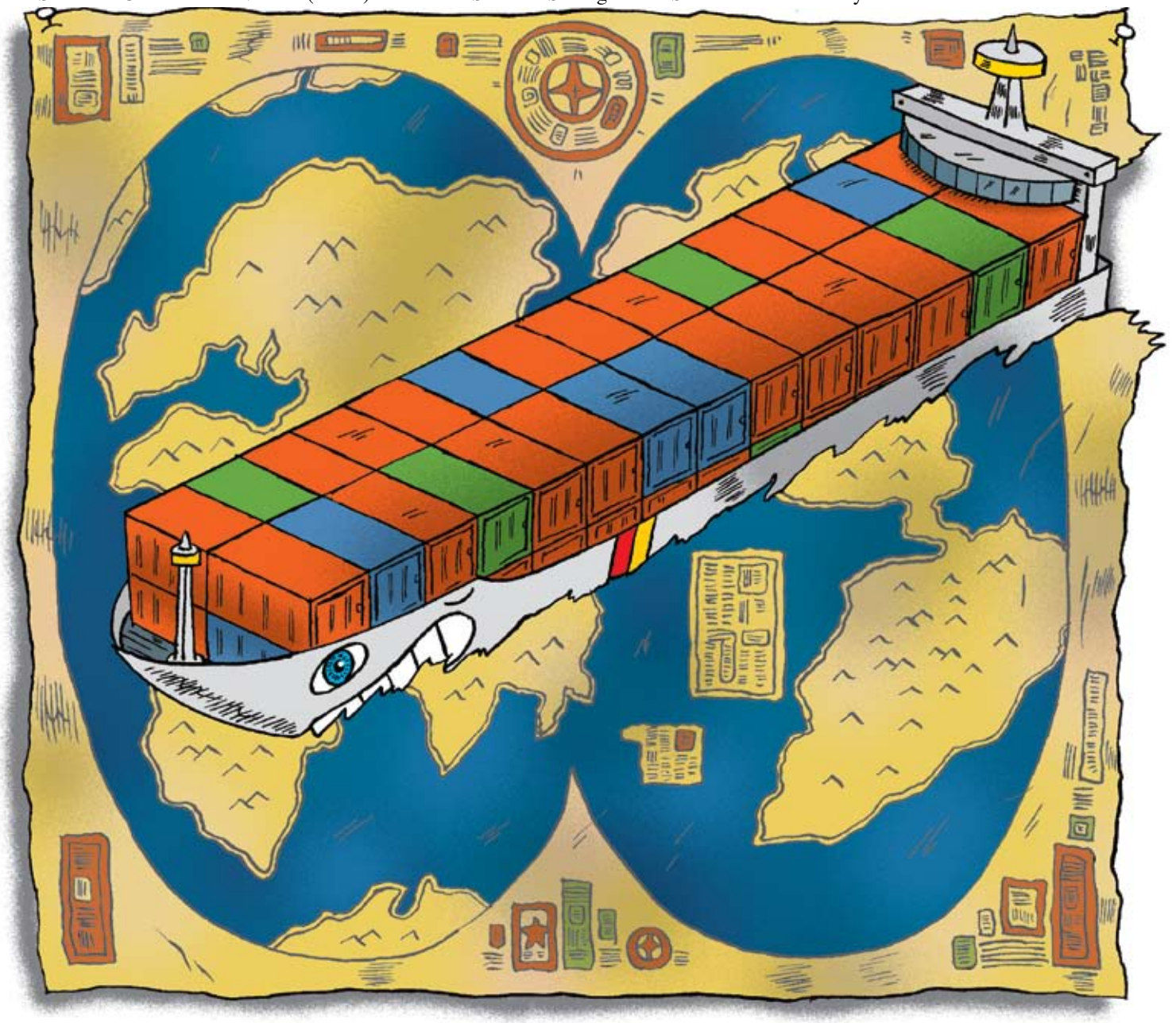

PAUL CORIO

Be Aggressive

Advanced Scale-In Strategies For Short-Term Traders

How can short-term traders add an edge of as much as 10% to their per-trade win rate?

by David Penn

High-probability exchange traded fund (ETF) trading is a quantified strategy of buying ETFs after they have pulled back and selling after they have recovered in price. More than 100 ETFs were tested since inception. The results of the testing showed that buying ETFs after they had pulled back and become oversold resulted in high-probability ETF trading strategies that were correct more than 75% of the time.

