AIQ Opening Bell Newsletter

November 2002 Vol. 11 Issue 11

In This Issue

The Opening Bell Newsletter is a publication of AIQ Systems
P.O. Box 7530
Incline Village, Nevada
89452

Testing Determines Effectiveness of Pre-Built Rules

The Least Effective EDS Rules Are Valuable in Creating Short-Selling Strategies

By David Vomund

Place Vomund Photo Here

DAVID VOMUND

TradingExpert Pro comes with about 200 pre-built rules for the Expert Design Studio. Most of the pre-built rules are based on the action of a specific indicator. For each indicator, several rules were created to represent most of the indicator's technically significant actions. Trading systems can be created by simply copying and pasting these individual rules.

Recently we performed the time consuming task of testing all of the pre-built rules. In last month's issue of the *Opening Bell* we identified the most effective of the 200 rules. New Expert Design Studio models can be created by combining some of these most effective rules.

"This month, we will reveal which Expert Design Studio pre-built rules are the least effective. Why care about the least effective EDS rules? Because the rules that lost the most money on the long side can be used as effective short-selling rules. "

This month, we will reveal which rules are the least effective. Why care about the least effective rules? Because the rules that lost the most money on the long side can be used as effective short-selling rules. By combining some of these least effective rules, valuable short-selling strategies can be created.

Our tests were run on a database of the AIQ Pyramid stocks, which includes about 1700 issues. The time period used for the tests was 01/01/98 to 07/31/02. This period includes both bull and bear markets. A fixed holding period of 22 business days (approximately one month) was used. This is a longer time period than what most of the pre-built rules were designed for. For that reason, most of the trading results were very similar and represent simple market activity.

Table 1 is a listing of the 40 least effective Expert Design Studio rules, sorted by their return on investment (ROI). To aid you in locating these rules in your system, Table 1 indicates which folders the rules reside in and what the rule names are.

The first column of the table displays the name of the directory (or directories) followed by the file name. The second column shows the name of the rule that was tested.

To find a pre-built rule, open the Expert Design Studio and select ***File, Open***, and double-click the ***EDS Strategies*** folder. This accesses the directory list found in Table 1. Double-click the appropriate directory name and then highlight and open the file name. With the file open, the rule will be displayed in the ***Rule Library*** page of the EDS window.

