

Feature

Testing shows good results for EDS Aggressive Growth Model 1

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EDS MODELS

AGGRESSIVE GROWTH STRATEGY SEARCHES FOR UPTRENDING STOCKS WITH LITTLE VOLATILITY

By David Vomund

Over the years, I have noticed an attractive pattern that often signals higher prices. It is a pattern which growth investors will find attractive because it involves buying into strength. In fact, the pattern is so aggressive that many growth investors may be too timid to buy stocks on this basis.

What is this pattern? It is an uptrending formation with extremely little volatility. That is, as a stock moves higher, its price remains in a very tight upward sloping trading channel. Using the AIQ charts, these stocks bounce between the upper AIQ Band and the 28-day Moving Average for several months.

An example of a stock that fits this pattern is Linear Technology (LLTC),

which is charted in **Figure 1**.

Notice that from November through the end of the year the stock moved sharply higher with very little volatility. Stocks that exhibit this type of pattern are often referred to as "high alpha" stocks because they have achieved a very high return given their level of risk. Even though these



DAVID VOMUND

stocks are very overbought and well off their lows, they often surprise investors by moving higher.

Before AIQ's Expert Design Studio (EDS) package,

"We created an Expert Design Studio model that searched for stocks that have remained above their 28-day Moving Average for all of the last 60 business days...The average trade gained 1.94% compared to an average trade in the S&P 500 of 0.21%."

we could only speculate on whether or not this trading pattern was effective. Now we can test it. We created an Expert Design Studio model that searched for stocks that have remained above their 28-day Moving Average for all of the last 60 business days. It took three rules to accomplish this. The first

EDS MODELS *continued* . . .

rule defines a bad stock as one that closes below its 28-day Moving Average. The second rule searches for stocks with a closing price below the 28-day Moving Average anytime in the last 60 days. The third rule accepts the stocks that did not pass the second rule.

Rule 1: `isabadstock if [it esa] >[close].`

Rule 2: `isbadstocklast60days if scanAny(isabadstock,60)>=0.`

Rule 3. `isgoodstock if not isbadstocklast60days.`

When you create a system it is important to verify that the trading results are correct. After a backtest, go to the Positions page in EDS and plot the stocks with the biggest profits as well as the biggest losses. Within the Positions page, you can sort the individual columns by simply clicking their titles. Some of the positions with the largest losses can be a result of bad data or an unadjusted stock split.

The results of backtesting the rule which states that a stock must be above its 28-day Moving Average for all of the last 60 days initially showed very impressive results. After going to the Positions page and plotting the biggest winners, however, we saw that there was a problem in our logic. In our EDS model, we searched for stocks

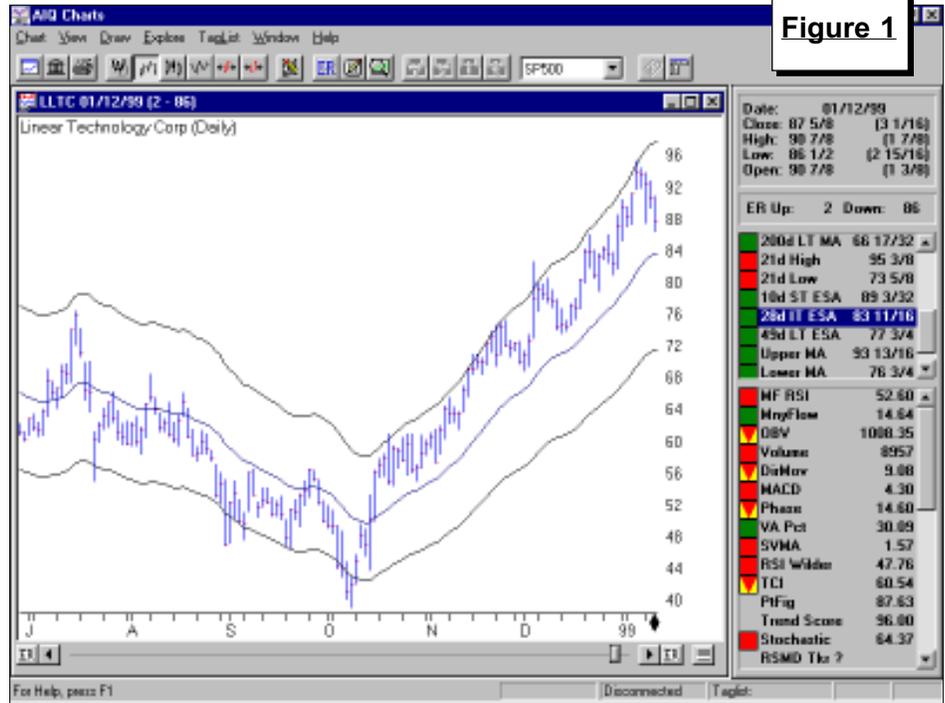


Figure 1

that had not closed below their 28-day Moving Averages in the last 60 days. What we found was that many of the stocks that were purchased were new issues that were on their second day of trading. If they rose in value on their second day of trading, then they were never below their moving average so they passed our EDS rule.

