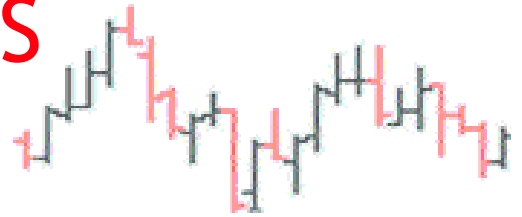




Setting targets and controlling risk with CONTINUATION PATTERNS

Getting an early (but not too early) jump on price moves will improve the performance of any pattern-based strategy.

This approach uses a momentum oscillator to signal potential price swings and continuation patterns to set price goals and risk levels.



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Continuation patterns such as triangles and flags have specific advantages in terms of trading according to a structured plan: They can be used to determine price targets and the risk-reward potential of a trade, and they also can be traded on any time frame (i.e. weekly, daily or intraday data) with equal effectiveness.

Here, we will focus on the techniques for establishing price targets based on continuation patterns as well as present a method to trade these formations by confirming their completion with a technical indicator, the Relative Strength Index (RSI). Specifically, we will show you how the RSI can provide early warning that a continuation pattern has completed. The approach consists of first analyzing a longer-term time frame and working down to a short-term time frame.

Leading the market with the RSI

The RSI is a momentum oscillator that is usually used to identify overbought and oversold levels and declining trend momentum (through divergences). For more information on this indicator, see "3-D trading" on p. xx and Indicator Insight in the August 2001 issue of *Active Trader*.

In addition to interpreting RSI overbought-oversold levels, traders can analyze the indicator's patterns like price patterns. Because momentum often leads price (that is, it changes direc-

FIGURE 1 WEEKLY PERSPECTIVE

Price broke out of a nine-month trading range in November 2000, moving through resistance at 110.50 and rallying nearly to 120 in early 2001. The RSI was trending higher (along with price) up to Point 1.



Source: DealBook FX



tion before price), momentum indicators such as the RSI can sometimes alert you to price reversals before they develop.

To use the RSI this way, plot trendlines along the peaks or troughs of the RSI as you would on a price chart. A trendline break on the RSI signals potential changes in market direction. For this discussion we will look at the Japanese yen/U.S. dollar (Yen/\$) relationship on several time periods. For anyone not familiar with the cash foreign exchange (FX) market, when the Yen/\$ value rises the dollar is becoming stronger; when the Yen/\$ rate declines the dollar is getting weaker.

In Figure 1 (opposite page), a weekly chart of the Yen/\$ rate, price broke out of a nine-month trading range in November 2000, moving through resistance at 110.50 and surging very close to the 120 level in early 2001. The nine-week RSI confirmed the price highs up to point 1 by not diverging from price action. The RSI was trending higher (along with price) and was supported by an up trendline (B). These positive technical conditions indicated any correction should be considered a buying opportunity.

Having determined the trend on the weekly time frame, the next step is to search the daily and intraday price charts for a good risk-reward entry point. Figure 2 (above) shows a daily view of the uptrend captured in Figure 1. Notice that after the

FIGURE 2 DAILY PERSPECTIVE

The daily chart of the uptrend shows that after the peak in early January, price declined to just below the 38 percent Fibonacci retracement level (point 1) of the rally from 106.80 to 119.85. Price then rallied for five days before retesting support, forming a large wedge pattern (lines A and B). The 14-day RSI broke a well-defined down trendline (C) at point 3. The corresponding price downtrend was not broken until point 2, three days later.



peak in early January, price declined to just below the 38 percent Fibonacci retracement level (point 1) of the rally from 106.80 to 119.85. (See "The Fibonacci series," p. xx, for more information on Fibonacci retracements.) Price rallied for five days and then retested the support level again. This rally formed the upper boundary of a continuation pattern — a large wedge (lines A and B). Price tested the 38 percent support level but held 20 pips (a minimum price fluctuation in currencies) above the prior lows.

The successful test suggested the corrective period could be ending. The 14-day RSI broke a well-defined down trendline

continued on p. x

(C) on Feb. 25, 2001 (point 2). The corresponding price downtrend was not broken until Feb. 28, 2001 (point 3). The break of the downtrend line on the RSI indicated momentum was rising, and signaled a resumption of the price uptrend.

