Chapter Five: Price and Patterns

The 2B Test

In his 1991 book, *Trader Vic—Methods of a Wall Street Master*, Victor Sperandeo wrote of the 2B:

> *This one observation, considered alone, has the greatest potential for catching the exact highs or lows: it carries more weight in terms of probability than any single one of the other three criteria for a change of trend.*

This observation, one Sperandeo called his "personal favorite" in his book, *Methods of a Wall Street Master*, is the 2B Test. It is a remarkably straightforward approach to determining when a market has run out of momentum to the upside or downside. The 2B Test represents another opportunity for market technicians to focus on reading price action and momentum directly.

Combined with the intelligence provided by Japanese candlestick patterns and momentum indicators, the 2B Test might be unparalleled in its ability to let technicians know precisely when a market's momentum is exhausted. For those looking to trade reversals, there is no better intelligence than that.

I have also seen the 2B Test referred to as Turtle Soup. Larry Connors coined the phrase in his book, co-authored with Market Wizard Linda Bradford Raschke, *Street Smarts*. Connors' phrase colorfully captures the market behavior behind the reversal pattern, and while 2B is the shorthand I've become accustomed to, Connors' idea of "turtle soup" captures the scheudenfreude and buyers/sellers remorse that makes the pattern work.

A 2B or Turtle Soup pattern occurs when prices make a high, pull back, make a higher high, but then fail to follow-through to the upside. That is a "2B Test of Top." "A 2B Test of Bottom" occurs when prices make a low, bounce, make a lower low, but then fail to follow-through to the downside.

The market behavior behind this simple pattern is something that virtually every technician or trader has experienced, and usually from both sides of the wager. The 2B takes advantage of the false breakout or breakdown. When a false breakout takes place, buyers have overplayed their hand and are overwhelmed by sellers. Realizing they overplayed their hand, buyers often become sellers themselves, looking to exploit those who made the same mistake but have not yet acted.

The same thing happens to the downside, when sellers create bargains by pushing prices so low that an overabundance of buyers emerges. Short seller covering, as well as buyers chasing value, can create a great deal of upward or bullish momentum in a short period of time, to say nothing of signaling the end of a downtrend or bear market.

There have been a number of different confirmations that I have heard of when using the 2B. The approach used by Sperandeo says that a 2B is confirmed when prices move back below the initial high after failing to follow through to the upside (or move back above the initial low after failing to follow through to the downside). A more conservative approach would be to wait for prices to close below that initial high (or initial low).

Because trading momentum means understanding who is winning the fight between those betting on higher prices and those betting on lower prices, my preference is to wait for a confirming close.

One great example of a 2B bottom developed in the S&P 500 during the spring of 2007 (Figure 5.1). The S&P had been moving higher fitfully since the beginning of the year. A mid-February breakout above 1450 led not to further bullish days, but to confused, ambivalent price action as the market went skidding sideways for the balance of the month.

Then, on February 26, the bottom fell out as the market plunged 50 points in a single session, the largest single-point drop in several months.

The market traded lower into the next month, bounced for a few days, and then continued moving lower to test the lows set at the beginning of March. The S&P 500 exceeded those lows on an intraday basis. But buyers bid the market higher going into the close. Buyers showed up the

Figure 5.1 | S&P 500 Index, Daily | January 2007-March 2007

A lower low in the second half of March set up the opportunity for a 2B bottom and an end to the spring 2007 correction.

Chart courtesy of Prophet Financial Systems. Inc.

Figure 5.2 | S&P 500 Index Daily | March 2007-April 2007

Failure to follow-through to the downside and a confirming close above the high of the initial low in early March set up a powerful spring rally in the S&P 500.

Chart courtesy of Prophet Financial Systems. Inc.

following day as well, bidding the market still higher from the lows that, only briefly, exceeded those of the month.

The 2B test of bottom occurred when the market rallied back above the high of the initial low in early March. That happened on March 15th on a closing basis. The market traded lower for a day, then surged to the upside (Figure 5.2).

The momentum trade likely ended with the market trading below the hanging man late in the month. But in any event, the failure to follow-through to the downside was a signal that the S&P 500 was running out of momentum to the downside and vulnerable to a reversal.

