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Feature

Sections

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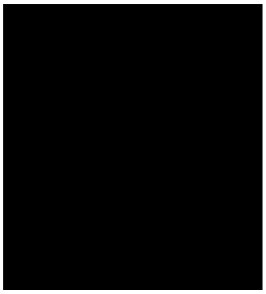
STOCK ANALYSIS

STOCK SELECTION IS A GAME OF PROBABILITIES

By David Vomund



DAVID VOMUND

In the last few issues of the *Opening Bell*, we've covered my stock selection process and listed the securities that I've recommended in the last three years. We will now examine two of these selections, one that worked and one that didn't, to demonstrate that selecting stocks is a game of probabilities.

On August 9, 1996, we picked Conseco Inc. (CNC) as an attractive stock. One week later, our selected stock was Precision Castparts (PCP). These stocks looked very much the same.

> ***You develop a (trading strategy) to increase the odds of success...You never know which selections will be the ones that work out. The key is to understand this and not feel that your strategy is bad or must be revised when a loss is seen.***

According to *Investor's Business Daily*, CNC's earnings per share (EPS) ranking was 83, implying its earnings growth outpaced 83% of all other companies. PCP's EPS ranking was 80.

The weekly charts of both these stocks showed nice uptrending patterns with the 28-week moving average acting as support.

Both stocks appeared on TradingExpert's Point & Figure Breakout report.

Figure 1 (page 2) shows Conseco's Point & Figure chart and **Figure 2** shows the Point & Figure chart for Precision Castparts. The patterns were similar. The stocks both moved above their previous column of X's, a level that had acted as resistance. CNC's Point & Figure chart was slightly more bullish since its consolidation took place in five columns instead of four, but both stocks just rose above resistance and were hitting new highs.

Turning to the daily charts (**Figure 3** for Conseco and **Figure 4** for Precision Castparts), we see that both stocks

Stock Analysis continued on page 2

STOCK ANALYSIS *continued . . .*

were moving to new highs and negative divergences were not forming (i.e., they were still being accumulated). As the stocks were hitting new highs, so were their On Balance Volume and Money Flow indicators. Both stocks were also on confirmed AIQ buy signals.

What happened to these stocks? Since being recommended, Conseco rose almost 30%. Precision Castparts on the other hand is unchanged as of this writing, a poor performance considering what the strength of the market has been.

Both of these stocks looked very similar but only one performed as expected. Evidence that stock investing is a game of probabilities.

You don't develop a trading strategy to find a system that always works. You develop a process to increase the odds of success. The better the strategy, the higher the success rate. You never know which selections will be the ones that work out.

Figure 1

Conseco Inc. (CNC)

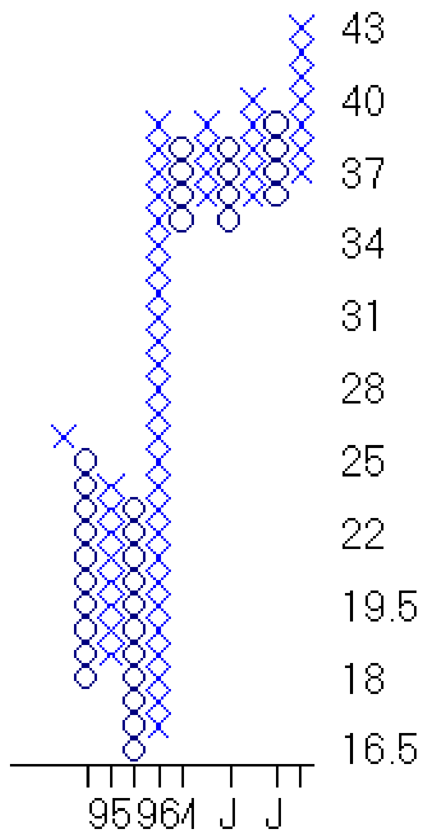


Figure 2

Precision Castparts (PCP)

