

Feature

AIQ's Group Analysis Report Identifies Group Rotation ... 1

Sections

Data Maintenance 4
 S&P 500 Changes 4
 New in TradingExpert -- Color Studies 5
 Testing MACD As Market Timing Indicator 6
 Market Review 8

The *Opening Bell Monthly* is a publication of AIQ Systems
 David Vomund, Chief Analyst
 P.O. Box 7530
 Incline Village, Nevada 89452

GROUP ROTATION

IDENTIFY GROUP ROTATION WITH AIQ'S UNIQUE GROUP ANALYSIS TOOLS

By David Vomund

One of TradingExpert Pro's most powerful features is its ability to identify industry group rotation. Last month, we demonstrated several uses of the lesser known group analysis tools including how groups can be created to identify the rotation between growth stocks and value stocks. In this issue, we'll discuss how AIQ's Group Analysis report can be used to identify group rotation.

Most people use the industry group structures that come with TradingExpert. Some power-users prefer to create their own groups designed to fit their individual needs. For this article, we created a structure that contains the Rydex

sector funds along with some other groups of interest. This is a small group structure so it is easy to identify the rotation of the groups. Groups that we are not interested in are eliminated.

DAVID VOMUND

"A report that is unique to AIQ and very helpful in identifying group rotation is the Group Analysis report. To properly use this report, you'll need to understand the Trend Score and Delta Trend Score indicators."

In creating the groups that correspond to Rydex sector funds, we used each fund's 10 largest stock holdings. These stocks are listed at

www.rydexfunds.com.

TradingExpert has several pre-built industry group reports. The most conventional report to identify rotation is the Price Change report. This report concentrates on the groups that have performed the best.

A report that is unique to AIQ

and very helpful in identifying group rotation is the Group Analysis report. To properly use this report, you'll need to understand the Trend Score and Delta Trend Score indicators.

Trend Score (TS) is a special AIQ expert system that measures the strength of several indicators including MACD, Volume Accumulation Percentage, Directional Movement, On Balance Volume, Positive Volume, and Average Directional Movement Index. Since TS is based on the strength or weakness of the technical indicators, and indicators tend to lead price action, TS is a leading indicator. The TS values vary between +100 and -100, where +100 means a very strong uptrend.

Delta Trend Score (DTS) measures the rate-of-change in the TS. In effect, DTS measures the momentum of TS. When a group hits a low and begins to move higher, its DTS will have a large positive value. That's because the indicators are improving and beginning to move higher.

Here are the stages of a group that forms a bottom and enters a new uptrend:

Stage 1 - High DTS. The group finished its period of weak-

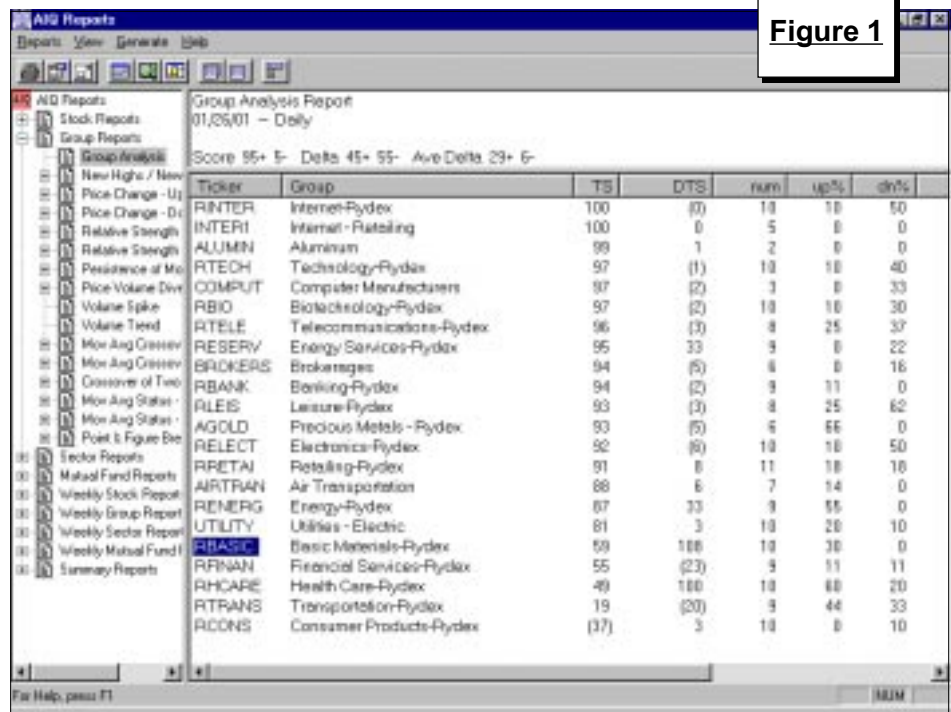


Figure 1

ness and is forming a bottom. The indicators may still be negative but they are beginning to improve.

Stage 2 - Improving TS. The group has made its bottom and is showing signs of entering a new uptrend. The group appears in the upper half of the Group Analysis report.

Stage 3 - High TS. The group is in an uptrend. Its TS value is higher than almost all other groups.

DTS readings, however, signify that their indicators are beginning to gain in strength.

When we say "a high DTS" we mean a high number relative to the other groups. There isn't a specific level that designates a high DTS. On some days a high DTS may be 100 and on other days it may be 50. Looking at Figure 1, the two groups we mentioned clearly have the

"In almost any market environment there are some groups that do well. That's why group rotation is so important. AIQ recognized this years ago and built valuable tools to identify group rotation."

Let's clarify this with an example. In **Figure 1** we show the Group Analysis report on January 26 of this year. Looking for groups entering Stage 1, we see that Basic Materials and Health Care have the highest DTS values. Because these groups are near the bottom of the ranking on the report, we know that they have been underperforming. Their high

highest DTS readings. Those people who like to pick bottoms should look for high DTS readings. Since buying groups with high DTS readings gets you into a trend very early, you catch the entire move. But there are a lot of false signals as well.

By waiting for Stage 2, you miss some of the advance right off the bottom but you weed out

PLEASE SEND CORRESPONDENCE TO:

Opening Bell Monthly
 G.R. Barbor, Editor
 P.O. Box 7530
 Incline Village, NV 89452

AIQ Opening Bell Monthly 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.

For subscription information, phone 1-800-332-2999 or 1-775-831-2999.
 © 1992-2001, AIQ Systems

GROUP ROTATION *continued* . . .

many of the false Stage 1 signals.

In **Figure 2** we see that Basic Materials has entered Stage 2. It has risen to the top third of the report and it still has a positive DTS value. That means that its indicators are strong and they are still gaining strength. Many AIQ users follow a strategy of picking groups that appear near the top of the report and also have positive DTS values.

Notice that the high DTS for Health Care (see Figure 1) turned out to be a false signal. Health Care did not enter Stage 2. Again, the benefit of buying at Stage 1 is that you catch the entire advance. But the cost is a lot of false signals.

Basic Materials entered Stage 3 on March 2 (**Figure 3**). Just because this group is at the top of the report doesn't mean it is too late to buy it. It means the group is uptrending and worthy of attention for growth investors. Basic Materials can't move any higher in the report but it can stay in the upper half of the report for