These tests included all of the most widely traded ETFs from the Standard & Poor's 500 SPDRS ETF (SPY) to country ETFs like the iShares FTSE/Xinhua China 25 ETF (FXI) to sector ETFs like the Financial Select Sector SPDRS ETF (XLF) since inception. In the case of SPY, this meant including data going back to 1993.

Figure 1 consists of the performance results for the SPY since inception through December 31, 2008, in three of the seven high-probability ETF trading strategies that are part of the seven trading strategies recently published in Larry Connors' book, *High Probability ETF Trading* (see sidebar "ETF Trading Strate-

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The 3-Day/High Low Method. Long Only.
Trades: 64
Average P/L 0.91%
Percent Winners: 87.5%

RSI 25 Strategy. Long Only.
Trades: 84
Average P/L: 1.23%
Percent Winners: 82.1%

Multiple Days Up/Multiple Days Down Strategy
Trades: 110
Average P/L: 0.50%
Percent Winners: 74.5%

PROPHET FINANCE

FIGURE 1: PERFORMANCE RESULTS FOR SPY SINCE INCEPTION THROUGH DECEMBER 31, 2008

The 3-Day/High Low Method. Long Only – Aggressive.
Trades: 64
Average P/L: 1.12%
Percent Winners: 90.6%

RSI 25 Strategy. Long Only – Aggressive.
Trades: 84
Average P/L: 1.48%
Percent Winners: 89.3%

Multiple Days Up/Multiple Days Down Strategy. Long Only – Aggressive.
Trades: 110
Average P/L: 0.78%
Percent Winners: 85.5%

FIGURE 2: PERFORMANCE RESULTS USING SCALING-IN STRATEGIES

gies"). These results with the SPY were consistent with those from the other ETFs tested. I use the SPY here for simplicity's sake and because the SPY has the most extensive data from which to draw.

Figure 2 involves the exact same strategies, but with a twist. That twist is an edge: scaling in.

THE SCALE-IN SOLUTION

The only difference between the strategies in Figure 1 and their counterparts in Figure 2 is that the strategies in Figure 2 all used "aggressive" variations on the basic high-probability ETF strategy. That variation called for scaling-in with a second unit (a second unit long in these instances of long trades) if the market moved lower after the initial position was taken.

Let's look at this scale-in process at work. This particular scale-in trade you see in Figure 3 uses another high-probability ETF trading strategy called "TPS," which stands for "time, price, and scale-in." With TPS, the scale-in process is built into the strategy, although even here there are variations and a number of different ways for short-term traders to build their position as the oversold market becomes even more oversold.

At its most basic, TPS is a set of mean reversion strategies that calls for buying ETFs after their two-period relative strength index (RSI) has closed in oversold territory for two days in a row. The strategy uses successive lower closes to add to the position and calls for an exit when the two-period RSI rallies to close in overbought territory. For trading rules of the TPS strategy, see sidebar "TPS 1-2-3-4 Rules."