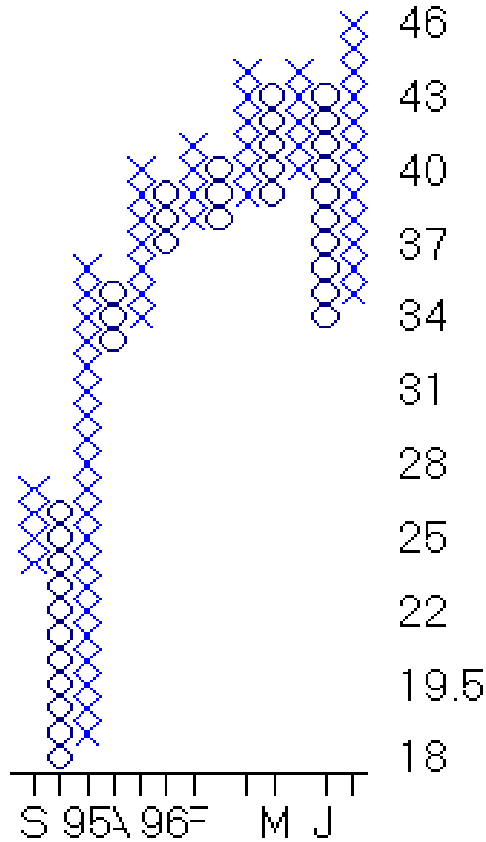
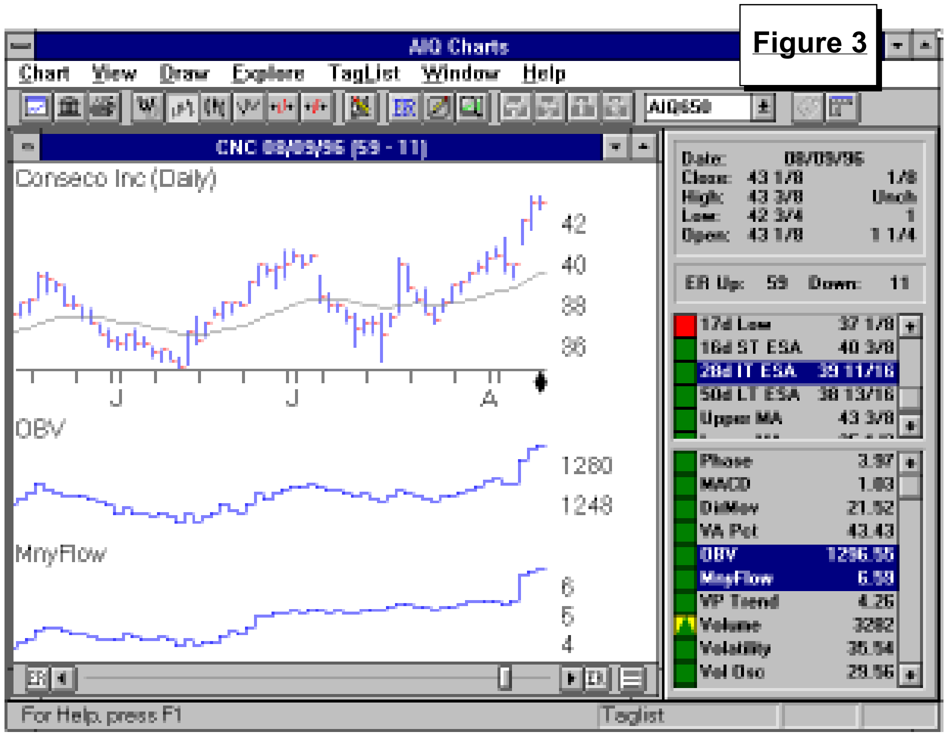