The single worst performing rule (i.e., best short-selling rule) used a

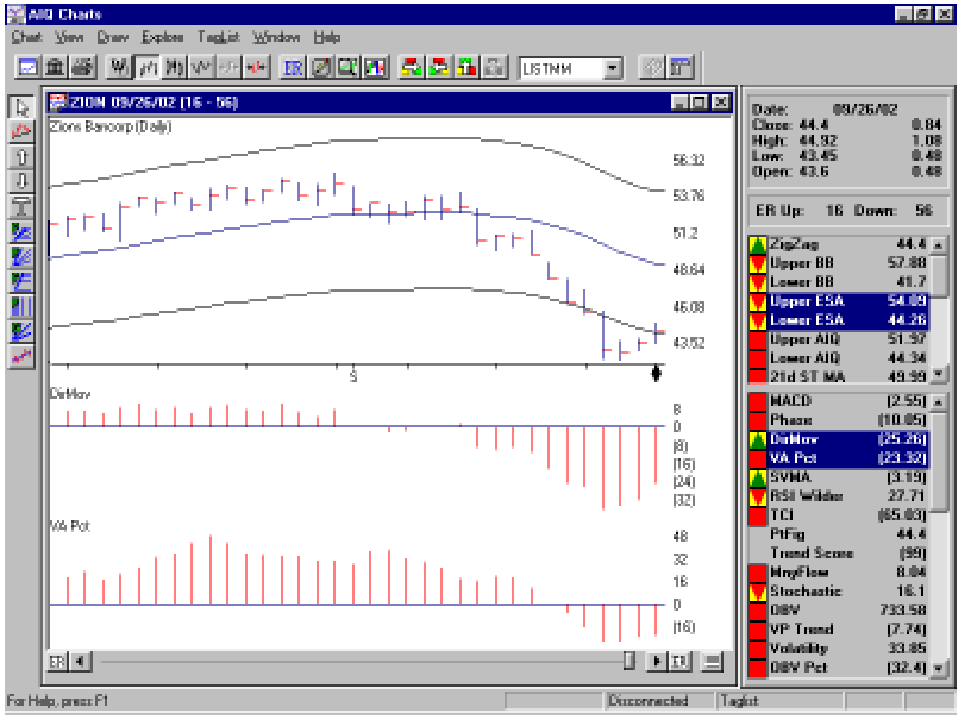

Figure 1. Daily chart of Zions Bancorp. Stock passed short-selling screening rules with price rise above Lower ESA band, DMI below -25, and Vapct below -20.

candlestick charting pattern called Meeting Lines. Meeting Lines are formed when opposite colored candlesticks have the same closing price. Unfortunately, this rule only provided 66 trades. It will be worth loosening the criteria for the rule in order to increase the number of trades.

For example, part of the rule states that the value of yesterday's close minus the value of yesterday's open is greater than \$2. With today's low stock prices, fewer stocks pass this screening. By changing the rule to use percentage figures instead of dollar figures, there would be more trades (look for this to be covered in a future *Opening Bell* article).

The second worst performing rule was an EDS model featured in the December 1998 *Opening Bell*. Luckily, this was a short-selling model!

> ***"The second worst performing rule was an EDS model featured in the December 1998 Opening Bell. Luckily, this was a short-selling model! The concept ... it shorts downtrending securities that have recently rallied."***

The concept behind this model is that it shorts downtrending securities that have recently rallied. The rules are — the stock must have risen above the Lower ESA trading band, it must have a Directional Movement Index (DMI) below –25, and it must have a Volume Accumulation Percent (Vapct) indicator below –20.

A recent example of a stock that passes this screening is Zions Bancorp (ZION) shown in **Figure 1**. The low DMI ensures that the stock is in a downtrend and the low Vapct implies that money is not flowing into the stock.

Another *Opening Bell* short-

...continued on page 4

AIQ Opening Bell Newsletter

David Vomund, Publisher
G.R. Barbor, Editor
P.O. Box 7530
Incline Village, NV 89452

AIQ Opening Bell does not intend to make trading recommendations, nor do we publish, keep or claim any track records. It is designed as a serious tool to aid investors in their trading decisions through the use of AIQ software and an increased familiarity with technical indicators and trading strategies. AIQ reserves the right to use or edit submissions.

While the information in this newsletter is believed to be reliable, accuracy cannot be guaranteed. Past performance does not guarantee future results.

For subscription information, phone 1-800-332-2999 or 1-775-831-2999.

© 1992-2002, AIQ Systems

Table 1 - Lowest ROI Trades

The following lists the results of testing the pre-built EDS rules using a stock database of the 1700 AIQ Pryamid stocks. A fixed 22-business day holding period was used. The testing time period was 01/01/98 to 07/31/02.

