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Feature

Sections

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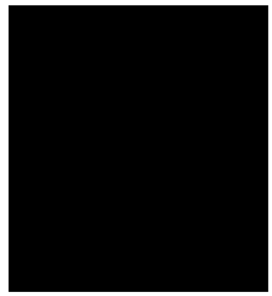
GROUP ANALYSIS

AN UPDATE ON BOLLINGER'S GROUP POWER

By David Vomund



DAVID VOMUND

A few months ago, AIQ began offering a new industry group structure, Bollinger's Group Power. This is the industry group structure that John Bollinger of Bollinger Capital Management uses for his analysis and for his Group Power internet newsletter. An avid AIQ user, Bollinger created the structure using TradingExpert and MatchMaker. Bollinger discussed this newly created industry group structure in the February 1997 *Opening Bell* and at our March seminar. Since that time, several users requested the components of the structure. Since Bollinger created the structure in the AIQ format, it was an easy decision to make it available to AIQ users.

Until the release of the Group Power structure, the only industry group structure that covered the broader market stocks was the AIQALL structure which classifies about 6000 stocks into a set of industry groups. The problem with this structure is that very few people follow 6000 stocks and half the stocks classified in the structure have large bid-ask spreads or no liquidity. The typical AIQ user follows about 1500 to 2000 stocks, which may cut some of the AIQALL groups down to one or two stocks.

"With 2200 stocks classified, there is a good mix of large companies, mid-sized companies, and small companies."

Bollinger's Group Power structure classifies about 2200 stocks into 143 industry groups. With 2200 stocks classified, there is a good mix of large companies, mid-sized companies, and small companies. Of these 2200 stocks, 235 are currently priced under $10, or about 10% of the total. This is either good or bad news depending on your investment style. Users who want to ignore low priced stocks can do so by entering a minimum price in reports.

Bollinger used our MatchMaker module to test the correlation of stocks

Group Analysis continued on page 2

GROUP ANALYSIS *continued . . .*

against their groups, keeping only those stocks with a good correlation to their industry group. He loosened the correlation cutoff figure to below the normally used 500 mark in order to increase the number of stocks in each group. The average group contains about 15 stocks.

Using the new Group Power industry group structure, we ran a test on the industry groups in order to find which industry groups have the propensity to stage a large advance or decline. It's difficult to make big money when you buy into groups that typically make only small moves.

To determine which groups have a propensity to move, we calculated the quarterly returns for the Group Power industry groups beginning in 1992. We counted the number of times that each group was one of the 15 best performers or one of the 15 worst performers for a quarter. The groups that often rise to the top or fall to the bottom of the quarterly Price Change report are the ones that have the inherent volatility to stage a strong advance or undergo a steep drop.

Table 1 lists the groups that appeared most frequently (seven or more appearances) on either extreme of the Price Change report. For each

Table 1

Groups That Move

Industry Group	Count
Semiconductor Equip.	17
Computers PC	16
Internet	16
Employment Services	15
Casinos	13
Semiconductor	13
Computer Services	12
Home Supply Stores	12
Manufactured Housing	12
Commercial Furniture	11
Gold, South Africa	11
Hospitals	11
Oil, Drilling	11
Precious Metals	11
Savings & Loans	11
Airlines	10
Computer Parts	10
Gas Producers	9
Healthcare Providers	9
Networking	9
Oil Equipment	9
Pacific	9
Recreation, Toys	9
Retail Electronics	9
Cable Television	8
Computers, Main Frame	8
Home Furnishings	8
Marine Transport	8
Automobile Mfg.	7
Brokers	7
Commercial Services	7
Communications Tech	7
Footwear	7
Industrial Technology	7
Office Supplies	7
Oil, Producers	7
Retail, Apparel	7
Tobacco	7

... And Those That Don't

Industry Group	Count
Chemicals, Specialty	0
Diverse Business	0
Electrical Components	0
Food Retailers	0
Household Products	0
Industrial, Diversified	0
Railroads	0
Aerospace/Defense	1
Cement	1
Construction	1
Diversified Technology	1
Instruments	1
Insurance, Diverse	1
Insurance, Full Line	1
Insurance, Life	1
Long Distance Comm.	1
Machinery, Heavy	1
Newspapers	1
Pharmaceuticals	1
Printers	1
Publishing	1
Real Estate Investment	1
Recreation, Other	1
US Stock Funds	1

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GROUP ANALYSIS *continued . . .*

of these groups, the table shows the number of times it appeared in the top 15 or bottom 15 places of the Price Change report. Also listed are the groups that infrequently appeared on the report (one or no appearances). In a sense, this table shows aggressive groups and defensive groups. In a strong bullish market, pay particular attention to the list of Groups that Move. One of these will likely become the next big winner.