Figure 3



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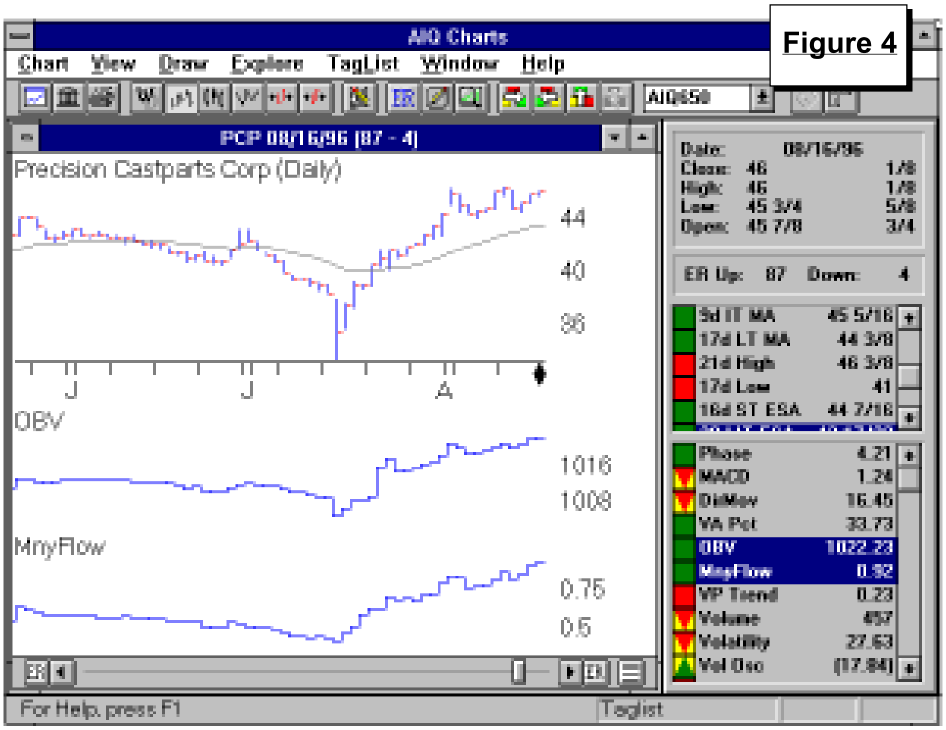
STOCK ANALYSIS *continued . . .*



The key is to understand this and not feel that your strategy is bad or must be revised when a loss occurs.

If you look at my buy list of stocks which appeared in the November issue of the *Opening Bell*, you will see that about half of them were sold at a loss. However, the winners rose considerably more than the losers fell.

When there is a string of consecutive losses such as in March 1994 or in May 1996, then we know the problem was one of market timing. Some of the losers were a result of choosing the wrong industry group. As to the remaining losers, the majority were good selections that simply didn't work. ■

STOCK DATA MAINTENANCE

The following table shows past and future stock splits and large dividends:

Stock	Ticker	Split/Div.	Approx. Date
DSP Communications	DSPC	2:1	12/03/96
Clear Channel Comm.	CCU	2:1	12/03/96
OM Group	OMGI	3:2	12/03/96
Comp USA	CPU	2:1	12/03/96
Worthington Foods	WFDS	4:3	12/09/96
Dell Computer	DELL	2:1	12/09/96
Microsoft	MSFT	2:1	12/09/96
TRW Inc.	TRW	2:1	12/10/96
United Technologies	UTX	2:1	12/11/96
Progressive Bank	PSBK	3:2	12/11/96
Boole & Babbage	BOOL	3:2	12/11/96
Expeditors Int'l Wash	EXPD	2:1	12/12/96

Stock	Ticker	Split/Div.	Approx. Date
Clayton Homes	CMH	5:4	12/12/96
Crane Co.	CR	3:2	12/13/96
Market Facts Inc.	MFAC	2:1	12/16/96
Cardinal Health	CAH	3:2	12/17/96
Brightpoint Inc.	CELL	3:2	12/17/96
First Midwest Bancorp	FMBI	5:4	12/17/96
Detection Systems	DETC	3:2	12/18/96
Avery Dennison	AVY	2:1	12/23/96
Penn National Gaming	PENN	2:1	12/23/96
Innovex Inc.	INVX	2:1	12/24/96
Halifax Corp	HX	3:2	12/30/96
Williams Cos.	WMB	3:2	12/31/96

Trading Suspended:

AccuStaff Inc. (ASTF)
Redman Industries (RDMN)
Super Food Services (SFS)
American RE Corp (ARN)
Roper Industries (ROPR)
Supercuts Inc (CUTS)
Magna Group (MAGI)
Spectra Vision (SVN)
Trizec Corp (TZR)

Name/Ticker Changes:

