

Connors Research Trading Strategy Series

Options Trading with ConnorsRSI

By

Connors Research, LLC

Laurence Connors

Cesar Alvarez

Matt Radtke

Copyright © 2012, Connors Research, LLC.

ALL RIGHTS RESERVED. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher and the author.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold with the understanding that the author and the publisher are not engaged in rendering legal, accounting, or other professional service.

Authorization to photocopy items for internal or personal use, or in the internal or personal use of specific clients, is granted by Connors Research, LLC, provided that the U.S. \$7.00 per page fee is paid directly to Connors Research, LLC, 1-973-494-7333.

ISBN 978-0-9886931-1-1

Printed in the United States of America.

Disclaimer

By distributing this publication, Connors Research, LLC, Laurence A. Connors, Cesar Alvarez and Matt Radtke (collectively referred to as "Company") are neither providing investment advisory services nor acting as registered investment advisors or broker-dealers; they also do not purport to tell or suggest which securities or currencies customers should buy or sell for themselves. The analysts and employees or affiliates of Company may hold positions in the stocks, currencies or industries discussed here. You understand and acknowledge that there is a very high degree of risk involved in trading securities and/or currencies. The Company, the authors, the publisher, and all affiliates of Company assume no responsibility or liability for your trading and investment results. Factual statements on the Company's website, or in its publications, are made as of the date stated and are subject to change without notice.

It should not be assumed that the methods, techniques, or indicators presented in these products will be profitable or that they will not result in losses. Past results of any individual trader or trading system published by Company are not indicative of future returns by that trader or system, and are not indicative of future returns which be realized by you. In addition, the indicators, strategies, columns, articles and all other features of Company's products (collectively, the "Information") are provided for informational and educational purposes only and should not be construed as investment advice. Examples presented on Company's website are for educational purposes only. Such set-ups are not solicitations of any order to buy or sell. Accordingly, you should not rely solely on the Information in making any investment. Rather, you should use the Information only as a starting point for doing additional independent research in order to allow you to form your own opinion regarding investments.

You should always check with your licensed financial advisor and tax advisor to determine the suitability of any investment.

HYPOTHETICAL OR SIMULATED PERFORMANCE RESULTS HAVE CERTAIN INHERENT LIMITATIONS. UNLIKE AN ACTUAL PERFORMANCE RECORD, SIMULATED RESULTS DO NOT REPRESENT ACTUAL TRADING AND MAY NOT BE IMPACTED BY BROKERAGE AND OTHER SLIPPAGE FEES. ALSO, SINCE THE TRADES HAVE NOT ACTUALLY BEEN EXECUTED, THE RESULTS MAY HAVE UNDER- OR OVER-COMPENSATED FOR THE IMPACT, IF ANY, OF CERTAIN MARKET FACTORS, SUCH AS LACK OF LIQUIDITY. SIMULATED TRADING PROGRAMS IN GENERAL ARE ALSO SUBJECT TO THE FACT THAT THEY ARE DESIGNED WITH THE BENEFIT OF HINDSIGHT. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN.

Connors Research
10 Exchange Place
Suite 1800
Jersey City, NJ 07302

Table of Contents

Section 1 Options Basics	5
Section 2 The ConnorsRSI Indicator	8
Section 3 ConnorsRSI Option Strategy Rules	15
Section 4 Test Results	24
Section 5 Selecting Strategy Variations	31
Section 6 Additional Thoughts	34

Section 1

Options Basics

WWW.TRADING-SOFTWARE-COLLECTION.COM
ANDREYBBRV@GMAIL.COM SKYPE: ANDREYBBRV

This document cannot be reproduced without the expressed written permission of Connors Research, LLC.
Copyright © 2012, Connors Research, LLC. All Rights Reserved.

Option trading was once the realm of professional money managers looking for efficient mechanisms to hedge their portfolios. Over the past decade, however, millions of retail investors have pushed options into the mainstream. In response to this demand, online brokerages have integrated options into their trading platforms, so that entering, tracking and exiting option positions is just as straightforward as performing those operations for equities.

One reason for the popularity of options is the wide variety of purposes for which they can be used, including:

- Hedging against losses
- Income generation via credit spreads or covered call writing
- Highly leveraged speculation
- Proxies for buying or shorting equities (stocks and ETFs)

In this Guidebook, we will focus on the final item in the list above: using options as a proxy for buying equities, specifically the *SPDR S&P 500 ETF* which is commonly referred to by its ticker symbol, [SPY](#). In this context, the single biggest advantage of using options is that it allows us to capture the gains from a price change in the underlying security (SPY) while risking considerably less capital. Furthermore, as you will see in Section 3, we apply a systematic, quantified approach to selecting which options to trade as well as to the timing of our entries and exits. Well-defined strategies such as the one you'll learn here are scarce in the options industry, which is a major contributor to options' reputation as "risky" investments among many retail traders.

A complete options primer is beyond the scope of this Guidebook. Before we go on, however, it will be helpful to review a few terms and concepts related to options.

The owner of a **call option** has the right, but not the obligation, to purchase the underlying security (stock or ETF) at the **strike price** on or before the **expiration date** of the option contract. The value of a call option generally rises as the price of the underlying security rises. A call option is considered to be **In The Money (ITM)** when its strike price is below the price of the underlying security, and **Out of The Money (OTM)** when its strike price is above the price of the underlying security. For example, if the increment between strike prices for SPY options is \$1 and the price of SPY is currently \$142.35, then the first (closest) ITM call option is the one with a strike price of \$142. The first OTM call option is the \$143 strike.

The owner of a **put option** has the right, but not the obligation, to sell the underlying security (stock or ETF) at the **strike price** on or before the **expiration date**. The value of a put option usually rises as the price of the underlying security falls. A put option is considered to be **In The Money (ITM)** when its strike price is above the price of the underlying security, and **Out of The**

Money (OTM) when its strike price is below the price of the underlying security. If the price of SPY is currently \$136.55, then the first (closest) ITM put option is the \$137 strike, and the first OTM put option is the \$136 strike.

Most **option contracts** control 100 shares of the underlying stock or ETF. However, the price quoted by most trading platforms is the price per share. Therefore, the cost of purchasing the option contract is typically 100 times the per-share price, plus commissions. Thus, if a SPY call option has a quoted price of \$1.27, then it will cost you \$127.00 plus commissions to purchase the call option contract. Sometimes you will hear the price of an option referred to as the option's **premium**.

All option contracts have an **expiration date**, after which the contract is no longer valid. The three most common types of option expirations are:

- **Weekly:** Contract expires on the last trading day of the week, typically a Friday.
- **Monthly:** Contract expires on the Saturday following the third Friday of the month, which means that the last day for trading the option is the third Friday.
- **Quarterly:** Contract expires on the last trading day of the calendar quarter.

In this Guidebook, we will be focused entirely on option contracts with monthly expirations. The monthly contract with the nearest expiration date is known as the **front month**. For example, if today is June 10th, then the front month contract is the one which expires in the third week of June. The next available expiration (in this case July), is known as the **second month**. The day after June expiration, July would become the front month and August would become the second month.

Next we'll look at the ConnorsRSI indicator, which forms the centerpiece of our options strategy, and then we'll move on to the actual trading rules.

Section 2

The ConnorsRSI Indicator

WWW.TRADING-SOFTWARE-COLLECTION.COM

ANDREYBBRV@GMAIL.COM

SKYPE: ANDREYBBRV

This document cannot be reproduced without the expressed written permission of Connors Research, LLC.
Copyright © 2012, Connors Research, LLC. All Rights Reserved.

Larry Connors (and later, Connors Research) has been developing, testing, and publishing quantified trading strategies since the mid-1990's. During that time, we have had the opportunity to evaluate a great number of different technical indicators and to assess their effectiveness in predicting future price action. Now we've taken the next step and created an indicator of our own: ConnorsRSI. The purpose of this Guidebook is to describe the indicator itself and also to provide a well-defined, quantified trading strategy that utilizes this new indicator.

ConnorsRSI is a composite indicator consisting of three components. Two of the three components utilize the Relative Strength Index (RSI) calculations developed by Welles Wilder in the 1970's, and the third component ranks the most recent price change on a scale of 0 to 100. Taken together, these three factors form a *momentum oscillator*, i.e. an indicator that fluctuates between 0 and 100 to indicate the level to which a security is overbought (high values) or oversold (low values).

Before we discuss how to calculate ConnorsRSI, let's review Wilder's RSI. RSI is a very useful and popular momentum oscillator that compares the magnitude of a stock's gains to the magnitude of its losses over some look-back period. Wilder himself believed that 14 periods was the ideal look-back. We often use the shorthand notation RSI(14) for the 14-period RSI. The formula below computes RSI(14) for a series of price changes:

$$RSI = 100 - \frac{100}{1 + RS}$$

RS = Average Gain / Average Loss

Average Gain = [(previous Average Gain) x 13 + current Gain] / 14
 First Average Gain = Total of Gains during past 14 periods / 14

Average Loss = [(previous Average Loss) x 13 + current Loss] / 14
 First Average Loss = Total of Losses during past 14 periods / 14

Note: "Losses" are noted as positive values.

RS = Average of x days up closes / Average of x days down closes

If we wanted to compute RSI for a different number of periods (N), then we would replace 14 in the formula above with N, and replace 13 with N-1. Regardless of the number of periods used in the calculation, the result will always be a number between 0 and 100. Traders who use RSI(14) typically look for values greater than 70 to identify overbought conditions, and values less than 30 to indicate oversold conditions.