The volatility of the technology groups immediately stands out, as the three groups that most frequently appeared are all technology related. Remember, this is not a list of the most bullish groups -- it is a list of groups that frequently appear as one of the biggest winners or losers. When the market corrects and you are looking for volatile groups, check this list.

All group structures include semiconductor and computer manufacturing stocks but not all have new industry groups such as the Internet group.

Internet stocks have only recently appeared and they are definitely volatile (see **Figure 1**). From May 1, 1997 to its October high, this group increased 90%. Since then, it has fallen 20%. This is no flatliner!

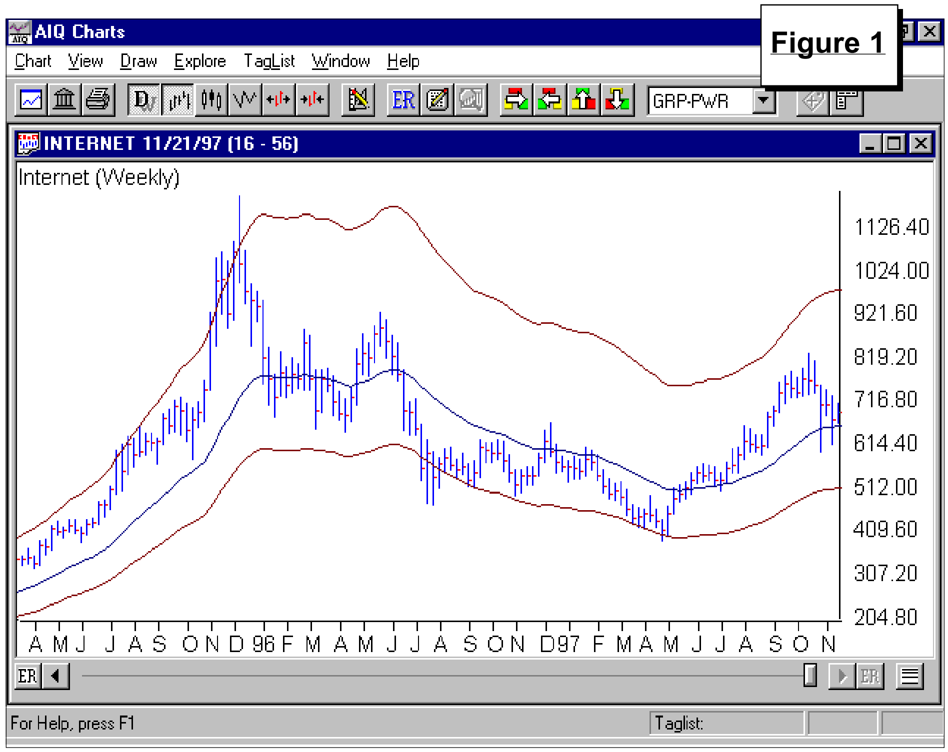

Figure 1

Along the same line, groups like Chemicals-Specialty or Food-Retailers never appeared on the extreme of the Price Change report. These are the more defensive groups simply because they are less volatile.

If you purchase the new Group Power industry group structure, you may want to tag the more volatile groups so that they are easily spotted when they appear on reports. To tag a group, you can change the description field to all capitals or you can add an asterisk to the title. Then, when a volatile group appears on a report, it will stand out and you'll pay more attention to it. ■

MARKET REVIEW

This was an active month for AIQ as several market timing signals were registered. A 95 buy signal was registered on November 13 and again on November 14. The same rules fired for both signals.

Another buy came on November 17. This came at the time that the majority of stocks were testing their October 27 lows. The Dow and the S&P 500 were still well above their October low points but the Russell 2000 came right to its October low and then rallied.

These buy signals were confirmed by the Price Phase indicator on November 14.