	Directory\file	Rule Name	Annual ROI
1	basic indicator strategies\candlsticks\Meeting	LinesMeetinglines	-67.80
2	OBM\OBMdec98	Allworks	-16.24
3	combination basic indicator strategies\ER up and increasing trendscore	ConfirmedUp	-10.39
4	basic indicator strategies\candlesticks\Dark Cloud	DarkCloud	-7.47
5	OBM\Nov99obm	Allworks	0.47
6	obm\congesti	Breakout	0.95
7	hit and run\Gilligans Island Buy	GilligansIslandBuy	1.41
8	basic indicator strategies\ESA\ST ESA crossover IT ESA to the downside	ESACrossDown	4.00
9	barometer\red down\ITMAreddown	ITMAreddown	4.82
10	street smarts\Whiplash	Whiplash	5.01
11	hit and run\Lizards Buy	LizardBuy	5.27
12	barometer\red down\LTESAreddown	LTESAreddown	5.57
13	basic indicator strategies\ESA\Price crosses from below to above the Lower ESA	ESAlowerUp	6.07
14	barometer\red down\Velocityreddown	Velocityreddown	6.75
15	barometer\green up\MACDgreenUp	MACDgreenup	6.85
16	street smarts\Turtle soup	Isgoodturtle	6.93
17	barometer\red down\STMAreddown	STMAreddown	7.29
18	hit and run\5-day Momentum Buy	BuyLong	7.37
19	barometer\green up\MACDOSCgreenup	MACDOSCgreenup	7.70
20	barometer\green up\CCIgreenup	CCIgreenUp	7.95
21	barometer\green up\PVOLgreenup	PVOLgreenup	8.18
22	street smarts\range contraction	RangeContraction	8.26
23	basic indicator strategies\candlesticks\Candlestick Beltholds	Belthold	8.63
24	barometer\green up\DIRMOVgreenup	Dirmovgreenup	8.80
25	hit and run\180s short	SellShort180	8.93
26	chart patterns strategies\double top strategy	Doubletop	9.18
27	barometer\red down\LowerAIQreddown	LowerAIQreddown	9.29
28	barometer\red down\ITESAreddown	ITESAreddown	9.29
29	barometer\red down\UpperAIQreddown	UpperAIQreddown	9.29
30	basic indicators strategies\price based\Price Gap down	PriceGapDown	9.33
31	barometer\green up\OBVPCTgreenup	OBVPCTgreenup	9.48
32	barometer\red down\LTMAreddown	LTMAreddown	9.82
33	basic indicator strategies\candlesticks\HARAMI	Harami	9.89
34	basic indicator strategies\CCI\CCI cuts from below -100 to above -100	CCIcovershort	10.03
35	combination basic indicator strategies\Volume and volatility filter	TradeOK	10.84
36	barometer\red\STMAinred	STMAinred	10.94
37	barometer\green up\MFOSCgreenup	MFOSCgreenup	11.18
38	basic indicator strategies\Bollinger Bands\price crosses from below to above Lwr BB	LOWERBBcrossUp	11.30
39	barometer\green up\PHASEgreenUp	PHASEgreenup	11.50
40	barometer\green up\STESAgreenUp	STESAgreenup	11.52

selling model appears near the top of the ranking. In the fifth spot is a model from the November 1999 issue. This model combines the AIQ pre-built Harami candlestick pattern with an RSI AIQ indicator rising above 30. Testing shows that this short-selling model was actually more effective in the bullish time period than the bearish time period.

Some of the worst performing rules were designed to be bearish, and some were not. Looking at some of the rules that were designed to be bearish, the fourth rule is Dark Cloud. This is a candlestick chart pattern that takes place over two days.

The first day is a strong white real body, meaning the stock closed well above its opening price. The second day's price must open above the previous day's high price but by the end of the second day's session, the security must close near the low of the day (see **Figure 2**). This screening produced 2435 trades so it can become a valuable part of a short-selling model.

A popular bearish trend-following rule is when the short-term Exponentially Smoothed Average (ESA) crosses below the long-term ESA. This rule, found in row 8, tested well and had 25,787 trades so additional bearish rules can easily be added to this rule to form an effective short-selling model.

"A popular bearish trend-following rule is when the short-term Exponentially Smoothed Average (ESA) crosses below the long-term ESA. This rule tested well… additional bearish rules can easily be added to form an effective short-selling model."

An AIQ Report, the Crossover of Two Moving Averages, performs a similar function.

