SUCCESSFUL STOCK STRATEGIES: WHAT WORKED BEST ON WALL STREET

By John Bajkowski

As in 1998, three segments performed strongly in 1999—large cap, growth and technology. The performance of these segments is reflected in the performance of the stock screens we have been tracking, which include those of well-known and successful investment professionals.

For the last two years we have presented and discussed monthly stock screens on the AAII Web site. The screens have covered a full spectrum of investment approaches ranging from small-cap growth to large-cap value.

We have tracked the results of these screens to help determine the characteristics and performance of the approaches. Each month we perform a new screen using AAII's *Stock Investor* program and post the results on the Web site. The screens are reapplied to each subsequent month's updated database. Thus, a stock is "sold" (no longer included in the portfolio) if it no longer meets the initial criteria, and new stocks are added if they qualify. Performance is measured by tracking price gains (dividends excluded) for the portfolios.

Even with more than two years of performance-tracking under our belt, it is too early to determine if any single approach has special characteristics that will make it a top performer over the long haul. Determining long-term success requires testing over several market cycles at a minimum. Furthermore, these stock screens are only a first step in developing a real investment portfolio. These portfolios are merely computer-generated lists, based upon our own interpretation of the investment approaches, with no further fundamental analysis on each company. Each company listed in a stock screen needs hands-on analysis to see if makes sense as an investment.

While it is still too early to determine if any approach will be a top performer over the long haul, interesting patterns have emerged.

IT'S ALL IN THE STYLE

As you look at the performance of popular stock market indexes such as the S&P 500 (Table 1), you might be surprised to discover that over half the companies tracked by *Stock Investor* were actually down for the for the first 11 months of 1999. The typical stock was down about 6% for the year, while the S&P 500 was up 13.0% (14.3% if dividends are considered). Three segments performed strongly in 1999—large cap, growth, and technology.

"Cap" refers to market capitalization, which is determined by multiplying the number of shares outstanding by market price. The S&P 500 is a popular benchmark for stock market performance, but it only covers the largest companies traded on U.S. exchanges. The S&P MidCap 400 measure mid-sized firms while the S&P SmallCap 600 tracks small-cap companies.

As of this writing (end of December), it appears that 1999 will be the fifth year in a row that the S&P 500 will have produced double-digit gains. Over the period of the stock screen tracking (September 30, 1997, through November 30, 1999), the S&P 500 had a price gain of 46.6%, the S&P MidCap index was up 26.7%, while the S&P SmallCap index was actually down 2.4%. Large-cap stocks have now outperformed small-cap stocks for six consecutive years.

The other matrix that is normally used to segment stocks is the growth versus value style. Growth approaches have outpaced value approaches strongly over the last two years. The S&P 500/Barra Large Cap Growth

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TABLE 1. PERFORMANCE OF STOCK SCREENS BASED ON WELL-KNOWN INVESTMENT APPROACHES

