

NOVICE TRADER

Candlesticks For Support And Resistance



Even as you read this, the candlestick charting technique, with its origins in Japan, is being absorbed into the ways of Western technical analysis. Here's how candlestick charting can be used for a typically Western technical analysis strategy.

by John H. Forman III

Observation is the best friend of the technical analyst. By watching the markets, I noticed something interesting about candlestick charts, which I use extensively. I realized the real bodies used in candlestick charting can be used to determine significant support and resistance points, a strategy I had never seen before. Take a look at how it can be done.

Although they have only recently become popular in the Western Hemisphere, Japanese traders have been using the candlestick charting technique for hundreds of years. Candlestick charts, much like the bar chart equivalent, utilize the open, high, low and close activity to plot a period (usually a day). In candlestick charting, unlike bar charting where the highs and lows tend to be the focus, the opens and closes are the most significant.

A candlestick is composed of two features, as shown in Figure 1. The real body is a rectangle encompassing the area between the open and close and is what gives candlestick graphs their distinctive appearance. The real bodies are blacked in if the open is above the close and white if the close is above the open. A session in which the open and close are the same is commonly referred to as a doji session and is represented by a single horizontal line at that price.

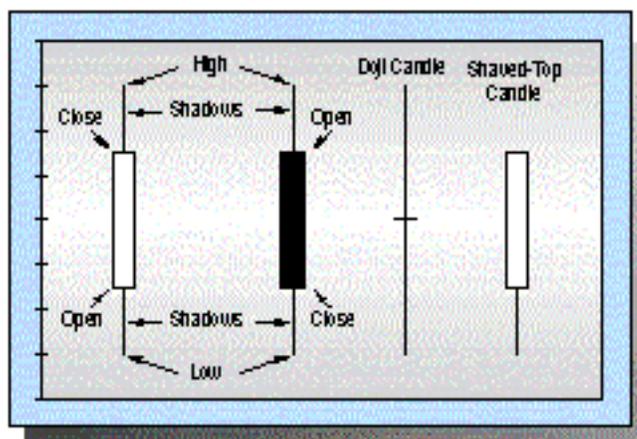


FIGURE 1: CANDLESTICKS. A candlestick is composed of two features. The first is the real body, which is the rectangle between the open and close and is what gives candlestick graphs their distinctive appearance; this area is blacked in if the open is above the close and white if the close is above the open. A session in which the open and close are the same is commonly referred to as a doji session and is represented by a single horizontal line at that price. The second distinctive feature is the shadows of a candle, which are drawn in the area above and below the real body and the extremes. It is possible to have one, two or no shadows. When a shadow is absent, the result is referred to as a shaved candle.

The shadows of a candle - which give the appearance of being wicks - are drawn in the area above and below the real body. The upper shadow is the area between the high and the top of the real body, while the lower shadow is the area between the bottom of the real body and the low. It is possible to have one, two or no shadows. When a shadow is absent, the result is often referred to as a shaved candle.

Much of candlestick analysis revolves around the search for, and identifying, reversal patterns. Many of the distinctive terms associated with candlestick charting come into use with reversal patterns. This is where the real difference between candlestick charting and bar charting comes into play. However, candlestick analysis can offer more than you think. Most technicians use highs and lows for support and resistance points as part of their basic charting techniques. But in keeping with the candlestick emphasis on opens and closes, let's change the way we look at the market. Instead of the usual highs and lows, let's use real-body highs and lows.

DETERMINING SUPPORT AND RESISTANCE

When a chartist looks at a bar graph, accumulations of highs and lows are often seen as key market levels. Breaking

through these points signals important changes in the expected direction of prices. Candlestick real bodies, however, may turn out to be better for this task. Much like highs and lows are on bar charts, an accumulation of real-body highs or lows at a given level is significant.

An example of real-body resistance levels can be seen in Figure 2. The real-body high from the first day provides the initial resistance point. Note how the second day's action takes prices above that resistance, even to a new high, but the market ends lower on the day. The situation is similar after the fourth day. Twice the market rallies above real-body resistance, only to fall back. Real-body support levels would work in a similar, but opposite, manner.