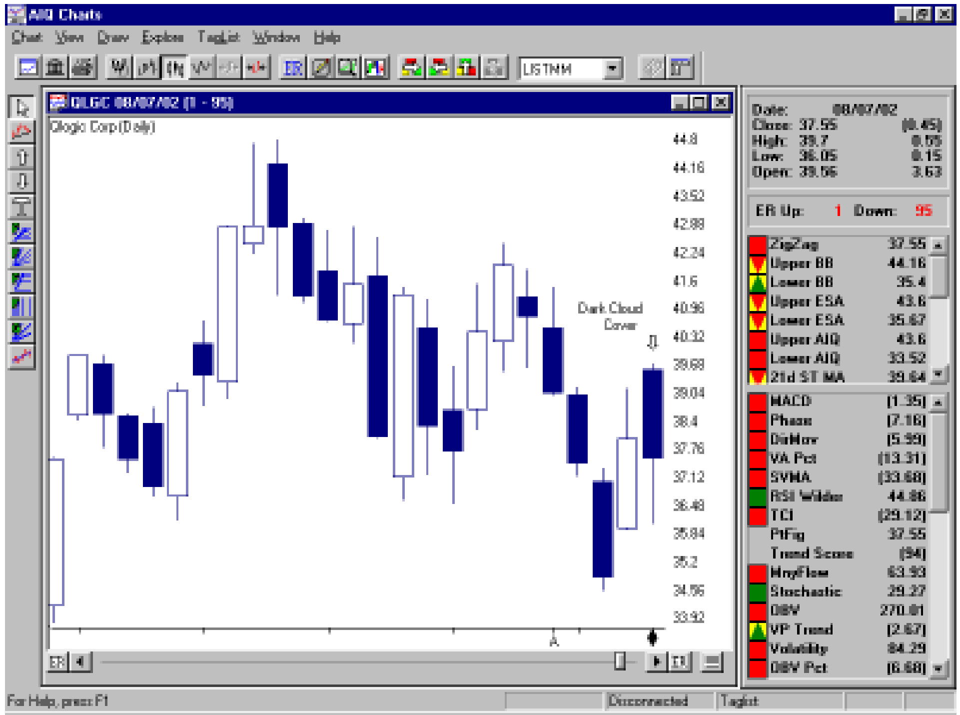

Figure 2. Daily candlestick chart of Qlogic. Stock met criteria of this short-selling strategy when Dark Cloud pattern occurred on 08/07/02.

Several of the rules at the top of the ineffective list search for stocks with moving averages that are heading lower. The 9th rule finds stocks whose intermediate-term moving average shows a red down arrow on the Color Barometer, the 12th rule does the same thing but uses the long-term moving average, and the 17th rule uses the short-term moving average.

Several of the top-listed rules were designed to be bullish. The third rule searches for stocks with Expert Rating buy signals and an increasing Trend Score. This scan had 8178 trades. The 15th rule searches for stocks whose MACD indicator has a green up arrow on its color barometer.

Over the coming months, we'll use the information reported in this issue to create effective short-selling models.

In addition, we are going to run the same tests on all of the 200 pre-built rules using a holding period of just a few days. This will tell us which rules are the most effective and least effective for short-term trading.

David Vomund publishes VIS Alert, a weekly investment newsletter. For a sample copy, call 775-831-1544 or go to ***www.visalert.com.***

How to Subscribe

To the Opening Bell Monthly, AIQ's Educational Newsletter

For subscription information, phone 1-800-332-2999 or go to **www.aiqsystems.com** (check out back issues).

Using TradingExpert Pro's Overlay Feature

Compare Two Charts with Different Time Periods

Several years ago, AIQ added the ability to overlay different securities on one chart. This makes it possible to compare the price movement of two securities, seeing if prices move together or if they move independently of one another. With the release of TradingExpert Pro version 7.0, AIQ added the ability to overlay charts with different time periods.

Overlaying charts using different time periods is helpful for those who use seasonality factors. You have the ability to plot a current General Electric (GE) chart overlaid with a chart of General Electric from a year ago.

Another alternative is to compare the market averages using different time periods. For example, many people have compared today's market with that of 1973-74. In both cases, major stock indexes lost about 50% of their value.

By using the new Overlay feature, we can compare how the 1973-74 market bottom looked compared to the current time period. **Figure 1** shows an overlay of the 1973-74 bear market with the current bear market. It's striking how similar the downside movement is between the two markets. Notice also how the 1973-74 bear market ended with an initial low and then a retest of the low. Is the current market making a similar low?

