STOCK STRATEGY PERFORMANCE: THE WINNERS AND LOSERS IN 2001

By John Bajkowski

The Joseph Piotroski screen seeking financially strong low price-to-book-value stocks was the best-performing strategy in 2001, while the David Dreman With Estimate Revisions screen was the weakest. Both screens showed strong reversals from their 2000 performance, highlighting the danger of blindly investing in the prior year's best performer.

For the last four years we have presented and discussed a new monthly stock screen on the Stock Screens segment of AAII.com, while simultaneously tracking the success and updating the results of all the previous screens. We now have 50 screens that cover the full spectrum of investment approaches, ranging from small-cap growth to large-cap value. Some of the approaches attempt to capture the investment philosophy of famous investors such as Warren Buffett, while other screens explain and implement basic investing approaches, such as investing in stocks with low price-to-sales ratios.

At the beginning of each month, we run each screen using AAII's *Stock Investor* and produce a table of passing companies for each screen, which is posted on-line. We construct a fresh hypothetical portfolio for each screen every month. Stocks are purchased in equal dollar amounts at the start of the month and sold/rebalanced at the end of the month. A stock is sold if it no longer meets the initial criteria, and new stocks are added if they qualify. The price gains (dividends excluded) for these portfolios are tracked. No additional screens are applied in constructing the portfolios.

The performance reflects buying and selling each month at the month-end closing. The impact of factors such as commissions, bid-ask spread, dividends, and time-slippage (time between the initial decision to buy a stock and the actual purchase) are ignored. While this makes the reported performance unachievable, in a best-case scenario, all approaches are subject to the same conditions and procedures. However, higher turnover portfolios would typically benefit from our simplified rules. The goal of tracking the performance of the screens is to help gain an understanding of how each approach reacts in different market conditions, and to gain a feel for their characteristics.

Even with over four years of performance tracking under our belt, it is early to determine if any approach has special characteristics that will make it a top performer over the long haul. But, we have had the opportunity to observe the reaction of the screens during bull and bear markets.

WINNERS AND LOSERS

As 2001 is drawing to a close, the S&P 500 may show back-to-back calendar-year losses—the first such event since 1973 and 1974. As revealed in Table 1, most of the indexes show negative returns through December 14. Only the S&P SmallCap 600 index shows a positive rate of return through December 14. Just as in 2000, small-cap stocks generally outperformed large-cap issues. The technology-heavy Nasdaq 100 lost almost a third of its value in 2001 after losing 36.8% in 2000.

"Cap" refers to market capitalization, which is determined by multiplying the number of shares outstanding by the 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 measures mid-sized firms while the S&P SmallCap 600 tracks small-cap companies.

The other matrix that is normally used to segment stocks is the growth versus value style. Value approaches seek stocks that are priced cheaply

John Bajkowski is AAII's financial analysis vice president and editor of Computerized Investing.

relative to tangible variables such as earnings, book value, or sales. Growth approaches seek stocks with rapidly expanding earnings, with little regard to the stock price.

The screening approaches listed in Table 1 are grouped by growth versus value approach. The table shows the price change from January 1, 2000, through December 14, 2001, along with the gains or losses during 2000, 1999 and 1998. The Total Gain columns do not include dividends. Higher yield large-cap value strategies such as the Dogs of the Dow would be affected the most by excluding dividends.

The Joseph Piotroski screen seeking financially strong low-price-to-book-value stocks was the best performing strategy in 2001, with a gain of 87.3% after showing a 0.9% loss in 2000. The David Dreman With Estimate Revisions screen was the weakest performer in 2001, with a 35.0% loss after gaining 38.7% in 2000. The screen seeks out larger stocks with low price-earnings ratios that have had recent upward earnings revisions. Most of the losses for the screen came in September and October, with very few passing stocks (one in September, three in October). These strong reversals highlight the dangers of investing in last year's best-performing market segment without first appraising its ability to continue its strong performance. So far, the growth-oriented screen that follows the William O'Neil CANSLIM approach has shown some of the most consistently strong performance gains: 53.5%, 38.0%, 36.6%, and 28.2% over the last four years. The Martin Zwieg screen is the other long-term standout, with a four-year gain of 299.7%.

RISK

When measuring performance, the risk of the strategy should be considered. The Monthly Variability columns report the greatest monthly gain and loss as an indication of the volatility that has occurred over the last four years. For example, the most that the Martin Zwieg approach gained in a single month was 32.7%, while the most that it lost in a single month was 24.2%. By way of comparison, the most that the S&P 500 index gained in a single month was 9.7%, 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. It indicates the degree of variation in return experienced by a strategy relative to its average over the test period. The higher the standard deviation, the greater the total risk of the strategy. The Graham Defensive Investor (Utility) screen has the lowest monthly standard deviation figure of 4.7%, while the Richard Driehaus approach exhibited the highest monthly standard deviation of 15.3% over the same four-year period.