Softkey Int'l (SKEY) to The Learning Co. (SKEY), Iomega Corp (IOMG) to Iomega Corp (IOM)
Lewis Galoob Toys (GAL) to Galoob Toys Inc. (GAL), Learning Co. (LRNG) to Learning Co. (TLC)
Butler Mfg. (BTLR) to Butler Mfg. (BBR), Melville Corp (MES) to CVS Corp (CVS)

AIQ REPORTS

Price Volume Divergence Report Applied to Industry Groups Gets 'High Marks'

By David Vomund

AIQ's Price Volume Divergence report was introduced in our first version of TradingExpert for Windows. It immediately became a very popular report. We tested this report's effectiveness on stock selection in the December 1995 issue of the *Opening Bell.* We compared the average price change for stocks that appeared in the *Positive Divergence* section to that of the stocks that appeared in the *Negative Divergence* section. The results were encouaging - the positive divergence stocks gained one percent more per month than the negative divergence stocks.

Based on these results, we decided the report should be available for groups and sectors as well as stocks. Version 3.0 of TradingExpert includes a Price Volume Divergence report for both groups and sectors. In this article, we'll apply the same test that we applied to stocks to industry groups.

Before we report results of our testing, let's review how the Price Volume Divergence report works. This report looks for divergences between the price action of a security and the readings of the security's On Balance Volume and Money Flow indicators. A positive divergence occurs when the security falls in price over the last 15 days but a composite reading of the slopes of these two indicators increases in value.

An example is found in **Figure 5**. In this example, the Aerospace/Defense group made a new high in mid-October and then began to move lower. There is a pattern of lower lows (see trendline). Looking at the On Balance Volume and Money Flow indicators, we see that both indicators moved higher over the same 15 day time period. Both the time period used in the calculation and the weighting of each indicator can be changed on the *Daily Stock Criteria* screen, which is accessed from the *Settings* menu command in TradingExpert's Reports application.

In our testing, we ran the Price Volume Divergence report on the Standard & Poor's industry group structure at the beginning of each month. We then calculated the average monthly return on the top three groups that appeared in the report's *Positive Divergence* section and *Negative Divergence* section. A new report was run each month, beginning in January 1995. The results are found in **Table 1**.

In Table 1, we see that the highest rated three groups that appear in the

Table 1

Summary Statistics
Price Volume Divergence Report

		Positive Divergences	Negative Divergences	S&P 500
1995	January	7.11	-0.34	2.42
	February	6.69	4.38	3.24
	March	-0.30	2.32	3.10
	April	5.05	10.88	2.71
	May	4.44	5.36	3.74
	June	8.47	5.25	2.11
	July	3.13	-2.67	2.73
	August	5.37	4.96	0.75
	September	-6.39	2.58	3.65
	October	-1.81	0.14	-0.03
	November	5.83	1.46	3.90
	December	-2.32	-2.86	1.47
1996	January	5.91	3.53	3.74
	February	0.00	-1.60	0.93
	March	1.51	-3.12	1.45
	April	3.96	0.90	0.13
	May	2.31	2.13	2.22
	June	-0.25	-3.30	1.01
	July	-6.17	-10.77	-3.83
	August	5.86	-0.55	0.30
	September	4.37	2.36	5.69
	October	-1.51	0.75	2.13
	November	6.81	3.95	7.57
	Average=	2.52	1.12	2.22

AIQ REPORTS *continued* . . .

Positive Divergence section increase an average of 2.52% per month. The top three groups that appear in the *Negative Divergence* section increase 1.12% per month. The S&P 500 index increased an average of 2.22% per month. This is what we hoped would happen.

The groups showing positive divergences on average outperformed the S&P 500 and the groups showing negative divergences underperformed the S&P 500. There is a 1.4% difference per month between the groups that have positive divergences compared to the groups that have negative divergences. There was no backfitting or optimizing involved in this study.

TradingExpert's strength has always been its industry group analysis. With the ability to screen for positive and negative divergences, our group analysis is even more powerful. The Price Volume Divergence report is effective in forecasting short term movement in industry groups.