Our previous research has shown that using shorter look-back periods makes RSI more effective in predicting short-term price movements. We have published many strategies that utilize RSI(2), as well

as several that use RSI(3) and RSI(4). Changing the number of periods also has an effect on the RSI levels that best identify overbought and oversold conditions. For example, an RSI(2) value of less than 10 is usually a reliable indicator of an oversold condition, while an RSI(2) value over 90 is a good benchmark for an overbought condition.

Now let's turn our attention back to ConnorsRSI. As mentioned previously, ConnorsRSI combines three components, and as you might guess, they are all elements that our research has repeatedly shown to have significant predictive ability:

Price Momentum: As we just discussed, RSI is an excellent way to measure price momentum, i.e. overbought and oversold conditions. By default, ConnorsRSI applies a 3-period RSI calculation to the daily closing prices of a security. We will refer to this value as RSI(Close,3).

Duration of Up/Down Trend: When the closing price of a security is lower today than it was yesterday, we say that it has "closed down". If yesterday's closing price was lower than the previous day's close, then we have a "streak" of two down close days. Our research has shown that the longer the duration of a down streak, the more the stock price is likely to bounce when it reverts to the mean. Likewise, longer duration up streaks result in larger moves down when the stock mean reverts. In effect, the streak duration is another type of overbought/oversold indicator.

The problem is, the number of days in a streak is theoretically unbounded, though we could probably place some practical limits on it based on past experience. For example, we might observe that there have been very few instances of either an up streak or a down streak lasting for more than 20 days, but that still doesn't get us to a typical oscillator-type value that varies between 0 and 100.

The solution is two-fold. First, when we count the number of days in a streak, we will use positive numbers for an up streak, and negative numbers for a down streak. A quick example will help to illustrate this:

Day	Closing Price	Streak Duration
1	\$20.00	
2	\$20.50	1
3	\$20.75	2
4	\$19.75	-1
5	\$19.50	-2
6	\$19.35	-3
7	\$19.35	0
8	\$19.40	1

The closing price on Day 2 is higher than on Day 1, so we have a one-day up streak. On Day 3, the price closes higher again, so we have a two-day up streak, i.e. the Streak Duration value is 2. On Day 4, the closing price falls, giving us a one-day down streak. The Streak Duration value is

negative (-1) because the price movement is down, not up. The downward trend continues on Days 5 and 6, which our Streak Duration reflects with values of -2 and -3. On Day 7 the closing price is unchanged, so the Streak Duration is set to 0 indicating neither an up close nor a down close. Finally, on Day 8 the closing price rises again, bringing the Streak Duration value back to 1.

The second aspect of the solution is to apply the RSI calculation to the set of Streak Duration values. By default, ConnorsRSI uses a 2-period RSI for this part of the calculation, which we denote as $RSI(Streak,2)$. The result is that the longer an up streak continues, the closer the $RSI(Streak,2)$ value will be to 100. Conversely, the longer that a down streak continues, the closer the $RSI(Streak,2)$ value will be to 0. Thus, we now have two components -- $RSI(Close,3)$ and $RSI(Streak,2)$ -- that both use the same 0-100 scale to provide a perspective on the overbought/oversold status of the security we're evaluating.

Relative Magnitude of Price Change: The final component of ConnorsRSI looks at the size of today's price change in relation to previous price changes. We do this by using a Percent Rank calculation, which may also be referred to as a "percentile". Basically, the Percent Rank value tells us the percentage of values in the look-back period that are less than the current value.

For this calculation, we measure price change not in dollars and cents, but as a percentage of the previous day's price. This percentage gain or loss is typically referred to as the one-day return. So if yesterday's closing price was \$80.00, and today's price is \$81.60, the one-day return is $(\$81.60 - \$80.00) / \$80.00 = 0.02 = 2.0\%$.

To determine the Percent Rank, we need to establish a look-back period. The Percent Rank value is then the number of values in the look-back period that are less than the current value, divided by the total number of values. For example, if the look-back period is 20 days, then we would compare today's 2.0% return to the one-day returns from each of the previous 20 days. Let's assume that three of those values are less than 2.0%. We would calculate Percent Rank as:

$$\text{Percent Rank} = 3 / 20 = 0.15 = 15\%$$

The default Percent Rank look-back period used for ConnorsRSI is 100, or $\text{PercentRank}(100)$. We are comparing today's return to the previous 100 returns, or about 5 months of price history. To reiterate, large positive returns will have a Percent Rank closer to 100. Large negative returns will have a Percent Rank closer to 0.

The final ConnorsRSI calculation simply determines the average of the three component values. Thus, using the default input parameters would give us the equation:

$$\text{ConnorsRSI}(3,2,100) = [RSI(Close,3) + RSI(Streak,2) + \text{PercentRank}(100)] / 3$$

The result is a very robust indicator that is more effective than any of the three components used individually. In fact, ConnorsRSI also offers some advantages over using all three components together. When we use multiple indicators to generate an entry or exit signal, we typically set a target value for

each one. The signal will only be considered valid when all the indicators exceed the target value. However, by using an average of the three component indicators, ConnorsRSI produces a blending effect that allows a strong value from one indicator to compensate for a slightly weaker value from another component. A simple example will help to clarify this.

Let's assume that Trader A and Trader B have agreed that each of the following indicator values identify an oversold condition:

- $RSI(\text{Close},3) < 15$
- $RSI(\text{Streak},2) < 10$
- $\text{PercentRank}(100) < 20$

Trader A decides to take trades only when all three conditions are true. Trader B decides to use ConnorsRSI to generate her entry signal, and uses a value of $(15 + 10 + 20) / 3 = 15$ as the limit. Now assume we have a stock that displays the following values today:

- $RSI(\text{Close},3) = 10$
- $RSI(\text{Streak},2) = 8$
- $\text{PercentRank}(100) = 21$
- $\text{ConnorsRSI} = (10 + 8 + 21) / 3 = 13$

Trader A will not take the trade, because one of the indicators does not meet his entry criteria. However, Trader B will take this trade, because the two low RSI values make up for the slightly high PercentRank value. Since all three indicators are attempting to measure the same thing (overbought/oversold condition of the stock) by different mechanisms, it makes intuitive sense to take this "majority rules" approach. More importantly, our research has shown ConnorsRSI to be superior to any other momentum indicator that we've tested.

With any indicator that you use in your trading, it is helpful to know how the indicator behaves, and what it's telling you about the security price. Our goal with ConnorsRSI was to develop a superior momentum oscillator which would produce low values for oversold stocks and ETFs, and high values when those securities are in an overbought state.

To determine whether we had achieved our goal, we ran the following test. We created a universe of approximately 6,000 highly liquid stocks. Starting on January 2, 2001, we looked for every stock in the universe which had the following characteristics on that day:

1. At least 200 days of trading data available
2. Average daily volume over the past 21 days of at least 500,000 shares per day

Each stock that met our criteria was placed in one of twenty different "buckets" corresponding to its ConnorsRSI value at the close of trading on that day. Stocks with ConnorsRSI(3,2,100) values of less than 5 went into the 0 bucket. Those with ConnorsRSI(3,2,100) values greater than or equal to 5 and less than 10 were placed in the 5 bucket, etc. all the way up to the 95 bucket, which contained stocks with Connors RSI values of 95 to 100. This process was repeated for every trading day through July 31, 2012.

This document cannot be reproduced without the expressed written permission of Connors Research, LLC.
Copyright © 2012, Connors Research, LLC. All Rights Reserved.

Next, for each of the 20 buckets we calculated the five-day return of each stock for every day in the test period, and averaged those values for each of the 20 buckets. In simple terms, we determined the typical 5-day price move (as a percentage) of a stock whose ConnorsRSI value fell into a particular bucket.

We expected that stocks that were oversold (those with low ConnorsRSI values) would increase in price, while those that were overbought would decrease in price. As you can see in the table below, this is exactly what happened.