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 four 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 Geraldine Weiss Blue Chip Dividend Yield approach averaged 11 passing stocks with as many as 25 stocks for a given month, and no passing stocks at the end of November 2001. The % 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 from month to month. As a general rule, approaches that focus on value tend to have less portfolio turnover than the pure growth approaches, and they 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

Table 2 presents the characteristics of the stocks that passed the screens in each approach 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 3.8 for the value-oriented Fundamental Rule of Thumb screen to 53.1 for the Richard Driehaus approach.

Both the historical and estimated growth rates of earnings follow the predictable script. The more growth-oriented approaches typically have higher historical and expected earnings growth rates, while the value approaches tend to have lower growth rates.

Market capitalization is provided as a gauge for the size of firms passing each screen. Strategies such as the Dogs of the Dow and O'Shaughnessy Value are clearly invested in the large-cap segment. Fundamental Rule of Thumb, Graham Enterprising Investor, Low Price/Book, Peter Lynch, Stock Market Winners, and the Shadow Stocks are at the other end of the spectrum, with 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. Negative numbers indicate underperformance, while positive numbers indicate outperformance.

For details on how the screens were constructed and to follow their performance over time, go to the Stock Screens area of AAII.com (found under Tools in the left-hand menu bar).

CONCLUSION

As you look at the performance of the screens, do not simply follow the

TABLE 1. PERFORMANCE OF STOCK SCREENS ON AAII'S WEB SITE

Strategy	Total Gain (%)					Monthly Variability (%)			Monthly Holdings	
Value	**2001***	**2000**	**1999**	**1998**	**Cumulative**	**Std. Dev.**	**High**	**Low**	**Avg. #**	**% Holdover**
Cash Rich Firms	11.9	40.5	37.1	–3.8	107.4	8.0	17.6	–20.7	37	74%
David Dreman	21.6	38.0	–3.0	–1.5	60.2	5.6	12.6	–15.4	20	67%
David Dreman With Est Revisions	–35.0	38.7	6.7	10.7	6.5	7.7	11.4	–25.8	7	21%
Dogs of the Dow	–3.4	4.1	5.7	9.8	16.7	5.9	16.1	–13.1	10	92%
Dogs of the Dow (Low Priced 5)	4.9	3.2	–2.0	24.6	32.2	6.7	19.1	–14.0	5	82%
Low Price-to-Free-Cash-Flow (30)	55.4	17.8	10.0	2.6	106.6	6.6	25.1	–14.4	30	75%
Fundamental Rule of Thumb	31.1	28.7	11.7	–9.4	70.7	8.6	33.8	–19.2	50	75%
Graham—Defensive Investor (Non-Utility)	52.7	12.0	3.6	9.6	94.0	6.6	15.7	–14.6	24	83%
Graham—Enterpising Investor	47.9	24.2	–5.0	–7.3	61.8	6.9	23.4	–18.7	8	68%
Josef Lakonishok	–2.4	36.7	14.8	7.3	64.3	6.5	16.6	–13.7	16	9%
John Neff	57.8	37.3	17.4	9.3	178.1	8.2	26.8	–20.2	19	65%
O'Shaughnessy—Value	7.8	22.3	–3.9	7.2	35.8	6.3	15.5	–14.0	50	78%
Joseph Piotroski	87.3	–0.9	27.1	17.9	178.1	8.7	25.7	–17.2	8	79%
Low Price/Book	42.7	–22.7	31.1	–3.4	39.7	10.1	50.2	–18.4	nmf	nmf
