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PRECISION PROFITS

Pivot Strategy Guide

By Michael Carr

The Pivot strategy is based on the idea of pivot points. These were values that floor traders calculated every morning to develop expectations for the day's trading.

Pivot points use the prior day's high, low, and close to identify potential breakout levels along with possible areas of support and resistance. There are several types of pivot points. This strategy uses a simple calculation to identify potential breakouts.

Before turning to that, let's look at the original implementation.

Calculating Pivot Point Levels

Floor traders found pivot points with a simple formula. The first step is to find a value known as the typical price (TP):

(1) TP = ((high + low + close) / 3)

Before looking at a chart, let's consider the math behind the typical price:

High = 20

Low = 10

Close = 15

TP = (20 + 10 + 15) / 3 = (45) / 3 = 15

Pivot high = (15*2) – 10 = 30 – 10 = 20

Pivot low = (15*2) – 20 = 30 – 20 = 10

Because of the symmetry of the high and low around the close, in this special case, tomorrow's pivot points are equal to today's high and low. Let's look at one more example without symmetry.

High = 22.10

Low = 17.50

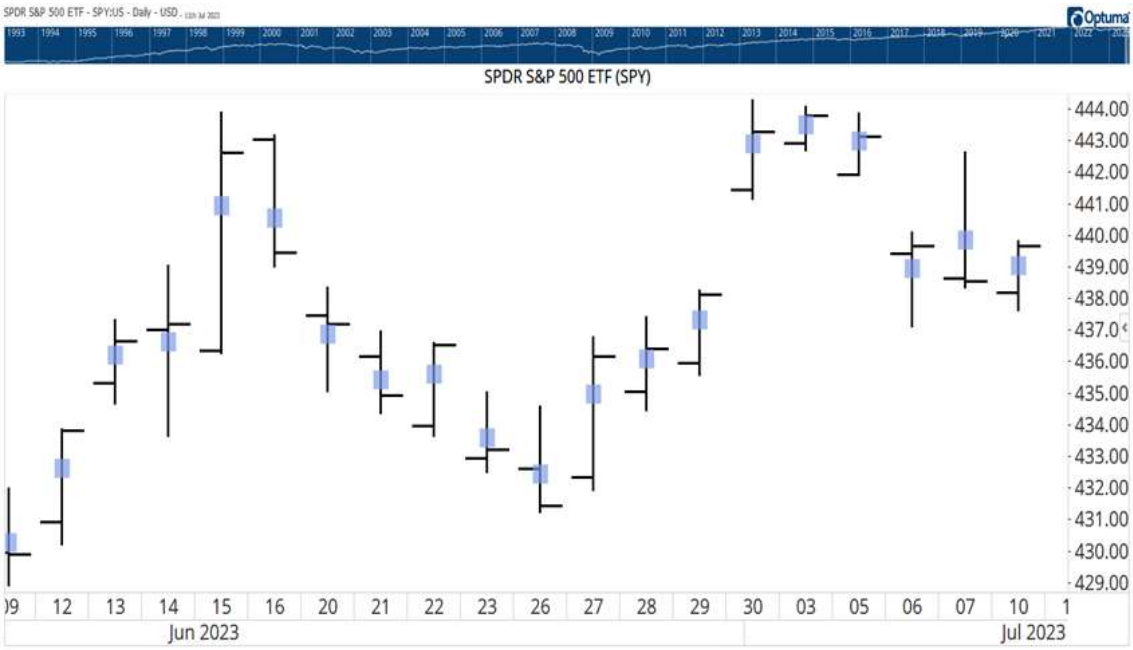
Close = 18.01

TP = (22.10 + 17.50 + 18.01) / 3 = (57.61) / 3 = 19.20

Pivot high = (19.20*2) – 18.01 = 38.40 – 18.01 = 20.39

Pivot low = (19.20*2) – 22.10 = 38.40 – 22.10 = 16.30

The typical price for the SPDR S&P 500 ETF Trust (NYSE: SPY) is shown in the chart below.



The typical price should be nearer the high on strong up days and closer to the low on strong down days. The value of the typical price is used to find pivot points.

The typical price is multiplied by two. The low and high are then subtracted from that to find the first pivot points.