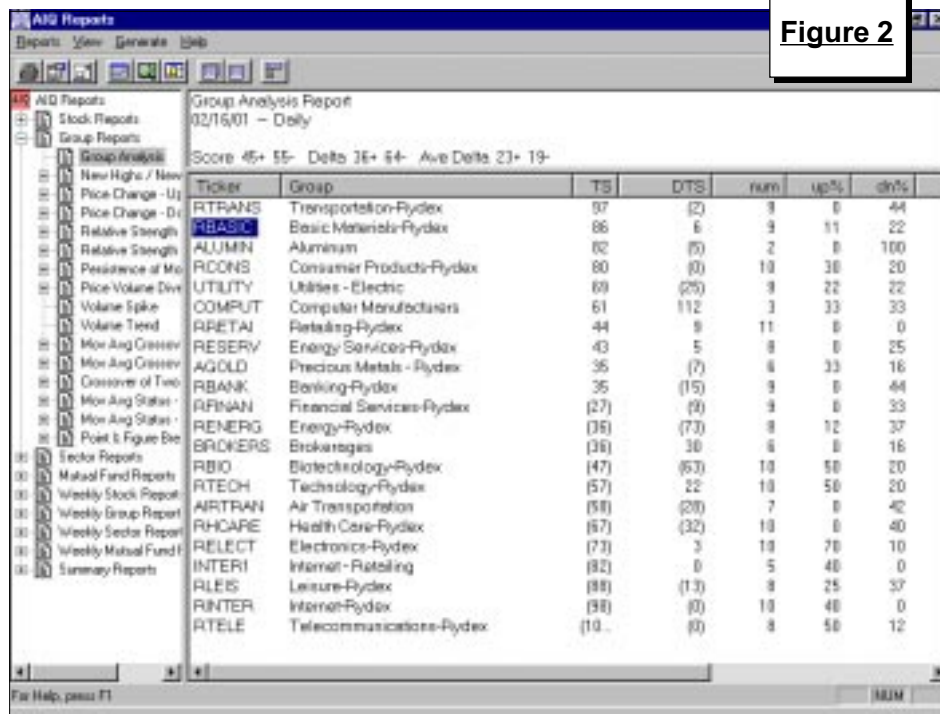


Figure 2

a number of weeks as it outperforms most of the other groups.

Notice in Figure 3 that Basic Materials has a DTS value of 0. That is to be expected. Those groups at the top of the report already have strong indicators. Their indicators are trending

higher so the rate-of-change of the indicators is flat.

The daily Group Analysis report is for short-term traders. If you are a long-term trader, then you should perform the same analysis as described above but you should add the additional criteria that your group selections must also be in the upper third of the weekly Group Analysis report. The weekly report is less volatile and better identifies long-term trends.

Now that we like Basic Materials, what do we buy? Obviously, the most appropriate vehicle is the Rydex-Basic Materials mutual fund. After all, our Basic Materials group was comprised of the ten largest stock holdings of the fund.

If you want to buy a stock, start your analysis with the stocks that comprise the industry group. Many times, however, you'll want to examine more stocks than those that are in the group. This is especially true if you use the

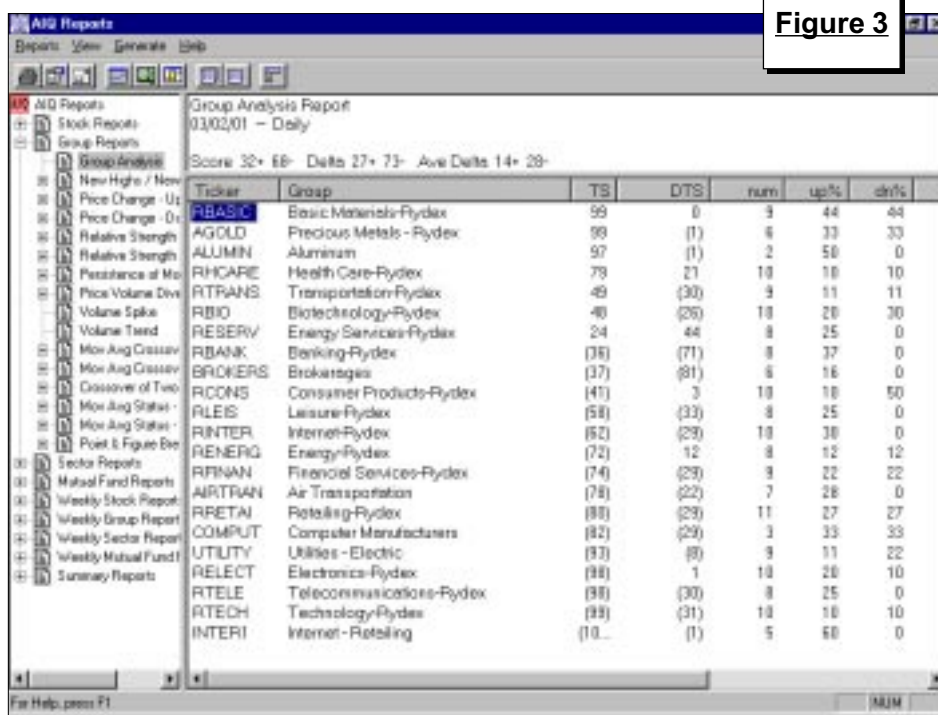


Figure 3

GROUP ROTATION *continued*

Standard & Poor's industry group structure. The S&P structure groups contain so few stocks that in many cases you may like a group that contains only two stocks. That doesn't give you much of a selection.