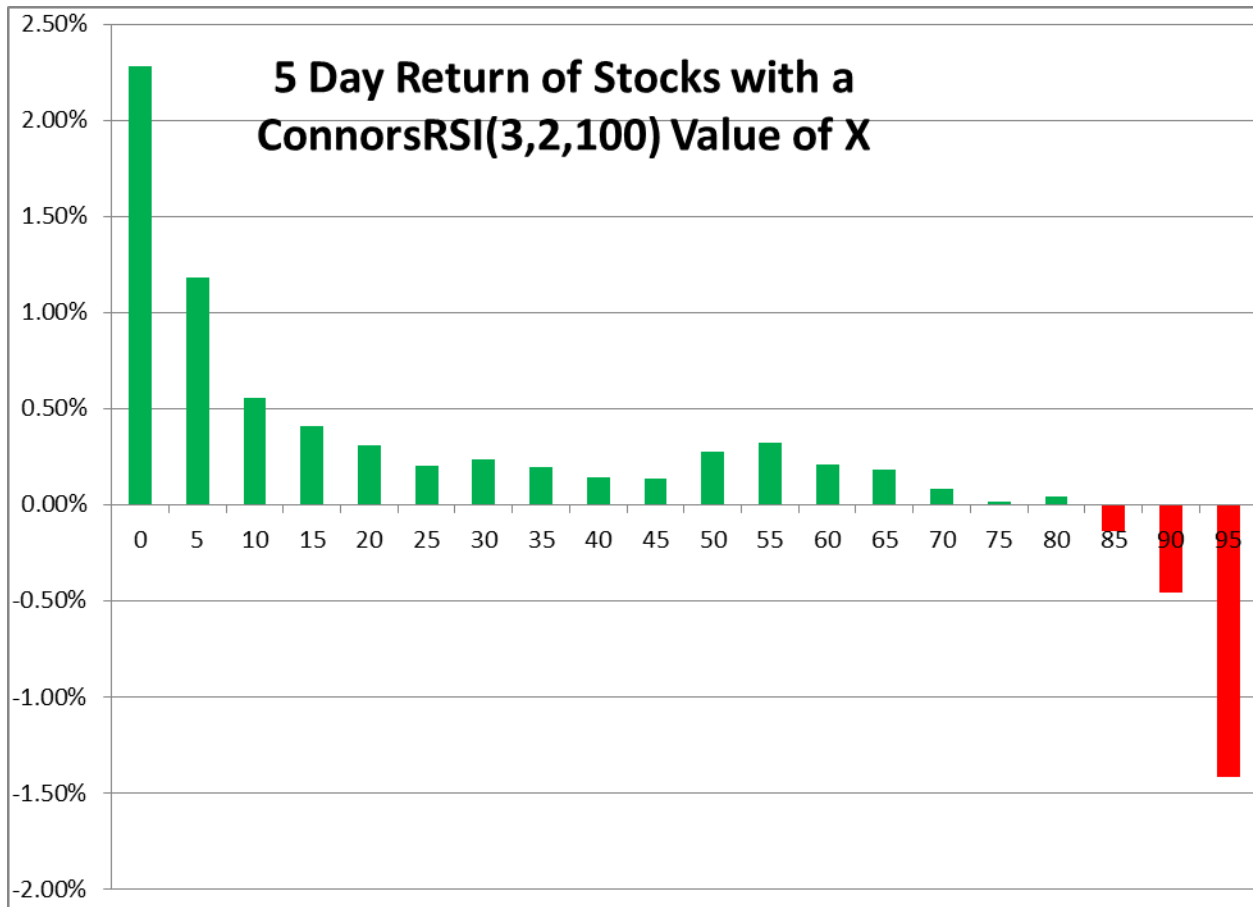
ConnorsRSI(3,2,100) Bucket	5-Day Return
0	2.28%
5	1.18%
10	0.56%
15	0.41%
20	0.31%
25	0.20%
30	0.23%
35	0.20%
40	0.14%
45	0.13%
50	0.28%
55	0.32%
60	0.21%
65	0.18%
70	0.08%
75	0.02%
80	0.04%
85	-0.14%
90	-0.46%
95	-1.42%

You can see that as the ConnorsRSI value goes below 20, the 5-day returns begin to increase substantially. Stocks with a ConnorsRSI value in the range of 0 to 5 (the 0 bucket) experienced an average price increase of 2.28% over the next five trading days.

We see the inverse behavior at the top end of the ConnorsRSI range: as the value moves above 80, the 5-day returns are increasingly negative, with stocks in the 95 bucket showing a 1.42% price decrease over the following five days.

WWW.TRADING-SOFTWARE-COLLECTION.COM
ANDREYBBRV@GMAIL.COM SKYPE: ANDREYBBRV

For those of you who are more visually oriented, the chart below shows the same information as the table above:



Now that we've looked at ConnorsRSI in isolation, let's move on to the ConnorsRSI Option Strategy rules to see how the indicator performs as part of a complete system.

WWW.TRADING-SOFTWARE-COLLECTION.COM
ANDREYBBRV@GMAIL.COM
SKYPE: ANDREYBBRV

This document cannot be reproduced without the expressed written permission of Connors Research, LLC.
Copyright © 2012, Connors Research, LLC. All Rights Reserved.

Section 3

ConnorsRSI Option Strategy Rules

Often when you hear someone refer to option strategies, they're talking about option positions with multiple strikes and/or multiple expirations like vertical spreads, calendar spreads, butterflies, iron condors and a host of others. However, these "strategies" just define a set of related option contracts without any guidelines for profitably entering and exiting trades. In contrast, our definition of "strategy" is a set of quantified entry and exit rules which you can execute precisely time after time. We support these rules with historical test results that allow you to select the variations of the strategy that will best complement your own trading plan.

Options are *derivatives*, which means that they derive their price from other things, like the price of the underlying security and the time remaining until expiration. As we discussed in Section 1, there are also some terms and concepts that are unique to options. If you're new to option trading, these things can make the mechanics of executing an option strategy seem more complex than trading stocks or ETFs. For that reason, we're going to start with a very basic version of the ConnorsRSI Option Trading Strategy. Once we've thoroughly explained the base rules, we'll layer on additional filters and variations to the rules. At the end of this section, we'll summarize the complete set of rules with all possible variations.

To begin, we will use a single entry rule and a single exit rule, as follows:

Entry Rule: When the ConnorsRSI(3,2,100) value of SPY closes below 15, buy the first ITM call option that has at least eight trading days until expiration.

We know from Section 2 that low values of ConnorsRSI are caused by price pullbacks, which typically indicate oversold conditions from which a stock or ETF price will rebound. Thus, the first part of our entry rule is identifying a state in which the price of SPY is likely to increase.

The second part of the entry rule tells us to buy the first call option that is currently "in the money". That means we want to find the call option with the highest strike which is still less than the price of SPY. We'll look at an example of that momentarily. As you may recall, we buy calls because the price of call options generally increases when the price of the underlying security increases.

The final part of the entry rule states that the option contract that we purchase should have at least eight trading days until expiration. Although we have ways to handle the case in which an option contract expires before we want to exit the trade, it makes things simpler if we buy a contract that, in most cases, has a sufficient lifespan to allow our trade to play out without making adjustments.

Exit Rule: When the ConnorsRSI(3,2,100) value of SPY closes above 75, exit the position.

The exit rule is fairly self-explanatory. We are simply waiting for SPY to reach an oversold condition (as identified by a high ConnorsRSI value), which means that the price is unlikely to continue rising for much longer. Therefore, we exit our trade by selling the call options that we purchased.

Let's look at an example of a basic trade.



Chart created in Amibroker. Reprinted courtesy of AmiBroker.com.

Figure 1: SPY Prices for a Trade Using Basic Entry & Exit Rules

The chart above shows prices for SPY during the last half of July, 2012. The red line in the upper pane is the 200-day moving average, or MA(200) of the closing prices of SPY. The blue line in the lower pane shows the ConnorsRSI(3,2,100) value for SPY.

The light blue vertical line marks the currently selected day, which is July 24, 2012. On this day we can see that the ConnorsRSI value has fallen to 14.69, which is below our entry criteria of 15. Our entry rules tell us that this is our signal to buy the first ITM call with at least eight days until expiration. Let's see what that means.

On 7/24/2012, the closing price of SPY was \$133.22. For a call option to be in the money (ITM), its strike price must be below the current price of the underlying instrument (SPY). Since the strike prices on SPY options are one dollar apart, the first ITM strike price is the \$133 strike.

Next we need to decide which expiration month to buy. The July options expired on Friday, July 20th (or technically, on Saturday the 21st), so those are no longer tradable. The next available expiration month is August. On July 24th, there are still 18 trading days until August expiration, so the August options meet our criteria of needing eight or more days until expiration. That means we will buy the SPY calls with a \$133 strike expiring on August 18, 2012. You will often see these referred to as the August 133 SPY calls. Below is the price chart for this option contract.

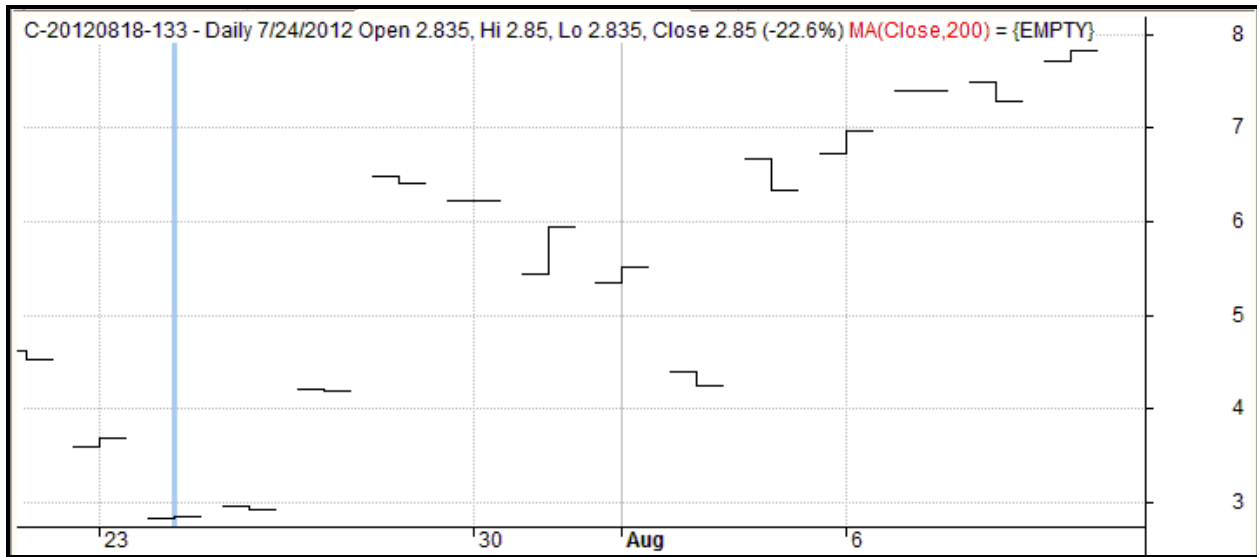


Chart created in Amibroker. Reprinted courtesy of AmiBroker.com.

Figure 2: Option Prices for a Trade Using Basic Entry & Exit Rules

Once again, the light blue vertical bar marks the current day, which is our entry day of July 24th, 2012. The closing price for the call option is \$2.85. It is important to note that option prices are typically quoted on a per share basis, but they are traded on a contract basis, with one contract controlling 100 shares of the underlying security. Thus, to buy one contract of the August 133 SPY calls would cost \$285.00 plus commissions and fees charged by your broker.