Obviously, we wanted to add an additional rule that would eliminate new issues from the test. We added a rule which insured that there was at least 60 days of data:

Rule: `history if val([close],60) > val([it esa],60).`

A second problem that we found

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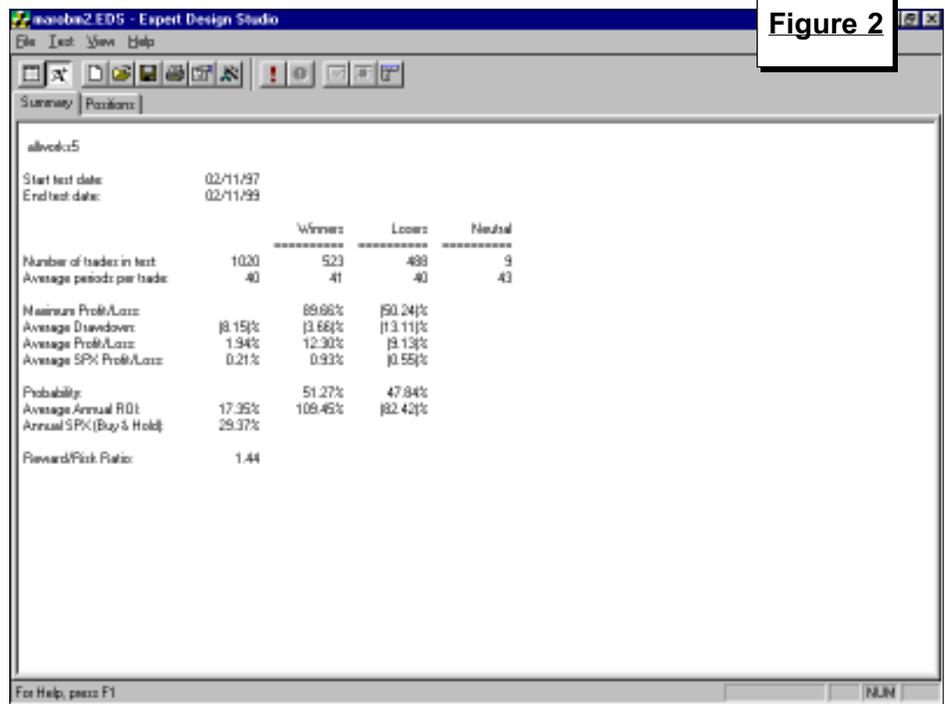


Figure 2

EDS MODELS *continued* . . .

when we charted the securities on the Positions page was that the model sometimes picked up stocks that had risen too far and with too much volatility. Sometimes takeover plays and stocks that were well above the upper AIQ Trading Band appeared. To eliminate these stocks we added a rule that stated that the stock must be below its upper AIQ Trading Band.

The results of backtesting stocks that have been above their 28-day Moving Averages for all of the last 60 days is found in **Figure 2**. We used a fixed 30 business day holding period which led to an average calendar day holding period of 40 days. The average trade gained 1.94% compared to an average trade in the S&P 500 of 0.21%. That was certainly very impressive.

In **Figure 3** we ran the same test with the additional criteria that the stock's closing price must be below its upper AIQ Trading Band. This only eliminated a couple of stocks but we decided to keep it in the model nonetheless.

Next, we tried additional screening techniques using various technical indicators. The indicator that added additional value was Volume Accu-