Figure 5.3 | Dow Jones Industrial Average
Daily | May 2006-July 2006

Another set-up for a 2B bottom developed toward the end of the sharp correction that began in May.

Chart courtesy of Prophet Financial Systems. Inc.

Figure 5.3 is another classic example of a 2B bottom at work.

I wrote about this bottom in the Dow Jones Industrials for *Traders.com Advantage* back in the late summer of 2006. My article, "*A 2B Bottom Test in the Dow*," asked the question "is the long sought-after bottom in the DJIA finally at hand?"

The surge higher in mid-July confirmed the 2B bottom of a few days prior. In spite of the sharp pullback, the Dow moved on strongly over the balance of the summer and into the fall (Figure 5.4).

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2B tops can warn of waning momentum in an uptrend—important market intelligence for the momentum trader. Like 2B bottoms, 2B tops

Figure 5.4 | Dow Jones Industrial Average
Daily | June 2006-September 2006

Once again, a successful 2B bottom ends a bear market downturn and clears the stage for a significant rally.

Chart courtesy of Prophet Financial Systems. Inc.

do not necessarily mean that a market is going to reverse. These patterns simply reflect the market's lack of momentum in the current direction, with a vulnerability to reversal in the other direction. In the short-term, these opportunities are very often exploitable, whether or not the patterns lead to major reversals and enduring new trends.

Figure 5.5 is of a 2B top in a weekly chart. It is worth pointing out that this 2B top did not lead to a reversal in trend. The pattern developed in the Dow Industrials in the spring of 2005, just as the market was emerging from the 2004 bear market. No doubt that many feared that the rally into 2005 would fail as the Dow moved sharply lower, bringing a resumption of the bear market that had characterized stock behavior for months.

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Figure 5.5 | Dow Jones Industrial Average
Weekly | May 2004-April 2005

Failure to follow-through above the December 2004 highs led to a 2B top in late February/early March and a sharp correction over the balance of the spring.

Chart courtesy of Prophet Financial Systems. Inc.

The Dow did move sharply lower, but no new low was made vis-à-vis the lows of the 2004 bear market, and the Dow went on to make new highs.

But the sharp move downward in the spring of 2005, one that was telegraphed by the 2B top, remained an excellent opportunity to the downside—even in the midst of a market that was on its way much higher.

Wrote Victor Sperandeo of his 2B (1991):

> *I have never done a rigorous test to determine how often the 2B indicator accurately predicts changes of trend, and I don't need to. Even if it works just one in three times (and I'd lay money that it's more), I would still make money by trading on it, especially in the intermediate-term trend. The reason is that a 2B allows you*

> *to catch almost the exact top or bottom, and thus sets up a great risk-reward scenario.*

There is only one true caveat—and one that Sperandeo is clear on: fading momentum by selling potential tops and buying potential bottoms means being willing to admit defeat immediately. This sounds easy, but can be difficult in practice for many. When a 2B top goes on to make a new high or when a 2B bottom goes on to make a new low, it is the obligation of the technician trading momentum to respect that momentum and step aside. As Sperandeo wrote in his 1994 text, *Trader Vic II—Principles of Professional Speculation*:

> *The hardest thing in trading is to reverse your position after getting whipsawed. I recommend you double your position on the second 2B buy after a whip. Make it pay double!*

Channel Breakouts and Breakdowns

In some ways, trend channel breakouts are the sin qua non of momentum in markets. A trend is in place, prices are already moving at a certain clip, then momentum increases and the angle of ascent (or descent in the case of bear markets) grows steeper and steeper as price changes that formerly took weeks or days to happen are happening in days or hours.

Trend channel breakouts are another simple momentum indicator to which many technicians do not pay enough attention. There is a built-in bias against trend lines—especially angular trend lines—that many technicians have developed unnecessarily. Trend lines form the basis of trend channels.

The complaint is that everyone draws trend lines differently, so using them as a tool will always vary from technician to technician, or even from chart to chart if the technician is not consistent.

My solution? Draw trend lines the same way that I do—or, rather, the same way Victor Sperandeo suggests.

