CSI NEWS JOURNAL

## Evaluating the Merits of Trend Following vs. Overbought/Oversold Trading Systems

Have you have ever considered the dynamics of the two trading philosophies: Trend Following and Overbought/Oversold? The two are essentially opposites. With some careful consideration, you may forever abandon the latter as a viable means of winning consistent profits. We'd like to place the question in a tatistical perspective to stimulate some thought on this subject.

The trend follower's philosophy is to cut losses short and to let profits run. His typical trading record shows many small losses and a few very large profits. A trade-by-trade distribution of the trend-follower's profits and losses has the following general appearance.

TREND FOLLOWER PATTERN
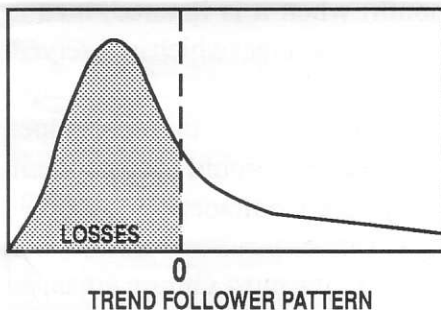
The overbought/oversold user is more likely to experience many small profits and occasional very large osses. The distribution of profits and losses for this analysis typically looks like the example below. This might be expected when studies like RSI, stochastics and %R, are used exclusively as overbought/oversold indicators.

OVERBOUGHT/OVERSOLD PATTERN
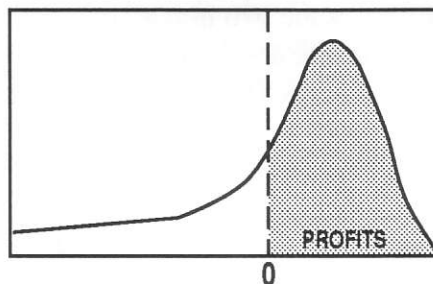
The trend-following approach may appear to require more capital because reserves must be maintained to survive the inevitable losses. These are usually recouped when the occasional large profit materializes. Obviously, the trend-following trader must resist the temptation to take a developing profit before the trade has run its course.

In the overbought/oversold scenario, profits may come easily, but after several gratifying profits in a row, a large loss is to be expected. One catastrophic loss may wipe out your hard-earned profits and could push you permanently from the market.

For many, this story may mark a familiar theme. Knowing the pitfalls in advance may give you the courage to go forward with greater confidence.

The distributional form for your own personal approach can be compared with what we have proposed as the theoretical form by preparing a histogram showing the quantity of trades logged at price intervals over the range of profits and losses.

If two candidate trading philosophies can be classified at the opposite extremes that we have proposed here and their respective mathematical expectation is equivalent, which should be favored? The answer would be the approach which requires the least capital. The reliable measure, return on investment, should certainly have a bearing on the trader's choice and this concept should be invoked.

The only method I know to realistically solve the problem of determining capital stake requirements is the randomization of trading by generating profits and losses through a Monte Carlo Simulation. The Trading System Performance Evaluator™ is designed to make this decision for you.

This brief article was not intended as a promotion for the Trading System Performance Evaluator, but in some ways it is. That product can evaluate either of the above approaches.

Knowing capital stake requirements should bring every trader a long way toward understanding the chances of survival in nearly any candidate trading game. □

How Perpetual Contracts® and Continuous Contracts Compare

Recently Mr. T.D. Feldberg, a customer in London England wrote asking if we would comment regarding Perpetual Contracts and Continuous Contracts and how each deals with the problems of discontinuity and stationarity.

Before providing my response, I would like to review the characteristics of Mr. Feldberg's definition of a Continuous Contract. His Continuous Contract is like a nearest futures contract with two exceptions. First, his continuous contract application uses the nearest futures contract data only until the 20th day of the month prior to expiration. Secondly, to mitigate price gaps upon roll over to the next delivery month, his Continuous Contracts adjust the prices of the expiring contract to the level of the new contract. For instance, if on rollover day the next contract is trading 80 points higher than the expiring contract, then all the prices of the old contract would be moved up by 80 points to exactly match the nearby contract. This method alters the daily prices themselves, but maintains identical price relationships. Some forms of continuous contracts build the time series in the opposite manner, making it necessary to add or subtract a constant to derive the actual price of the current contract.

CSI's Answer:

Regarding the use of Perpetual Contracts versus Continuous Contracts, each has an advantage over the other, so it is difficult to make a decision for a given specific use. I know of no testing that rigorously compares the two in real time trading, but here are some comments in defense of each based on a priori and theoretical grounds.