P/E Relative	11.7	20.3	–6.0	26.5	59.8	5.0	13.3	–12.4	27	19%
Geraldine Weiss Blue Chip Div. Yield	25.6	18.8	3.9	3.3	60.2	6.2	14.3	–13.1	11	72%
Growth & Value										
Buffettology—EPS Growth	21.5	5.9	17.7	4.0	57.6	7.0	15.0	–20.4	39	88%
Buffettology—Sustainable Growth	24.0	3.3	14.6	7.4	57.6	7.4	16.5	–18.0	25	85%
Philip Fisher	61.7	–16.7	5.4	2.6	45.7	10.6	25.6	–26.7	42	69%
Peter Lynch	35.1	3.2	8.9	1.3	53.7	5.1	16.4	–17.4	28	77%
Oberweis Octagon	11.8	18.4	33.4	15.6	104.1	9.7	23.3	–23.2	23	59%
O'Shaughnessy—Growth	13.7	11.5	19.5	19.4	80.7	6.6	13.9	–17.9	50	61%
Low Price-to-Sales	37.3	23.3	21.1	13.2	132.1	6.4	14.8	–17.8	44	57%
T. Rowe Price	4.7	35.2	–4.5	1.8	37.7	7.0	13.3	–18.0	19	67%
John Templeton	12.8	20.3	8.1	16.2	70.6	6.7	14.3	–18.2	29	73%
Stock Market Winners	36.9	27.6	21.7	–12.0	87.1	6.7	17.5	–16.7	15	36%
Value on the Move (PEG with Est Growth)	28.4	22.9	11.0	2.1	78.9	6.8	15.7	–23.1	61	51%
Value on the Move (PEG With Hist Growth)	17.5	19.4	18.0	1.5	68.0	5.4	12.7	–19.1	131	63%
Ralph Wanger	12.7	–2.8	3.2	–2.4	10.3	7.9	22.8	–19.8	31	71%
Martin Zweig	51.2	46.2	17.1	54.5	299.7	10.1	32.7	–24.2	13	53%
Growth										
Richard Driehaus	–31.7	–8.3	107.4	0.0	29.7	15.3	51.3	–25.7	10	30%
Inve$tWare Quality Growth II	5.3	18.5	–3.0	14.5	38.7	6.7	18.2	–22.0	35	89%
William O'Neil's CANSLIM	53.5	38.0	36.6	28.2	271.0	8.3	23.6	–23.1	11	45%
Sector/Specialty										
ADRs	–7.1	9.9	4.0	2.3	8.6	7.5	31.1	–17.7	15	58%
DRPs	27.2	13.1	4.4	–4.3	43.7	6.2	18.4	–13.6	29	76%
Dual Cash Flow	19.9	5.7	114.3	0.9	174.0	8.8	34.7	–16.2	39	68%
Est Rev Down	20.8	–7.1	21.9	–15.0	16.2	8.2	17.6	–23.3	221	23%
Est Rev Down 5%	21.2	–4.2	27.8	–3.9	42.6	9.4	23.6	–23.2	70	11%
Est Rev Up	–5.8	2.2	38.2	29.9	72.8	7.4	12.2	–18.6	155	18%
Est Rev Up 5%	–13.1	3.6	107.1	43.3	167.0	11.1	30.8	–21.7	38	8%
Graham—Defensive Investor (Utility)	0.8	51.4	–8.4	14.6	60.2	4.7	12.0	–7.3	18	83%
Insider Net Purchases	16.4	–38.3	7.5	0.0	–22.7	10.7	26.7	–19.0	25	65%
Michael Murphy Technology	24.6	–52.1	139.7	29.7	85.5	15.0	44.7	–27.8	19	78%
Strong ROE	12.2	31.4	1.0	18.8	76.9	6.8	13.0	–22.2	34	82%
Short % Outstanding	4.0	–31.7	–26.9	0.0	–48.0	13.9	33.3	–24.1	25	82%
Short Interest Change	5.4	–51.8	111.1	0.0	7.2	14.7	34.1	–27.4	25	24%
Short Ratio	14.0	–40.9	2.2	0.0	–31.1	10.0	37.8	–24.5	25	53%
Shadow Stocks	25.2	–10.5	16.8	–4.3	25.1	6.4	22.2	–17.4	nmf	nmf
Shadow Stocks—Growth Screen	68.5	–6.2	0.7	–8.8	45.2	6.9	18.6	–18.3	10	56%
Shadow Stocks—Value Screen	5.8	–13.5	4.8	–11.9	–15.5	6.9	23.4	–17.8	16	77%
Indexes										
DJ 30	–9.0	–6.2	25.2	16.1	24.1	5.3	10.2	–15.1		
S&P 500	–14.9	–10.1	19.5	26.7	15.7	5.3	9.7	–14.6		
S&P/Barra 500 Growth (incl. dividends)	–12.9**	–22.1	28.3	42.1	23.8	6.3	9.2	–13.0		
S&P/Barra 500 Value (incl. divs.)	–13.0**	6.1	12.7	14.7	19.3	5.2	10.4	–16.1		
S&P MidCap 400	–4.8	16.2	13.3	17.7	47.5	6.3	12.0	–18.7		
S&P SmallCap 600	1.4	11.0	11.5	–2.1	22.9	6.4	13.3	–19.4		
Nasdaq 100	–31.4	–36.8	102.0	85.5	62.2	13.0	25.0	–27.5		

Unless otherwise stated, figures do not include dividends or transactions costs.