Draw your up trend lines from the lowest low to the highest low immediately preceding the highest high. Draw your down trend lines from the highest high to the lowest high immediately preceding the lowest low.

If you have to cut through prices, especially closes, in order to make your trend line work, then your trend line is probably too long. Move up from the lowest low to the next lowest low (or down from the highest high to the next highest high) and see if a proper trend line can be drawn. You don't have to be a fanatic about trend lines that cross through exceptionally long shadows. But keep the cheating to a minimum—a shorter accurate trend line is better than a longer trend line that does not reflect true support.

The trend channel is just the parallel extension of the trend line. Most charting software will allow you to create a parallel line based on a trend line, if not provide a channel tool outright that allows you to create the channel and the support or resistance trend line at the same time.

A trend channel breakout occurs when prices close above the upper resistance boundary of the channel. A trend channel breakdown occurs when prices close below the lower support boundary of the channel.

Occasionally prices will move back into the channel, sometimes in the form of a false breakout, other times simply as a counter-reaction or retest of the channel boundary, before continuing in the direction of the break. What is especially worthwhile about trend channel breakouts, however, is that because a trend is already in place, the likelihood of a breakout continuing to move prices forward (or downward in the case of a breakdown) is relatively high. In wagering on a trend channel breakout, you are simply betting on a short-term surge in momentum in a trend that is already in place.

Even though trend channel breakouts often result in new trends, it is the surge that momentum traders are interested in. As such, confirmation

Figure 5.6 | Oil Service HOLDRS (OIH)
Daily | January 2007-June 2007

Bullish trend channel breakout. An advancing market for oil service stocks developed a surge of momentum in the spring of 2007, powering the stocks—as represented by the OIH—out of their old trend channel and into a new, more aggressively bullish trend channel.

Chart courtesy of Prophet Financial Systems. Inc.

of a trend channel breakout occurs as soon as prices close beyond the trend channel boundary.

Price projections from trend channels tend to be based on the width of the trend channel. In other words, add the value of the width of the channel to the value at the breakout (or subtract in a downtrend) to get a price target for the breakout. Short-term momentum traders often do well to pay more attention to momentum than to price targets, which may or may not be reached.

Consider the bullish trend channel breakout in the chart of the Oil Service HOLDRS that developed over the first half of 2007 (Figure 5.6). The Oil Service HOLDRS (or OIH) bottomed in January and began a pattern of higher highs and higher lows going into the spring. The trend channel of that advance is clear.

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However, in late March, the angle of ascent in the OIH's rally became even steeper. The market broke out above the upper resistance boundary of the trend channel. While prices did dip back into the body of the trend channel, the market did not close below the close of the breakout day. The OIH climbed from the mid-140s to mid-170s in three months, evidence of a strong rally in oil stocks at the time.

Bullish trend channel breakouts are a part of virtually all strong bull markets, and often signal the moment at which convictions have deepened about market direction, emboldening those who were already in place and encouraging those on the sidelines to join in. This shift in momentum revealed by the trend channel breakout provides a great opportunity for traders in the short to intermediate term.

Bearish trend channel breakdowns can be quite volatile and dramatic. In the stock market, the breakdowns are often severe; rewarding the quick and the sure-handed who bet on the confirmation that comes when the market closes beyond the trend channel boundary.

A classic example of a bearish trend channel breakdown can be seen in the S&P 500 during the bear market of 2000-2002. The S&P 500 topped out in the spring of 2002 after the so-called "patriotic rally" in the wake of the September 11th Al Qaeda attacks in the United States. The market began moving down gradually over the balance of the spring. But it was not until the second half of May going into June that the bearish momentum became overwhelming (Figure 5.7).

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The S&P 500 broke down below its trend channel in mid-June and by early July, the S&P 500 was moving almost in a vertical line downward.

Figure 5.7 | S&P 500 Index Daily | March 2002-July 2002

A bear market in stocks in the spring of 2002 only became more intense as selling momentum increased dramatically in June. The selling was so intense that the secondary trend channel that developed after the first one was broken was also broken to the downside.