Because the Continuous Contract uses actual data for the current contract, there is a distinct advantage in Continuous Contract use if your trading methods are of a very short term. Suppose you were trading live hogs, which for a Continuous Contract application would extract data from all even-numbered delivery months plus July. In this event, you would probably require a system algorithm that would complete a buy/sell round trip in 20 days during part of the year and 40 days in the remainder. For longer periods you must face the problem of rolling forward into successively more current contracts in the same trade direction. On an actual application basis as you approach the 20th of the month prior to delivery, the next trade you will enter in the opposite direction will inevitably be taken in the next futures contract. This would

be approximately one to several days before the series you have committed to follow rolls into the next contract. I would think the typical user could get very confused given this requirement.

On the negative side, Continuous Contracts lack the stationarity present in Perpetual Contract data because the market is viewed in an ever-alternating mode of expanding and contracting time to delivery. This phenomenon causes problems in long-term market synthesis and simulation of historical data because volatility alternates from active to tame and the vantage point, time-to-delivery, is not constant. A second disadvantage is that given the early assumed contract expiration (the 20th of the month prior to expiration), the market volatility up until and slightly after first notice day escapes from the time series; yet the trader may find himself in the market in the nearest contract well past the 20th of the month. And if volume and open interest are important to your system, their effects may be more significant in the nearest contract (following the 20th of the prior month) when it is ignored, than in the actual contract which is observed. In other words, a false correlation of price effects and volume or open interest effects could easily prevail.

Perpetual Contracts cure all of the above defects with the exception that the user must choose an actual contract in his trading upon which he applies the signals derived from the Perpetual Contract data. Market synthesis and simulation for Perpetual Contract data can be readily accommodated with few compro-

...nises. There is also no long-side bias other than inflation (which is present in both continuous and actual data) and results are as close to stationary as possible. Perpetual Contracts work well with short-term trading, and they are also an excellent medium for longer term trading. Intermarket and intramarket spread work is an additional but very significant natural extension of Perpetual Contract capability. Given this information and knowledge of your own specific needs, perhaps you can make a more informed decision as to which are best for your needs. □

Candlestick Charting Revisited

Last month we ran an article on Candlestick Charting. Our motive was not to criticize this technique, because it does paint a more descriptive picture of market dynamics than standard charting methods. Since Candlestick Charts have stimulated so much interest, we wanted to point out that they have some limitations as well.

One of our loyal customers Mr. Irwin Porter, President of Candlestick Fax, responded to our article illustrating how the use of his Candlestick Charting methodology would successfully trade the T-Bond scenario we used in our illustration.

Mr. Porter holds seminars teaching Candlestick Charting and trading methodology. For more information, contact him at 139 Castle Rock Rd., Quinter, KS 67752. You can call him at (800) 729- 3913 or (913) 754-3913. □

More On Seasonals
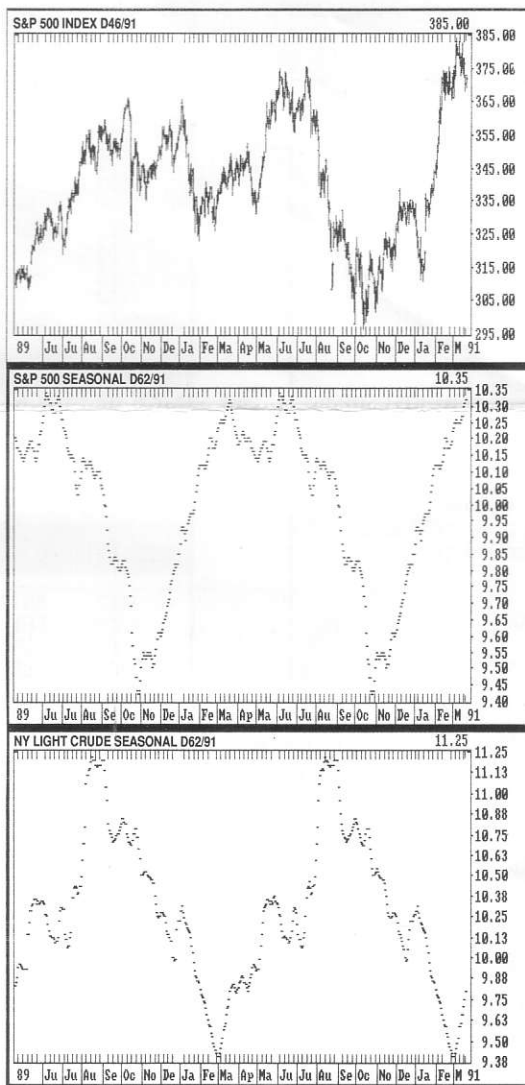
The unleaded gasoline price chart and seasonal index of unleaded gas included in the enclosed flyer tells an interesting story. Notice the predictive power of the index. We advise adding the #62 contract seasonals to your portfolio for all commodities which relate to items you follow.