Right after the three buy signals were registered, the system fired a 99 down signal on November 18. Another sell came on November 24. These signals have not yet been confirmed by the Price Phase indicator.

Having several signals fire in opposite directions in such a short time rarely happens, but it is not unprecedented. Back in 1994, a 99 buy came on 9/15, a 98 down came on 9/18, a 99 down came on 9/21, a 95 up came on 9/26, and a 98 down came on 9/29.

The common denominator in these two time periods is a sideways market. In our current market, the S&P 500 has been in a trading range for the last four months. At the end of November, it was at the upper end of its range and near its old highs. The broader market stocks have lagged badly and the New High/New Low indicator has barely moved higher. ■

SCREENING TECHNIQUES

Relative Strength Investing
It's Volatile and It's Risky -- But It Works!

By David Vomund

Several studies that we have conducted have shown the benefits of buying high relative strength stocks. (We covered trading systems which utilize relative strength in the April and July issues of the *Opening Bell*.) Relative Strength investors know that it is a high risk and volatile strategy, but for those who can stomach the risk — the returns are fantastic.

We recently completed a study using AIQ's Relative Strength report which identifies the rewards of relative strength investing and shows the downside as well.

The Rewards of Relative Strength Investing

When a trading system is tested on only a few stocks, it is possible that the results are due simply to luck. In a five stock portfolio, if there is one high flier then it is likely that the entire portfolio will do well simply because the one good performer is a large percentage of the overall portfolio.

To really see if a screening technique is effective, you should test the strategy with portfolios of different size. Try running tests with five stocks, 10 stocks, 20 stocks, etc. If the screening technique is effective, the five stock portfolio will outperform the 10 stock portfolio, which will outperform the 20 stock portfolio, etc.

Although this sounds obvious, this is not how it works for many screening techniques. If a screening technique does not work with five stocks or 15 stocks but it does with 10 stocks, then the screening technique is ineffective. To say it works well only for 10 stocks is over optimizing. A longer term study would reveal that its outperforming was random luck.

You may be tempted to loosen your screening criteria in order to increase the number of stocks that pass the screening, but performance will likely suffer. The return from an effective screening technique should lessen as the parameters are loosened. We completed a study which shows this is the case for relative strength investing.

Using a database of the current S&P 500 stocks, we ran the Relative Strength-Strong report at the beginning of every quarter. We then looked at the performance of the stocks which appeared at the top of the long term section of the report for the remainder of the quarter, at which time a new report was generated.

"When the market goes up, high relative strength stocks lead the way. Unfortunately, when the market moves lower, relative strength stocks can fall like a rock. . . We've shown this to be true"

In our test, we looked at the quarterly performance of the top 10 stocks on the report and then examined the performance of the next 10 stocks (stocks ranked 11 to 20). The results are found in **Table 2**.

The most important column in the table is the last one, which looks at the average quarterly percentage return of the top 10 stocks that appear on the Relative Strength report compared to the next 10 stocks. We see in every year, except 1995, that the top 10 stocks outperformed the stocks that were ranked 11 to 20 on the report.

In most cases, the 10 highest stocks dramatically outperformed (remember, these percentage results represent a quarter's return instead of an annual return). Out of the 19 quarters examined, there were only four cases where the stocks ranked 11 to 20 outperformed the 10 highest rated stocks.

The quarterly percentage return figures are overstated because they are using today's S&P 500 structure. Many of the strong performing stocks in this study were not in the S&P 500 at the time they were selected. However, the important element of the study is the comparison of the top 10 stocks to the next 10 stocks.

The Downside Is the High Risk

The downside of relative strength investing is the high risk. When the market goes up, high relative strength stocks lead the way. Unfortunately, when the market moves lower, relative strength stocks can fall like a rock.

This is apparent in Table 2. In all but one case where both the top 10 and next 10 stocks fell on the quarter, the top 10 stocks fell more.

The recent correction gives the best demonstration of the risk of relative strength investing. So far in the fourth quarter, the top 10 stocks have corrected 17% (updated through Nov. 21). The next 10 stocks have a small loss.

In a bull market, high relative strength stocks outperform. When the market corrects, they underperform. Therefore, many people choose to lower the risk by

SCREENING TECHNIQUES *continued* . . .

incorporating market timing. Since no market timing model is perfect, investors need to understand the risk involved in high relative strength investing before deciding to follow this type of strategy.