To overlay two charts, you first plot one of the two securities. Type the ***O*** key for overlay. Then enter the ticker symbol for the second security. An overlay of two securities, both with the same time period, will appear. When plotting an overlay chart, it is best to remove all the indicators such as trading bands and moving averages.

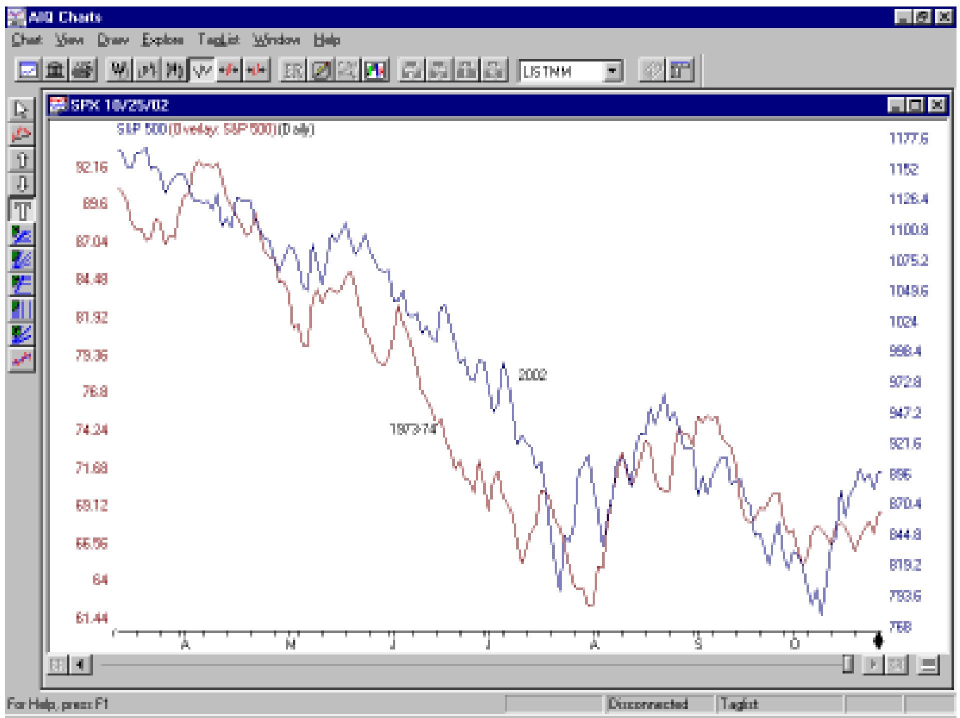

Figure 1. Daily (close only) chart of S&P 500 index. 1973-74 market bottom overlaid on chart of current (2002) SPX price action.

To plot an overlay using different time periods, first chart two securities using the standard Overlay feature. With the two securities plotted, select ***Chart*** and then ***Lock Overlay***. The second ticker that was plotted will stay fixed even as you change the dates of the first chart.

To duplicate Figure 1, first chart the S&P 500 using close only data with no indicators. Type the ***O*** key and for the second chart enter the SPX again. You have now plotted the S&P 500 twice. Next, change the date of the second S&P 500 chart to 12/31/74 – type ***D*** and enter ***12/31/74***. To lock this chart in place, select ***Chart*** and then ***Lock Overlay***. This S&P 500 chart will now remain in place. On the dateline, drag the first S&P 500 chart to the current time period. After performing this procedure, your screen will show the 1973-74 S&P 500 chart along with a current S&P 500 chart.

Whether or not an overlay of the 1973-74 bear market with today's market implies the market has hit its low is open to discussion. After all, an overlay of today's market with the Japanese market may give very different results. Analysts often use overlay charts to support their preconceived views of the market.

After 2 ½ year of a bear market, we can at least hope that today's market enters a new bull phase just as it did after 1973-74!

S&P 500 Changes

Changes to the S&P 500 Index and Industry Groups:

There were no changes to the S&P 500 index components.