Chart courtesy of Prophet Financial Systems. Inc.

While many may have been lulled to sleep by the market's slow motion erosion of the spring of 2002, the trend channel break in the summer was a clear warning that momentum to the downside was increasing at a significant rate.

Trend channels are found everywhere from the charts of Elliott wave theorists to those using channels for stage analysis. I wrote about using channels for stage analysis for *Working-Money.com*, highlighting how a market was more likely to produce trading gains at a more rapid rate

Figure 5.8 | U.S. Dollar, Continuous Futures
Daily | July 2004-December 2004

A symmetrical triangle provides another opportunity for traders to exploit the bear market in the greenback during the fall of 2004.

Chart courtesy of Prophet Financial Systems. Inc.

after breaking out of an initial trend channel and into a new, steeper trend channel. As *John Murphy* wrote of trend channels (1996):

> *While the channel technique doesn't always work, it's usually a good idea to know where the channel lines are located. A move above a channel line is a sign of market strength, while a decline below a falling channel line is a sign of market weakness.*

I don't necessarily see buying trend channel breakouts or selling trend channel breakdowns as a trading method in and of itself. But such moves beyond the boundaries of the trend channel—particularly when accompanied by the confirmation of momentum indicators—can be as profitable as any other form of breakout, and often more so.

Triangles

There are a number of chart patterns that should be of particular interest to market technicians focusing on momentum. These patterns—triangles, pennants, and flags—often develop in the course of strongly trending markets and represent either a temporary lull in momentum in the direction of the trend or, in the case of pennants and flags, actual counter-trend price action in the short-term.

Trading momentum is about spotting instances where momentum dramatically increases, such as during a breakout or breakdown. But trading momentum is also is about spotting instances where momentum is waning—with the idea that when momentum returns to the market,

Figure 5.9 | AMEX Gold BUGS Index
Daily | October 2001-October 2003

An ascending triangle stretches from the spring of 2002 to the spring of 2003 before breaking out to the upside that summer.

Chart courtesy of Prophet Financial Systems. Inc.

prices will be propelled with enough force and enough speed to create worthwhile opportunities for swift and observant traders.

There are three different types of triangles that traders and speculators need to be aware of: symmetrical, ascending, and descending. Symmetrical triangles consist of short-term price action bound by a pair of converging trend lines (Figure 5.8). Ascending triangles consist of short-term price action, as well, but this price action is bound by a flat, horizontal resistance trend line and an upwardly sloping, support trend line. The "ascending" description of the triangle refers to the upward slope of higher lows, a bullish characteristic in itself, and to the tendency of prices to breakout from this pattern to the upside (Figure 5.9).

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Figure 5.10 | Dow DIAMONDS Trust (DIA)
Daily | May 2001-October 2001

This descending triangle helped traders anticipate the downturn that would eventually become the lows accompanying the September 11th terrorist attacks in the U.S.

Chart courtesy of Prophet Financial Systems. Inc.

Figure 5.11 | Copper, Continuous Futures
Daily | March 2006-January 2007

This symmetrical triangle grew over the second and third quarters of 2006, and formed the beginning of a long bear market in copper futures.

Chart courtesy of Prophet Financial Systems. Inc.

By contrast, the descending triangle (Figure 5.10) consists of short-term price action bound by a flat, horizontal support trend line, and a downwardly sloping, resistance trend line. The "descending" description of this triangle refers to the downward slope of lower highs, a bearish characteristic, and to the tendency of descending triangles to produce downside breakdowns.

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This descending triangle helped traders anticipate the downturn that would eventually become the lows accompanying the September 11th terrorist attacks in the U.S.

Chart courtesy of Prophet Financial Systems. Inc.

With symmetrical triangles, technicians need to measure the triangle from its highest point to its lowest point and then wait for the market to break free from one of the triangle boundaries. With a symmetrical triangle, the break could be to the upside or downside (Figure 5.11).

Figure 5.12 | Philadelphia Gold and Silver Index ($XAU) | October 2006-November 2006

The pullback in the advance of the Philadelphia Gold and Silver Index in mid-November took the form of a flag.