Strategy	Total Gain (%)* 1999	Total Gain (%)* 9/30/97–11/30/99	Sharpe Ratio	Monthly Variability (%)** Std. Dev.	Monthly Variability (%)** High	Monthly Variability (%)** Low	Monthly Holdings Avg.	Monthly Holdings % Hold-overs
Value								
Dogs of the Dow	5.2	15.0	5.1	5.4	16.1	–13.1	10	92
Dogs of the Dow (Low Priced 5)	–2.1	29.0	12.0	6.5	18.7	–11.9	5	78
David Dreman	–2.9	–3.0	–6.2	5.8	12.6	–15.4	21	65
David Dreman w/Est. Revisions	5.6	31.7	13.8	6.1	11.4	–15.7	7	20
Low Price-to-Free-Cash-Flow	10.2	18.2	7.2	5.2	9.1	–16.3	104	81
Benjamin Graham—Defensive	3.3	11.0	3.0	6.6	15.7	–11.3	23	81
Benjamin Graham—Enterpr'g	–3.9	–15.2	–11.1	7.2	23.4	–18.7	8	72
O'Shaughnessy—Value	–0.4	4.2	–1.7	5.7	13.9	–14.0	50	79
Geraldine Weiss Blue Chip Div. Yield	3.0	11.5	3.3	6.5	12.8	–11.5	11	74
Growth & Value								
Warren Buffett—EPS Growth	9.3	7.9	1.9	6.8	10.7	–20.4	37	86
Warren Buffett—Sustain. Gr.	6.0	9.8	2.5	6.5	9.7	–17.5	21	81
Philip Fisher	1.1	1.3	1.7	10.3	23.9	–26.7	41	70
Peter Lynch	8.6	5.1	5.8	5.2	10.5	–17.4	24	76
NAIC/Investware Qual. Gr.+Val.	–4.6	–5.9	–5.5	7.1	12.1	–20.3	33	74
O'Shaughnessy—Growth	11.6	26.7	11.1	6.4	11.6	–17.9	50	62
Stock Market Winners	2.8	24.6	10.9	5.3	14.2	–8.4	11	39
T. Rowe Price	–2.1	–15.8	–12.0	6.9	12.5	–18.0	19	72
Ralph Wanger	–6.2	–10.7	–10.1	6.3	8.6	–18.7	11	78
Growth								
William O'Neil's CANSLIM	14.8	58.4	20.8	8.3	20.5	–23.1	13	42
Sector/Specialty								
Benjamin Graham—Def. Util.	–4.2	28.7	14.7	4.5	11.8	–5.4	20	85
Estimate Revisions—Up	28.2	68.7	27.8	6.6	11.4	–18.6	144	16
Estimate Revisions—Down	11.8	–14.8	–10.1	7.4	12.3	–23.3	195	21
Michael Murphy Technology	98.4	97.2	23.3	12.7	47.8	–18.8	20	76
Indexes								
S&P 500	13.0	46.6	24.4	4.9	8.0	–14.6		
S&P/Barra Large Cap Growth***	19.4	75.7	37.6	5.1	8.4	–13.0		
S&P/Barra Large Cap Value***	8.6	27.3	12.8	5.2	8.6	–16.1		
S&P MidCap 400	7.1	26.7	11.1	6.4	12.0	–18.7		
S&P SmallCap 600	3.1	–2.4	–5.2	6.0	9.0	–19.4		
Nasdaq 100	61.6	170.4	44.2	8.7	18.0	–17.2		

**Cumulative price appreciation; figures do not include dividends or transaction costs*

***The highest and lowest monthly gain or loss; figures do not include dividends or transaction costs*

****Total return includes reinvestment of dividends*

index had a total return of 75.7% compared to a 27.3% gain by the S&P 500/Barra Large Cap Value index. Growth outpaced value approaches among mid-cap and small-cap stocks as well.

The third important market factor over the screening period has been the strong, but volatile, performance of technology stocks. For example, the technology-heavy Nasdaq 100 index was up nearly three times the S&P 500 with a price increase of 170.4%.

The performance of these segments is reflected in the performance of the stock screens presented on our Web site. The screening approaches listed in Table 1 are grouped based on their growth versus value approach. The table shows the price change during the first 11 months of 1999 and over the complete testing period. The Total Gain columns do not include dividends. For example, through the first 11months of 1999, the Dogs of the Dow: Low Priced Five approach lost 2.1%. Since September 30, 1997, the approach has generated a price gain of 29.0% During this time period, shareholders of these stocks would have also received dividends that would have increased their rate of return, but our performance figures do not consider the impact of this income. Large-cap value strategies such as the Dogs of the Dow: Low Priced Five would be affected the most by dividend exclusion.

The most successful strategies recently invest in the technology sector, large-cap area, or growth segment. This is the second year in a row now that the Michael Murphy Technology screen has topped the list. The growth-oriented screen following the O'Neil CANSLIM approach was another top-performing strategy for 1999. Small-cap value techniques have been the weakest groups these past two years. Ralph Wanger's small-cap value approach was the weakest screen in 1999.

RISK

When measuring performance, the risk of the strategy should also be considered. The Monthly Variability

columns report the highest and lowest monthly gain or loss as an indication of the volatility that occurred over the last two years. For example, the most that the Dogs of the Dow: Low Priced Five gained in a single month was 18.7%, while the most that it lost in a single month was 11.9%. By way of comparison, the most that the S&P 500 index gained in a single month was 8.0%, while its largest single monthly loss was 14.6%.