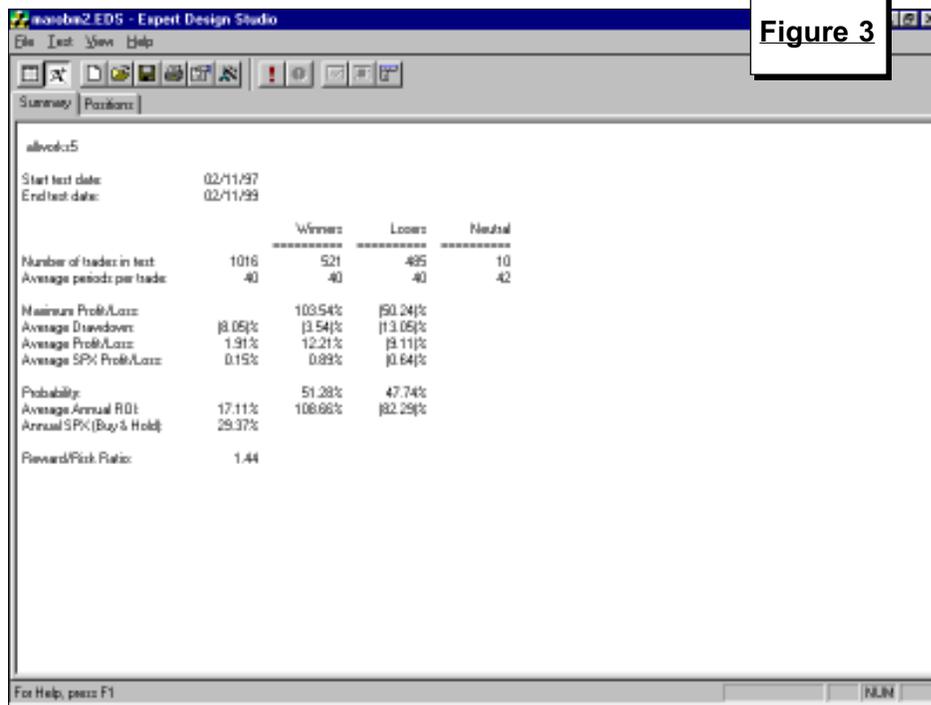


Figure 3

mulation Percent (VA Pct), developed by Marc Chaikin. We added a rule that the VA Pct indicator must be above 30. The results are found in **Figure 4**.

We see in Figure 4 that about 300 trades were executed over the two-year time period. Adding the VA Pct rule

eliminated two-thirds of the trades from the model that was used in Figure 3, but the average return per trade was significantly improved. The average trade gained 3.63% over a 40 calendar day holding period. This was well above the 0.48% return from an equivalent trade in the S&P 500.

This EDS model is found in **Figure 5**. The model can be downloaded off AIQ's internet site at www.aiq.com. Click on the Educational Products folder and go to the AIQ Educational Newsletter-Opening Bell section. At the bottom of the next screen you can download the EDS file as well as other models previously featured in the *Opening Bell*.

This test covers only a two-year time period. This may be sufficient because the last two years have seen both bull markets and severe corrections. We ran an additional test on a longer period and it outperformed as well, although the results were not as impressive.

The test was run on a database of about 1800 stocks. This EDS model works best on a large database. Results significantly deteriorated

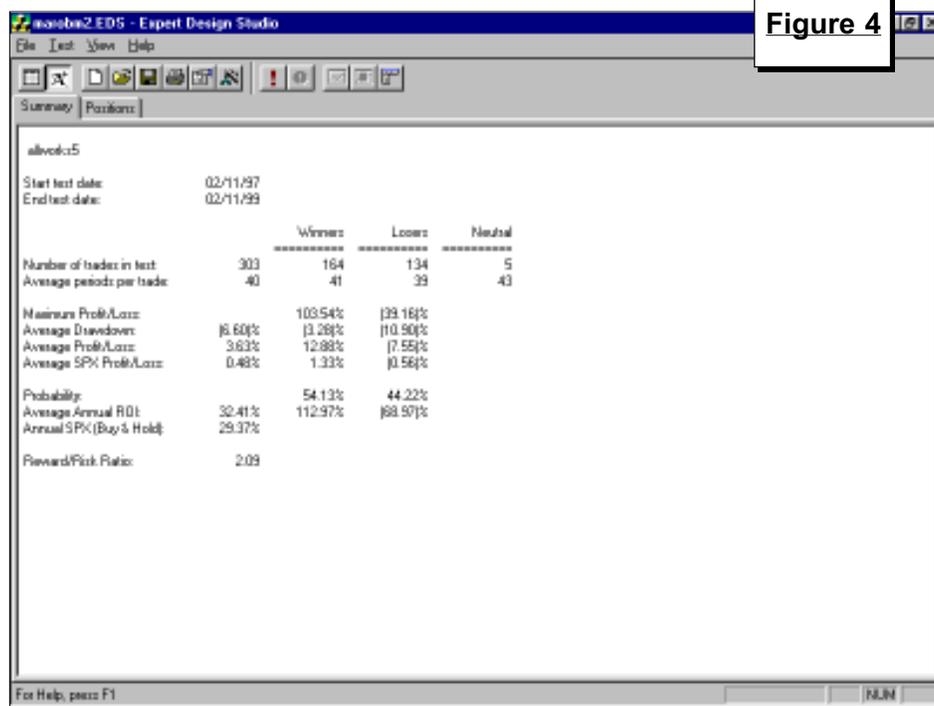


Figure 4

EDS MODELS *continued* . . .

when we ran the test on just the S&P 500 stocks. The large-cap stocks have a harder time making a prolonged advance.

Throughout our testing, the annualized return from this strategy was either less than or equal to the buy & hold annualized return. This is to be expected. The system does not find stocks to buy at or near market lows. Instead, it gives the most buy candidates when the market is strong. It is hard to outperform on an annualized basis when you start to buy three months after a market low. This strategy should be combined with a model that buys into weakness.

For years I have suspected that this uptrending pattern serves as a good tip-off to favorable market conditions. That was confirmed late last year when most of the technology stocks including the Nasdaq Composite rallied between the 28-day Moving Average and the upper AIQ Band.