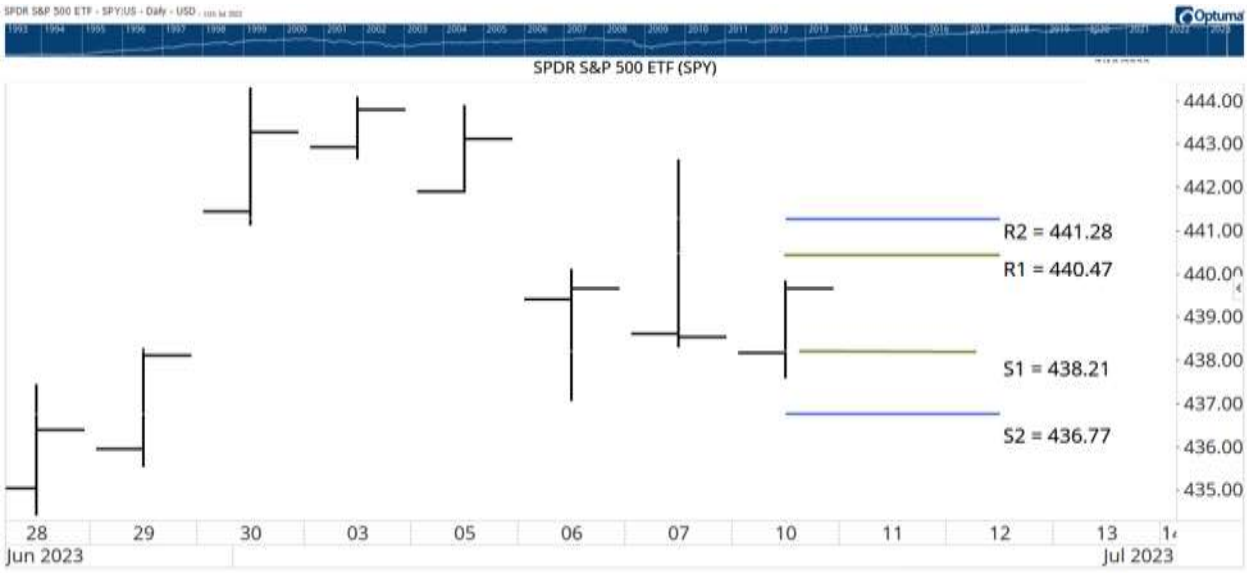
(2) Pivot high = (TP*2) – low
(3) Pivot low = (TP*2) – high

In the formulas:

- The typical price is used as a representative value of the day's trading activity. If being developed today, pivot points could use the volume-weighted average price (VWAP). But this concept dates back to the time when math was done with pencil and paper and the formulas were kept simple.
- To find the pivots, the typical price is multiplied by 2 because we will be subtracting the high or low from it. If we don't multiply it by 2, the values will be too far from the price action to be meaningful.

- The low is subtracted from the typical price (*2) to obtain a higher value than that found by subtracting the high. That's why the pivot high is based on the low. Likewise, the pivot low is based on the high.

Next, let's look at a chart to show the values for SPY on a recent day.



This chart shows the pivot points as R1 and S1. Floor traders expected resistance at the pivots. A break of resistance would set up a move to the next level, labeled R2 and S2 on the chart. The formulas for those values are:

R2 = TP + (High - Low)

S2 = TP - (High - Low)

It's also possible to find additional pivot points, for example, R3, S3, R4 and S4. For this strategy, we will limit ourselves to R1 and S1. But for the sake of completeness:

R3 = R2 + (High – Low)

S3 = S2 – (High – Low)

R4 = R3 + (High – Low)

S4 = S3 – (High – Low)

Pivot Strategy

This strategy follows the usual Trade Room philosophy of simplicity.

TP is calculated with the true high and the true low. These values represent the most bullish and bearish extremes of price action. Most days, this won't make a difference.

- ✓ Pivot high = ((True High + True Low + Close) / 3 * 2) - True Low
- ✓ Pivot Low = ((True High + True Low + Close) / 3 * 2) - True High

Just the first two pivots are used. Calls are entered if the price exceeds the pivot high (R1).

Puts are entered when prices fall below S1.

At-the-money options are used. To determine the call strike price, round down. For example, if the price of SPY is $441.86, use a $441 call. Round up for put strike prices. With SPY at $441.36, use a $442 put.

This strategy will trade options expiring the next day. You can use the option with the same strike price expiring the same day if you prefer.

To close trades:

- Use a profit target of 75%.
- Use a stop based on the price action. These vary from day-to-day based on the price action. As an example:
  - If a call is entered at R1, close the trade if SPY falls below the previous close.
  - If a call is added at R2, close the trade if SPY falls below R1.
  - If a put is entered at S1, close the trade if SPY rises above the previous close.
  - If a put is added at S2, close the trade if SPY rises above S1.
- Close trades near the end of the day. Within a half of the close is a general guideline.

Variations to strategy:

- More aggressive traders can hold positions until the end of the day, foregoing stops and targets.
- The strategy could be applied to QQQ. It could also be applied to any actively traded stock. However, options on individual stocks expire on Friday. Daily options are not available.

There are other variations of the strategy. It's also possible to add some discretion to this strategy. This is my personal approach:

- I don't expect trades every day.
- Review R and S levels. Consider whether or not there is important resistance or support near those values. For example, there could be resistance from a previous advance near R2. Or S1 may coincide with the low of two previous declines. If there are additional factors to consider, like longer-term support or resistance levels, these add weight to the levels.
- It is possible momentum could be at an extreme, or another technical indicator like a divergence is present. These factors are not important to this strategy. This strategy is based solely on price action.

- If the open is above R1 or below S1 and there is no news, wait. From this level, prices can trend, reverse, or drift.
- Reversals after a strong open — a move below R2 or above S2 — are strong signals.
- If the open is between R1 and S1, set alerts to trade at those levels. Intraday breakouts seem to have a higher probability of success than moves at the open.

This strategy is similar to opening range breakout (ORB). Some traders may not be comfortable with adding additional risk in SPY to their portfolios.

So that is a factor to consider when deciding if the pivot strategy is right for you. Pivots can also be integrated with our ORB strategy.

Regards,

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