Now we'll wait for our exit. Returning to Figure 1, you can see that on the day following our trade entry, the ConnorsRSI value of SPY rises to somewhere around 60. Our exit criterion is a value of 75 or higher, so we just maintain the trade. The next day (July 26th), you can see that the ConnorsRSI value closes slightly over 80; the exact value is 81.67. This is our signal to exit the trade.

Now return to Figure 2. The price chart for the August 133 SPY calls shows that on July 26th, the options closed between \$4 and \$5. The actual value was \$419. That means we will exit our trade for \$419, less commissions and fees. Our gain on this trade, expressed as a percentage, would be:

$$(\$419 - \$285) / \$285 = .4702 = 47.02\%$$

Before we move on, notice how different the stock and options charts are. While stocks and ETF's sometimes gap up or down, it is most common for there to be some overlap between adjacent price bars. In contrast, option prices often move significantly from day to day and especially overnight. Although the dollar amount of the moves may seem small for options, on a percentage basis they can be very large. This is one of the most obvious advantages of using a leveraged instrument like options. Just remember that the leverage sword cuts both ways.

There is one more issue that we need to address before we can consider our most basic set of strategy rules complete: option expiration. We buy option contracts that have at least eight trading days until

expiration so that the majority of our trades will play out before expiration occurs. Even so, there will be occasions when expiration occurs before an exit signal is generated. When this happens, you have two choices: exit the trade or roll to the next month.

Exiting the trade when the option expires is as simple as it sounds. On expiration Friday, you simply sell your call contracts regardless of whether SPY generates an exit signal or not. For better or worse, the trade is now complete.

Rolling is a term frequently used by option traders to indicate that they are replacing one option position with another. In our case, the roll operation is quite straightforward. Near the close of trading on expiration Friday we will sell our about-to-expire call contracts and buy an equal quantity of the call contracts that expire the following month. The strike price of the new options should be the current first ITM strike, which will not necessarily be the same strike as the expiring options. In this way, we can extend the trade until we get a proper exit signal. When we get to the section on test results, you will see that we tested both exiting and rolling at expiration so that you can evaluate which method is best for you.

Now let's begin to expand our basic rules. You've probably guessed by now that there is nothing magical about the ConnorsRSI values 15 and 75. In fact, we tested a variety of entry values for ConnorsRSI ranging from 5 to 20, and a range of exit values from 60 to 80. Let's look at a trade that uses an entry value of 20 and an exit value of 80. This trade will also include an example of rolling, so that you can see how that works.

WWW.TRADING-SOFTWARE-COLLECTION.COM
ANDREYBBRV@GMAIL.COM SKYPE: ANDREYBBRV

WWW.TRADING-SOFTWARE-COLLECTION.COM
ANDREYBBRV@GMAIL.COM
SKYPE: ANDREYBBRV

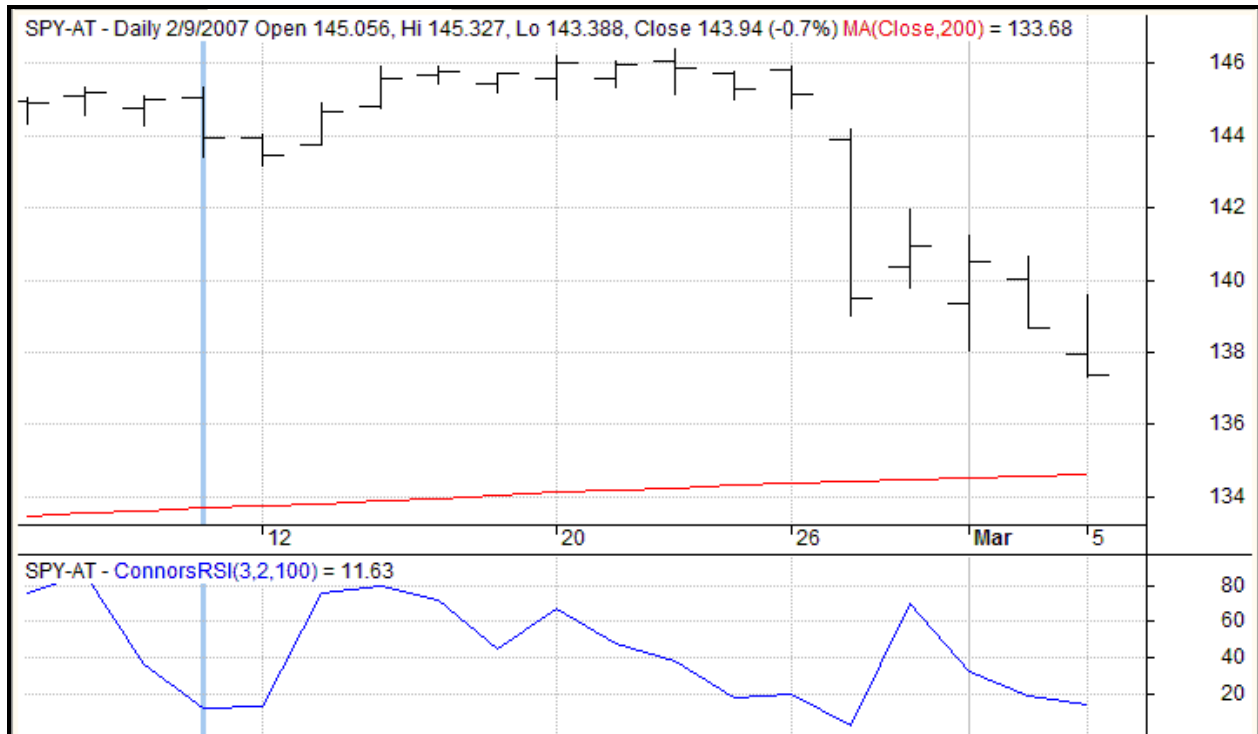


Chart created in Amibroker. Reprinted courtesy of AmiBroker.com.

Figure 3: Entry to Trade #2

As in the previous example, our entry day is marked by the vertical light blue selection line which is set to February 9th, 2007. You can see that on this day the ConnorsRSI value for SPY closed at 11.63, which meets our rule of a value below 20. The price of SPY at the close was \$143.94, so the first ITM strike would be the \$143 strike.

In February 2007, monthly options expired on Saturday the 17th, making Friday February 16th the last day for trading the February options. February 9th was also a Friday, just one week (five trading days) before expiration. Because there were less than eight trading days remaining for the February contracts, we would have bought the options with a March expiration, specifically the March 143 SPY calls. On February 9th, these options closed at \$2.75/share, so it would have cost \$275.00 to buy one contract.

Now that we're in our trade, we're waiting for the ConnorsRSI value to exceed 80 to signal our exit. Notice that the blue ConnorsRSI line in the lower pane of the chart above nearly crosses 80 three days after we entered the trade. The actual value on February 14th was 79.98. If you made your trade decision two minutes before the close, then possibly the ConnorsRSI value would have been above 80, and you would have exited the trade. Our testing, however, assumes that it's possible to execute your trade just as the closing bell sounds, and since the ConnorsRSI value did not exceed our threshold of 80 at the close, we did not exit the trade on February 14th.

As we look ahead to the beginning of March, we can see that the price of SPY holds steady for a few days and then begins to decline. The ConnorsRSI value also falls, and though it bounces a few times it doesn't get above 80. Let's look at a March chart to see how this trade progresses.

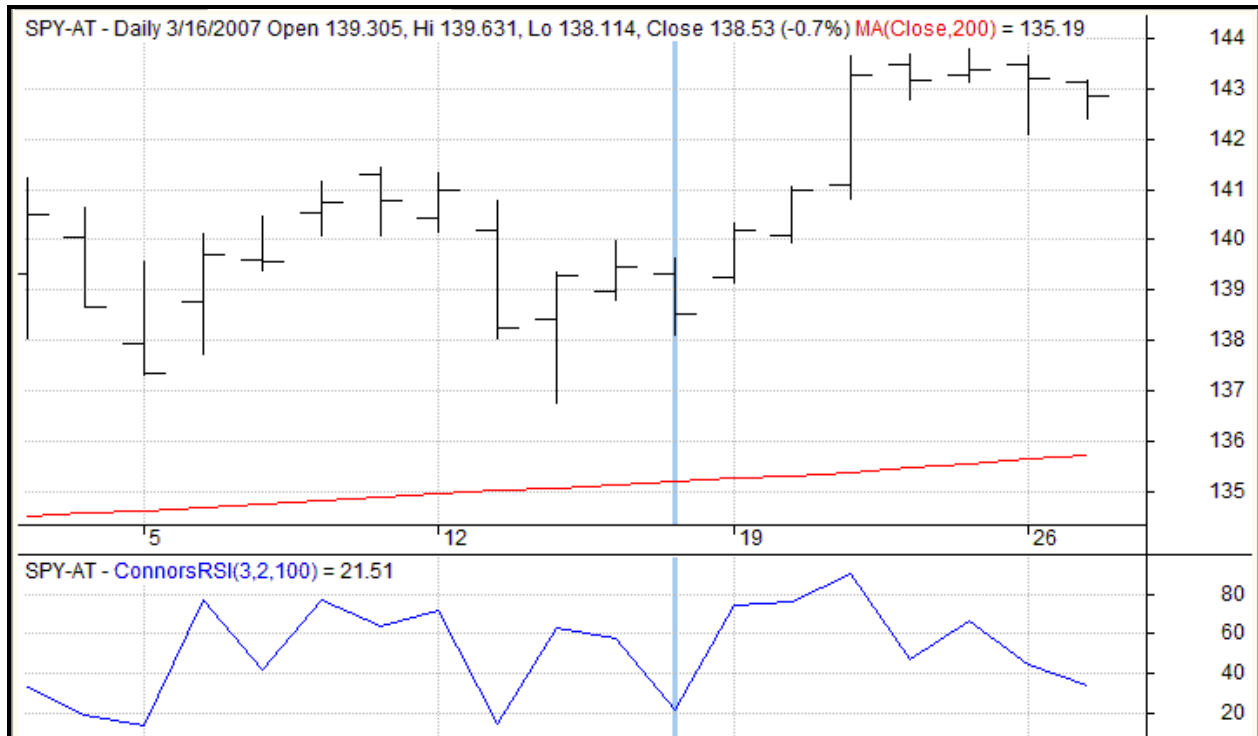


Chart created in AmiBroker. Reprinted courtesy of AmiBroker.com.