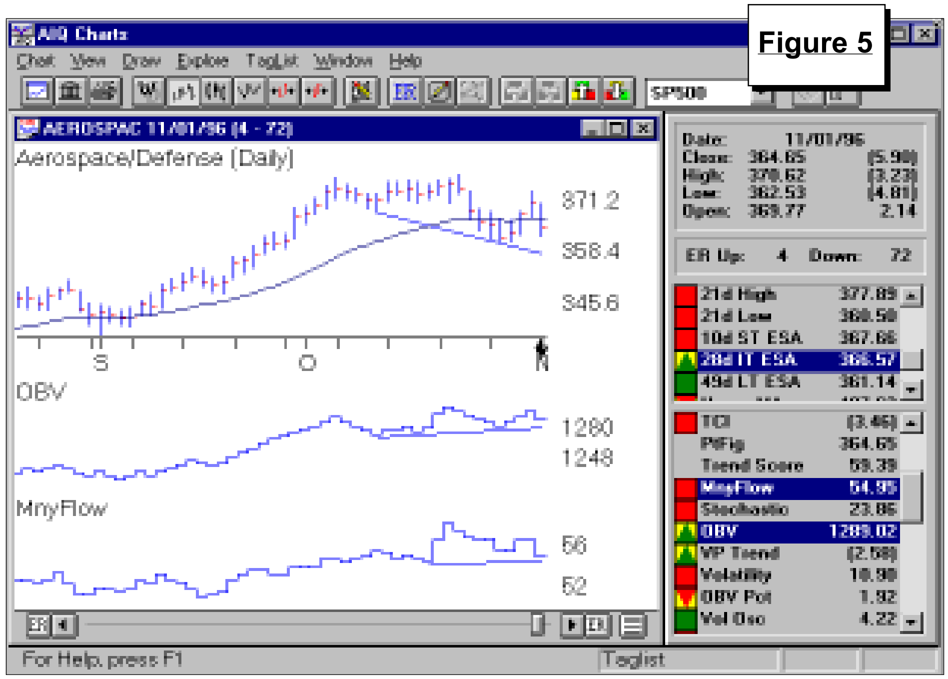


Figure 5

The Price Volume Divergence report is also an anticipatory report. In order to appear in the *Positive Divergence* section, the groups must have decreased in value over the last 15 days. The opposite is true for groups that appear in the *Negative Divergence* section. ■

MARKET REVIEW

The market rally gained momentum in November as there were only five days in the month in which the Dow lost ground. The strongest groups were technology related. Semiconductor stocks gained about 25% while the computers group gained 20%.

Airline stocks have lagged badly in recent months but came to life in November as they rose about 15%.

AIQ is still on the buy signal that was issued September 9, 1996.

For those who want to check Expert Ratings to make sure that your data is correct, the ER on November 27 was 54 - 46 and the ER on November 29 was 86 - 9 (using data from Dial/Data).

While the S&P 500 has been marching into new high ground, small company stocks have been lagging. The Russell 2000 is still about 2.5% below its highs.

