

## Overbought/Oversold RSI Levels

The Relative Strength Index (RSI), developed by J. Welles Wilder, Jr. is an overbought/oversold oscillator that compares an entity's performance to itself over a period of time. It should not be confused with the term "relative strength" which is the comparison of one entity's performance to another. We recommend using 5 and 14 periods as the parameter. The RSI (5) of DIA, SPY and QQQQ will be updated on a daily basis on the blog (Crowder's Corner).

	<u>Dow Jones (DIA) and S&amp;P 500 (SPY)</u>	<u>Nasdaq 100</u>
<b>Very Overbought</b>	Greater than or equal to 80.0	Greater than or = to 85.0
<b>Overbought</b>	Greater than or equal to 70.0	Greater than or = to 75.0
<b>Neutral</b>	Between 30.0 and 70.0	Between 30 and 75.0
<b>Oversold</b>	Less than or equal to 30.0	Less than or equal to 30
<b>Very Oversold</b>	Less than or equal to 20.0	Less than or equal to 20.0

Generally, when the RSI Wilder (5) and (14) exceeds 70.0, the underlying index is considered to be overbought, and when the index falls below 30.0 the underlying is considered to be oversold.

Once prices have reached overbought or oversold levels a price reversal is usually imminent. Therefore, in most cases, investors buy puts when the RSI exceeds 70 and calls when the RSI falls below 30. Our guidelines are slightly different.

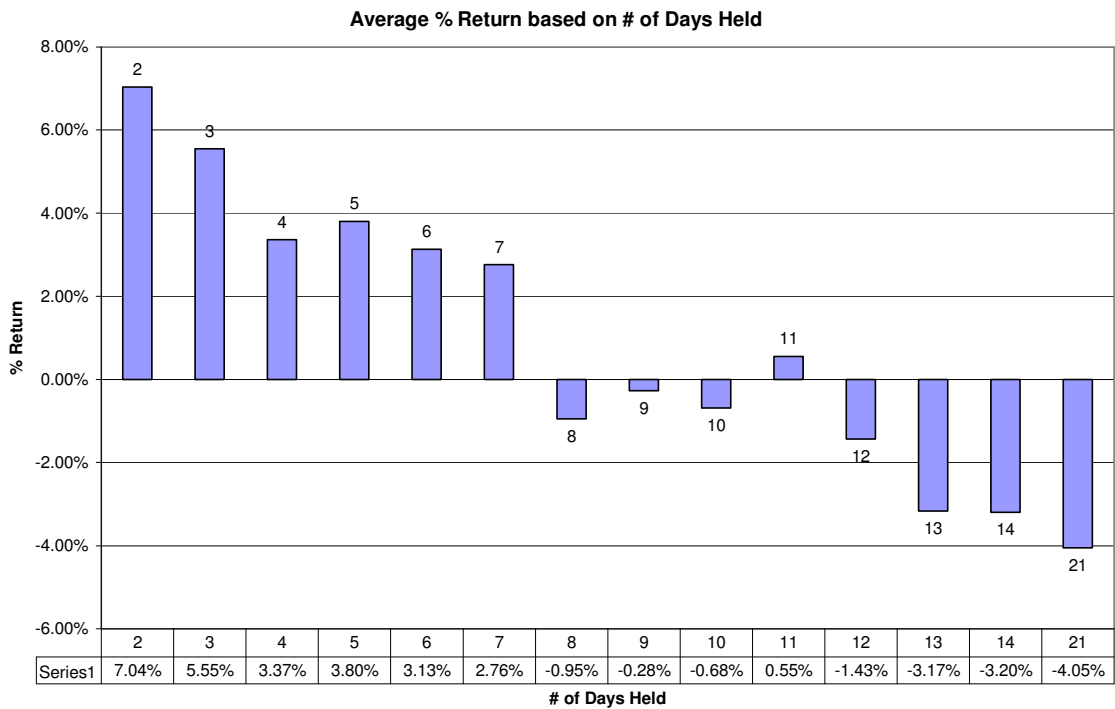
Vaughn Okumura, founder of the now defunct [www.vtoreport.com](http://www.vtoreport.com), outlined the RSI Wilder (5) on his site and stated that it was one of his favorite short-term strategies. He kept a record on the site, and his gains from 2/21/97 through 2/03/06 were in excess of 384%. He achieved these remarkable gains by only trading the QQQQ. Below is the signal that he follows.

### Signal:

Buy the Nasdaq 100 Trust (QQQQ) when the 5-day RSI closes below 30.0  
 Sell the Nasdaq 100 Trust (QQQQ) when the 5-day RSI closes above 50.0.

No one can argue the success of Mr. Okumura's chosen signals. In the past, following his strategy has been extremely profitable. However, after back-testing the results on RSI we have found some interesting results that make the strategy even more effective.

The strategy requires holding the underlying QQQQ until the sell signal is triggered, which is when the 5-day RSI closes above 50.0. So we back-tested to see if the amount of days held gave us any insight as to where the trade was headed. We happened to find some interesting discoveries.



As the chart shows, once the underlying QQQQ is held for 7 or more days the chance of success for the trade diminishes. Therefore, when using the RSI as a signal for placing a trade, it is best to only hold the underlying of choice for seven days. Similar results were found on some other highly liquid ETF's such as SPY and DIA.

Another interesting find was discovered when we tested the success of buying calls when QQQQ was oversold versus buying puts when the underlying was oversold.

According to Mr. Okumura's signal, he only places a trade when the underlying QQQQ falls below 30.0 (oversold). The reason for this is that the chance of success is greater when the index is oversold as opposed to overbought.

This where the RSI (14) comes into play.

The RSI (14) takes longer to reach oversold and overbought levels than the RSI (5). Therefore, we prefer to wait until the RSI (14) reaches overbought territory to buy a put. Hopefully, I can simplify our guidelines below.

### **Trading Guidelines using RSI with options**

1. Buy an at-the-money call, either one or two months out (depends on when options expiration falls), when the underlying ETF (DIA, QQQQ, SPY, etc.) reaches oversold territory. To increase the chance of success, only buy a call when the underlying ETF reaches very oversold. Sell the underlying of choice once the RSI (5) reaches 50.0. If the underlying of choice does not reach 50.0 in seven days sell the call.
2. Buy an at-the money put, either one or two months out (depends on when options expiration falls), when the underlying ETF's (DIA, QQQQ, SPY, etc.) RSI (5) reaches **very overbought** territory. The ETF's RSI (14) should be in overbought territory. Sell the underlying of choice as soon as a 10%-15% profit can be taken on the put option. If the underlying of choice does not reach the profit target in 3 days sell the put.
3. Make sure that a stop-loss is placed when making either trade. We prefer to have our stop-loss set 30% below the purchase price.

If you have any suggestions or questions regarding this report please do hesitate to email us at [info@crowderinvestments.com](mailto:info@crowderinvestments.com).