Figure 4: Rolling a Trade

The light blue selection bar is now set to March 16th, 2007 which is expiration Friday for March options. As you can see, the ConnorsRSI value of SPY has not yet climbed above 80, which means that we're still in the trade on expiration day. Since SPY closed at a price of \$138.53, which is below our March strike price of \$143, our March option contract will expire worthless and we will lose the entire \$275 that we paid to enter the trade. Remember what we said about the leverage sword cutting both ways?

However, all is not lost as we decided in advance that we would roll any expiring trades. That means that on March 16th we will buy the April options with the \$138 strike price. Here's the chart:

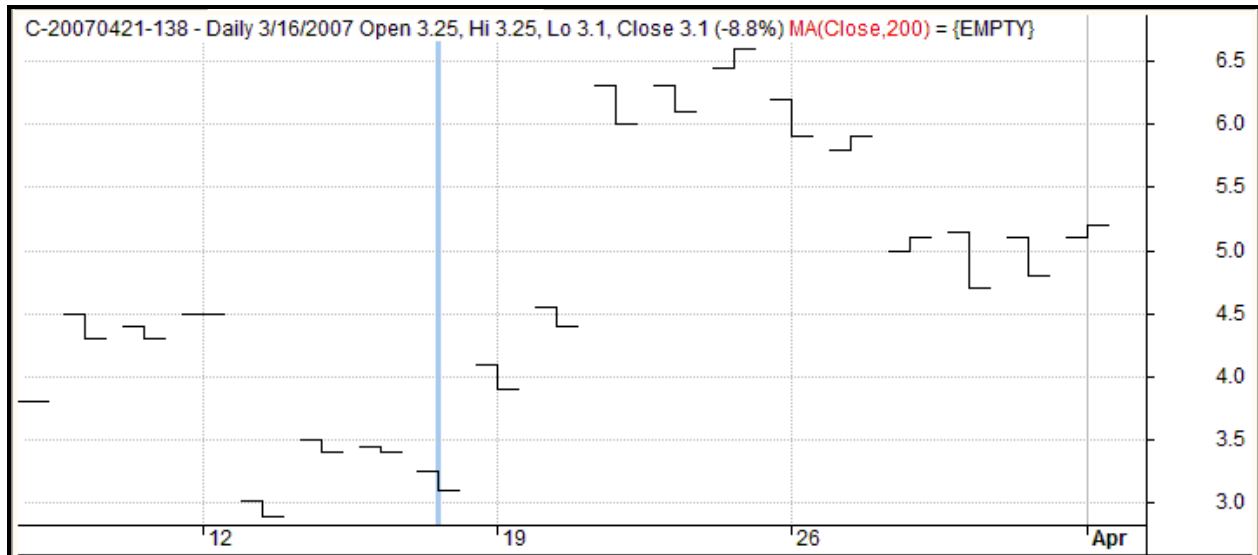


Chart created in Amibroker. Reprinted courtesy of AmiBroker.com.

Figure 5: Option prices for the Roll Trade

We can see that on March 16th, the April 138 SPY calls closed at a price of \$3.10/share, so that's our new entry price for the second phase of this trade.

We're still looking for our exit of a ConnorsRSI value above 80. Returning to Figure 4, we can see that this occurs three trading days after the entry day, which is on Wednesday, March 21st when SPY closes with a price of \$143.29 and a ConnorsRSI value of 89.78. With our exit signal in place, we sell our option contract for \$6.00/share, or \$600 for the contract.

If we hadn't rolled at expiration, the March 143 SPY calls trade would have resulted in a 100% loss. By rolling to the April expiration, the return for the entire, two-phase transaction looks like this:

$$\begin{aligned}
 \text{Total \% Profit} &= [\text{Phase 1 Gain} + \text{Phase 2 Gain}] / [\text{Phase 1 Cost Basis} + \text{Phase 2 Cost Basis}] \\
 &= [(\text{Phase 1 Exit} - \text{Phase 1 Entry}) + (\text{Phase 2 Exit} - \text{Phase 2 Entry})] / [\text{Phase 1 Entry} + \text{Phase 2 Entry}] \\
 &= [(0 - \$275) + (\$600 - \$310)] / [\$275 + \$310] \\
 &= [-\$275 + \$290] / \$585 = \$15 / \$585 = .0256 = 2.56\%
 \end{aligned}$$

While a 2.5% profit may not sound very exciting, it's certainly a lot better than a 100% loss!

There is one more rule, or *filter*, that can be added to this strategy. After we've discussed the back-testing results, it will be up to you whether or not you wish to implement this filter. As with many filters, this one improves the average return per trade, but it also decreases the total number of trade entry signals. We'll discuss that in greater depth in a future section.

The final, optional filter is to only take trades when SPY is trading above the 200-day moving average of its closing price. We usually refer to this value as MA(200). Our research has shown that when stocks

and ETFs are trading above the MA(200), their prices are more likely to increase than when they're trading below the MA(200).

Here is the complete set of rules for the ConnorsRSI Option Strategy, including variations and optional rules:

Entry Rules

Buy the first ITM call option that has at least eight trading days until expiration when all of the following conditions are true:

- The ConnorsRSI(3,2,100) value of SPY closes below X, where X = [5, 7.5, 10, 12.5, 15, 17.5, 20]
- Optional: The closing price of SPY is above MA(200) of SPY

Exit Rules

Close the option position when any of the following conditions are true:

- The ConnorsRSI(3,2,100) value of SPY closes above Y, where Y = [60, 65, 70, 75, 80]
- The option expires
- Optional: Roll expiring options by buying the first ITM call option for the next available expiration

Now that we've discussed the rules in depth, let's look at the test results.

Section 4

Test Results

WWW.TRADING-SOFTWARE-COLLECTION.COM
ANDREYBBRV@GMAIL.COM
SKYPE: ANDREYBBRV

This document cannot be reproduced without the expressed written permission of Connors Research, LLC.
Copyright © 2012, Connors Research, LLC. All Rights Reserved.

We can never know for sure how a trading strategy will perform in the future. However, for a fully quantified strategy such as the ConnorsRSI Option Strategy described in this Guidebook, we can at least evaluate how the strategy has performed in the past. This process is known as “back-testing”.

For strategies that involve buying and selling stocks and ETFs, we typically select a group of securities upon which we will evaluate the strategy. This group of securities is sometimes called the universe or watchlist. We have a great deal of flexibility in defining our universe, because historical price data is readily available for almost all publicly traded stocks and ETFs.

Unfortunately, it is much more difficult to obtain complete, error-free data for historical prices of options. One reason for this is that options are transient, i.e. they have a limited lifespan. Once an option has expired, many people lose interest in its price history. Another factor is that there is such a tremendous volume of data to track with options. Consider that SPY currently boasts almost 200 call strikes and 200 put strikes for the monthly contracts. At any given time, there are about 10 different expiration months available, so storing just the monthly option data would mean keeping open, high, low, close, volume, and open interest values each day for about 4000 unique option contracts just for SPY. And that doesn't take into account weekly or quarterly options.

Our back-tests for the ConnorsRSI Option Strategy were confined by the availability of good data to test against. The test results presented in the following pages were generated from option data that begins on January 10, 2005 and ends on October 31, 2012, a period of just less than eight years.

One of the key statistics that we can glean from the back-test results is the Average % Profit/Loss, also known as the Average Gain per Trade. Some traders refer to this as the “edge”. The Average % P/L is the sum of all the gains (expressed as a percentage) and all the losses (also as a percentage) divided by the total number of trades. Consider the following ten trades:

Trade No.	% Gain or Loss
1	1.7%
2	2.1%
3	-4.0%
4	0.6%
5	-1.2%
6	3.8%
7	1.9%
8	-0.4%
9	3.7%
10	2.6%

The Average % P/L would be calculated as:

$$\text{Average \% P/L} = (1.7\% + 2.1\% - 4.0\% + 0.6\% - 1.2\% + 3.8\% + 1.9\% - 0.4\% + 3.7\% + 2.6\%) / 10$$

$$\text{Average \% P/L} = 1.08\%$$

Another important statistic is the Winning Percentage or Win Rate. This is simply the number of profitable trades divided by the total number of trades. In the table above, 7 of the 10 trades were profitable, i.e. had positive returns. For this example, the Winning Percentage is $7 / 10 = 70\%$.

Why do we care about Winning Percentage, as long as we have a sufficiently high Average % P/L? Because higher Winning Percentages generally lead to less volatile portfolio growth. Losing trades have a way of “clumping up”, and when they do that, the value of your portfolio decreases. This is known as *drawdown*. Those decreases, in turn, can make you lose sleep or even consider abandoning your trading altogether. If there are fewer losers, i.e. a higher Winning Percentage, then losses are less likely to clump, and your portfolio value is more likely to grow smoothly upward rather than experiencing violent up and down swings.

Let’s turn our attention to the test results for the different variations of the ConnorsRSI Option Strategy. First, we’ll look at the 20 variations that produced the highest Average % P/L.

