

## The Fractal Nature Of Patterns

Although I'm not a big fan of daytrading, lately I have been witnessing more and more of my daily patterns play out intra-day. This is probably due to the fact that the volatility has increased this year, creating bigger swings during the day. Inspired by this action, this week I like to show you the fractal nature of patterns. What occurs in the daily time frame also occurs intra-day. This fractal nature also works the other way too. What works on dailies also works on weekly and even monthly charts. Let's explore this further.

My Bowtie pattern seems to have struck a chord with the daytraders. So, let's start by taking a look at the Bowties on the 1 minute S&P Cash Index. The pattern uses a 10-period simple moving average (SMA), 20-period exponential moving average (EMA), and a 30-period exponential moving average (EMA). For short setups, it looks for them to go from "uptrend proper order" where the  $10\text{ SMA} > 20\text{ EMA} > 30\text{ EMA}$  to "downtrend proper order"  $10\text{ SMA} < 20\text{ EMA} < 30\text{ EMA}$ . Ideally, this occurs over a relative short period of time, suggesting a fairly quick change in trend. This gives the moving averages the appearance of a "Bowtie." I often like to include a 50 period simple moving average for reference. We'll cover Bowties in more detail in coming articles. If you can't wait, email me at [dave@davelandry.com](mailto:dave@davelandry.com) and I'll send you the rules.

Now, getting back to the charts, on the day this is being written 12/19/08, the S&P 500 index forms a 1-minute bowtie. It then sells off nicely.



Jumping up to the 5 minute daily chart. Here's a recent Bowtie setup in the S&P. Notice the it traded mostly sideways mid-day before rolling over for an afternoon sell off.



Now, let's back out to the daily. Although *somewhat* loosely formed, the bear market that began in early '07 started with a Bowtie on the daily chart.



Backing out even further, we see that there was also a weekly Bowtie down in early 2008. Also notice that market formed a weekly Bowtie up in 2003. In fact, you'll find that the weekly Bowtie will often signal longer-term bull and bear markets.



Finally, let's take a look at the monthly chart. Here the Bowties aren't as clearly defined—the crossings take a little longer. However, the “proper order” of the Bowtie moving averages is still useful. It helps to keep you on the right side of the market. If you focus on the long side when the  $10SMA > 20EMA > 30EMA$  then you'll be buying stocks in bull markets. And, if you focus on the short side when the  $10SMA < 20EMA < 30EMA$  then you'll be shorting stocks in bear markets. I have illustrate this below with up arrows when the Bowtie moving averages are in uptrend proper order and with down arrows when the moving averages are in downtrend proper order. Notice the moving averages can stay in proper order for many years, allowing you to participate in longer-term bull or bear markets.



As you can see, regardless of your investment horizon, you can use the fractal nature of patterns to your advantage.