The Monthly Variability columns also report the monthly standard deviation over the full study period. Standard deviation is a measure of total risk, expressed as a monthly change, that indicates the degree of variation in return experienced relative to the average for a strategy for the test period. The higher the standard deviation, the greater the total risk of the strategy.

SHARPE RATIO

The Sharpe ratio equates the return to risk by dividing the excess portfolio return (average return minus the risk-free rate of return) by the portfolio standard deviation.

The Sharpe ratio measures the return per unit of risk, but must be compared against other portfolios over the same time period to be meaningful. The higher the value, the better the performance relative to the risk taken. Within the Sector/Specialty section, the Estimate Revisions—Up approach had a higher Sharpe ratio (27.8) than the Michael Murphy Technology approach (23.3) even though the Murphy approach had a greater overall gain (97.2% for Murphy versus 68.7% for Estimate Revisions—Up). This is because of the high relative monthly standard deviation of the Murphy Technology screen.

TURNOVER RATES

The Monthly Holdings columns provide data on portfolio holdings over time—the average number of stocks that were in each portfolio over the last two years along with the average holdover percentage from month to month. The Dogs of the Dow: Low Priced Five approach always has five stocks in the portfolio, but the O'Neil CANSLIM approach averaged 13 passing stocks with as many as 32 stocks and as little as one stock for a given month.

The percent holdover column gives an indication of the turnover for a given strategy. The higher the percentage holdover, the more often companies stay in a portfolio month to month. The Dogs of the Dow: Low Priced Five approach averaged 78% in holdovers from month to month. Since the portfolio has five stocks, that means on average one stock would have been replaced, while four were held over for a given month. The holdover percentage is lower than that of the Dogs of the Dow approach, which averaged 92%, but significantly higher than that of the O'Neil CANSLIM approach which averaged only 42% in holdovers in the last two years.

As a general rule of thumb, approaches that focus on value tend to have less portfolio turnover than the pure growth approaches, tend to be less volatile, and outperform other approaches during bear markets. However, value approaches can fall behind other approaches, particularly in the strongest portion of a bull market.

PORTFOLIO CHARACTERISTICS

Even the best stockpicker, if he followed a small-cap value approach during this period, would have had a difficult time outperforming a large-cap growth style manager. Table 2 presents the characteristics of the stocks that passed the screens at the end of November.

The current price-earnings ratio (price divided by trailing 12-month earnings per share) for this group of screens ranges from 6.6 for the value-oriented Benjamin Graham—Enterprising screen to 32.9 for the growth-at-any-price O'Neil CANSLIM approach.

The Graham—Enterprising portfolio illustrates some of the pitfalls of stock screening and undiversified portfolios. With a 1.2 maximum acceptable price-to-book-value ratio, the Graham—Enterprising screen has effectively been out of the market during the past two years. The few stocks passing the screen were typically special situations that do not necessarily capture the spirit of the screen. Only eight stocks passed the current screen, with an average price-earnings ratio of 6.6 compared to the S&P 500's 30.6. While a very strict valuation rule may prevent you from buying in overheated markets, it may also leave you with an undiversified group of holdings that have more portfolio volatility than you might have expected.

Both the historical and estimated growth rates follow the predictable script. The more growth-oriented approaches have higher growth rates, while the value approaches tend to have lower growth rates. Screens such as the Geraldine Weiss Blue Chip Dividend Yield value consistent earnings over high earnings growth rates. This screen requires at least four years in which earnings have increased out of the last seven years, but has no minimum growth requirement. In contrast, the O'Neil CANSLIM screen requires a minimum 25% annual growth in earnings from continuing operations as well as earnings increases in each of the last five years.

Market capitalization is provided as a gauge for size of firms passing each screen. Strategies such as Dogs of the Dow, O'Shaughnessy value, and Buffettology are clearly invested in the large-cap segment. Graham Enterprising, Lynch, Stock Market Winners, and Wanger are at the other end of the spectrum with relative low market caps.

The relative strength index is calculated against the performance

of the S&P 500. Stocks with performance equal to the S&P 500 over the last 52 weeks have a relative strength index of zero. A relative strength rank of 7.0 indicates that a stock outperformed the S&P 500 by 7%. Negative numbers indicate underperformance relative to the index. Only a handful of strategies have positive figures.