One effective method of increasing the number of stocks to analyze is to use MatchMaker to see which other stocks are highly correlated to the industry group you selected. In our study, we liked Basic Materials so we used MatchMaker to compare the Basic Materials industry group to all of the stocks in our database. We used a one-year time period and weekly data.

The result is found in **Figure 4**. Here we see a listing of all the stocks that are highly correlated to our Basic Materials industry group. Not surprisingly, the list contains aluminum, chemical, and paper stocks. Since we liked the group, Figure 4 represents a great list of stocks as potential buy candidates.

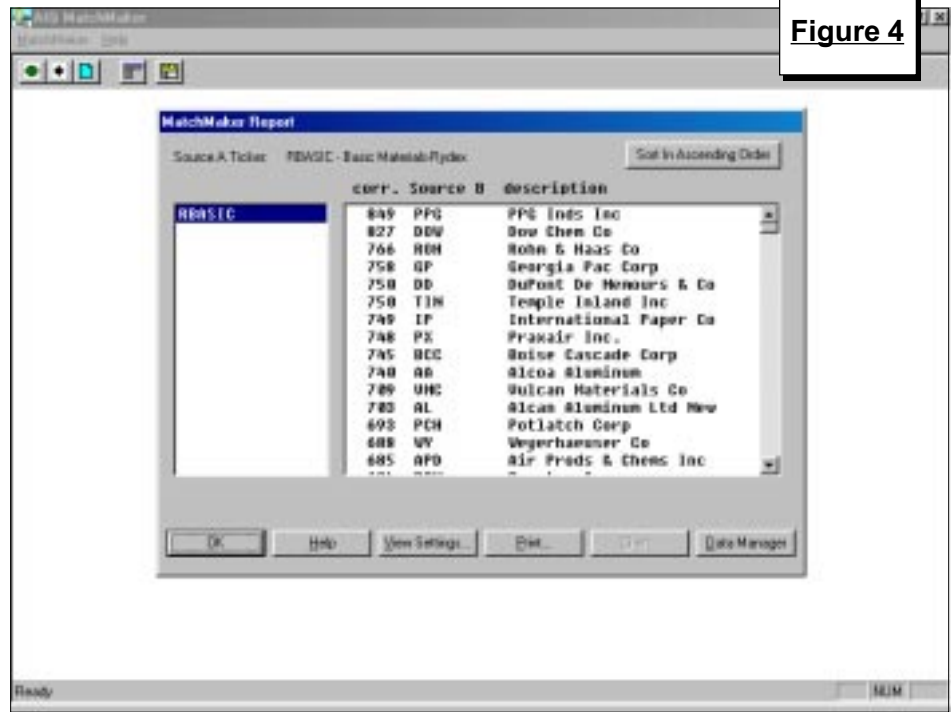


Figure 4

In conclusion: In almost any market environment there are some groups that do well. That's why group rotation is so important. AIQ recognized this years ago and built valuable tools to identify group rotation. The

ability to easily create industry groups to match each person's individual needs is important. The Group Analysis report with its Trend Score and Delta Trend Score is a valuable tool to help identify group rotation. Finally, MatchMaker is effective in seeing which stocks correlate well with specific groups. ■

STOCK DATA MAINTENANCE

The following table shows stock splits and large dividends:

Stock	Ticker	Split	Approx. Date
Advanced Marketing Svcs.	MKT	3:2	05/14/01
SouthTrust Corp	SOTR	2:1	05/14/01
Washington Mutual	WM	3:2	05/16/01
Chicos FAS	CHS	3:2	05/17/01
State Street Corp.	STT	2:1	05/31/01
Quest Diagnostics	DGX	2:1	06/01/01
BJ Services	BJS	2:1	06/01/01
ESB Financial	ESBF	6:5	06/01/01

Trading Suspended:

CD Warehouse (CDWI), Crown Crafts (CRW), Flowers Ind. (FLO), IPALCO Ent. (IPL), Michael Foods (MIKL), Morgan Keegan Inc. (MOR), Old Kent Financial (OK), Pennaco Energy (PN), TCI Int'l (TCII), Transmedia Networks (TMN)