Also note the S&P 500 versus its seasonal index . The vertical line on the chart marks the point precisely one year earlier than the last data point shown. The seasonal index, of course, repeats year after year. Note the apparent or perceived predictive power here as well. The enclosed flyer lists the available indexes which we hope our readers will consider. We believe that no trading opportunity should be entertained without first examining the respective commodity's seasonal chart. □

Good News About TSPE

The Trading System Performance Evaluator is now ready to ship. Earlier tests indicated that substantial improvements could be made to make it more user friendly. Consequently, we decided to absorb the heat and spend the time and money to produce a superfine piece of software. We are now confident that those of you who have purchased or will purchase this software will be more than pleased.

Our only delay as we prepare this newsletter is the printing process for the manual. Please expect your copy soon after receiving this message. We apologize for the inconvenience this has caused many of you who ordered this software before the end of the year. A 10% discount will be credited to all purchasers of TSPE to date. This is in addition to the 10% discount given on all purchases made before December 16, 1990. □

Oil - Who Needs It?

The media and some politicians have not done a good job of informing the general public about the importance of oil to our economy. Oil is not just fuel for our thirsty cars and energy for our furnaces. Oil is used virtually everywhere. Without it massive layoffs and unemployment would occur. Many of our electric power generating plants would sit idle most of every day. People could not get to their place of employment, the economy would virtually stop, and world food shortages and even famine could result.

A war over oil had to happen. There was no other choice given the circumstances. Anyone who takes a different view does not know what oil means to us and the entire world.

Our farm production would slow to a crawl. Farm machinery for cultivating, planting, fertilizing and harvesting would virtually sit idle. Imagine a world without these products: plastic, nylon, polyester, vinyl, mylar, styrofoam, insulation, paint, rope, light fixtures, furniture, wall covering, building products, lubricants, insulated wire, computer chips, tires, many auto parts, shoes, clothing, electric power, roads, toys, polishes and hundreds of other things.

An economy without oil would seem like the year 1900 or before. My late grandfather who fought in the Spanish American War in 1898, told me that he would buy gasoline at the general store one gallon at a time. From the stories he told me, he got around with a horse and buggy or else walked nearly everywhere he had to go. Some may take the position that this would be an acceptable result, but few who lived through it would agree with you.

In the trading of commodities and in economic analysis, oil could substitute for a wide range of economic indices because it influences such a wide range of products. Consider oil as a trade-off to interest rates, grains, and many other agricultural products. You may gain more insight into our economy from the resource known as oil than any other product. We encourage our customers to investigate spread studies that track the price of oil and the inverse of the price of oil with a broad range of products. There is a near limitless abundance of opportunities waiting to be discovered.

Consider the lead/lag relationship between light crude and the S&P 500 in the #62 seasonal "contracts" shown on page 3. The inverse of the price of oil leads the market by 2 to 4 months, assuming seasonal characteristics. In my opinion there is nothing more reasonable than this finding, and there is no evidence which will support the hypothesis that a change in the importance of this product in our economy is likely to occur.

Some may say that we are "stretching it" when we suggest that the stock market follows seasonal forces. When you see the lagged relationships between the stock market and the crude oil market which does exhibit seasonal characteristics you may want to rethink some text book assertions. □

Best Wishes for Prosperous Trading,

Bob Pelletier

The following errors were found after the data was first released. They may or may not affect a user depending upon the time of access. The figures in **bold italic** print represent the corrected values. The total and individual volume and open interest are presented in raw form ready for input into your IBM computer. The scientific notation requirement of QuickTrieve would require a raw open interest value of 294070, for example, to be stored as 129407. A volume or open interest of magnitude 9999 or less requires no adjustment.