Reevaluating Risk Tolerance

Trading 'Style Indexes' Is Great Way To Avoid Risk of Holding Individual Stocks

By David Vomund-

Having experienced the worst bear market since the 1930's, many people have reevaluated their risk tolerance. As we approach the end of the third consecutive down year, many people believe that most of the pain is behind us and that things will improve. Yet, risk is still high and there are too many stocks that lose a third of their value based on lower profit guidance from management. Buying individual stocks is scary.

A great way to participate in the market without the risk of holding individual stocks is to buy securities that track "style indexes." By trading securities that track market indexes (i.e., large-cap growth, large-cap value, small-cap growth, small-cap value indexes, etc.) one can outperform the S&P 500 without the risk of holding individual stocks. In a sense, it is similar to trading sector funds but is safer because the trading vehicles are more diversified.

"By trading securities that track market indexes (i.e., large-cap growth, large-cap value, small-cap growth, small-cap value, etc.) one can outperform the S&P 500 without the risk of holding individual stocks."

I've found two good vehicles that allow for easy trading of style indexes. The ProFunds mutual fund family (*www.profunds.com*) has six style funds that have free end-of-day trading. There are also Exchange Traded Funds (ETFs) that track market indexes but trade just like stocks. These choices are listed in **Table 1**.

Table 1. Style Index Trading Vehicles

ProFund Choices		ETF Choices	
Ticker	**Fund**	**Ticker**	**ETF**
LVPIX	Large-Cap Value	IVE	Large-Cap Value
LGPIX	Large-Cap Growth	IVW	Large-Cap Growth
BLPIX	S&P 500 Index	SPY	S&P 500 Index
MLPIX	Mid-Cap Value	IJJ	Mid-Cap Value
MGPIX	Mid-Cap Growth	IJK	Mid-Cap Growth
MDPIX	Mid-Cap Index	MDY	Mid-Cap Index
SVPIX	Small-Cap Value	IWN	Small-Cap Value
SGPIX	Small-Cap Growth	IWO	Small-Cap Growth
SLPIX	Small-Cap Index	IWM	Small-Cap Index
OTPIX	Nasdaq 100 Index	QQQ	Nasdaq 100 Index

Price history on these securities is limited so it is hard to run a backtest that covers both bull and bear markets. Most of the ETFs began in 2000. Therefore, a backtest of a trading system can't be run on the actual securities but must instead be run on proxy securities. For example, instead of buying the Nasdaq 100 ETF (QQQ) for our backtesting, we bought the Nasdaq 100 index (NDX). Instead of buying the Large-Cap Growth ETF (IVW), we bought the S&P/Barra Growth index (SGX). Instead of buying the Large-Cap Value ETF (IVE), we bought the S&P/Barra Value index (SVX). As proxies for the Small- Cap Growth and Small-Cap Value ETFs, we used Vanguard's Small-Cap Growth fund (VISGX) and Vanguard's Small-Cap Value fund (VISVX). In backtests we didn't include mid-cap choices.

Our trading strategy is similar to the one used in the September 2002 *Opening Bell*. We designated all of the proxy securities as mutual funds and the Mutual Fund Relative Strength Short-Term report was run on these securities every other Friday (i.e., there is only one day in a two-week time span when you need to reevaluate).

At the start of the test, the two highest rated ETFs were purchased with equal dollar amounts to establish a fully invested portfolio.

Two weeks later, the Relative Strength report was run again. If the current holdings were rated in the top half of the report, then there were no trades. If a holding had fallen in the Relative Strength report to where it was no longer in the top half, then it was sold and the highest rated ETF was purchased.

The portfolio was always fully invested in two ETFs. During times when no ETFs appeared on the Relative Strength Short-Term Strong report, then the best performing ETFs were purchased from the Relative Strength Short-Term Weak report.

I assumed that the ETFs were bought and sold on Friday's closing price instead of Monday's opening price. This assumption is reasonable because you can download price data and run the report a few minutes before the close. The backtest doesn't include slippage or commission fees, however.

I began the test on August 31, 1998. This trading strategy can't be automated so I generated the Relative Strength report every other week and manually entered the trades. Although it's time consuming, I found this manual process beneficial because it gave me a "real" feel for how the strategy behaved.