Name/Ticker Changes:

Chicos FAS (CHCS) to Chicos FAS (CHS)
 Talk.com (TALK) to Talk America Holdings (TALK)
 United Wisconsin Services (UWZ) to Cobalt Corp (CBZ)

CORRECTIONS

In the April issue, the 4/9/99 to 4/23/99 trade in the 2 Week Reversal section of Table 1 should have read 0.63%. The overall return for the 2 Week Reversal in Table 2 should have read 45.28%. These results will be summarized in the June *Opening Bell*.

S&P 500 Changes

There are no changes to the S&P 500 Index and Industry Groups this month.

COLOR STUDIES

NEW! 'COLOR STUDIES' ON CHARTS -- NOTEWORTHY ADDITION TO TRADING EXPERT PRO 6.0

With the release of TradingExpert Pro version 6.0, AIQ users now have the ability to perform Color Studies in the Charts application. Users can change the colors of the individual price bars on charts depending on any criteria they choose.

For example, if you like stocks that have a Stochastic buy signal combined with a positive MACD indicator, then you can have AIQ plot a green price bar every time this criteria is met. Then, when you examine charts you can quickly see the buy and sell signals.

The Expert Design Studio (EDS) module is used to set up the criteria for buy and sell signals. Many AIQ users have created their own EDS strategies and we've published several effective strategies in this newsletter as well. With Color Studies, we can now visually identify our entry and exit points on a chart.

Another use of Color Studies is to pick a particular indicator and have the chart plot one color when the indicator is bullish and another color when the indicator is bearish. This can be very beneficial for a user who has a favorite indicator.

As an example, let's use the MACD Oscillator (MACD Osc) indicator. This indicator is bullish when it is above zero and bearish when it is below zero. Before TradingExpert 6.0, we could see the buy and sell signals on the indicator but effort was required to identify the buy and sell signals

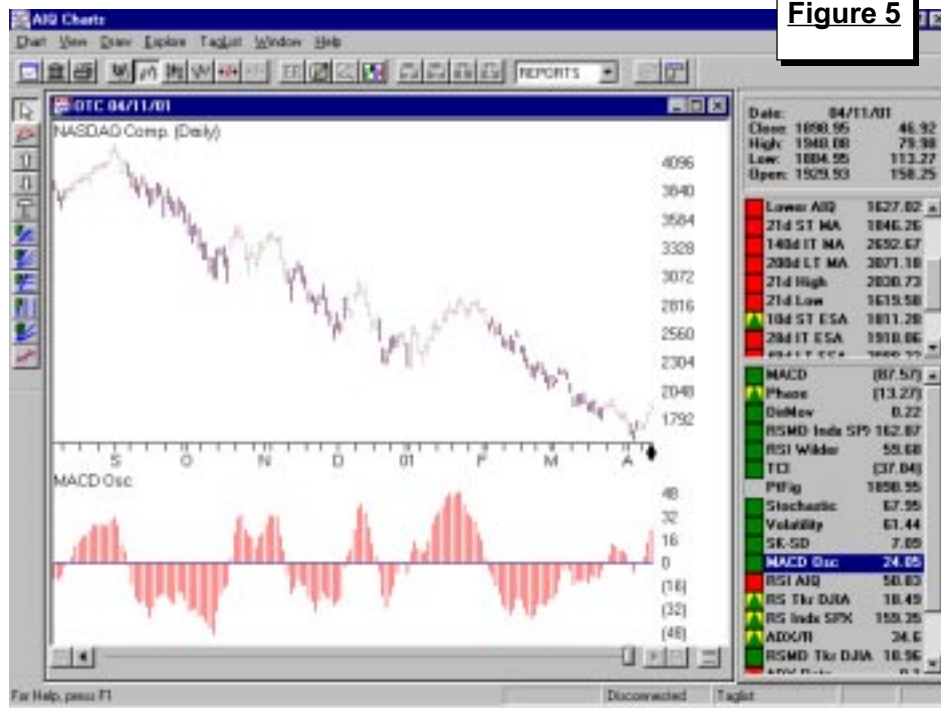


Figure 5

on the price chart. With version 6.0, we can plot the price with one color when the MACD Osc is above zero and a different color when the MACD Osc is below zero.