In our relative strength study in the April *Opening Bell*, we incorporated relative strength investing with the AIQ timing model. Unfortunately, AIQ remained on a buy signal for most of the recent correction.

From the market high point in early October to Nov. 21, this portfolio dropped 20%. After the 20% correction, the strategy outlined in the April *Opening Bell* is up 17.3% this year, including commissions and excluding dividends.

Summary of Relative Strength Investing

It has been said that relative strength investing produces good returns but is a risky strategy. We've shown this to be true.

In a bull market, the more stocks you add to a high relative strength portfolio, the lower the return. At the same time, relative strength investing is a risky strategy. When the market decreases, the high relative strength stocks lead the way. The stocks that appear at the top of the Relative Strength report typically fall the fastest when the market corrects. ■

Visit Vomund's Web site at www.visalert.com.

Table 2

Quarterly Performance
Top 20 Relative Strength Stocks
(% Gain)

1993	Q1	Q2	Q3	Q4	Average
First 10 Stocks	11.74	30.00	42.66	-1.36	20.76
Next 10 Stocks	11.22	12.30	16.95	-1.50	9.74
1994	**Q1**	**Q2**	**Q3**	**Q4**	**Average**
First 10 Stocks	5.20	-2.89	17.48	7.44	6.81
Next 10 Stocks	4.97	-0.94	6.26	1.66	2.99
1995	**Q1**	**Q2**	**Q3**	**Q4**	**Average**
First 10 Stocks	12.43	18.15	20.53	-11.87	9.81
Next 10 Stocks	11.46	19.39	15.43	-2.41	10.97
1996	**Q1**	**Q2**	**Q3**	**Q4**	**Average**
First 10 Stocks	6.30	14.78	6.86	6.78	8.68
Next 10 Stocks	5.77	4.22	4.05	8.67	5.68
1997	**Q1**	**Q2**	**Q3**	**Q4**	**Average**
First 10 Stocks	3.09	14.07	23.70	-16.98	13.62
Next 10 Stocks	-0.31	13.29	12.25	-0.02	8.41

Happy Holidays

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USING AIQ REPORTS

New Indicator Settings Recommended for Price Volume Divergence Report

For short term traders, one of the most valuable AIQ reports is the Price Volume Divergence report. This report looks for situations where a positive or negative divergence exists between a stock's price and its Money Flow or On Balance Volume indicators. A positive divergence occurs when the stock's price falls over a 15 day time period at the same time that a composite average of its Money Flow and On Balance Volume indicators increases. The opposite is true for a negative divergence.

By default, the Price Volume Divergence report looks at the activity of the On Balance Volume and Money Flow indicators over the last 15 trading days, searching for the largest divergences. Each indicator is equally weighted. Because positive and negative divergences occur more often with the Money Flow indicator than with On Balance Volume, some users are changing the report settings to compensate for this factor. Before discussing new settings for this report, a review of both indicators is in order. Both On Balance Volume and Money Flow try to measure whether a stock is under accumulation or distribution. Their computations are different, however, so the indicators do not always agree.

> ***"Because larger divergences are most often seen in the Money Flow indicator, the majority of the stocks on the report have a Money Flow divergence instead of an OBV divergence... to more equally weight the divergences, we recommend an 80% weighting for OBV and a 20% weighting for Money Flow."***