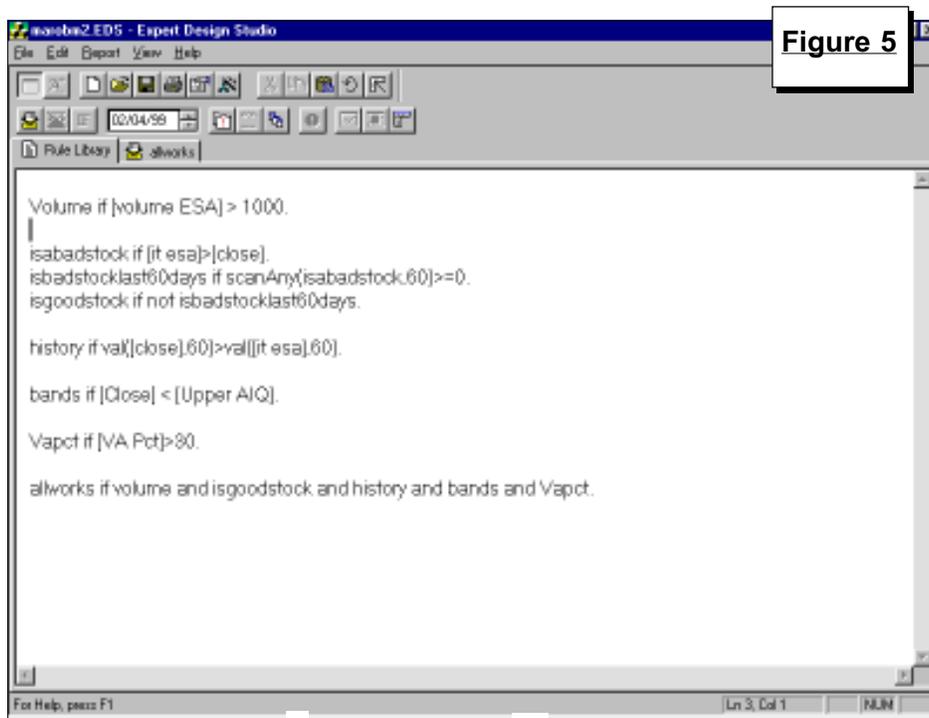


Figure 5

Although most people believe it is too late to buy stocks that have moved

sharply higher, results of this testing show otherwise. ■

MARKET REVIEW

Market activity during February was either a blessing or a curse for day traders. On February 9 the Nasdaq fell 94 points only to rally 96 points two days later. On February 17 the Dow fell 100 points and then rose 103 points the next day. Despite the volatility, the S&P 500 remained in a trading range. For the month, the S&P 500 fell 3.23%. While large-cap stocks were in a trading range, the broader market stocks corrected. Both the Russell 2000 and Nasdaq Composite corrected 8%.

In last month's Market Review, we graphed a Point & Figure chart of the S&P 500 which showed a consolidation. Since that time the chart has a new column but the consolidation continues. If the S&P 500 rallies to 1285, this Point & Figure chart will register a triple-top buy signal. If the S&P 500 falls to 1200, this Point & Figure chart will register a Point & Figure triple-bottom sell signal.

Heading into February, the system

was on a January 25 buy signal. Two additional buy signals were registered during February -- a 100 buy on February 11 and a 97 buy on February 18. The market saw periods of weakness during these signals but near the end of the month the S&P 500 rallied to the top of its trading range before a 100 sell signal was registered on February 25. During the January 25 to February 25 buy signal the S&P 500 only rallied 0.9%.

The February 25 sell was a result of a Stochastic sell signal combined with a decreasing Volume Accumulation Percent indicator. At the time of the sell, large-cap stocks were outperforming so it is likely that during the sell signal most of the damage will be among small-cap stocks.

The best performing sector during February was Leisure, with gaming stocks the biggest winners. Mirage Resorts has been a laggard but in February it increased 35%. Harrah's Entertainment increased 12%. The oil sector was the worst performer. ■

Service Pack 2 Now Available

Service Pack 2 is now available to be downloaded off the internet. This contains bug fixes and has new features for TradingExpert Pro. To download the service pack, go to AIQ's Main Menu and select **Help** from the menu bar. Next, select **Technical Support and Updates**. That will launch a web page. On that page, click on **TradingExpert Pro Service Pack 2**.

The new Features from this service pack are:

- Zoom on real-time charts
- Secondary sorts on quotes page
- Four decimals displayed for mutual funds in the Profit Manager
- Real-time trendline breakouts

SECTOR TRADING

EVOLUTION OF TRADING VEHICLES FOR INDUSTRY SECTORS

By David Vomund

When we incorporated industry group analysis into TradingExpert nearly nine years ago, the thought was to allow investors to perform a nice top-down analysis. That is, it allowed traders to analyze the market, then industry sectors, then industry groups within the sectors, and finally the stocks within the groups. It wasn't until after TradingExpert's release that we discovered the power of surrogate group analysis.