The percentage of shares held by institutions ends up serving as proxy for market cap. The Peter Lynch screen has the lowest market cap of the group yet it does not have any screens for market cap. However, it does not allow an institutional shareholder percentage above that of the median for all companies, which is 22.6%. Currently, only the small-cap universe has a large group of stocks with low institutional ownership.

For details on how the screens were constructed and to follow their performance, go to the Stock Screens area of the AAII Web site at www.aaii.com.

CONCLUSION

As you look at the performance of the screens, do not blindly follow the strategies with the highest performance. Instead, try to understand the forces that affect their performance.

Here are some important questions to ask that will help you evaluate any series of screens that seek to capture an investment approach:

- How is the portfolio reacting relative to the current market environment? If it is deviating substantially, what is the cause of that deviation—is it the particular stock picks, or it is perhaps overconcentration in a particular sector that is a result of the particular set of screens you have chosen?
- Are the portfolio's characteristics more similar to a value-based or growth-based approach? That may give you a better idea of how the portfolio is likely to behave in the future.
- Are the screens actually capturing the kinds of firms you want to invest in based on your chosen investment approach? Are the screens producing unintentional biases in your portfolio?
- What is the proper benchmark to measure the performance of your portfolio? It is important to look at the characteristics of your portfolio (market capitalization, industry concentration, growth vs. value) to properly select a benchmark to evaluate the performance of your holdings.
- How frequently do your screens cause your portfolio to substantially change? If trading is frequent, you need to consider developing "hold" criteria rather than selling whenever initial criteria is no longer met, which may cause you to sell winners too soon.

Most importantly, remember that screening is just a first step. There are qualitative elements that cannot be captured effectively by a quantitative screening process. ❖

TABLE 2. PORTFOLIO CHARACTERISTICS OF STOCK SCREENS

Strategy	P/E Ratio (X)	Annual EPS Growth Rate (%)	Estimated Long-Term EPS Growth Rate (%)	Market Cap ($ mil)	52-Wk Relative Strength Index (%)	Percentage of Shares Held by Institutions (%)
Value						
Dogs of the Dow	20.6	11.0	10.0	65,759	–14	67.2
Dogs of the Dow (Low Priced 5)	23.6	11.6	10.1	68,145	–16	67.1
David Dreman	10.4	9.9	11.0	1,526	–31	56.9
David Dreman with Est. Revisions	10.8	21.0	12.5	1,305	–29	58.1
Low Price-to-Free-Cash-Flow	12.4	17.6	13.8	4,948	–26	63.0
Benjamin Graham—Defensive	10.9	13.2	13.0	763	–37	65.8
Benjamin Graham—Enterprising	6.6	23.1	17.5	81	–37	40.4
O'Shaughnessy—Value	13.8	7.3	10.5	15,890	–36	70.8
Geraldine Weiss Blue Chip Div. Yield	12.1	7.4	12.0	1,861	–35	56.6
Growth & Value						
Warren Buffett—EPS Growth	19.1	32.0	23.4	31,190	–15	64.5
Warren Buffett—Sustainable Growth	16.2	34.3	23.5	37,360	–39	52.5
Philip Fisher	9.4	33.3	22.5	324	–46	54.8
Peter Lynch	8.9	25.5	17.5	32	–23	13.9
NAIC/Investware Quality Gr. + Val.	14.5	33.2	20.6	1,125	–22	67.1
O'Shaughnessy—Growth	22.2	10.7	20.1	883	75	45.0
Stock Market Winners	13.9	15.2	9.5	126	20	24.1
T. Rowe Price	9.3	33.3	17.8	656	–23	46.6
Ralph Wanger	15.5	29.3	14.4	207	–26	14.3
Growth						
William O'Neil's CANSLIM	32.9	38.1	21.3	1,182	58	46.8
Sector/Specialty						
Benjamin Graham—Def. Utility	13.8	4.0	5.1	1,856	–32	36.9
Estimate Revisions—Up	23.3	19.3	18.5	5,944	7	59.8
Estimate Revisions—Down	13.7	12.4	14.3	7,068	–33	56.6
Michael Murphy Technology	12.5	28.7	25.0	300	7	38.7