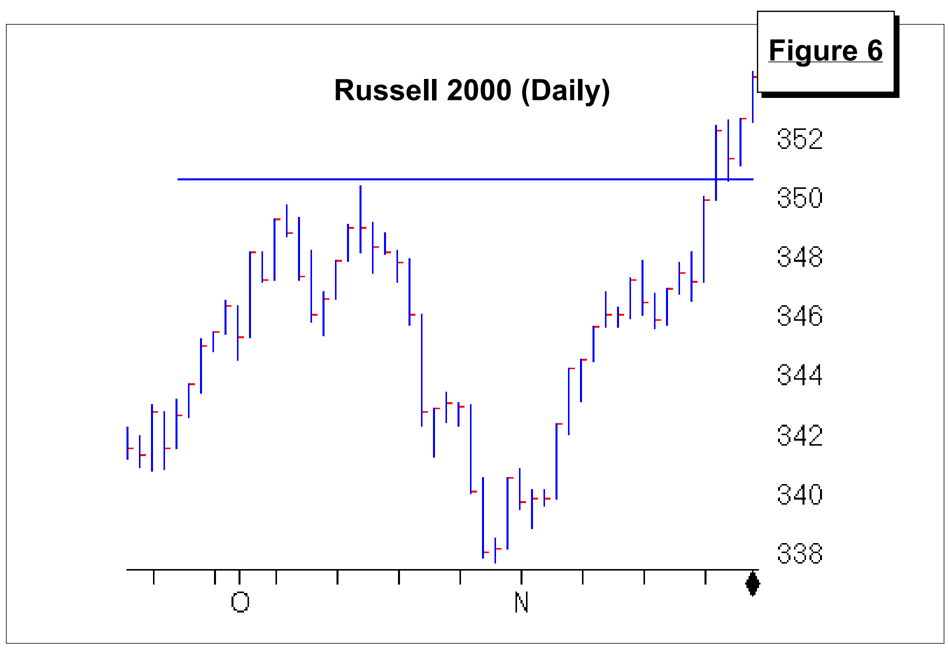


Figure 6

Late in the month, the Russell 2000 was able to rise above 351, a level that acted as resistance in October '96 and in April '96 (see Figure 6). This rise has helped propel small company stocks higher, and they are now showing signs of outperforming the larger company stocks. ■

TRADING COMMENTARY

'Mechanical' Selling Strategies -- Putting Them to the Test

By David Vomund

There are two elements in stock trading — buying and selling. I believe that human judgment can help determine what and when to buy. That's why I don't use a mechanical "black box" strategy which selects stocks for me. Selling, on the other hand, is best left to a mechanical system. Emotions get in the way of good sell decisions.

Emotions will force you to sell too early on big winning stocks and keep you in losing stocks because you don't want to take a loss. We've recently tested sell strategies for all the stocks that have appeared in the Current Buy List section of my *Stock Alert* newsletter. In the newsletter, I select an attractive stock almost every week. After 3 1/2 years of publishing the newsletter, we have a large representation of stocks to use for testing different sell strategies. In this article, we'll summarize our testing of several mechanical selling strategies.

Using 15% trailing stop

My stock selection strategy is geared toward longer term trading than what most AIQ users employ so we have only tested strategies that will keep you in most of a stock's move. The sell strategy that we employ in the newsletter is a simple trailing 15% stop level. That is, anytime a stock falls 15% from its highest closing price after the purchase date, it is sold.

With this method, the average trade (ignoring commissions and slippage) through the middle of October 1996 gained 9.8% with a 166-day holding period. That translates to a 21.6% annual rate of return.

15% trailing stop but sell if stock hits 20% profit

Using a trailing 15% stop, you give up a lot at the top before you sell. The rule of our first alternate strategy is to sell anytime a stock has a 20% return. If the stock never reaches 20%, the 15% trailing stop is used. Since my average stock selection gains about 25% before there is a 15% correction, this is a viable strategy.

Testing shows that this strategy lowers the overall return, however. Using this strategy, the average stock gained 4.6% with a 99-day average holding period. This is a 17.0% annual rate of return.

> ***Selling...is best left to a mechanical system. Emotions will force you to sell too early on big winning stocks and keep you in losing stocks because you don't want to take a loss.***

15% trailing stop but sell if stock hits 60% profit

Our next strategy once again uses the trailing 15% stop, but the position is closed anytime the stock has a 60% return. Since a stock with a 60% return may be top heavy, this too is a viable strategy.

Testing results for this strategy show that the average stock gained 9.6% in 148 days. That is a 23.7% annual rate of return, slightly higher than the simple 15% trailing stop.

10% initial stop-loss, then 15% trailing stop

We next tested our initial stop loss level. By examining only the stocks that had the biggest percentage gains (60% or more), we saw that only one of the 27 stocks initially saw a loss of more than 10%. At the same time, only one stock never showed a loss. All the other big winning stocks had a loss on an inter-day basis of somewhere between 0% and 10%.

Was our initial 15% stop-loss system giving up too much? To test this, we had to review all of our stock selections and employ a new strategy. We tested the stocks using the normal 15% trailing stop but added an initial stop loss of 10%. This helped save money on the stocks that immediately went sour, but it took us out of some stocks that eventually turned out to be winners.

Overall, the average stock using this new approach gained 9.6% in 157 days. That is a 22.3% annual rate of return which is close to but slightly higher than our normal 15% trailing stop.