Chart courtesy of Prophet Financial Systems. Inc.

When prices break free from the pattern, traders should add or subtract the width of the triangle to or from the value at the breakout point. Thomas Bulkowski, who writes extensively about chart patterns in his book, *Encyclopedia of Chart Patterns*, says of symmetrical triangle breakouts "if a triangle breaks out and moves less than 5% or so, then returns and breaks out in the opposite direction, trade it in the new direction."

Ascending and descending triangles, by some contrast, have very clear support and resistance lines. This means traders can see where the breakout or breakdown level will be in advance and can get an earlier sense of what type of move might follow a successful break.

Take the width of the ascending or descending triangle at its widest point. In the case of an ascending triangle, add that amount to the value at the horizontal resistance level to get a minimum upside price target. In the case of a descending triangle, subtract that amount from the value at the horizontal support level to get a minimum downside projection.

Pennants and Flags

Pennants and flags are the true hallmarks of a strongly trending market. These patterns often appear in markets that are moving at such a powerful clip that they are not able to correct fully; instead, they move sideways, or sideways with a slightly counter-trend bias, before resuming their directional momentum.

Pennants and flags are similar in appearance, but not quite identical. Pennants represent short, counter-trend price action bound by a pair of short, converging trend lines. Flags, on the other hand, represent short, counter-trend price action bound by a pair of short, parallel trend lines (Figure 5.12). Although the differences in the trend lines are significant enough to call one pattern a pennant and the other a flag, for all intents and purposes, the differences end there (Figure 5.13).

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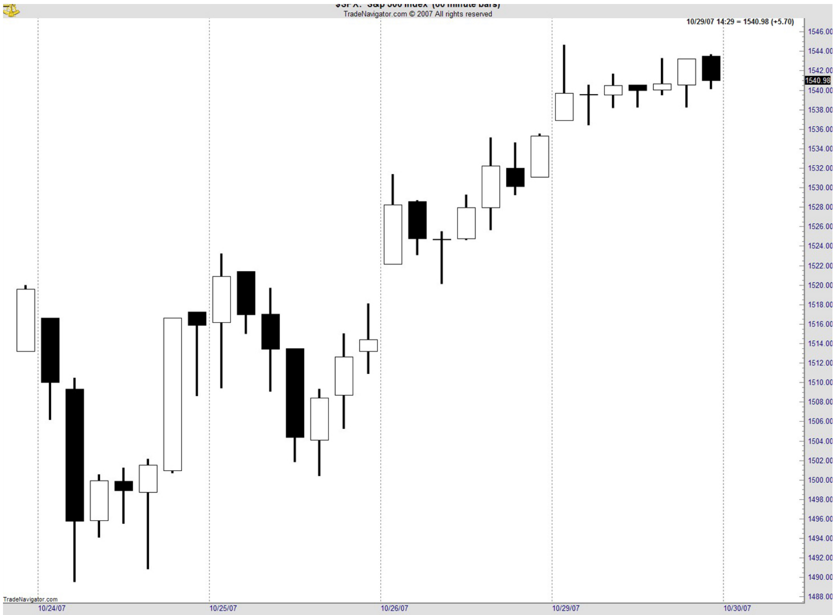
As such, the measurement rule for these patterns is the same. As befitting their placement in strong trends, pennants and flags tend to have ambitious measurement rules as well. Essentially, traders and speculators are encouraged to take the measure of the advance or decline from the end of the pattern back to the consolidation from which it came.

Take this value and add it to the value at the bottom of the pennant or flag pattern (conversely, take the value and subtract it from the value at the top of the pennant or flag pattern.) This will provide an upside (or downside) projection. Bulkowski, writing about pennants and flags, suggests that markets tend to fall short by a "slight" amount. As with all price projections, short-term momentum traders tend to be better off

Figure 5.13 | S&P 500 Index, Hourly | October 24 2003-October 29, 2003



An intraday pullback early in the market day set up a strong rally going into the session close.

Chart courtesy of Prophet Financial Systems, Inc.

letting waning momentum, as reflected in the candlestick lines, provide the signal as to when the market has given all the gains it is going to give for the time being.