**Through 12/14/2001*
***Through 11/30/2001*

TABLE 2. PORTFOLIO CHARACTERISTICS OF STOCK SCREENS

Strategy	P/E Ratio (X)	P/E to EPS Est. Growth (X)	Hist. EPS Growth (%)	Estimated Long-Term EPS Growth (%)	Market Cap. ($ Million)	52-Week Relative Strength (%)
Value						
Cash Rich	17.9	1.3	19.9	20.0	280.3	10.0
David Dreman	11.6	1.3	8.7	9.4	2,131.3	15.0
David Dreman with Est Revisons	10.6	0.7	15.3	13.9	3,200.9	22.0
Dogs of the Dow	18.6	1.9	4.7	9.3	36,532.0	14.0
Dogs of the Dow (Low Priced 5)	18.6	1.6	11.1	9.8	74,421.2	–16.0
Low Price-to-Free-Cash-Flow	9.6	0.9	5.3	12.5	231.5	23.5
Fundamental Rule of Thumb	3.8	0.6	32.3	18.3	62.3	14.0
Graham—Defensive Investor (Non-Utility)	13.2	1.1	14.2	14.0	409.1	35.0
Graham—Enterpising Investor	5.4	na	16.4	na	39.0	32.5
Josef Lakonishok	30.1	1.5	14.8	11.1	2,664.5	3.0
John Neff	7.8	0.6	17.6	14.0	796.3	5.0
O'Shaughnessy—Value	16.8	1.6	7.6	9.4	9,243.1	17.0
Joseph Piotroski	8.2	0.7	2.1	15.8	101.0	5.0
Low Price/Book	10.1	0.8	–16.9	15.5	22.4	–29.0
P/E Relative	13.2	1.0	13.6	12.5	2,555.3	26.5
Geraldine Weiss Blue Chip Div. Yield*	12.8	1.3	22.9	10.0	355.8	64.0
Growth & Value						
Buffettology—EPS Growth	18.6	1.4	30.2	17.1	2,072.5	30.0
Buffettology—Sustainable Growth	15.1	1.2	30.5	17.1	1,447.7	14.0
Philip Fisher	8.8	0.5	36.2	20.0	129.0	5.0
Peter Lynch	7.1	0.7	30.6	15.3	36.6	15.5
Oberweis Octagon	14.7	0.8	19.9	19.7	204.9	91.0
O'Shaughnessy—Growth	19.1	1.1	1.9	17.0	313.7	269.0
Low Price-to-Sales	15.0	1.4	–3.3	14.5	185.0	39.5
Stock Market Winners	12.8	1.0	18.4	11.0	62.8	73.0
T. Rowe Price	9.2	0.6	39.8	15.1	685.5	54.0
John Templeton	10.5	0.8	24.3	14.6	1,853.7	18.5
Value on the Move (PEG With Est Growth)	13.0	0.8	28.2	16.0	419.2	86.0
Value on the Move (PEG With Hist Growth)	12.7	1.0	21.6	15.4	141.9	71.5
Ralph Wanger	19.6	1.1	38.3	22.3	332.0	65.0
Martin Zweig	18.1	0.8	18.9	16.0	1,364.8	113.5
Growth						
Richard Driehaus	53.1	1.4	–20.0	32.9	541.8	6.0
Inve$tWare Quality Growth II	34.3	1.5	28.6	22.5	2,901.2	42.0
William O'Neil's CANSLIM	11.6	1.1	36.7	19.7	305.2	99.0
Sector/Specialty						
ADRs	15.4	1.7	31.2	12.5	6,472.1	–4.0
DRPs	18.8	1.6	15.0	11.5	2,606.0	11.0
Dual Cash Flow	17.2	1.3	2.3	16.4	130.8	37.0
Est Rev Down	18.3	1.4	11.4	14.3	1,435.2	8.0
Est Rev Down 5%	21.1	1.3	5.8	16.7	785.1	–7.0
Est Rev Up	23.4	1.4	12.4	16.5	1,426.7	41.5
Est Rev Up 5%	22.6	1.9	5.2	17.4	1,346.3	86.0
Graham—Defensive Investor (Utility)	12.0	1.7	5.8	6.8	2,122.0	5.0
Insider Net Purchases	14.7	0.8	–8.0	21.0	156.7	8.0
Michael Murphy Technology	10.2	2.4	32.2	24.3	281.0	–37.0
Strong ROE	21.0	1.1	32.0	18.8	869.7	60.0
Short % Outstanding	16.1	0.8	26.9	22.5	406.9	22.0
Short Interest Change	22.1	1.8	7.0	17.5	197.3	51.0
Short Ratio	16.9	0.6	–16.7	12.8	167.6	8.0
Shadow Stocks	19.1	1.0	13.8	20.5	71.1	18.0
Shadow Stocks—Growth Screen	18.0	0.5	43.3	26.8	280.0	39.5
Shadow Stocks—Value Screen	8.4	0.6	36.3	18.8	63.1	19.0
All Exchange-Listed Stocks	**16.4**	**1.4**	**5.9**	**16.3**	**166.6**	**14.0**

Data as of 11/30/2001. **Data as of 11/2/2001.*

strategies that have 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.
- Are the screens actually capturing the kinds of companies you want to invest in based on your chosen investment approach? Also, are the screens producing any unintentional biases?
- 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.
- How frequently do your screens cause your portfolio to substantially change?

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