With surrogate group analysis, you create an industry group which mimics an actual investment security. For example, you can create an industry group which represents an actual mutual fund. The stocks within the group can be the actual holdings of the fund or stocks that are highly correlated to the fund.

What makes this significant is that, whereas mutual funds don't have volume statistics, the surrogate group which represents the mutual fund does. Since the surrogate group has volume, all the price and volume indicators can be applied to the analysis. This means you can use indicators such as On Balance Volume, Money Flow, and Positive Volume to analyze mutual funds. That's quite an edge.

Initially many users including myself applied this analysis to Fidelity sector funds. Fidelity offers approximately 40 sector funds. Unlike other funds that only have end-of-day pricing, Fidelity provides hourly pricing for its sector funds.

But there are drawbacks to investing with Fidelity. First, Fidelity imposes a 3% initial sales load and

then charges a penalty fee if a sector fund is held less than 30 days. Second, the sector funds are actively managed so their stock holdings change. This means that the surrogate groups need to be actively managed. For a fee, investors can get a listing of the ten largest stock holdings on a quarterly basis.

In TradingExpert's early days, Fidelity clearly provided the best vehicle for sector trading using surrogate group analysis. Fidelity now has some competition.

"In TradingExpert's early days, Fidelity clearly provided the best vehicle for sector trading using surrogate group analysis. Fidelity now has some competition."

Rydex Sector Funds

Recently, the Rydex family of mutual funds (800-820-0888) decided to give Fidelity a run for their money in the sector fund arena. Rydex has introduced 14 sector funds and all of them have no sales load and unlimited free trading. With 14 funds, Rydex doesn't offer the selection that Fidelity has but they do have the ones that count the most.

The funds are passively managed, which means there isn't much turnover in their portfolios. That is advantageous to surrogate group investing because there is less maintenance of groups. Also, the correlation between the surrogate group and the actual fund will be higher.

For example, I created a surrogate group for the Rydex Technology mutual fund a year ago. With no maintenance, the correlation between

the fund and the surrogate group remains very high. In **Figure 6** we see the surrogate group on the upper half of the screen and the actual mutual fund on the lower half. The pattern is nearly identical.

Investors can get a listing of each fund's equity holdings at any time on their web page free of charge. Go to www.rydexfunds.com and click on Individual Investors. Next, click on Funds NAV and select the Sector Funds folder. The ticker symbol is listed next to each stock listing which is a tremendous time saver when creating surrogate groups.

Select Sector SPDRs

The American Stock Exchange has released its own product to compete with the sector mutual funds. Recently introduced are Select Sector SPDRs, nine sector funds that trade like stocks on the AMEX. You can buy or sell the sectors at any time during the trading day in the same manner as buying shares of stock. You can even sell them short. The nine sector choices are:

- Basic Industries (XLB)
- Consumer Services (XLV)
- Consumer Staples (XLP)
- Cyclical/Transportation (XLY)
- Energy (XLE)
- Financial (XLF)
- Industrial (XLI)
- Technology (XLK)
- Utilities (XLU)

The SPDRs are passively managed and only hold Standard & Poor's 500 stocks. Because the funds are passively managed and are sold through exchange trading, they are tax efficient. The annual management fee is 0.65% of assets annually, nearly half of the 1.2% cost of Fidelity sector funds. The bid-ask spread is typically less than 0.5%.

Sector Trading continued on page 6

SECTOR TRADING *continued* . . .

Since all the stocks are in the S&P 500 index, these sector funds can be more stable than funds that hold a high percentage of small company stocks. The downside of S&P 500 stock ownership is that the funds will hold a broad array of stocks, many of which are uncorrelated to the actual fund. For example, the Cyclical/Transportation SPDR holds appliances, railroads, cars, and airlines but its top holding is Wal-Mart. Figure that out.

Like the S&P 500 index, the largest stocks dominate the SPDR portfolios. The Technology SPDR holds 82 stocks but its top six holdings make up nearly half of the portfolio.

You can receive more information on the Select Sector SPDRs including a listing of their stock holdings by calling 800-THE-AMEX or by visiting their web site at www.amex.com.

AIQ Analysis

The Select Sector SPDRs began trading in December so there is not enough data to perform a good end-of-day analysis on these securities. That is true unless you use AIQ TradingExpert to create surrogate groups, in which case you create the