Top 20 Variations Based on Avg % P/L

# Trades	Avg % P/L	Avg Days Held	Win %	Connors RSI Entry	Use MA(200) Filter	Roll at Exp	Connors RSI Exit
56	21.96%	7.96	66.07%	17.5	Y	Y	80
45	20.62%	8.04	64.44%	15.0	Y	Y	80
53	19.77%	8.25	64.15%	17.5	Y	N	80
32	18.58%	4.75	71.88%	12.5	Y	Y	75
32	18.58%	4.75	71.88%	12.5	Y	N	75
42	17.77%	8.40	61.90%	15.0	Y	N	80
63	17.47%	4.83	74.60%	17.5	Y	Y	75
63	17.47%	4.83	74.60%	17.5	Y	N	75
31	16.85%	8.61	64.52%	12.5	Y	Y	80
48	16.26%	4.88	70.83%	15.0	Y	Y	75
48	16.26%	4.88	70.83%	15.0	Y	N	75
97	15.73%	4.78	73.20%	17.5	N	Y	75
97	15.73%	4.78	73.20%	17.5	N	N	75
66	14.12%	8.38	60.61%	20.0	Y	Y	80
74	13.04%	4.86	68.92%	15.0	N	Y	75
74	13.04%	4.86	68.92%	15.0	N	N	75
63	12.72%	8.59	58.73%	20.0	Y	N	80
86	12.46%	8.24	61.63%	17.5	N	Y	80
76	12.33%	5.16	68.42%	20.0	Y	N	75
25	12.30%	8.08	64.00%	10.0	Y	Y	80

Below is an explanation of each column.

Trades is the number of times this variation triggered from January 10, 2005 – October 31, 2012. We have filtered out any variations that produced less than 20 trades, on the grounds that the results from such infrequent trading signals may not be representative of the true performance of that variation.

Average % P/L is the average profit or loss for all trades, including the losing trades, expressed as a percentage of the capital invested in the trade. The top 20 variations have all shown positive gains ranging from 12% to nearly 22%.

Average Days Held is the number of trading days on average the trade was held. In the table above, it is always less than two weeks (10 trading days).

Win % is the percentage of trades which closed out at a profit. The top 20 variations have averaged between 65% and 70%.

ConnorsRSI Entry is the maximum allowed ConnorsRSI(3,2,100) value on the setup day. We tested values from 5 to 20, in increments of 2.5. However, all of the variations that used a ConnorsRSI value of 5 for entry produced less than 20 trades during the back testing period, so they have all been filtered out.

Use MA(200) Filter simply specifies whether the MA(200) filter that we discussed in the previous section was used as one of the input criteria. A value of “Y” in this column means that we only entered trades when the price of SPY was above the MA(200), while a value of “N” indicates that we ignored the MA(200). We see that a majority of the variations in this table used the MA(200), which is what we predicted when we discussed this filter previously: higher average returns, but possibly at the expense of total number of trades.

Roll at Exp A “Y” in this column indicates that the variation rolled expiring options to the next month, while an “N” indicates that we simply exited the position if the option contract expired.

ConnorsRSI Exit is the ConnorsRSI(3,2,100) value which must be exceeded to trigger an exit. Thus, a value of 75 in this column indicates that we will exit on the first day that ConnorsRSI closes above 75.

What we see above are 20 different variations of the ConnorsRSI Option strategy which show consistent behavior over nearly 8 years. The key is to choose the variation or variations that best complement your overall trading plan and then apply them in a systematic, structured manner.

Now let's now look at the 20 highest performing variations as measured by percentage correct.

Top 20 Variations Based on Win Rate

# Trades	Avg % P/L	Avg Days Held	Win %	Connors RSI Entry	Use MA(200) Filter	Roll at Exp	Connors RSI Exit
63	17.47%	4.83	74.60%	17.5	Y	Y	75
63	17.47%	4.83	74.60%	17.5	Y	N	75
97	15.73%	4.78	73.20%	17.5	N	Y	75
97	15.73%	4.78	73.20%	17.5	N	N	75
32	18.58%	4.75	71.88%	12.5	Y	Y	75
32	18.58%	4.75	71.88%	12.5	Y	N	75
48	16.26%	4.88	70.83%	15.0	Y	Y	75
48	16.26%	4.88	70.83%	15.0	Y	N	75
115	12.20%	5.17	70.43%	20.0	N	N	75
115	11.75%	5.19	69.57%	20.0	N	Y	75
74	13.04%	4.86	68.92%	15.0	N	Y	75
74	13.04%	4.86	68.92%	15.0	N	N	75
32	12.02%	3.41	68.75%	12.5	Y	Y	70
32	12.02%	3.41	68.75%	12.5	Y	N	70
32	7.58%	2.88	68.75%	12.5	Y	Y	65
32	7.58%	2.88	68.75%	12.5	Y	N	65
76	12.33%	5.16	68.42%	20.0	Y	N	75
76	11.65%	5.20	67.11%	20.0	Y	Y	75
48	9.46%	4.98	66.67%	12.5	N	Y	75
48	9.46%	4.98	66.67%	12.5	N	N	75

When looking at the variations which have been correct the most often, we see a broader variety of entry parameters. However, the value 75 dominates the list of ConnorsRSI exit values. That tells us that if your goal is to close out as many trades as possible at a profit, then regardless of your entry criteria a ConnorsRSI value of 75 may be the most effective exit method.

For some traders, the most important metrics for evaluating a strategy may revolve around capital management. For these traders, it's acceptable to give up a portion of the gains if they can get their money back more quickly so that it can be deployed elsewhere. So, let's take a look at the strategy variations that have the shortest trade durations as measured by Average Days Held.

Top 20 Variations Based on Average Days Held

# Trades	Avg % P/L	Avg Days Held	Win %	Connors RSI Entry	Use MA(200) Filter	Roll at Exp	Connors RSI Exit
108	5.78%	2.52	62.96%	17.5	N	Y	60
108	5.78%	2.52	62.96%	17.5	N	N	60
138	4.32%	2.55	61.59%	20.0	N	Y	60
138	4.32%	2.55	61.59%	20.0	N	N	60
32	3.49%	2.56	62.50%	12.5	Y	Y	60
32	3.49%	2.56	62.50%	12.5	Y	N	60
80	2.83%	2.58	58.75%	15.0	N	Y	60
80	2.83%	2.58	58.75%	15.0	N	N	60
50	2.11%	2.60	56.00%	12.5	N	Y	60
50	2.11%	2.60	56.00%	12.5	N	N	60
50	2.60%	2.64	60.00%	15.0	Y	Y	60
50	2.60%	2.64	60.00%	15.0	Y	N	60
86	0.70%	2.66	59.30%	20.0	Y	Y	60
86	0.70%	2.66	59.30%	20.0	Y	N	60
66	2.41%	2.71	60.61%	17.5	Y	Y	60
66	2.41%	2.71	60.61%	17.5	Y	N	60
34	-3.00%	2.82	52.94%	10.0	N	Y	60
34	-3.00%	2.82	52.94%	10.0	N	N	60
49	4.73%	2.86	59.18%	12.5	N	Y	65
49	4.73%	2.86	59.18%	12.5	N	N	65

All 20 of these variations have average durations of less than three days. As you will learn in the next section, it's predictable that the strategy variations with the shortest trade durations are dominated by the most lenient exit that we tested, which is an exit when ConnorsRSI(3,2,100) is greater than 60. The profitability tradeoff is clear here, as some of the short-duration variations had negative Average % P/L.

Finally, we'll find the variations that produced the most trades during the testing period. While not many traders would use "most trade signals" as a metric for selecting a strategy variation, it is helpful to know what the top end of the range is.

Top 20 Variations Based on Number of Trades

# Trades	Avg % P/L	Avg Days Held	Win %	Connors RSI Entry	Use MA(200) Filter	Roll at Exp	Connors RSI Exit
138	4.32%	2.55	61.59%	20.0	N	Y	60
138	4.32%	2.55	61.59%	20.0	N	N	60
131	6.38%	3.06	64.12%	20.0	N	Y	65
131	6.38%	3.06	64.12%	20.0	N	N	65
123	8.16%	3.85	66.67%	20.0	N	Y	70
123	8.16%	3.85	66.67%	20.0	N	N	70
115	12.20%	5.17	70.43%	20.0	N	N	75
115	11.75%	5.19	69.57%	20.0	N	Y	75
108	5.78%	2.52	62.96%	17.5	N	Y	60
108	5.78%	2.52	62.96%	17.5	N	N	60
106	8.50%	2.89	65.09%	17.5	N	Y	65
106	8.50%	2.89	65.09%	17.5	N	N	65
100	9.46%	3.73	66.00%	17.5	N	Y	70
100	9.46%	3.73	66.00%	17.5	N	N	70
100	10.25%	8.54	60.00%	20.0	N	Y	80
97	15.73%	4.78	73.20%	17.5	N	Y	75
97	15.73%	4.78	73.20%	17.5	N	N	75
95	8.83%	8.76	57.89%	20.0	N	N	80
86	0.70%	2.66	59.30%	20.0	Y	Y	60
86	0.70%	2.66	59.30%	20.0	Y	N	60

Based on the total number of trades over an eight year period, these variations generated trade signals an average of 10 to 20 times per year, which does not seem like very many. Keep in mind that in our testing we only looked at SPY for signals, and purchased SPY call options. It is likely that this strategy would work similarly with other highly liquid index ETFs like QQQ and IWM, and as you work with the strategy you may find other candidate ETFs as well. This could substantially increase the number of trade signals generated.