In all of our testing, the 15% trailing stop has always been part of the strategy. Is this a good level? We once again examined the list of big gainers (60% or more returns) and looked for the largest correction that took place during the advance. We don't want to sell the big winners too early because the stop was too tight.

The results were surprising. Of the 27 big winning stocks, only two had corrections of less than 10% (Intel and British Petroleum). All the other stocks corrected between 10% and 15% sometime during their large advance. Had we employed a trailing stop of less than 10%, we would not have stayed in the biggest winners.

Using 28-Week Moving Average strategy

What about the strategy of selling when the stock falls below the 28-week Moving Average that I've written about in past *Opening Bells*? This strategy will lead to more frequent trades than using a trailing

TRADING COMMENTARY *continued . . .*

15% stop. For the stocks that produce a good return, the selling point is similar under both these strategies, but I typically buy a stock that is within 15% of its 28-week Moving Average so the initial stop is tighter.

Using the 28-week Moving Average as a stop point may be appropriate for people who feel that a trailing 15% stop is too loose.

No stop?

Finally, what about having no stop? The majority of the stocks we are examining are higher today than when they were sold. I would like to believe that they are higher because of good stock picking but the fact that we are in a tremendous bull market may have helped!

Buying and holding is fine for some investors as long as they buy quality, but there are two problems:

First, the market in the next three years may not be as strong as in the last three years.

Second and more important, our study is on 161 stocks. You would have a diversified portfolio if you were able to buy all of the stocks but few people have enough money to buy that many stocks. If you are like me, your portfolio is small enough that a few stocks going very sour will significantly lower your overall portfolio return.

Table 2

Summary Statistics
For Tested Selling Strategies

Strategy	Average Trade	Annualized (%)
15% trailing stop	9.82% in 166 days	21.6%
15% trailing stop but sell if it hits a 20% profit	4.61% in 99 days	17.0%
15% trailing stop but sell if it hits a 60% profit	9.62% in 148 days	23.7%
10% initial stop-loss and then 15% trailing stop	9.60% in 157 days	22.3%
S&P 500		14.2%

The analysis is believed to be reliable but accuracy cannot be guaranteed.

Conclusions

If you employ a growth strategy similar to what I follow and want to catch the overall trends in stocks (i.e., you are not a short term trader), then our testing results are important. First, expect a stock to move below your purchase price. Nearly all of our biggest gainers initially had a loss. Second, use an initial stop-loss level somewhere between 10% to 15% below the purchase price. The overall return using either a 10% stop loss or a 15% stop loss is very close. The level you choose depends on how often you want to trade and what loss is acceptable.

As the stock moves higher, a trailing stop should be used. The trailing stop allows the stock to fluctuate at least 10% without forcing you to sell. Even stocks that produce triple-digit percentage returns will fall at least 10% sometime during the advance. I am comfortable using a trailing 15% stop. ■

In addition to managed accounts, David Vomund publishes the Stock Alert Newsletter, an advisory for stock investing. To receive a free copy of Stock Alert, phone 702-831-1544.

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AIQ GROUP PYRAMID *continued from page 8 . . .*

group index.

The AIQ Pyramid structure is primarily designed for investors who use a top-down approach and prefer large company stocks. The structure has approximately 400 stocks classified into 73 industry groups (average 5.5 stocks per group). A similar correlation test is run on sectors. The 73 industry groups are classified into 15 sectors.

The AIQ Pyramid sells for $188. If you are a registered owner of a previous version of the AIQ Pyramid, you can purchase the newly updated version for $44. If you are interested in ordering the Pyramid or an update, call your sales representative, 800-332-2999. ■

AIQ GROUP PYRAMID

NEW AIQ INDUSTRY GROUP PYRAMID IS COMPLETED

We've completed a new version of the AIQ Pyramid, our industry group structure.

In review, the AIQ Pyramid is an industry group structure that is classified on both a fundamental and a technical basis. Most industry group structures are classified only on the basis of fundamentals — stocks with comparable products are placed into an industry group. AIQ has taken it a step further by performing a technical test to ensure that all the stocks in each group are behaving similarly with respect to price action.