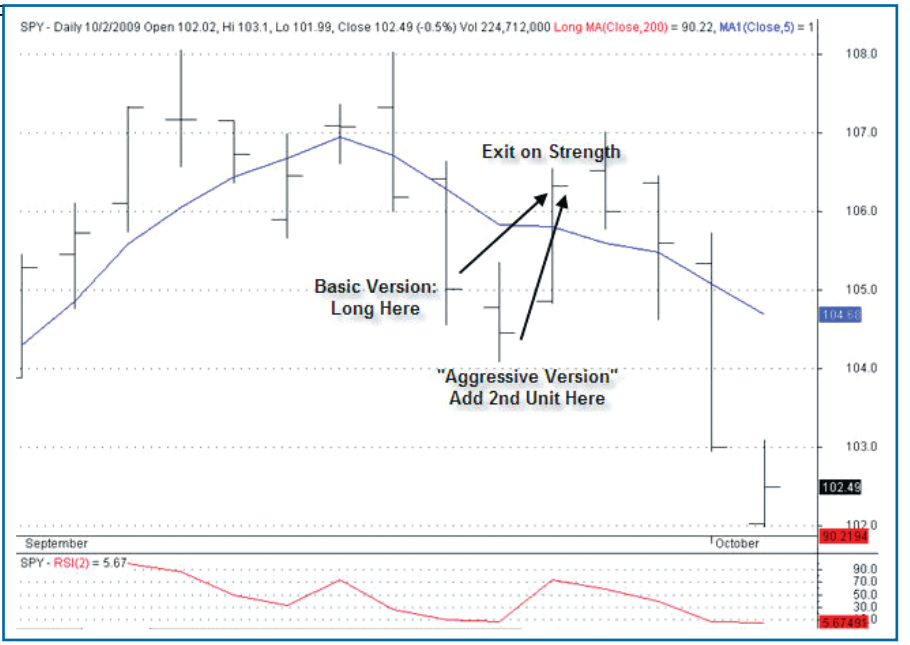

FIGURE 3: SPY PULLBACK. This pullback in the SPDR S&P 500 ETF created a high-probability trading opportunity in late September 2009. A trade based on the initial pullback yielded a gain of 1.25%. Scaling in by buying a second unit as the market moved lower (the aggressive version) resulted in a trading gain of 1.79%.

ETF TRADING STRATEGIES

- **The three-day high/low method** calls for trading ETFs to the long side after they have made lower highs and lower lows for three consecutive days. Traders exit the position on a close above the five-day simple moving average.
- **The RSI25 Strategy** uses the four-period RSI. Traders buy oversold ETFs on the close after their four-period RSI drops below 25 and exit when the RSI(4) closes above 55.
- **The long side of the multiple days up/multiple days down strategy** has traders buy ETFs on pullback after they have dropped at least four out of the past five days. The exit is a close above the five-day simple moving average.

THE TPS 1-2-3-4 RULES

From the book *High Probability ETF Trading* by Larry Connors and Cesar Alvarez:

1. The ETF is above the 200-day.
2. The 2-period RSI is below 25 for two days in a row. Buy 10% of your position on the close.
3. If prices are lower on the close than your previous entry price, any day you're in the position, buy 20% more of your position.
4. If prices are lower on the close than your previous entry price, any day you're in the position, buy 30% more of your position.
5. If prices are lower on the close than your previous entry price, any day you're in the position, buy 40% more of your position.

Using this 10%, 20%, 30% 40% scaling-in approach (also known as 1-2-3-4), you now have a full position in a very oversold ETF.

6. Exit on the close when the 2-period RSI closes above 70.

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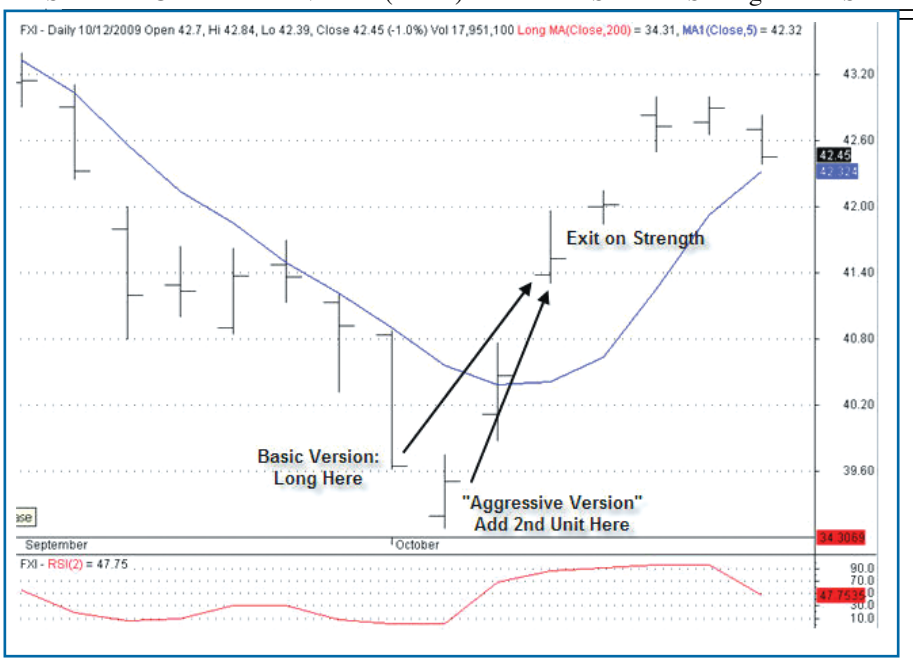

