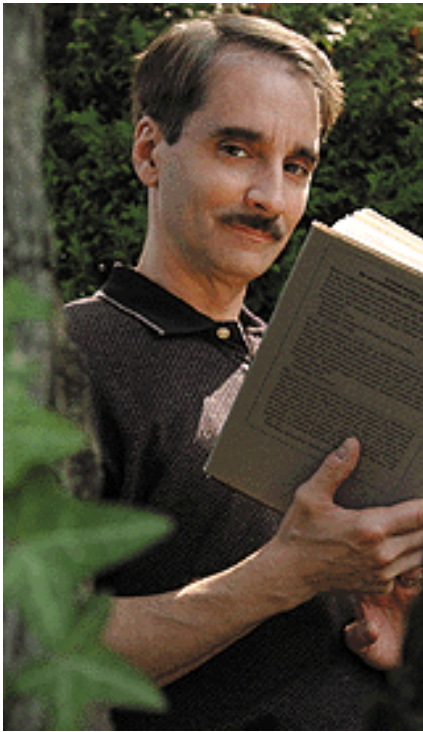
**FIGURE 2** EVENING STAR GIVES EARLY SIGNAL

*The evening star pattern in May provided an earlier short-term reversal signal than the neckline penetration of the head-and-shoulders pattern that had been forming on the chart.*



The price information is identical on both kinds of charts — the data is the same — but if you look at a bar chart, you'll have to go through mental gymnastics to convert it to the candlestick in your head. The same signals Western traders commonly look for on bar charts, such as gaps — which are referred to as windows — will show up on candlestick charts. So you can still get all your usual signals, but you also receive the additional benefit of the candlestick perspective.

Candles are also really good at preserving capital. For example, if a market makes a new high for the move and does so with a doji or a spinning top — that's a small real body with a long upper and lower shadow — that shows the market rejected the higher levels. It suggests the bulls are losing control.



On a bar chart, you'd see the market made a new high close, which is viewed as a plus. But on a candle chart, you'd ask, "What's the size of the real body; what does the shadow look like?" If a market makes a new high, with a small real body and a long upper shadow, I'd be reluctant to follow through or add to long positions. On a bar chart, though, the stock would look fine, because it had a higher high and higher close. But the long upper shadow on the candle chart means the market rallied during the session, but closed near the low of the day, creating a "bearish shadow."

AT: What Western indicators do you think work well with candles?

SN: I would certainly suggest volume, which shows you the force or pressure behind the move. For example, a bullish engulfing pattern, which occurs when a white real body wraps around a prior black real body, suggests the bulls are taking over from the bears.

If you have a bullish engulfing pattern after a downtrend, maybe the market is trying to bottom out. Then add the volume analysis: I would look for higher volume on the white candle and lower volume on the black candle to indicate the pattern has potential bullish implications.

Basically, just add your favorite indicators to the candle chart. The more signals joining up in the same area, the more likely a reversal will occur. For example, if a bullish engulfing pattern forms when a stock is at a major support area or a prior low, the odds of a turn are higher than if there was just a bullish engulfing pattern.

AT: Would you describe candles as a subjective or objective form of analysis?

SN: Both. I have a software plug-in for which I had to give specific definitions of different candle signals. For example, there is a candle pattern called a hammer — a single candle line with a long lower shadow and a small real body at the top of the trading range.

Most candle signals are reversal signals, and the hammer is a potential bottom reversal signal — it must come after a downtrend. So I had to define what a downtrend is and then define what a long lower shadow is. There's some objectivity there. An ideal hammer should have a lower shadow, which is two times the height of the real body.

But if I saw a hammer that came after a downtrend and the lower shadow was only 1 1/2 times the height of the real body, but the market was at a major support area, I would still view that constructively as a classic hammer. As a general rule, the overall technical picture is more important than a single candle line. Candles should be viewed in context of the market picture.

AT: Some traders seem put off by the language that surrounds candlestick analysis.

SN: Yes, but actually, the names of the patterns themselves will often tell you what the signal looks like. For example, a shooting star is the opposite of a hammer. It's a candle with a long upper shadow and a small real body at the bottom of the range — it looks like a shooting star or comet flaming through the sky. The opposite of a bullish engulfing pattern is a bearish engulfing pattern. It may sound unusual at first but the patterns are actually very descriptive.

AT: Do you think certain patterns are more reliable than others?

SN: The Japanese say stocks' personalities are like people's faces — two are never alike. Certain patterns will work well in certain markets and others won't work as well. It's trial and error.

For example, I follow the Nasdaq closely and evening stars work very well in the NASDAQ. It's a three-candle pattern that comes after a rally. The first candle has a tall white real body, the second has a small real body that gaps higher to form a star, the third is a black candle that closes well into the first session's white real body. The Japanese call the bullish candle a yang line and a bearish candle a yin line, and when yang reaches an extreme there is stillness, and stillness gives rise to yin.

A tall white candle is yang, which gives rise to stillness, which is the small real body of the following candle; and stillness gives rise to yin, which is the long black candle that completes the pattern. They converted that verbiage into a candle pattern. But I really have no idea why this pattern works so well in the NASDAQ, it just does.