Section 5

Selecting Strategy Variations

WWW.TRADING-SOFTWARE-COLLECTION.COM
ANDREYBBRV@GMAIL.COM SKYPE: ANDREYBBRV

This document cannot be reproduced without the expressed written permission of Connors Research, LLC.
Copyright © 2012, Connors Research, LLC. All Rights Reserved.

We have now discussed the strategy rules in detail, and examined the historical test results from a variety of perspectives. Some patterns have begun to emerge which allow us to see how variances in the entry and exit rules affect the results. In this section we're going to dig a little deeper into the connection between the strategy parameters and the expected outcomes so that you will have as much information as possible to determine which strategy variations best complement your own trading plan.

Both entry and exit rules can be thought of in terms of how strict they are, i.e. how easy or difficult they are to achieve. You might also say that strictness is a measure of how frequently or infrequently the rule conditions occur. For oscillators such as ConnorsRSI, values that are closer to the extremes (0 and 100) are more strict (less likely to occur) than values that are in the middle of the range.

Stricter entry rules will be satisfied less frequently than more lenient entry rules, and thus a strategy that relies on the stricter rules will generally generate fewer trades than a strategy whose entry rules are more easily satisfied. With a robust strategy, the reward for fewer trades is generally a higher gain per trade, on average. We saw this concept clearly illustrated in the previous section with the MA(200) filter. A majority of the strategy variations on the "Top 20 Variations Based on Avg % P/L" list used this filter, but those variations produced many fewer trades than those that did not use the filter.

We can often see similar patterns if we isolate a single entry criterion. For example, all five variations in the table below are identical except for the ConnorsRSI threshold for entry. The variations have been sorted from highest to lowest ConnorsRSI, i.e. from least strict to most strict entry rules.

# Trades	Avg % P/L	Avg Days Held	Win %	Connors RSI Entry	Use MA(200) Filter	Roll at Exp	Connors RSI Exit
76	12.33%	5.16	68.42%	20.0	Y	N	75
63	17.47%	4.83	74.60%	17.5	Y	N	75
48	16.26%	4.88	70.83%	15.0	Y	N	75
32	18.58%	4.75	71.88%	12.5	Y	N	75
23	10.89%	5.26	65.22%	10.0	Y	N	75

As the ConnorsRSI threshold gets smaller (more strict), the Number of Trades clearly decreases, from 76 down to 23. The Average Gain generally increases, although not as uniformly as the decline in Number of Trades. Most significantly, we see that the Average % P/L drops off considerably when we use a ConnorsRSI threshold of 10, which may indicate that this criterion is simply too restrictive. Alternatively, the relatively small number of trades may be skewing the results somewhat.

The strictness of exit rules has little effect on the number of trades generated by the strategy. However, just like the entry rules, stricter exit rules typically result in higher average profits. Why? Because stricter exit rules tend to keep you in your trades for a longer time, giving the ETF and therefore the call option more time to experience the mean reversion behavior that we're attempting to exploit with a strategy like the ConnorsRSI Option Strategy. Thus, for entries the tradeoff is between more trades and

higher gains per trade, while for exits the tradeoff is between shorter trade durations and higher gains per trade.

Again, this pattern emerges distinctly if we isolate the exit rule. The five variations in the table below are identical except for the ConnorsRSI threshold for exiting. The variations have been sorted from lowest to highest ConnorsRSI Exit, i.e. from least strict to most strict exit rules.

# Trades	Avg % P/L	Avg Days Held	Win %	Connors RSI Entry	Use MA(200) Filter	Roll at Exp	Connors RSI Exit
50	2.60%	2.64	60.00%	15.0	Y	N	60
50	6.57%	3.04	64.00%	15.0	Y	N	65
48	6.11%	3.77	62.50%	15.0	Y	N	70
48	16.26%	4.88	70.83%	15.0	Y	N	75
42	17.77%	8.40	61.90%	15.0	Y	N	80

Notice that the trade duration, as measured by Avg Days Held, marches upward in lock step with the increasing ConnorsRSI threshold used for the exit signal. The Average Gain is nearly as uniform, except for a slight misstep on the third variation.

Now that you have a good understanding of how the entry and exit rule parameters are related to the historical results, you can make an informed decision about which of the hundreds of strategy variations are best suited to your trading style and your overall plan. Want more trades? Look at variations with a higher ConnorsRSI entry threshold, or eliminate the MA(200) rule. Bigger average returns? Check out the variations that have lower ConnorsRSI entry threshold and longest durations (ConnorsRSI 75 or 80 exit threshold). Want to get in and out of trades more quickly to reduce overnight risk and free up your capital for other trades? Try the variations that utilize the ConnorsRSI 60 exit threshold. Once you understand how the strategy variables affect the results, you are well on your way to optimizing the performance of the strategy for your own use.

Section 6

Additional Thoughts

1. As you have seen throughout this Guidebook, the ConnorsRSI Option Strategy has had large quantified edges when applied in a systematic manner.
2. Although our testing focused only on SPY options, there is great potential to apply this strategy to other instruments as well. Look for highly liquid ETFs that also have liquid options. One good way to gauge the liquidity of options is to look at *open interest*, which tells you the total number of open contracts currently in the marketplace. For options, this can be a much more useful number than the daily trading volume.
3. What about stops (and we include the answer to this in all our Strategy Guidebooks)?

We have published research on stops in other publications including in our book ***Short-Term Trading Strategies That Work***.

What we have found is that stops tend to lessen performance and in many cases they completely remove edges. Yes, it feels good when a stock keeps moving lower and lower and a stop got you out. On the other side, the research which is backed by up to two decades of test results on many short-term trading strategies suggests that stops get hit often and accumulate many, many losses. Few trading strategies can overcome these aggregated losses.

For many traders stops are a must. Psychologically it allows them to take trades, especially difficult trades. Whether you use them or not is a personal choice. On the whole though, the edges you see in this strategy and many other short-term strategies are lower when stops are applied to them. Again this is a personal choice only you can make for yourself. We know successful traders in both camps.

4. Slippage and commission were not used in the testing. Factor them into your trading and make sure you are trading at the lowest possible costs. Most firms are now allowing traders to trade for under 1 cent a share, so shop your business, especially if you are an active trader. The online brokerage firms want your business.

We hope you enjoyed this addition to the **Connors Research Trading Strategy Series**. If you have any questions about this strategy please feel free to email us at info@connorsresearch.com

WWW.TRADING-SOFTWARE-COLLECTION.COM
ANDREYBBRV@GMAIL.COM SKYPE: ANDREYBBRV

Receive ConnorsRSI Readings for Free from the TradingMarkets Screener

TRADINGMARKETS DAILY BATTLE PLAN GUIDEBOOKS NEWSLETTERS THE MACHINE POWERRATINGS MY ACCOUNT LOGOUT

TRADING MARKETS
Making Great Traders

SEARCH Enter Symbols or Keywords GO

ANALYTICS CONNORSRSI LISTS RSI SOLVER SCREENER **LIVE SCREENER**

TradingMarkets Screener

Enter As Many Symbols As You Like, Separated By Commas:

Technical Profile / Price / Volume Proprietary All **Live Data**

ConnorsRSI 10 or Below VolatilityRating Any

View: Technical Show/Hide Columns Filter Results Reset Filters (3)

[Click here](#) to start your FREE trial of the TradingMarkets Live Screener.

Custom Tools

WatchLists
Select: None Selected (Edit)

Saved Filters
Select custom filter set: None Selected

Share
Share this custom filter set:

Help
[Click here](#) to learn about these tools.

Show 25 entries

Price and Technical Data as of 05/20/2013

Ticker	Close Price	ConnorsRSI	RSI2	RSI4	VR	HV10	HV100	ADX10	U/D	Return2	Return5	StretchMA5	%b
AHL	\$37.42	7.19	2.91	14.98	1	12.78	15.04	17.65	-4	-2.02	-3.31	-2.10	-0.22
BIOS	\$13.21	9.83	0.27	8.45	3	10.25	33.51	24.25	-8	-1.05	-3.93	-1.59	-0.09
BMRN	\$62.43	8.71	5.01	20.13	3	38.11	29.74	23.70	-4	-3.21	-9.32	-5.14	-0.09
CCU	\$31.25	5.91	1.77	9.74	2	21.40	18.23	18.79	-3	-4.08	-6.16	-4.15	-0.34
CMCSA	\$41.52	6.41	4.35	16.80	1	17.92	18.87	27.26	-3	-3.15	-3.87	-3.03	-0.37
CMCSK	\$39.86	7.14	3.88	17.11	1	17.88	17.18	31.56	-3	-3.21	-3.44	-2.98	-0.41
CPB	\$45.78	8.62	6.76	24.09	1	25.53	15.85	39.07	-3	-4.33	-1.36	-3.43	-0.48
CYNO	\$23.67	8.93	2.66	12.07	2	19.53	28.35	29.32	-4	-3.90	-5.66	-3.77	-0.23
DDC	\$14.98	8.71	0.48	7.69	--	12.99	0.00	25.08	-6	-0.93	-5.37	-1.27	0.04
EC	\$43.47	9.84	1.52	7.37	2	12.21	23.49	62.55	-3	-3.03	-2.64	-2.27	-0.41

<http://analytics.tradingmarkets.com/Screener/>

The S&P 500 Low-Volatility Growth Portfolio

Are You Looking For Growth In Bull Markets & Safety In Bear Markets From Your Investments With S&P 500 Stocks?

Introducing: The S&P 500 Low-Volatility Growth Portfolio Growth in a Bull Market, Safety in a Bear Market

You don't need an introduction to S&P 500 stocks. But you may need a better way to trade them -- to maximize your returns.

The majority of money in retirement pension and retirement accounts is in S&P 500 stocks. This is where the safer money likes to invest.

S&P 500 companies tend to be bigger and safer companies. Many are Fortune 500 companies with worldwide operations selling products to millions of customers.