FIGURE 4: FXI ETF. An early October retreat in the iShares FTSE/Xinhua China 25 ETF helped high-probability traders profit by buying on pullback. But even greater rewards were to be had by those traders who scaled in as FXI moved even lower.

Note here how the market — in this case an ETF — closed lower in oversold territory, giving a buy signal. The basic version of this strategy would say that the next step is the exit, either waiting for the market to close above its five-day moving average, or perhaps for its two-period RSI to climb above 70.

However, the aggressive version tells the trader to add a second unit if the market moves against him or her. In the example in Figure 3, the market moved lower after the initial position was taken, allowing the trader to add a second unit long, lower the cost basis of the trade, and increase the odds of both a larger average profit/loss and the overall accuracy rate of the trade.

As was the case in this example, the trader was able to exit the trade a few days later profitably. The basic version of this trade would have resulted in a gain of 1.25%. The aggressive version, with the scale-in, produced a near 1.80% gain instead.

In Figure 4 you see another example of a scale-in trade. Traders who bought the ETFs on the initial signal were able to take profits a few days later with a gain of 4.74%. Scaling-in by buying a second unit long when FXI closed lower allowed for gains of 4.93%.

WHY DOES THIS WORK?

That scaling-in tactics improve the average profit & loss and percent correct of high-probability trading strategies is a testament to the power of mean reversion in equities and equity-based vehicles. Markets tend to rally after short-term pullbacks, so buying more of the market as it moves lower helps traders maximize the edges inherent in this tendency to revert to the mean. We have found this to be true across a variety of high-probability, mean reversion–based strategies using a variety of indicators and parameters. The test results have been consistent: scaling in to high-probability trades provides traders with a significant edge compared to single unit or strategies that do not involve scaling in.

The biggest problem with scaling-in strategies is psychological. As difficult as it is for many traders to buy into

With the right strategies, scaling into positions is a way for short-term traders to gain greater edges.

oversold markets that are moving lower day after day, it is all the more difficult to add to those positions, especially if they are moving against the trader dramatically. How many traders have been warned from their earliest days that they should never average down? Or that adding to a losing position is for losers?

Referring to a note he recently received from a subscriber who had gone off to start his own hedge fund by renting space in an existing hedge fund's facilities, Larry Connors quoted the subscriber in a daily trading lesson, saying that:

> After being there a few months (and putting in some very good returns) he called me and told me what he observed. He told me there were dozens of different funds there and some had been in business well over a decade. Some managers traded stocks, some traded bonds, some used fundamental analysis, and some simply traded throughout the day. But the only single thing the majority of them had in common was that they "scaled into positions." When they had conviction in a position, no matter what their style was, they bought more as price dropped.

In fact, scaling into positions is common among professional traders. Connors added that he remembered being told by one very successful, 30-year veteran of the trading business that he should buy one of the man's recommendations, go home, and hope it dropped so he could buy more at an even lower price.

As Larry Connors has pointed out, it is important that traders using scaling-in strategies rely on quantified data and a structured, scale-in strategy that takes advantage of a given trading system. But in the right hands — and with the right strategies — scaling into positions is a quantified way for short-term traders to gain even greater edges than their strategies may provide on their own.

David Penn is editor-in-chief of TradingMarkets.com.

SUGGESTED READING

Connors, Larry, and David Penn [2009]. "Three Rules, One Easy Way To Trade ETFs," *Technical Analysis of* STOCKS & COMMODITIES, Volume 27: January.

Connors, Larry, and Cesar Alvarez [2009]. *High Probability ETF Trading: 7 Professional Strategies To Improve Your ETF Trading*, TradingMarkets Publishing Group.

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