To do this, we first create a file

“Users can change the colors of the individual price bars on charts depending on any criteria they choose...we can now visually identify our entry and exit points on a chart.”

containing the EDS rules that are used to identify when the indicator is bullish and when it is bearish. We named this EDS file MACD. Here is the code for the rules:

bullish if [MACD Osc] > 0.
bearish if [MACD Osc] < 0.

Our next step is to open the Charts module, click the **Color Studies** toolbar button (labeled Define Studies), and continue as follows:

- In the Color Studies dialog box, click the button at the right end of the EDS File text box. Use the Open dialog box to find and highlight the MACD file and then click **Open**. (EDS files are found in the EDS Strategies folder which is located within your WinTES 32 folder.)
- Click on **Create New Color Study**.
- On the next screen, accept the default for **Price Plot** and click **Next**.
- We want the color of the price bar to change so make sure **Price Bar** is highlighted and click **Next**.

Color Studies continued on page 8

TESTING THE MACD YIELDS SURPRISING RESULTS

By David Vomund

The Moving Average Convergence Divergence indicator (MACD) is a price momentum indicator that plots two lines. The first component is the *Price Phase Line*, which represents the difference between two moving averages. This is the fast line on the indicator, typically shown in green on AIQ's charts. The second component is the *Signal Line*, which is a moving average of the Price Phase Line.

How effective is the MACD as a market timing indicator? In our market timing series, we tested several buy and sell techniques using the weekly version of this indicator. The reason we chose the weekly version is because it gives fewer signals. Our goal is to find an indicator that can be used in conjunction with the Expert Ratings, and the Expert Rating system gives about six round trip trades per year.

Our first test uses the S&P 500's weekly MACD indicator and looks for a one-week change in the indicator. When the Price Phase Line is rising in value, you go long the S&P 500. Once the indicator falls in value, then you switch to the money market. Since we are using the indicator in the weekly mode, all trades are known on Friday's close and are executed on Monday's opening price.

The results of our testing are found in **Table 1**. The section at the left shows times when the weekly MACD favors the S&P 500. We were surprised to find that since 1996, trading the S&P 500 during time periods when the MACD was favorable only led to an 8.6% rate of return (not annualized). Only about one-third of the trades were profitable.

If trading results are poor when buying the S&P 500 during times that the weekly MACD Price Phase Line is increasing, then it must be true that trading the S&P 500 when the indicator is bearish would be very profitable.

The section at right in Table 1 shows the results of buying the S&P 500 when the weekly Price Phase Line was falling. Amazingly, nearly 80% of trades were profitable and the return since 1996 was an outstanding 77%.

We also tested a two-week change in the MACD. That is, we buy the S&P 500 when the weekly MACD indicator increases in value for two straight weeks and sell after the Price Phase Line falls for two straight weeks. Similar to our previous test, trading results were best when the Price Phase Line was falling. The overall return when the indicator was falling was 62% compared to a return of 25% when the indicator was rising.

In our final test, we looked for the Price Phase Line moving above or below the Signal Line. Sure enough, the highest return came from trading the S&P 500 during times when its weekly MACD Price Phase Line was below its Signal Line. The trading results are in **Table 2**. The 97% return is the highest in our tests thus far.

This does not discredit the MACD indicator. It was designed to be used in a daily format and is more often applied to stocks. It is important to know, however, that in the weekly format the indicator is ineffective when used conventionally. Instead, it is more profitable to go long when the weekly indicator is bearish.

This demonstrates that the

market is typically not trending. By the time the S&P 500 rises enough to turn the weekly MACD indicator upward, then it is typically too late to buy. Only in times when there is a strong trend, such as this year's bearish move, does the indicator work as designed.