- When the stock market rises, you want to own solid S&P 500 stocks.
- When the stock market declines, you want to be in cash.
- This is exactly what The S&P 500 Low-Volatility Growth Portfolio does for you.

The S&P 500 Low-Volatility Growth Portfolio delivers trading signals for S&P 500 stocks, providing you an optimized balance of both growth and safety for your capital.

In rising markets you are long blue chip stocks. In declining markets you are in cash.

Would you like the potential to earn returns like these -- from S&P 500 stocks?

Sample simulated historical back-test results from The S&P 500 Low-Volatility Growth Portfolio.

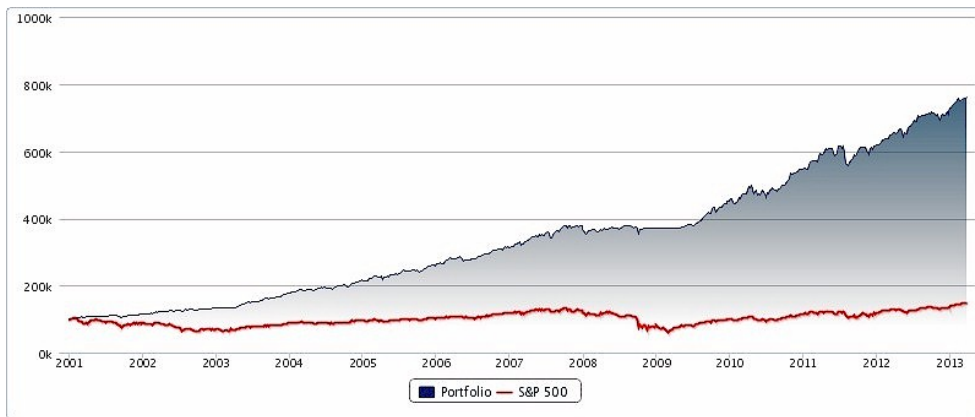
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
2001	3.29%	2.07%	2.14%	0.94%	0.22%	-1.44%	3.04%	0.65%	-1.38%	0.61%	1.37%	1.72%	+13.93%
2002	3.13%	0.36%	3.51%	0.61%	1.67%	0.49%	0.14%	2.40%	-0.85%	2.21%	0.25%	1.31%	+16.23%
2003	1.28%	0.13%	-0.73%	4.03%	5.92%	2.09%	1.40%	5.38%	-0.79%	4.36%	3.26%	4.29%	+34.90%
2004	1.19%	3.82%	0.49%	-1.53%	3.03%	2.69%	-1.65%	1.46%	1.72%	0.18%	4.23%	3.74%	+20.94%
2005	0.54%	3.69%	0.90%	-0.62%	3.17%	0.78%	4.49%	-1.07%	2.00%	-0.63%	3.87%	1.43%	+19.99%
2006	3.58%	2.39%	2.11%	1.54%	-3.22%	2.06%	1.54%	2.21%	2.51%	3.04%	-0.50%	2.48%	+21.41%
2007	1.89%	1.11%	1.91%	4.19%	2.30%	-1.11%	-0.36%	4.91%	2.57%	2.32%	-1.27%	-0.07%	+19.79%
2008	-3.89%	1.19%	-1.05%	1.70%	1.58%	-0.88%	2.18%	-0.53%	-0.53%	-1.46%	0.06%	0.01%	-1.76%
2009	0.03%	0.14%	-0.11%	0.00%	2.03%	0.64%	2.14%	3.32%	4.67%	-0.27%	3.55%	3.89%	+21.77%
2010	-1.49%	3.46%	4.54%	1.95%	-3.48%	-2.60%	5.31%	-1.26%	3.66%	4.49%	2.41%	2.66%	+20.93%
2011	0.87%	4.08%	3.09%	2.86%	0.82%	-0.33%	-2.24%	-3.00%	1.86%	3.64%	0.25%	0.74%	+13.11%
2012	1.28%	2.36%	2.51%	1.99%	-1.70%	3.82%	3.15%	0.33%	0.95%	-0.57%	0.29%	0.87%	+16.23%
2013	3.99%	0.48%	-	-	-	-	-	-	-	-	-	-	+4.49%

You Already Learned This Over the Past Decade... 'Buy and Hold' is Dead!

You understand that markets change -- as they have over the past decade. In order to take advantage of changing market conditions, The S&P 500 Low- Volatility Growth Portfolio is constantly reviewed, monitored, and updated by Connors Research.

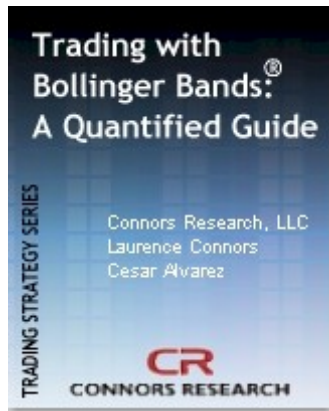
The back-test results indicate that The S&P Low-Volatility Growth Portfolio consistently outperforms the S&P 500 on "buy & hold".

Sample equity curve for \$100K invested in The S&P 500 Low-Volatility Growth Portfolio vs. the S&P 500.



If you would like to see a presentation on *The S&P 500 Low-Volatility Growth Portfolio* [click here](#). If you would like to order and have immediate access to it please [click here](#) or call toll free 888-484-8220 ext. 3 (outside the US please dial 973-494-7311 ext. 3).

More from the Connors Research Trading Strategy Series



Trading with Bollinger Bands® - A Quantified Guide

This Systematic Approach to Trading with Bollinger Bands® Brings You Results Quickly

Bollinger Bands are used by hundreds of thousands of traders around the world. In fact, it's considered one of the most powerful trading tools available to traders. Over the past two decades many professional traders at large funds, successful Commodity Advisors, and professional Equity Traders have stated they rely upon Bollinger Bands as one of the main indicators before they take a trade.

When traded correctly, Bollinger Bands can be one of the most consistent strategies available for your trading.

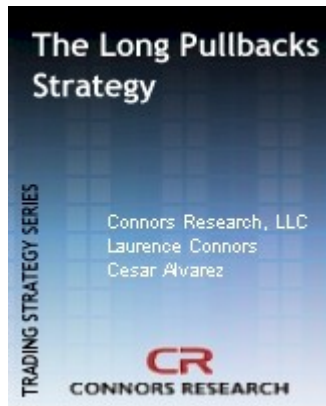
Now for the first time, we are making available to the public a fully systematic, quantified approach to trading with Bollinger Bands.

Consistent Trading Results - What you will learn with this strategy are dozens of Bollinger Bands strategy variations which have been correct from 65.43% up to over 82.74% from January 2001 to May 2012.

The Trading with Bollinger Bands® - A Quantified Guide comes with a 100% Money Back Guarantee (as do all the Guidebooks in our Strategy Series).

If you would like more information on Trading with Bollinger Bands® - A Quantified Guide [click here](#). If you would like to order and download it now so you can have immediate access to it please [click here](#) or call toll free 888-484-8220 ext. 627 (outside the US please dial 973-494-7311, ext. 3).

More from the Connors Research Trading Strategy Series



The Long Pullbacks Strategy

In 2005 we published what we consider to be our most powerful short-term trading strategy that we originally named the 5x5x5 Strategy. Many hundreds of traders learned the strategy and many still use it today. Since that time we have updated and improved the strategy, added new entry parameters, added new exit strategies, and have updated the trade results beginning from 2001-2011.

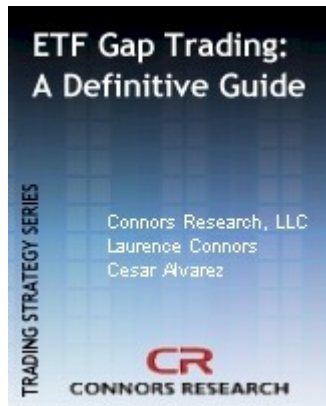
What you will learn with this strategy are many hundreds of variations that have been correct from 72.4% up to over 78% for more than a decade. And the average gain per trade (this includes all winning and losing trades) has averaged over 5.6% a trade on dozens of variations of the strategy.

You will learn how to identify the set-up, select, the entry level, where to place the order and where to exit the order. This is done on all liquid US stocks (and it can be done on global markets as well). And as an added bonus we also added a day trading component to this strategy for those of you who like to exit positions before the close each day.

The Long Pullbacks Strategy comes with a 100% Money Back Guarantee (as do all the Guidebooks in our Strategy Series).

If you would like more information on *The Long Pullbacks Strategy* [click here](#). If you would like to order and download it now so you can have immediate access to it please [click here](#) or call toll free 888-484-8220 ext. 627 (outside the US please dial 973-494-7311, ext. 3).

More from the Connors Research Trading Strategy Series



ETF Gap Trading: A Definitive Guide

If you trade ETFs you will soon see that trading Gaps on ETFs, when done correctly, can be the one of the most profitable strategies available to you in ETF Trading.

The average gains per trade from trading the gaps as taught in this Series ranges all the way up to over 4% per trade (a substantial number for ETFs). And we added a Leveraged ETF section where the average gains get above 5.5% trade.

Historically the majority of the ETF Gap set-ups have been correct 71-77% of the time. And like the Long Pullback Strategies we've also added a day trading aspect to trading gaps which allow you to day trade ETFs both on the long and the short side.

The ETF Gap Trading Strategy also comes with a 100% Money Back Guarantee.

If you would like more information on the ETF Gap Trading Strategy [click here](#). If you would like to order and download it now so you can have immediate access to it please [click here](#) or call toll free 888-484-8220 ext. 627 (outside the US please dial 973-494-7311, ext. 3).