The AIQ MatchMaker program is used to test the correlation of the stocks within an industry group to the industry group index. Only stocks with high correlations are kept in their group.

To create the Pyramid structure, we begin with the Dow Jones industry group structure and run the MatchMaker program to test the correlations. Only those stocks that demonstrate a high correlation to their industry group index are kept.

We then compare each industry group to a database of 1500 stocks, looking for new stocks to add to the structure. Only those that fit on a technical and fundamental basis are added. The industry group index then becomes a better representation of the underlying stocks.

An example of a group that was greatly improved in the new structure is Semiconductor & Related, which consists of 22 highly correlated stocks. **Table 3** is a list of the stocks along with their correlations. A coefficient of 1000 represents a perfect correlation, and 500 or greater is considered highly correlated.

Figure 7 is a chart of the Semiconductor & Related group along with Lam Research Corp., the stock that shows the highest correlation to its

AIQ Group Pyramid continued on page 7

Figure 7

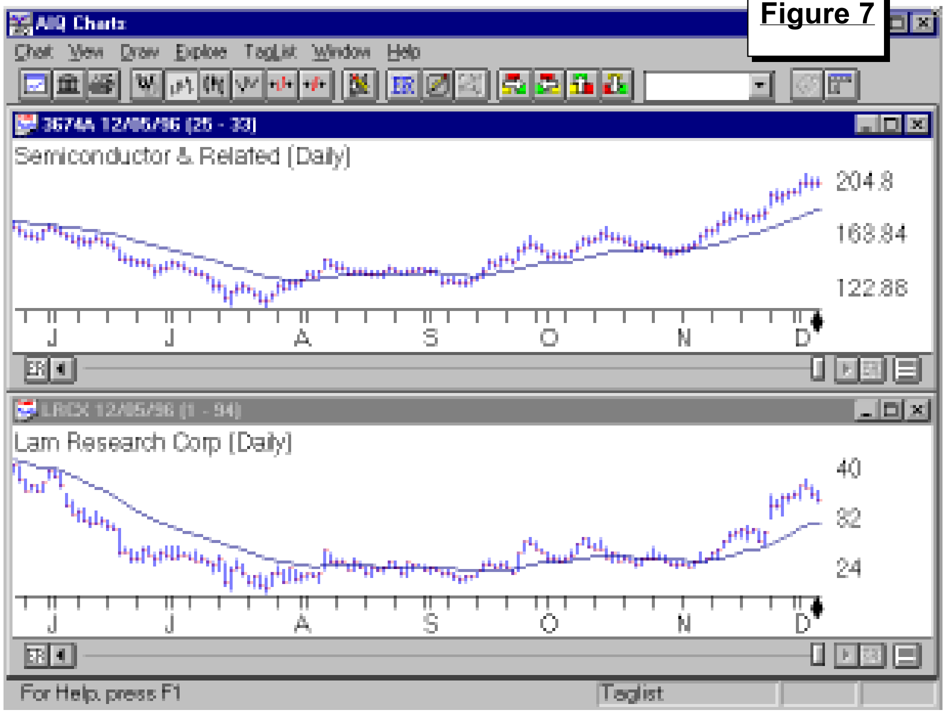

Table 3

AIQ MatchMaker
Semiconductor & Related
11/29/95 to 11/29/96

Coef.	Ticker	Stock
815	LRCX	Lam Research Corp.
807	LSI	LSI Logic
803	AMAT	Applied Materials
793	MU	Micron Technology
772	TXN	Texas Instruments
746	ATML	Atmel Corp
727	STM	SGS Thomson Microeltr.
715	XLNX	Xilinx Inc.
682	ALTR	Altera Corp.
682	NVLS	Novellus Systems
648	KLAC	KLA Instruments
637	NSM	National Semiconductor
626	UTR	Unitrode Corp.
623	ZLG	Zilog Inc.
619	OAKT	Oak Technology
617	WFR	MEMC Electr Material
615	WJ	Watkins-Johnson Co.
605	AMD	Advanced Micro Devices
589	ADI	Analog Devices
571	LLTC	Linear Technolgy
557	INTC	Intel Corp.
554	LSCC	Lattice Semiconductor