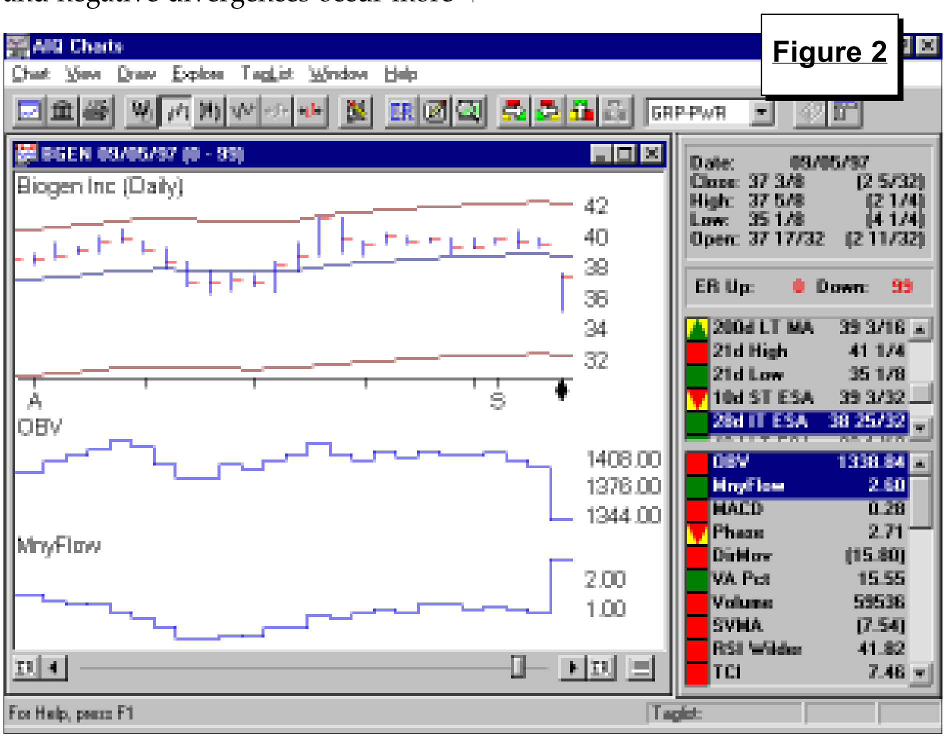

Figure 2

On Balance Volume simply looks at whether a stock increases or decreases and then factors in volume. This indicator will be most bullish when a stock rises on heavy volume and falls on light volume. Anytime a stock increases, it is said to be under accumulation so the On Balance Volume indicator will increase as well.

Money Flow, on the other hand, looks at whether a stock closes near the upper or lower end of its daily range and then factors in volume. It is most bullish when a stock closes near its high price on heavy volume.

Since On Balance Volume looks at whether a stock increases or decreases and Money Flow looks at whether a stock closes near its high or low price, the readings of these indicators can be very different. An extreme example is Biogen (BGEN) on September 5, 1997 (see Figure 2). On that day, the stock gapped down and closed more than $2 lower than the previous day. This came with above average volume. Since the stock fell on heavy volume, its On Balance Volume indicator fell sharply. Even though Biogen closed strong down, it was lower during the day and actually closed near its daily high price. When the stock was down $4, buyers came back in and bid the stock higher. The Money Flow indicator looks at this as accumulation and it rose sharply on the day.

Because Money Flow looks at the daily high and low prices, it is more apt to diverge from price activity. Figure 3 is a chart of Bell Atlantic along with its Money Flow indicator. Notice the three month negative divergence as Bell Atlantic increased in value from September through November at the same time that

STOP STRATEGIES

THE IMPORTANCE OF STOP STRATEGIES

BY David Vomund

During the last three years, we've been in a market environment where stop strategies were not needed. Lately, that has changed. It seems every day there are one or two industry groups that undergo a heavy round of selling. Momentum players have their hand on the trigger and bail in mass quantities when a strong performing group shows any signs of weakness. We've seen it in technology stocks and more recently in energy stocks.

Back in May, I purchased Smith International (SII). This Oil-Equipment company was in a red-hot industry group and had just broken above a right triangle pattern. Its Point & Figure chart had just registered a triple top buy signal so SII appeared on the Point & Figure Breakout report. This move above resistance was also confirmed by the On Balance Volume indicator. The stock turned into a big winner and a 50% profit was seen only five months later (**Figure 4**).

When the market began to correct, SII corrected as well. Early in the correction, the energy stocks did well and outperformed the market. In November that changed and there was a mad rush to the exit gates for almost all energy stocks.

People have different sell strate-

Stop Strategies continued on page 8

USING AIQ REPORTS *continued . . .*

Money Flow decreased in value. This tells you that even though the stock was rallying, it tended to close within the lower half of its trading range and when it did close within the lower half of its trading range, it did so on above average volume.

There are many cases where Money Flow will diverge from price activity, such as the Bell Atlantic example. This is not true for On Balance Volume. As long as there is volume, On Balance Volume will rise when a stock increases and will fall when a stock decreases. Because of this, there are fewer cases where On Balance Volume diverges from price activity and the divergence is typically more subtle than is the typical case with Money Flow.