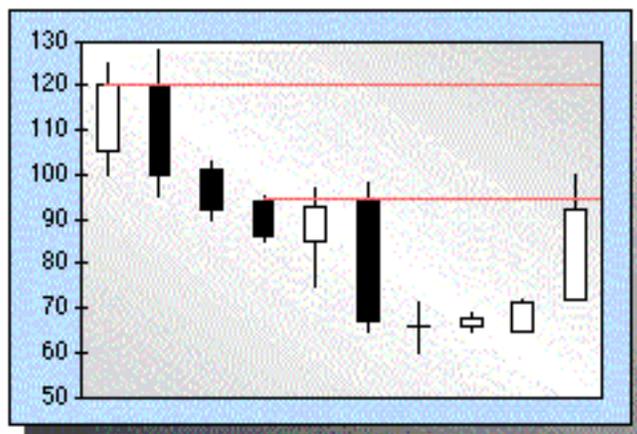


FIGURE 2: CANDLESTICK REAL-BODY RESISTANCE. Here's an example of real-body resistance levels. The real-body high from the first day provides the initial resistance point. Note how the second day's action takes prices above that resistance, even to a new high, but the market ends lower on the day. The situation is similar after the fourth day. Twice the market rallies above real-body resistance, only to fall back. Real-body support levels would work in a similar, but opposite, manner. The last candlestick is what would be considered a breakout. In effect, there must be a real-body penetration of the support or resistance point before we can consider the action to be significant.

The last candlestick on the chart is what would be considered a breakout. For the sake of our definition, a breakout of real-body support or resistance is official only if it is on a closing basis. In effect, there must be a real-body penetration of the support or resistance point before we can consider the action to be significant.

TRADING APPLICATIONS

One of the first uses that many technicians see for this technique is in terms of breakouts, much like in using bars. The advantage in using real-body highs and lows for support and resistance is that ranges are tighter, allowing entry into a trading position earlier than might otherwise have been the case.

Perhaps the most intriguing part of this new methodology, however, is its usefulness for day trading. Most technicians use candlesticks as a day-end indicator, but this technique gives us a greater degree of depth than is necessary for day trading. Real-body support and resistance allow us to take our analysis into the shorter time frames, which in turn allows us to get better entry points for our longer-term trades.

In my own analysis, I favor trading counter to the prevailing market action when a nearby real-body support or resistance level has been crossed intraday. This means that I recommend selling when the market has broken through very recent real-body resistance, and buying when recent real-body support has been breached. This is my strategy for trading against levels that are only a few days old, and one I recommend mostly for a very short-term position (say, day trading).

Longer-term levels require trading against the approach of a level. Often, in such cases, prices have come from a relatively long way off, and just reaching those key levels is a major achievement. Waiting for a break of support or resistance may mean missing a trade. Positions set under these circumstances can be held for longer time frames,

perhaps as long as a week.

In candlestick charting, as in bar charting, the more times a level is touched, the more significant the level becomes. This is, however, a double-edged sword; if a resistance point is touched or penetrated slightly several times, it becomes more likely that a real breakout is in the offing. The wrong side of a breakout is not where we want to be. At the same time, however, the more times that a resistance point is touched, the larger the eventual decline is likely to be if the market falls instead of rallying.

MINIMIZING THE RISKS

There is no way around the risks inherent in trading counter to the prevailing market action. All we can do is reduce the risks as much as possible by using the tools available. Happily, there are ways to do this.

First, always be aware of the longer-term picture. If the market you are planning to trade is in the middle of a strong trend, going against that action is probably one of the quickest ways to lose money. Wait until the momentum starts to ease; this will reduce your chances of getting caught on the wrong side of a breakout.

Further, this is a good time to mention a candlestick caveat: Beware of reversal patterns signaled by candlesticks in a trending market. The bond market is especially notorious for throwing out countertrend candlestick signals during major trends, and I've seen the same in other markets as well. *Never look at candles in a vacuum.*

So what should we look at in conjunction with candlesticks to lower our risk in the countertrend trades I am suggesting? For one, there's John Bollinger's band width indicator (BWI) as a trend indicator, which can be used by monitoring the area between the upper and lower bands. (I outlined this technique in the November 1994 STOCKS & COMMODITIES.) I like to use the BWI as an indicator of a weakening trend; I want to jump in when the slope of the BWI line starts to decrease. This is the first signal that the trend is petering out, and that at this point countertrend trades are reasonably safe.

There are, of course, other technicals that you can use. Bollinger bands themselves can be helpful, among others. Select the tool or tools that make you most comfortable.

More important than any additional indicator you could use, however, is your money management strategy. There are many ways you could trade using this methodology, and each has its own advantages and limitations. Cash or futures trading exposes you to the potential for theoretically unlimited risk, requiring tight stops and quick executions. Options could limit your risk, but probably at the cost of requiring larger moves to make them worthwhile. Of course, you may be able to tailor a combination of instruments to suit your needs.

An important factor in determining your risk exposure, and as a result how you trade, is the point at which you cut your losses. Often, there is no second support or resistance level nearby to provide a good stop-loss point, which means you'll have to use your own instinct as a guide. I find it useful to use whatever candlestick shadows there are as a rough guide to how far the market might go against me, thus letting me set reasonably good stops.