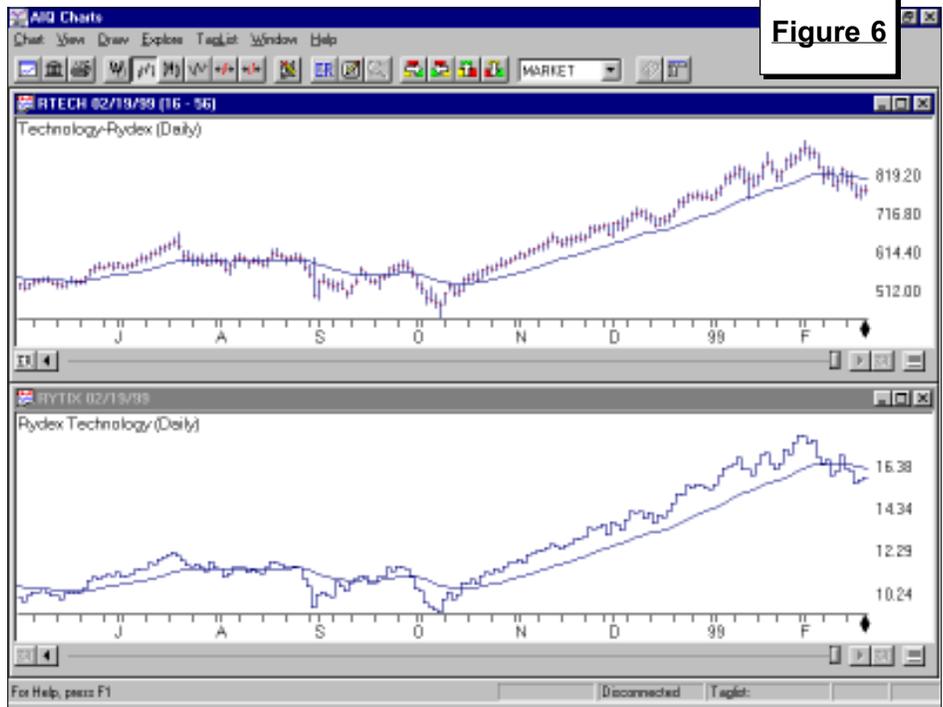


Figure 6

price history based on the underlying stocks.

With surrogate groups created, we can run the daily and weekly Group Analysis report to monitor the industry group rotation. The daily Group Analysis report for February 12 is found in **Figure 7**. The two most

important columns of the report are the Trend Score (TS) and the Delta Trend Score (DTS). TS gives a composite reading of the strength of the underlying indicators. DTS measures the momentum of the TS.

There are several successful strategies that can be followed using the Group Analysis report. For those who want to catch groups in the early stages of an upswing, look for the groups with the highest DTS values. In Figure 7, Consumer Services and Financial would apply. More often

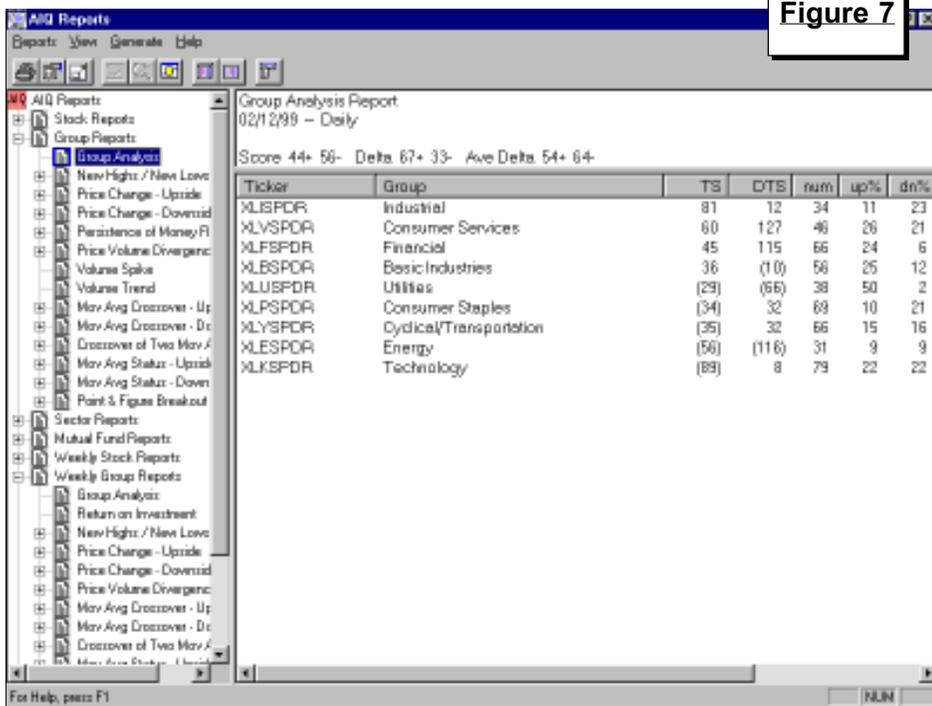


Figure 7

S&P 500 Changes

- (SOTR) SouthTrust Corporation is replacing (ORX) OryxEnergy and is being placed in the Banks (Major Regional) group.
- (ASO) AMSouth Bancorporation replaces (TCOMA) Tele-Communications and is being placed in the Banks (Major Regional) group.
- (HOU) Houston Industries is replaced with (REI) Reliant Energy and is being placed in the Electric Companies group.