CSI ERROR REPORT MARCH 1991

DATE	CSI#	SYM.	CODE	OPEN	HIGH	LOW	CLOSE
910208	101	CR	all months	Total Vol. = *339*		Total O.I. = *1528*	
910208	101	CR	3/91	Volume = *153*		O.I. = *685*	
910208	101	CR	5/91	Volume = *78*		O.I. = *437*	
919208	101	CR	7/91	Volume = *106*		O.I. = *385*	
910208	101	CR	9/91	Volume = *2*		O.I. = *21*	
910211	258	BC	3/91,55,58,59	*59200*	60750	59190	60695
910212	101	CR	9/91,43,44,45	*21400*	*21405*	*21400*	21380
910215	228	V	3/92	*8815*	8822	8815	8822
910219	69	PA	9/91,52,57	8690	*8750*	8575	8670
910219	5495	DJCA		12837	12843	12815	*12826*
910221	38	RL	50	3640	*3637*	3646	3642
910222	20	SU	3/91,56,60	849	850	813	*822*
910225	69	PA	3/91,55, 56,59,60	8037	8175	*7950*	8115
910225	199	ZH	3/92	2585	2585	2585	*2583*
910125	144	TQ	6/91	9621	*9628*	*9615*	9627
910301	21	W	7/91,53,57	*2810*	2894	2802	2890
910301	5542	DJBA		9379	9382	9373	*9373*
910301	38	RL	all months	Total Vol. = *33595*		Total O.I. = *71928*	
910301	47	ZL	all months	Total Vol. = *3161*		Total O.I. = *13185*	
910301	48	ZZ	all months	Total Vol. = *5895*		Total O.I. = *18666*	
910301	92	AH	all months	Total Vol. = *14552*		Total O.I. = *51108*	
910301	80	ZK	all months	Total Vol. = *2475*		Total O.I. = *7745*	
910301	46	ZT	all months	Total Vol. = *1596*		Total O.I. = *5730*	
910306	144	TQ	6/91	9503	9507	*9419*	9424
910307	3	CO	all months	Total Vol. = *5484*		Total O.I. = *38018*	
910308	20	SU	10/91,52,57	871	*898*	870	887
910308	20	SU	3/92	854	*876*	854	862
910311	264	EU	6/91,46, 55,58,59	12915	12915	12915	*12915*

Ask Customer Service

Each month in this column, the CSI Customer Service staff addresses a subject of interest to many users. In this issue Dave, Karen, Rudi, Susan and Tami will discuss how Quick-Trieve® Automation can enhance technical analysis with QuickPlot®/ QuickStudy® version 4.0 or 4.01.

Q. *I like my new QuickPlot program, but I find I have to press a lot more keys to perform studies than I did with my old QuickPlot. Is there a way to economize on keystrokes while keeping the advantages of version 4.0?*

A. Let QuickTrieve Automation come to the rescue. This macro feature will let you pre-program all the studies you wish to perform in a session and run them automatically. Once you start the process, you can sit back and relax while QuickPlot creates and prints charts of all your favorite markets and studies.

Q. *How do I get started making a macro with QuickTrieve Automation?*

A. The basic steps are outlined below. Start at the QuickTrieve main menu, the QuickManager® menu or at any point in QuickPlot operation where you will want to start this process every time.

1. Press <ALT> <L> to begin the learning process. A screen prompt saying ENTER QA # will appear. Enter any letter or single-digit number to name this macro, being sure to remember it for future use.

2. For completely automated analysis, proceed with data retrieval and chartmaking as desired. Make all the charts with all the studies you'll want to perform normally. QuickTrieve Automation will record each keystroke to repeat in sequence at your convenience. Be sure to include the Print Screen command (*) as needed to print your charts.

3. When you have finished your analysis session, but before exiting the program, press <Alt> <L> again. This will mark the end of the learning session and record the macro permanently in your QuickTrieve software.

4. To use your macro, return to the starting point for this macro. Press <ALT> <P> to play back the macro. A screen prompt saying ENTER QA # will appear. Enter the letter or single-digit number you named this macro. The entire series of keystrokes will be repeated, making QuickTrieve perform the same functions you requested initially.

Q. *I like to look at my charts on the screen, but not necessarily print them. Also, I don't necessarily want to study the same markets every day. Can QuickTrieve Automation help me?*

A. It sure can! You can use a different macro with various studies for each commodity, stock or group of tradeables. The technique described below keeps you in charge of the pattern and flow of analysis, but it speeds the process quite a bit. Here is an example of how it might work for you.

You might make many small macros that simply add studies to the chart on the screen. With this type of macro, you can pick the data series for display, then automatically add a series of studies such as CSI-STOP℠, RSI and MAC/D, for example.

To do this, first make a basic chart of any time series. With the chart shown on the screen, begin the learning process by pressing <ALT> <L>.

The ENTER QA# prompt won't show up on a QuickPlot chart, but your computer will beep. Enter the letter or number you want to name the macro when you hear the beep.

Go through the normal menus and screen prompts to add studies to your chart, then press <ALT> <L> again to mark the end of your macro.

You can repeat the same studies on any chart that is loaded by itself on a QuickPlot chart. Just press <ALT> <P> when the chart is displayed, then type the appropriate QA# (or letter) at the beep. Your studies will be added to the screen with lightning speed. □