Target objectives

Figure 3 (below) shows that the continuation pattern from Figures 1 and 2 was even more evident on the intraday (240-minute) chart. It is often easier to assess risk-reward parameters and determine potential price targets on a shorter time frame. The down trendline from the daily RSI was broken at point 1 a few days before price broke out of the upside of the triangle on the 240-minute chart at 116.70 (point 2).

One way of calculating a price objective based on a continuation pattern is to measure the width of the formation at several points and add or subtract these amounts from the breakout point to establish multiple targets. Two or (ideally) three points are chosen, one at the maximum width of the pattern, one at the minimum width and one near the middle. In Figure 3, these points are labeled A, B and C. Point A represents the maximum width of the formation, point B corresponds to the second point used to draw the downtrend and point C marks the subsequent high that touched the trendline. When the formation completed at point 2, three upside targets could be

determined. The distances of the pattern measurements are:

Distance A = 119.89-114 = 5.89

Distance B = 117.90-114.50 = 3.40

Distance C = 117-114.70 = 2.30

The down trendline was broken at 116.70. To determine the upside objective, you would need to add (or for a downside breakout, subtract) the three distances from the breakout point.

Target from line A = 116.70+5.89 = 122.59

Target from line B = 116.70+3.40 = 120.10

Target from line C = 116.70+2.30 = 119

Along with existing resistance levels from prior highs, these figures provide a framework for a long trade.

Managing the trade

Once the daily RSI broke its downtrend line (Figure 2, point 2) at 115.90 (Figure 3, point 1) half the total position size was entered (an approach that allows you to add to a trade when it is moving in your direction) The tightest recommended stop would be under the Feb. 20, 2001, low of 115.31 while a looser stop would be under the Feb. 15, 2001 low of 114.53. (It's advisable to add an additional

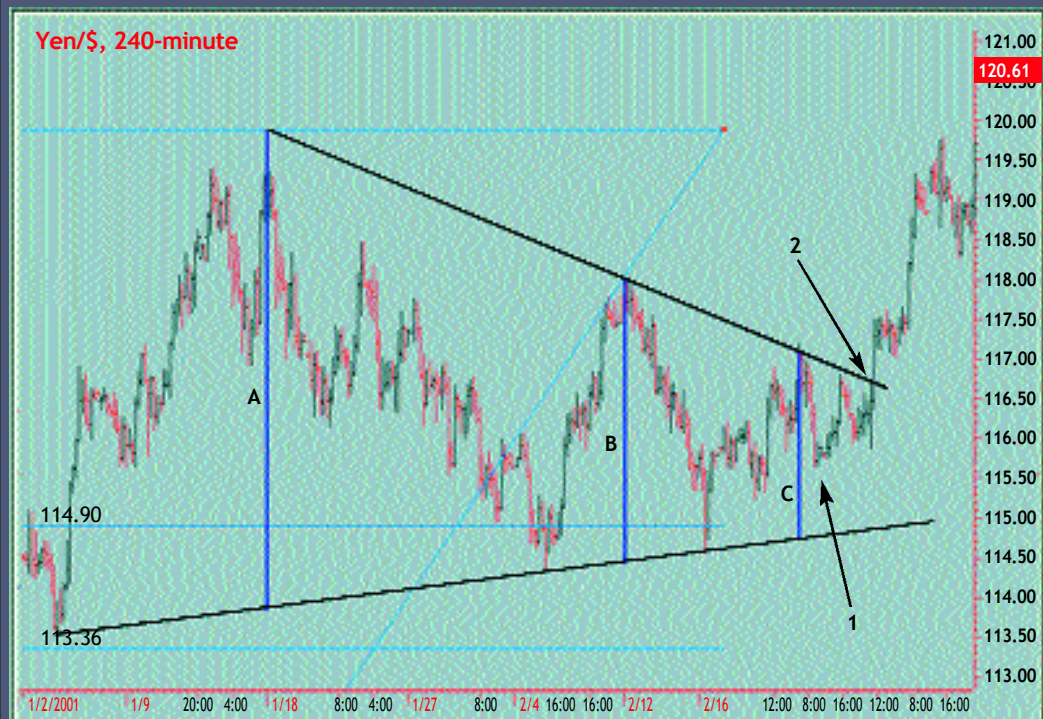
five to 10 pips to give the market a little room to fluctuate.)