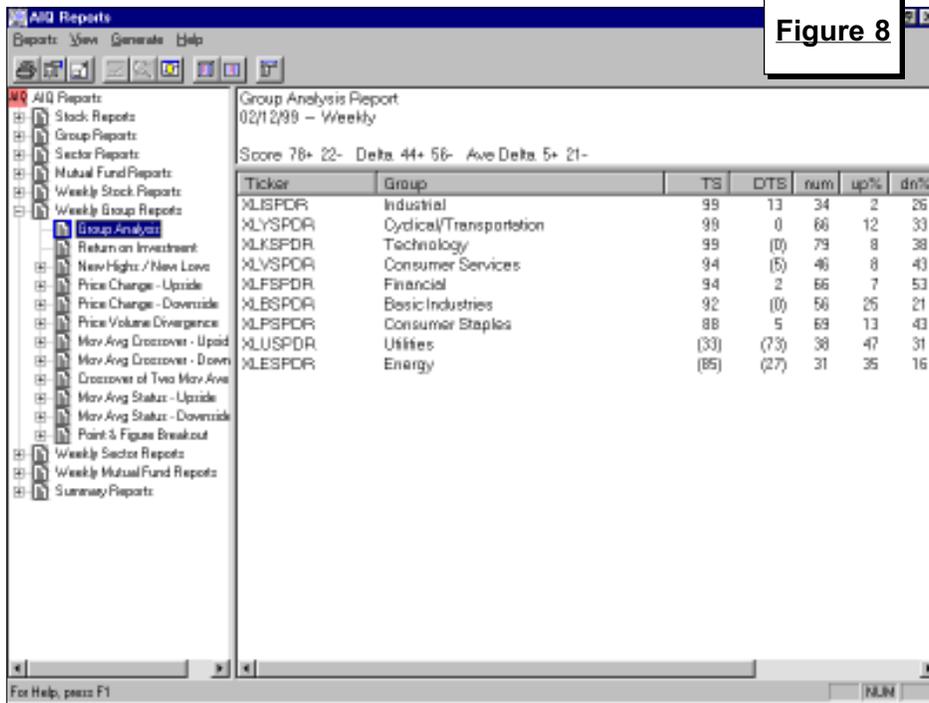


Figure 8).

By combining the daily and the weekly Group Analysis reports, I look for sectors that are near the top of both. That means that indicators are strong on both a short-term and a longer-term basis. On February 12, the Industrial sector held the top ranking on both the daily and weekly reports.

If a group is near the top of the daily Group Analysis report but near the bottom of the weekly report, then its strength will likely be temporary. Conversely, if a group is near the bottom of the daily report but near the top of the weekly report, then the weakness will likely be temporary. As a weak group moves back into favor, its DTS reading will improve and it will climb in the ranking.

To clarify this point, we see Energy and Technology at the bottom of the daily report (Figure 7). The weekly report (Figure 8) tells a different story, however. On a weekly basis, Technology is third best but Energy ranks last. Technology's weakness will not likely last long because it is

Sector Trading continued on page 8

the high DTS groups will appear in the lower half of the report.

A second strategy is oriented to growth investors. With this strategy you buy the groups at the top of the ranking. The daily Group Analysis report is a short-term report and

groups will rotate very quickly. To improve the odds of buying a group that remains in the upper half of the report, incorporate analysis from the weekly Group Analysis report. The weekly report is longer-term and the group ranking is more stable (see

How to Create a Surrogate Group Structure

In order to create a Surrogate Group Structure, you must first create a List file. Go to the *Data Manager* application and select **List** from the menu bar and choose **New**. Type in a list name. For our Select Sector SPDR surrogate structure, we used the name SPDR. Click **OK** and it will become the active structure.

Next, you must create the ticker symbols for the surrogate groups. Select **Ticker**, then **New**. Type in a ticker symbol to represent a surrogate group. We recommend you use at least five letters so the symbol won't duplicate a stock symbol. For our SPDR surrogate groups, we used the actual ticker symbols followed by SPDR. For example, we used symbol

XLISPD for the Industrial group. Make sure **Group** is checked and click **OK**. Type in the group's name under **Description** and click **OK**.

Next, move the surrogate group ticker symbols under the list name. On the left portion of the screen, highlight the list name and click on **List**, then **Insert Tickers**. Type in the ticker symbols for the surrogate groups separated by a semicolon (i.e. XLISPD;XLVSPD;XLVSPD).

Use the same procedure to add the stocks to the surrogate group symbols. Highlight a surrogate group ticker by clicking on it on the left portion of the screen and click **List**, then **Insert Tickers**. Type in the ticker symbols for each surrogate group separated by a

semicolon.

With the stocks associated to the proper groups, we can now compute the industry groups. Select **Utilities** and **Compute Group/Sector Indices**. Under **Source** click on **Compute Lists** and highlight the newly created list. Click **OK**.

In order to calculate the Group Analysis report on the new structure, go to **Reports**. Highlight **Group Reports** and select **Reports** and **Global Properties**. Under the **Group/Sector** choice, highlight the new list name.