Although the results are impressive when buying long during times that the indicator is bearish, I'd recommend against this strategy. It would be painful to be on the wrong side of the market each time a strong trend develops. ■

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

Table 2

Trade Details During Times When The MD Osc. Is Bearish

Buy Date	Sell Date	S&P 500 % Change
1/12/96	2/9/96	9.06
3/15/96	5/24/96	5.78
6/14/96	9/20/96	3.18
3/21/97	5/16/97	5.82
8/29/97	2/6/98	12.56
5/22/98	7/17/98	6.87
7/24/98	11/6/98	0.02
5/21/99	7/9/99	5.49
7/23/99	11/12/99	2.89
1/28/00	3/24/00	12.30
4/14/00	7/7/00	9.02
7/28/00	8/18/00	5.06
9/22/00	2/2/01	-6.85
2/23/01	N/A	-0.23

Return = **96.63%**
Trades per Year = 2.6

Table 1

Trade Details for One Week Change in the MACD

When the MACD is Rising

Buy Date	Sell Date	% Chg
1/26/96	3/1/96	3.66
4/5/96	4/12/96	-1.17
5/17/96	6/14/96	-0.46
8/2/96	8/30/96	-1.58
9/13/96	12/13/96	7.07
12/20/96	1/3/97	-0.11
1/10/97	2/28/97	4.12
3/7/97	3/14/97	-1.47
5/2/97	8/8/97	14.83
9/19/97	9/26/97	-0.56
10/3/97	10/17/97	-2.16
11/21/97	11/28/97	-0.80
12/5/97	12/12/97	-3.09
1/2/98	1/9/98	-4.86
1/30/98	4/24/98	13.02
6/26/98	7/24/98	0.67
10/16/98	1/22/99	15.97
1/29/99	2/5/99	-3.14
3/5/99	3/26/99	0.58
4/9/99	4/16/99	-2.18
4/23/99	4/30/99	-1.60
7/2/99	7/23/99	-2.47
10/8/99	10/15/99	-6.63
10/29/99	1/21/00	5.75
3/3/00	3/10/00	-1.00
3/17/00	4/14/00	-7.37
6/2/00	6/23/00	-2.42
6/30/00	7/28/00	-2.39
8/11/00	9/8/00	1.54
11/3/00	11/10/00	-4.39
12/8/00	12/15/00	-4.22
1/12/01	2/9/01	-0.27

Return = **8.62%**

Trades per Year = 6.1

When the MACD is Falling

Buy Date	Sell Date	% Chg
N/A	1/26/96	0.92
3/1/96	4/5/96	-0.02
4/12/96	5/17/96	5.06
6/14/96	8/2/96	-0.50
8/30/96	9/13/96	4.38
12/13/96	12/20/96	2.78
1/3/97	1/10/97	1.53
2/28/97	3/7/97	1.79
3/14/97	5/2/97	2.50
8/8/97	9/19/97	1.82
9/26/97	10/3/97	2.10
10/17/97	11/21/97	2.00
11/28/97	12/5/97	2.97
12/12/97	1/2/98	2.27
1/9/98	1/30/98	5.67
4/24/98	6/26/98	2.28
7/24/98	10/16/98	-7.40
1/22/99	1/29/99	4.45
2/5/99	3/5/99	2.91
3/26/99	4/9/99	5.11
4/16/99	4/23/99	2.87
4/30/99	7/2/99	4.20
7/23/99	10/8/99	-1.54
10/15/99	10/29/99	9.26
1/21/00	3/3/00	-2.23
3/10/00	3/17/00	4.97
4/14/00	6/2/00	8.90
6/23/00	6/30/00	0.91
7/28/00	8/11/00	3.66
9/8/00	11/3/00	-4.40
11/10/00	12/8/00	0.29
12/15/00	1/12/01	0.47
2/9/01	4/13/01	-9.98

Return = **76.90%**

Trades per Year = 6.1

COLOR STUDIES *continued* . . .

- On the **Select EDS Rule** screen, highlight one of the two rules, click **Next**, and select its color.
- Follow the on-screen instructions and click **Finish**.
- Finally, repeat the same steps for the second rule.

Note: Use the on-line Help feature for more detailed instructions.

The results of our Color Study are found in **Figure 5** (page 5). Looking at the chart, light colored price bars are plotted when the MACD Osc is above zero and dark price bars are charted when the MACD is below zero. Because the graphics in this newsletter are printed in black and white only, the results of Color Studies will be more visually distinct on your computer screen.

TradingExpert 6.0 also has the ability to change the colors on indicators. One Color Study that we are finding very beneficial is to change the colors of the Volume indicator, showing whether the security rose in value or fell in value on any given day.