The minimum upside target would be for a test of the Jan. 17, 2001, high of 119.89. With an entry at 115.90, the potential reward is 3.99 yen. Using the tighter stop of 115.18, the reward-risk ratio would be 3.99/.72 = 5.54. Even using the wider stop of 114.45, the reward-risk ratio would be 3.99/1.45 or 2.54. A reward-risk ratio greater than 2.5 is usually recommended.

The second half of the position would be added at 116.70 when the continuation pattern was complete (Figure 3, point 2). Stops on long positions should have been raised to just under the Feb. 20, 2001, low of 115.63, the strongest and most recent support level; a price drop below that mark would suggest a false breakout of the continuation pattern. The mini-

FIGURE 3 INTRADAY PERSPECTIVE 1

One way to calculate price objectives based on a continuation pattern is to measure the width of the formation at several points and add or subtract these amounts from the pattern's breakout point. Two or (ideally) three points are chosen, one at the maximum width of the pattern (point A), one near the middle (point B) and one at the minimum width (point C).



Source: DealBook FX

mum likely price target is 119.00, the 2.30 Yen/\$ distance of line C.


The average price for the position was 116.30 $[(115.90 + 116.70)/2]$ with a stop at 115.55, thereby making the risk .75 yen. On a rally to 119, the potential reward was 2.40 Yen, which gives a reward-risk ratio of better than 3:1. While all these calculations may seem tedious, they are an essential part of following a detailed, disciplined trading plan.

In this case, price made it to the first target of 119 as shown in Figure 4 (below), point 1. Half the position should be closed out at this point, because the first objective had been reached and a price pullback was probable. This is important from not only a money management perspective but also from a psychological standpoint, especially in volatile markets like the Yen/\$, in which daily gyrations of 2 to 3 yen are not uncommon. A quarter of the position should then be closed out at the upside projection of 120.10 and the last quarter of the position at 122.59 (point 2).

Figure 4 shows that a number of consolidations/continuation patterns formed during the rally from 116 to 123. If you follow the previously explained measurement guidelines, you will find that the targets from the patterns in all cases were met and in many cases exceeded. Be aware that on a daily basis after three or four continuation patterns within a trend, the likelihood of a trend change increases.

On the remainder of the position, a trailing stop should be used. In early April there was a technical reason to sell. The market had reached the 126.80 level (after point 2 on Figure 1), at which point the weekly RSI negatively diverged from price, dropping while price continued to rise. This was a strong indication an important high might be forming. A negative divergence was also appeared in Figure 2, indicated by line D.

Working within a framework

Following the unfolding of chart patterns on different time frames, along with a momentum indicator such as the RSI, provides technical traders with setups that confirm breakouts and techniques for establishing profit targets. Correctly trading the continuation patterns can provide more consistent gains as both the risk and the reward can objectively be determined. 

For more information on the author, see p. 12.

The Fibonacci series

The Fibonacci series is a number progression in which each successive number is the sum of the two immediately preceding it: 1, 2, 3, 5, 8, 13, 21, 34, and so on.

As the series progresses, the ratio of a number in the series divided by the immediately preceding number approaches 1.618, the "golden mean" found in the dimensions of the Parthenon, the Great Pyramid, and many natural phenomena. The inverse, .618 (.62), has a similar significance.

Some traders use fairly complex variations of Fibonacci number to generate price forecasts, but a basic approach is to use ratios derived from the series to calculate likely price targets.

For example, if a stock broke out of a trading range and rallied from 25 to 55, potential retracement levels could be calculated by multiplying the distance of the move (30 points) by Fibonacci ratios – say, .38, .50 and .62 – and then subtracting these results from the high of the price move. In this case, retracement levels of 43.6 $[55 - (30 \times .38)]$, 40 $[55 - (30 \times .50)]$ and 36.4 $[55 - (30 \times .62)]$ would result.

FIGURE 4 INTRADAY PERSPECTIVE 2

Several consolidations/continuation patterns formed during the rally from 116 to 123. In each case, the pattern-based price targets were met or exceeded.

