

## Pivot points

As more features become available on commonly available charting software, we receive more questions about them. We are not sure what some of you are using these days, but 'what are pivot points?' is becoming an increasingly asked question, here we provide an answer.

As suggested by it's name, a pivot point is a point of rotation. It is used to determine support and resistance levels predominantly for intraday trading. It consists of five price points; the pivot point, first level resistance, first level support and second level resistance and second level support.

These points are generally calculated using the previous days trading, although there was one method that took into account the present days open. They are used to determine the markets trend, for example if the price crosses up through the pivot point, then the market is deemed bullish. If the price falls through the pivot point the market will be deemed bearish. You should bear in mind that these are very short term trends.

Pivot points and the support and resistance levels are also used by some to enter trades, particularly when an instrument is range bound. An example of this could be where a trader goes long following the price breaking through the pivot point, he might use one of the support levels to decide where to put his stop.

I came across a number of different calculations that are used to determine the points although they all seem to agree on at least one common method using the high, low and close price of the previous days trading.

I will first take you through the calculations then show you the application.

First you need to calculate the pivot point (PP) itself. This is simply a matter of taking the days high, low and close price, adding them together and dividing by three. Thus for the example I am going to use, this would equate to;

High = 68.34 Low = 66.93 Close = 67.17  
Thus  $PP = (68.34 + 66.93 + 67.17) / 3 = 67.48$

The rest of the calculations are as per the formula to the right of this page. Of course if you are like me and cannot be bothered doing it manually, you can of course email me and I will send you my spreadsheet.

### TRADING EXAMPLES

Taking the chart to the right I have drawn on the pivot point and support and resistance levels for the 8th February.

As the price broke above the pivot point this would be a bullish signal and could be a buy at say 67.55. the initial target would be the first resistance point (RP1) at 68.03 giving a 48 point move. (Note this example is using Caterpillar, one of our favourite day trading stocks which can be spreadbet).

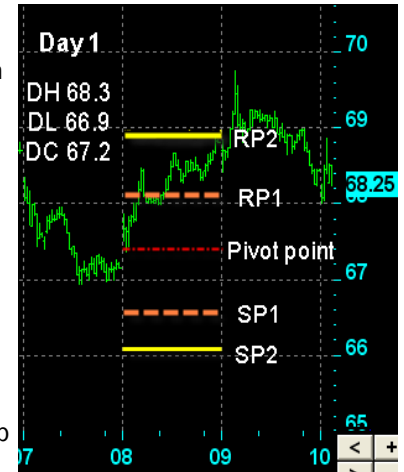
When it broke through the RP1, half of the position could have been closed and the stop moved up to the pivot point. This means whatever happens you have locked in a profit. The remaining trade is left to run and the stop moved up to just below the RP1 as the price heads for the second resistance level RP2. This will now safeguard even more profit. Finally as the price hits RP2 and the evening draws in, it is time to close the position at say 68.60. Using a modest initial bet of £2 per point that would return £153. Even if we take off £30 to allow for the spreads, it is a reasonable return for the risk.

Next, a trade that was looking like a set up as it was just short of a key fibonacci extension level of 161.8%. The combination of using the pivot point as a confirmation worked well. It was a short from the word go, with the price opening below the pivot point and continuing right through both levels of support.

An entry at 74.45 with half the position closed at the first level of support at 73.98 gave us 47 points immediately. With the second level of support being reached, the stop would be moved to just above this level to maximize the profit. With the price coming back to fill the gap it was time to exit at 73.00 and 145 points.

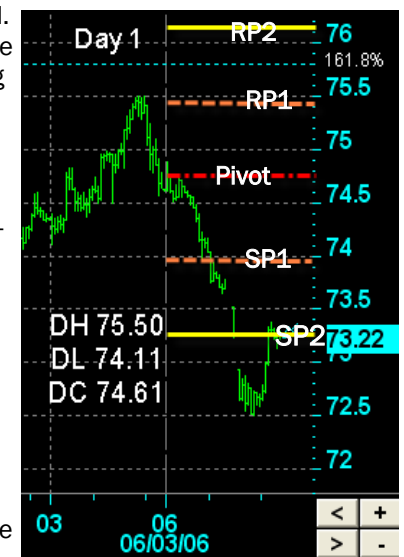
In conclusion pivot points can be used with some success for day trading. Some traders use them over longer time scales using weekly or even month periods to carry out the calculations. Personally I prefer using fibonacci but the combination may work.

# Economy



Calculation  
 $PP = (DH + DL + DC) / 3$   
 $RP1 = (PP \times 2) - DL$   
 $RP2 = PP + (DH - DL)$   
 $SP1 = (PP \times 2) - H$   
 $SP2 = PP - (DH - DL)$

Where  
 Pivot Price = PP  
 Resistance price 1 = RP1  
 Resistance price 2 = RP2  
 Support Price 1 = SP1  
 Support price 2 = SP2  
 Days high = DH  
 Days low = DL  
 Days close = DC



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