One last thing to consider: Where you're going to get out. I use a combination of techniques. Fibonacci retracement levels work fairly well, as do moving averages. I prefer to determine another support or resistance point using real bodies. Unfortunately, there are times when a significant level is not available nearby, forcing me to use other techniques.

A REAL-LIFE EXAMPLE

Figure 3, which shows the sterling/Deutschemmark cross-rate, contains several excellent examples. You can see how many times prices either approached or penetrated real-body support and resistance points but were unable to sustain those levels. Time after time, an attentive trader could have entered positions counter to the prevailing market action and would have done well. There are two noticeable exceptions, however.

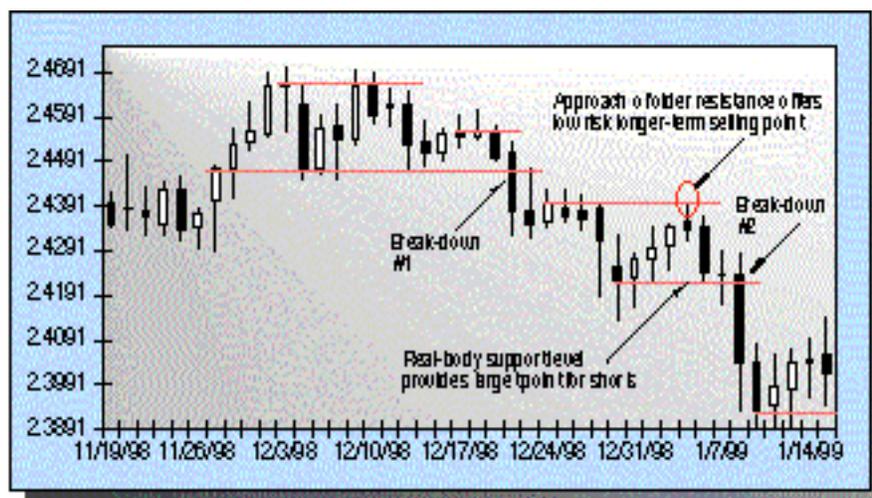


FIGURE 3: STERLING/DEUTSCHEMARK CROSS-RATE. *The sterling/DeutscheMark cross-rate contains several excellent examples. You can see how many times prices either approached or penetrated real-body support and resistance points but were unable to sustain those levels. Time after time, an attentive trader could have entered positions counter to the prevailing market action and would have done well.*

The first came in late December 1994, when the market finally broke down out of its range. Two things should have been noted that might have kept you out of a trade. One is the double top, or tweezers pattern in the candlestick vernacular, which took place about 10 days prior to the breakdown. That would have been your first indication that the trend was probably toward lower prices. The second indication came two days before the breakdown in the form of a shooting-star pattern, followed by a large negative real-body candlestick. This was another signal of lower prices.

The second exception was in January 1995, when the market again broke down after a consolidation. This, too, probably could have been avoided. All indications were signaling a bearish trend. That should have kept the careful trader from trading the doji day just prior to the breakdown. The doji, however, might have caused some confusion.

In addition, look at how taking those positions against the prevailing action is a great way to enter a new longer-term position. One glaring example of this took place early in January 1995, just before the second breakdown. After rallying for three days, the market approached, but never broke, real-body resistance. Prices did not stop falling until they were about 600 points lower, less than a week later.

CONCLUSION

By using real-body support and resistance levels, we can try to improve our trading and analysis on several levels. In the short term, we can derive important counteraction trading points and improved longer-term entry levels. In the longer term, we can use real-body support and resistance to get a jump on market breakouts in a trend-trading strategy.

Let me reiterate: Candlestick charting should not be used in a vacuum. That applies to the real-body support and resistance levels as well. You should, however, take the time to try out this methodology. I'm sure you'll find it worthwhile, and a beneficial addition to your technical toolbox. It just goes to show that by keeping our eyes open, we just might be able to discover new techniques.

John Forman is a currency analyst for Technical Data, a provider of real-time and day-end market commentary and trading advice over the Telerate system. He writes mostly from a technical perspective and also has experience in trading US and Canadian government cash and futures issues, equities and the energy markets.

REFERENCES, RESOURCES AND READING

Bollinger, John [1992]. "Using Bollinger bands," *Technical Analysis of STOCKS & COMMODITIES*, Volume 10: February.

Forman, John [1994]. "Bollinger band and trend," *Technical Analysis of STOCKS & COMMODITIES*, Volume 12: November.

Nison, Steve [1991]. *Japanese Candlestick Charting Techniques* , New York Institute of Finance.

_____ [1994]. *Beyond Candlesticks* , John Wiley & Sons.

Wagner, Gary S., and Bradley L. Matheny [1994]. *Trading Applications of Japanese Candlestick Charting* , John Wiley & Sons.