By plotting the Volume indicator using green lines on days when the security advances and red lines on days when the security declines, it is very easy to see what the security did on heavy volume days. This concept is used by *Investor's Business Daily* on its web page at www.investors.com.

Using this technique, the EDS

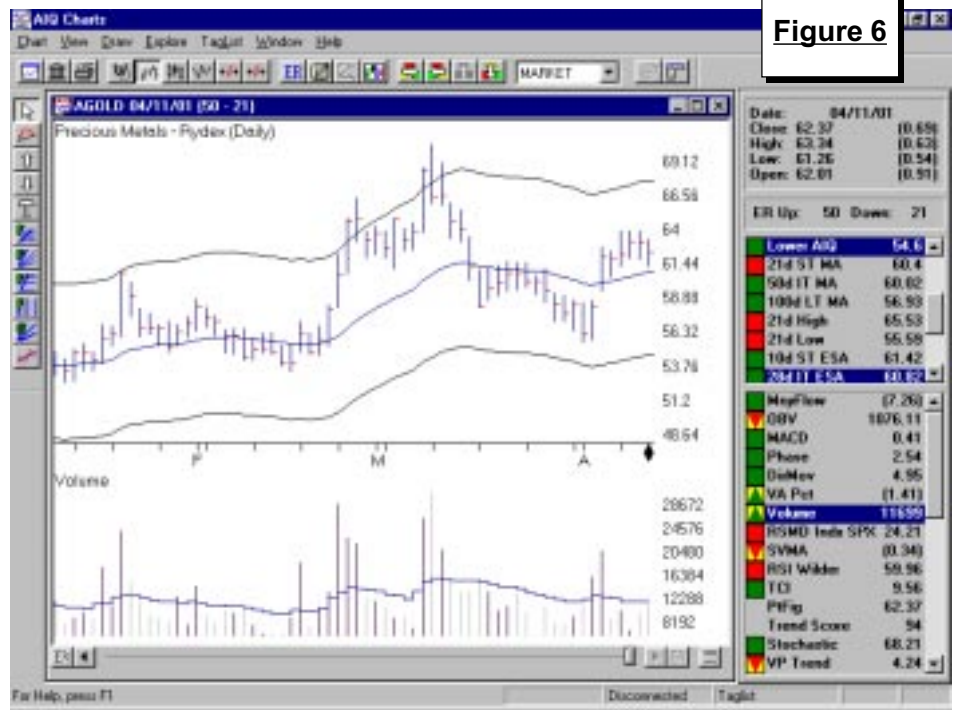


Figure 6

code is:

bullish if [close] > val([close],1).

bearish if [close] < val([close],1).

To set the colors for the Volume indicator, repeat the steps noted above except select **Indicator** instead of **Price Plot**.

Figure 6 shows the Rydex Precious Metals group with the Volume indicator. On days when the price increased, volume was plotted in dark black. On days when the price decreased, volume was plotted in a lighter color.

Notice how easy it is to spot the rally with heavy volume in the second half of February. The rally continued until the heaviest

volume day on the chart, a day when the price decreased.

At the beginning of April we see two volume spikes. Since they are in black, we know these are days when the price increased.

Anyone who uses the Volume indicator will want to take advantage of the new Color Studies feature available in TradingExpert 6.0. After seeing the Volume chart in two colors, you will never want to go back to the old single color charting method again.

To upgrade to TradingExpert Pro 6.0, call your AIQ Sales Representative at 800-332-2999. ■

MARKET REVIEW

Heading into April the market was like a stretched rubber band. Any bit of positive news led to much higher prices. Also helping prices was a Fed that lowered rates for the fourth time. By month's end, the market had staged a powerful advance.

In April, the S&P 500 rose 7.7%

and the Nasdaq Composite rose 15%. The AIQ timing model remained on a buy signal through the month. Entering the month, TradingExpert was on a March 26 buy signal. An additional 95 buy signal was registered on April 10.

Not too surprisingly, the best

performing industry groups were technology related. The Application Software group rose 40%, Internet Software & Services rose 32%, and Computers-Storage & Peripherals rose 32%. Only a few groups lost money in April. The largest loss was Brewers which fell 17%. ■