This process is demonstrated in AIQ's Advanced Group Analysis video tape which retails for \$69 (800-332-2999). ■

SECTOR TRADING *continued* . . .

highly ranked on the weekly chart. Energy, on the other hand, has a low ranking on both reports. That combined with a very negative daily DTS reading says this group should be avoided.

The weekly Group Analysis report is used to establish the overall trend. Alternatively, one could combine the daily Group Analysis report with simple chart reading. In **Figure 9** we've plotted both the Technology and Energy sectors. We see the overall trend for Technology is up while the trend for Energy is down.

Next Month: Advanced Sector Analysis by creating markets for the SPDR sectors. ■

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

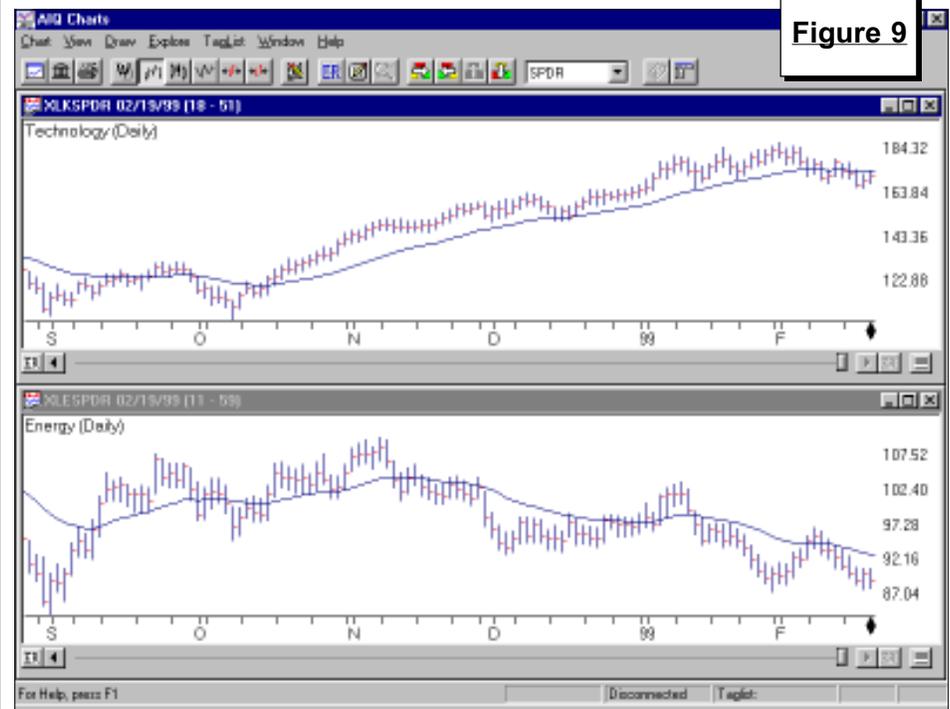


Figure 9

STOCK DATA MAINTENANCE

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

Stock	Ticker	Split/Div.	Approx. Date	Stock	Ticker	Split/Div.	Approx. Date
Bristol Myers Squibb	BMJ	2:1	03/02/99	UtiliCorp United	UCU	3:2	03/15/99
eBay Inc.	EBAY	3:1	03/02/99	Hasbro Inc.	HAS	3:2	03/16/99
Minnesota Power	MPL	2:1	03/03/99	Best Buy	BBY	2:1	03/19/99
Outback Steakhouse	OSSI	3:2	03/03/99	Osteotech Inc.	OSTE	3:2	03/22/99
BJ's Wholesale Club	BJ	2:1	03/03/99	Aquarion Co.	WTR	3:3	03/23/99
FFY Financial Corp	FFYF	2:1	03/08/99	Primex Technologies	PRMX	2:1	03/23/99
CSG Syst-Int'l Inc.	CSGS	2:1	03/08/99	May Dept. Stores	MAY	3:2	03/23/99
Dell Computer	DELL	2:1	03/08/99	Network Solutions	NSOL	2:1	03/24/99
McGraw-Hill Cos.	MHP	2:1	03/09/99	Amerisource Health	AAS	2:1	03/25/99
Global Crossing Ltd.	GBLX	2:1	03/10/99	Microsoft Corp.	MSFT	2:1	03/29/99
Kronos Inc.	KRON	3:2	03/10/99	K-Swiss Inc.	KSWS	2:1	03/29/99
Vulcan Materials	VMC	3:1	03/11/99	Unitrin Inc.	UNIT	2:1	03/29/99
Xilinx Inc.	XLNS	2:1	03/12/99	Manitowoc Co	MTW	3:2	04/01/99
Cost Plus	CPWM	3:2	03/12/99				

Trading Suspended:

First Brands (FBR), Harveys Casino Resorts (HVY)

Name/Ticker Changes:

Exel Ltd. (XL) to XL Capital Ltd. (XL)
 Houston Industries (HOU) to Reliant Energy (REI)