Both the On Balance Volume and Money Flow indicators work well — especially when they are in agreement. That's why AIQ's default settings on the Price Volume Divergence report place an equal weight on each indicator. Yet, because larger divergences are most often seen in the Money Flow indicator, the majority of the stocks that appear on the report have a Money Flow divergence instead of an On Balance Volume divergence. The divergences on Money Flow are more extreme so they are overshadowing the On Balance Volume Divergences.

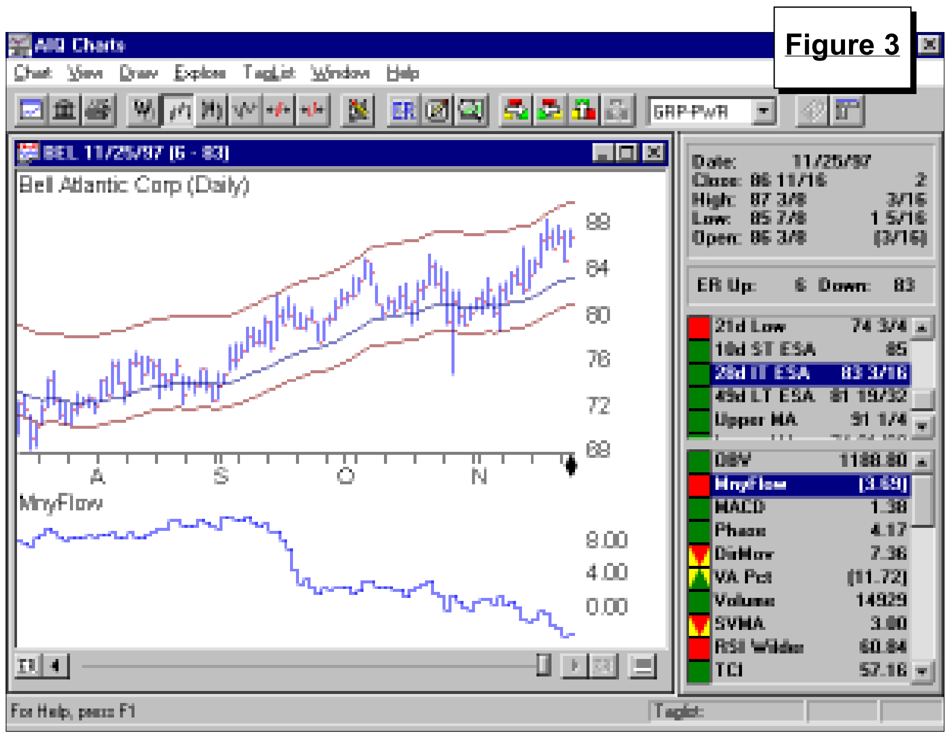

Figure 3

To offset this problem and to more equally weight the divergences rather than the indicators, we recommend an 80% weighting for On Balance Volume and a 20% weighting for Money Flow.

To change the default settings, go to the *Reports* application in TradingExpert. From the menu bar, choose *Settings*, *Report Criteria*, then *Daily Stock Criteria*. Highlight the Price Volume Divergence report. Under *Constants*, click on *Weight* for OBV and change its setting from 50 to 80. Next, highlight the *Weight* for Money Flow and change its setting from 50 to 20.

By making these changes, you will find fewer stocks that have conflicting Money Flow and On Balance Volume indicators. Stocks with divergences in one or in both indicators will appear. ■

STOP STRATEGIES *continued* . . .

gies. Some would point to the head-and-shoulders top pattern and would have sold when the right shoulder was broken. These patterns often appear in hindsight. Others would get out once the stock began making a pattern of lower lows and lower highs. Since I bought the SII stock based on a Point & Figure buy signal, it could be sold once a column of Os moves lower than its previous column of lows.

I stuck to the original sell strategy which uses a 15% trailing stop (protects 85% of profits). The stock was sold at a 35% profit. I was unhappy to give back so much at the top and thought the selling was overdone. Stop strategies should always be followed, however. If I didn't have the discipline to follow my sell strategy, I would have seen a 50% profit turn into a 10% profit in less than two months. Once the dust settles, I can consider re-entering the stock.