AT: What do candlesticks reveal about the psychology of the market?

SN: I look at a candlestick chart as if it's an x-ray of a market's supply and demand dynamics. A tall white candle means the market opened near the low and closed near the high, which suggests the bulls are in control. On the flip side, if you have a long black candle, the bears are in control. If you have a spinning top and a small real body, there is more a tug of war between the buyers and the sellers. If you have a doji, the market is balanced between the bulls and the bears, and you don't want to see that during a rally. What you want to see are tall white candles, not spinning tops or dojis. A doji really reflects indecision and at that point the market becomes tired.

One thing to keep in mind is that sometimes a little knowledge is a dangerous thing. I would caution people against trading with candles until they are very familiar with them. For example, the doji is a potential reversal signal, but one of the rules I have is that the high of the doji represents resistance. If the market closes above that resistance area, the market is

“refreshed,” as the Japanese like to say.

There are a lot of fine details. As a general rule, dojis represent indecision, but they are better at calling tops than bottoms. There is a saying that the market will fall under its own weight. So if you see a doji during a rally, the market really doesn't know what it wants to do and it is possible for it to fall under its own weight.

But if you see a doji during a downtrend, the market very often will continue down. There are many details you can pick up from looking at thousands of charts.

AT: What's an example of a setup you would look for to enter a trade on the long side?

SN: One of the techniques I like to use is a bullish engulfing pattern as a potential support area. The NASDAQ 100 had a bullish engulfing pattern — again, that's a white candle wrapped around a black candle — on July 23-24 (see Figure 3, below).



The low of that bullish engulfing pattern was 1,192, which becomes a potential support area. As the market gets near there one can think about buying. The market rallied out of the bullish engulfing pattern, but then pulled back on Aug. 5 and made a low of 1,205. It held above the low of that bullish engulfing pattern and the market started to rally from there. So, a potential setup would be to buy near the lows of a bullish engulfing pattern. In this case, you would wait

to buy until the higher open of the white candle after the Aug. 5 black candle, to confirm an up move. The stop would be below the low of the bullish engulfing pattern.

AT: Do candlesticks provide price objectives?

SN: No, candles don't give price targets. That's a very important point. Candles are great at giving you the initial buy or sell signal or the reversal signals. But as far as where you get out, that's purely Western technicals.

For example, on that bullish engulfing pattern I mentioned, the market stalled at a 30-day moving average, which I like looking at. If I bought on a bullish engulfing pattern, I'd probably be out at the 30-day moving average so we would have bought around 1,205 to 1,210 and the 30-day moving average was around 1,320. As far as price targets are concerned, that's an area where you need Western technicals.

AT: Is there a certain reward-risk ratio you use in your trading recommendations?

SN: Anywhere from 2 to 2.5. I use pivot highs and pivot lows for potential reward targets or exits, as well as trendlines.

AT: What advice can you give about trading more effectively with candlesticks?

SN: One of the things I would suggest is to always consider the major trend. How someone defines the major trend is subjective. Some traders will look at a moving average — if a stock is under the 200-day moving average, they'll say the trend is down. Personally, I keep it very simple. If the market is making higher highs and higher lows, the trend is up; if its making lower lows and lower highs, the trend is down.



Once you have the major trend, you want to think about initiating a new position in the direction of that trend. If the major trend is up, I'd be looking for bullish candlestick signals to buy on corrections. For example, if there is a bullish hammer and the major trend is up, I'd consider going long on that hammer.

AT: Would you go long at the next day's open?

SN: Candle signals are based on the close. But you can also enter on the next day's open, based on the prior day's candle signal.

AT: Do candlesticks offer guidelines for placing stops?

SN: Yes, many candle signals give stop-out levels. The lows of the bullish signals should be support areas. For example, the low of a bullish hammer should be a support area.

AT: Would you put your stop just below the low of the hammer?

SN: Yes, preferably on a close, because a market will often break support intraday. But if it doesn't close below that level, it's still a valid support area.

AT: How can traders use Western signals in conjunction with candles to identify entry points?

SN: I would suggest traders continue using whatever indicators they like to use – stochastics, moving averages, or whatever the case may be. Then, if they get a reversal signal from one of them, check the candlestick chart to see if there is confirmation from a candlestick pattern.

For example, if there is a bearish divergence in the stochastic indicator, which means price made a new high, but the oscillator didn't, and a bearish shooting star is appearing on the candle chart, that increases the likelihood of a market turn.

AT: That, for example, would be a good signal for going short?

SN: I would sell short if the major trend is down. If the major trend is up and I saw that particular signal, I would use it to liquidate longs. Stay in the direction of the major trend – it's easier to go downhill than uphill. I'd initiate new positions in the direction of the major trend and exit positions if you are going opposite the major trend. So, if you have a bullish trend and a bearish signal, I'd use that to exit a position.

AT: Do you have a favorite signal?

SN: Windows – when a market gaps up or gaps down – are one of my favorite signals. A window becomes a support or resistance area.

AT: How would you trade that?