Nasdaq 100 and Large-Cap Growth were the first two securities that were purchased. Amazingly, the Nasdaq 100 was held until May 2000. As a result, it became a very high percentage of the whole portfolio. That was remedied in July 2000 when the strategy sold both holdings and bought two new securities with equal dollar weightings.

From 08/31/98 to 09/30/02 this backtest gained 72% compared to a 10% loss in the S&P 500. The detailed trading statistics from the backtest are found in **Figure 1**. Notice there was an average of only 4.5 trades per year with the largest loss of 11.3%. This is a strategy that

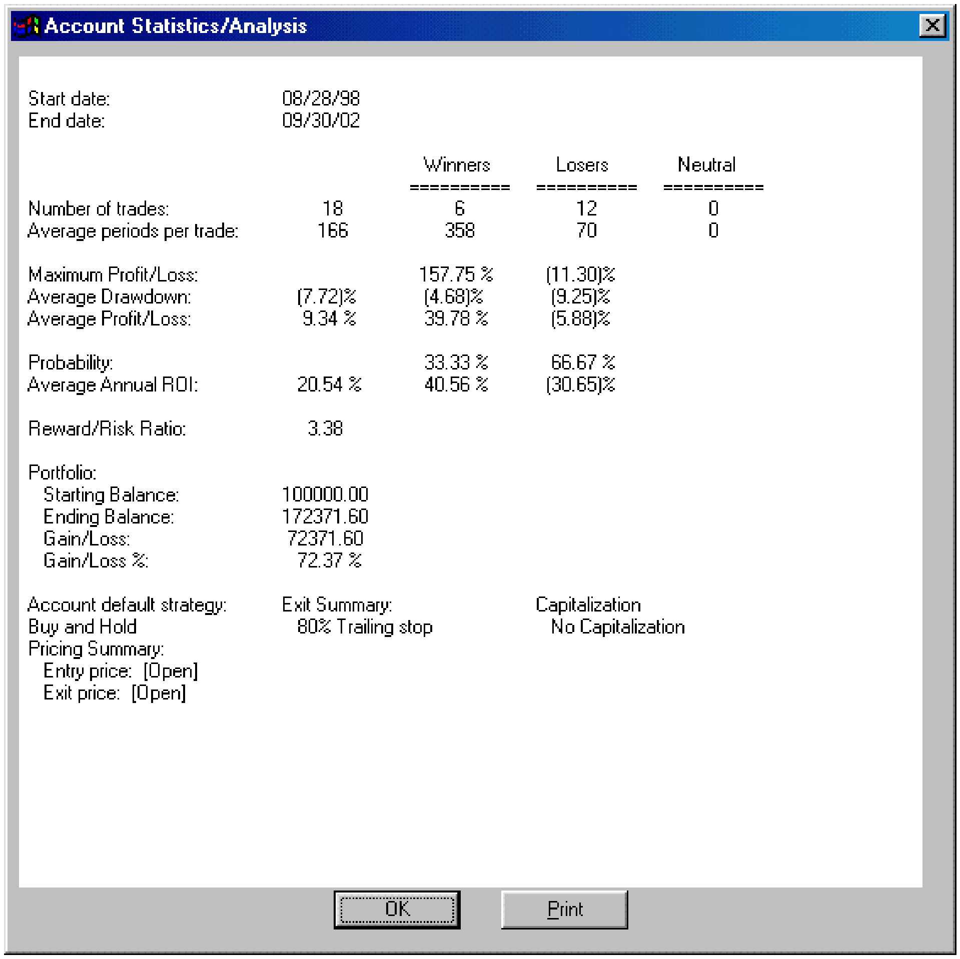

Figure 1. Backtest results of ETF Trading Strategy for period 08/31/98 to 09/30/02. Note the strategy's 72% gain compared to a 10% loss in the S&P 500.

allows you to sleep at night.

The yearly results are found in **Table 2**. This strategy outperformed the S&P 500 index every year and it held its value during the 2000 through 2001 bear market years. It was even unchanged in the first half of this year. It wasn't until the third quarter that all style indexes fell in value, accounting for the 19.93% loss.