Selling is never easy. You never sell at the very top and very often the stock will rise right after it is sold. In AIQ's Profit Manager, the stocks that reach their sell point turn red for a reason. By ignoring the sell equation, you will eventually run into a situation where the stock continues to fall. This happens to everyone at one time or another. I once held on to a stock while it fell over 50%. I think of this stock every time I consider ignoring a triggered stop. ■

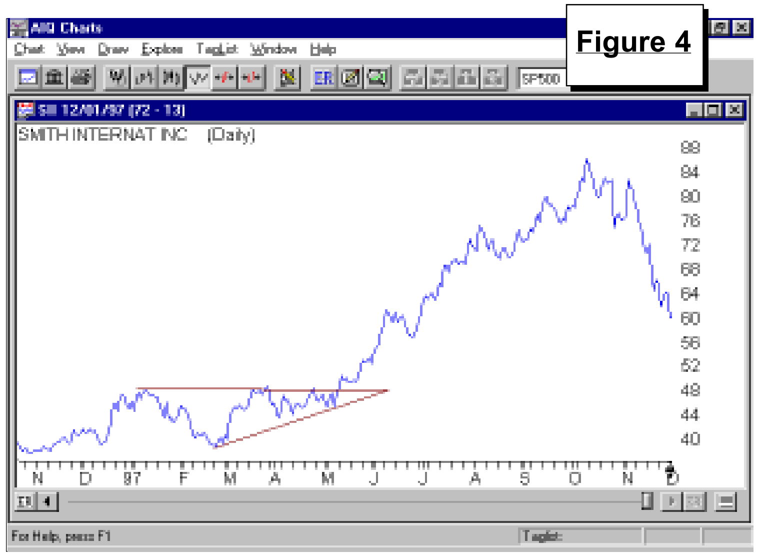

Figure 4

STOCK DATA MAINTENANCE

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

Stock	Ticker	Split/Div.	Approx. Date
Mead Corp	MEA	2:1	12/02/97
Frequency Elect.	FEI	3:2	12/02/97
Thomas Indus.	TII	3:2	12/02/97
Ferro Corp.	FOE	3:2	12/02/97
Tetra Tech	TTI	5:4	12/02/97
Analysts Int'l	ANLY	3:2	12/04/97
Raychem Corp.	RYC	2:1	12/04/97
Mohawk Inds.	MOHK	3:2	12/05/97
Varco Int'l	VRC	2:1	12/05/97
Marcus Corp.	MCS	3:2	12/08/97
NCO Group	NCOG	3:2	12/08/97
IFR Systems	IFRS	3:2	12/08/97
PeopleSoft Inc.	PSFT	2:1	12/08/97
RPM Inc.	RPOW	5:4	12/09/97
RPC Inc.	RES	2:1	12/11/97
Chittendon Corp	CNDN	5:4	12/15/97

Stock	Ticker	Split/Div.	Approx. Date
Sun Bancorp	SNBC	3:2	12/15/97
Old Kent Financial	OKEN	2:1	12/16/97
Dover Corp.	DOV	2:1	12/16/97
Baldor Elect.	BEZ	4:3	12/16/97
Cisco Systems	CSCO	3:2	12/16/97
Network Appliance	NTAP	2:1	12/19/97
Maxim Integ.	MXIM	2:1	12/22/97
Freds Inc.	FRED	5:4	12/22/97
Iomega Corp.	IOM	2:1	12/23/97
Gap Inc.	GPS	3:2	12/23/97
Curtis Wright	CW	2:1	12/24/97
USB Holding	UBH	2:1	12/26/97
Williams Cos.	WMB	2:1	12/30/97
Oneida Ltd.	OCQ	3:2	12/31/97
NSD Bancorp	NSDB	3:2	01/02/97

Trading Suspended:

Cyrix Corp (CYRX), Greenfield Indus (GFII), Gynecare Inc. (GYNE), Ohio Edison (OEC), Centerior Energy (CX)

Name/Ticker Changes:

ValueJet Inc. (VJET) to AirTran Holdings Inc. (AAIRD), Forest Oil Corp. (FOIL) to Forest Oil Corp. (FST)
Atlas Air (ATLS) to Atlas Air (CGO), Leasing Solutions (LSII) to Leasing Solutions (LSN)