SN: If the market gaps higher and then the market pulls back to that window, it should be a potential support area.

AT: How do you know when a candlestick pattern is wrong?

SN: That's what a stop is about. For example, if you buy on a bullish engulfing pattern on the

next morning's open, assuming the reward-risk ratio is attractive, your stop should be under the low of the bullish engulfing pattern. No signal is perfect. I use the expression "Even monkeys fall from trees."

There always should be a price that, when crossed, says you're wrong. You can use many candlestick patterns as potential support or resistance levels, and if the markets puncture those levels, you are wrong.

AT: What are some of the disadvantages of candlesticks?

SN: You don't get price targets. You need to wait for the close of the session before you get a signal. But a way to circumvent that is to use intraday charts.

For instruments that don't have open, high, low and close price data — such as mutual funds — you can't use candle charts.

AT: Do you think candlesticks work across all markets and all time frames?

SN: They should work in all time frames. However, if someone is using a real short time frame — a one-, three-, or five-minute chart — certain patterns won't be as important. There is more noise intraday and the opening and closing prices of these bars aren't as important as they are on a daily chart. If you see a certain pattern, like a doji, time after time after time and it isn't rare, then I wouldn't pay attention to it. For my clients, I don't usually go less than 15 minutes, just because I'm not an intraday trader.

AT: Have you done any testing on the reliability of candlestick patterns or is this all discretionary?

SN: Testing is impossible to do. I strongly recommend using candlestick analysis as a tool, not a system. It should be one weapon in your trading arsenal. Candles are great at giving reversals, and that alone is reason to use candle charts. They're going to give you early turning signals.

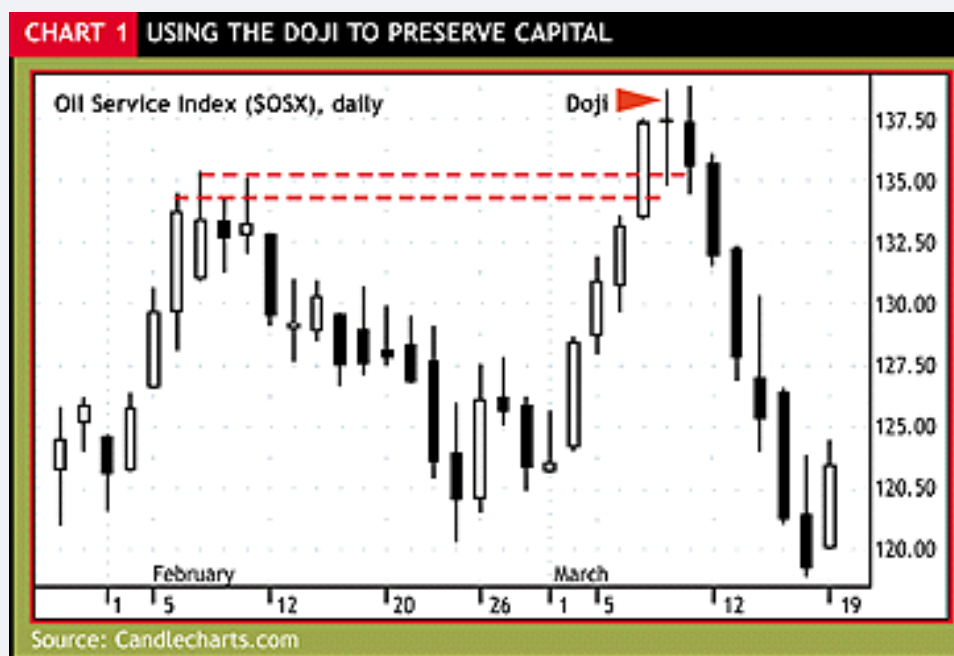
But I suggest not using them as a system because you don't get price targets. You need to use another trading technique to get price target — it might be a prior high, it might be a resistance line — but it has to be something else. If you don't have a price target, you don't have a trade. To be a successful trader, you need to know what the reward-risk is before you put on the trade.

Keep in mind that a single tree does not make a forest. What we've discussed is a single tree. Candles can be a powerful tool, but traders really need to study and understand them before using them.

## Candlestick Charts: Highlighting market dynamics

According to Nison, candle charts, if used properly, make it easier to avoid a potential losing trade or exit a profitable trade before it gives back too much of its gains. The chart above shows an example of the latter.

Says Nison: “The dashed lines show a resistance area near 135. A tall white candle pierced this resistance in early March – a bullish signal. But the next session the emergence of a doji (a session with the same, or nearly the same, open and closing prices) hinted the bulls had lost full control of the market, although this doesn’t mean the bears had taken control.



“The emergence of this doji should have been treated as a signal to consider taking profits or moving up a protective sell stop. This is a good example of the advantage of candle charting techniques. Specifically, one trading session provided a visual clue – in the form of a doji – that while the market was maintaining its highs, the bulls were not in complete control. Although the market may have looked healthy on a standard bar chart, the “internal” dynamics reflected by the doji on the candle chart relayed the existence of potential weakness. This market was, as a Japanese proverb states, “like a leaking boat brightly painted.”