Keep in mind that this backtest doesn't represent actual returns — remember, we bought proxy securities rather than what would have actually been purchased. Instead, the purpose of the backtest is to create and gain confidence in a strategy that successfully trades securities linked to style indexes. To emphasize my confidence in this approach, I've started a style index portfolio in my VISalert.com newsletter that trades ETFs using this strategy.

> *"This strategy (trading of style indexes) outperformed the S&P 500 index every year and held its value during the 2000 through 2001 bear market years. The strategy was even unchanged in the first half of this year."*

The beauty of the strategy is that the Nasdaq 100 ETF (QQQ) drives the results higher during very bullish time periods such as in 1999 when the strategy gained 61%, but it rotates to more conservative selections during bearish time periods. It only lost 3% in 2000 because it rotated to Small-Cap Value. In 2001 the strategy actually gained money because Small-Cap Value continued to perform well.

I tried variations of the strategy but they didn't perform as well. The first variation was to shorten the time period on the Relative Strength Short-Term report. The default time period on this report is 6 months. Since there were only 4.5 trades per year, I thought the report could be shortened, thereby increasing the number of trades and hopefully increasing the return. I changed the time period used on the report to three months but the return suffered. The strategy was only slightly worse in 1998 and 1999 but in 2000 it lost 22%. Those results put an end to that test.

Table 2. Percentage Returns

	ETF Strategy	S&P 500	Nasdaq Comp.
1998 *	33.18	28.37	46.26
1999	61.54	21.04	85.59
2000	-3.01	-9.10	-39.29
2001	3.17	-11.89	-21.03
2002**	-19.93	-28.16	-36.48

* 08/31/98 to 12/31/98
** 01/01/02 to 09/30/02

Another variation was to incorporate some form of market timing. I established a rule that said if no securities appeared on the Relative Strength Short-Term Strong report then nothing would be bought (i.e., you wouldn't buy the best performer on the Short Term Weak report). That rule successfully kept me in cash during the third quarter of this year but it hurt the returns in 2000 and 2001. In 2000 the strategy lost 11.4% and in 2001 it lost 15%.

"Risk tolerance has changed. Trading ETFs is a great way to capitalize on market returns without subjecting yourself to the risk of holding individual stocks. It's a strategy that most people can live with."

This form of market timing did not work. I'll continue to test market timing techniques and will report on them in a future article.

The best trading systems are ones that people can employ over long time periods. In the last few years, many investors have bailed on strategies that they once considered appropriate for the long run. Risk tolerance has changed. Trading ETFs is a great way to capitalize on market returns without subjecting yourself to the risk of holding individual stocks. It's a strategy that most people can live with.

STOCK DATA MAINTENANCE

The following table shows stock splits and other changes:

Stock	Ticker	Split	Approx. Date
Peapack Gladstone	PGC	2:1	11/04/02
Old Point Financial	OPOF	3:2	11/05/02

Trading Suspended:

Chase Industries (CSI), Donnelly Corp. (DON), Grubb & Ellis (GBE), Magellan Health Services (MGL), PayPal Inc. (PYPL), Pennzoil-Quaker State (PZL), Previo Inc. (PRVO), USI Holdings (USH), Wyndham Int'l (WYN)

Name Changes:

Midwest Grain Products (MGPI) to MGP Ingrediants (MGPI)
Reliant Energy (REI) to Centerpoint Energy (CNP)
RPM Inc. (RPM) to RPM Int'l (RPM)
Thompson Multimedia ADS (TMS) to Thompson ADS (TMS)

Market Review

The market has a history of forming a low during AIQ's fall seminar. It happened in 1998 and it happened again this year. The market formed a low on October 9 and rallied through the remainder of the month. For the month, the S&P 500 gained 8.6% and the Nasdaq Composite rallied 13.4%.

The AIQ timing model registered two signals in October. A 99 buy signal came on October 10 and another 98 buy signal came on October 11. These signals were mostly due to an improving market after severe oversold conditions.