

THE AAIL BEGINNER'S PORTFOLIO

By James B. Cloonan

Over the past six years the Beginner's Portfolio, an experimental portfolio of small stocks, has been periodically discussed in my column. Interest in this portfolio led us to provide detailed information about it a year ago in a special feature format, which we now are updating on an annual basis.

THE ORIGIN OF THE PORTFOLIO

We began the Beginner's Portfolio just over six years ago not to prove any one theory of investing, but to show that a consistent approach could be followed without great time requirements. We also wanted to examine and share the problems and procedures of managing a portfolio of small stocks.

A secondary consideration was our hope that we could convert a few "fundaholics" who exclusively invest in mutual funds into investing at least a part of their portfolio in individual stocks.

Our approach was based on historical evidence that small-capitalization stocks (these are now more commonly called micro-cap stocks) and stocks with low price-to-book ratios outperformed the market over the long run. It was also based on the belief that a portfolio could be managed by making adjustments only once a quarter.

Based on practical experience in the handling of our portfolio (it is a real

portfolio), we have adjusted the guidelines; the rules provided at the end of this article represent our latest ideas for managing such a portfolio. The performance results through the past six years can be seen in Table 1.

The purpose of the portfolio is to study processes and not to be an advisory letter. Because of this, we do not list the stocks as we purchase them, although anyone with a database

could have screened using our rules and come up with approximately the same selections. However, I thought it would give a feeling of reality to the process if we showed the stocks bought, sold, and currently held. They are presented in Table 2.

TAX BENEFITS

One interesting point to note is the

TABLE 1.
BEGINNER'S PORTFOLIO VS. PASSIVE PORTFOLIOS
SIX-YEAR PERFORMANCE AND RISK (1993-1998)

	Beginner's Portfolio	S&P 500 Index*	Russell 2000*	Micro Caps*
	Annual Return (%)			
1993	32.3	9.8	18.7	21.0
1994	2.0	1.1	-0.6	3.1
1995	20.7	37.4	28.7	34.5
1996	22.3	22.9	18.1	17.6
1997	44.3	33.2	24.6	22.8
1998	-8.9	28.6	-2.6	-14.3
6-Year Annualized Geometric Mean (%)	17.4	21.5	13.8	13.0
6-Year Annualized Arithmetic Average (%)	18.8	22.2	14.5	14.1
6-Year Annual Volatility (Risk)** (%)	0.18	0.13	0.12	0.16
Sharpe Ratio***	0.78	1.34	0.80	0.59

*Based on passively managed portfolios. The S&P 500 is represented by the Vanguard Index 500 fund; the Russell 2000 by the Vanguard Index Trust Small-Cap fund; and micro caps by the DFA U.S. Small-Cap fund.

**As measured by standard deviation—how much actual returns varied around the average from year to year. It is based on a normal curve, and two-thirds of the time variation will be less than % indicated.

***A measure of how much excess return (return above Treasury bills) is generated for each unit of risk.

Note: Standard deviation and the Sharpe ratio are only significant if these investments are a dominant part of all your investments. Otherwise their calculations should be based on performance and risk characteristics of your total portfolio.

side benefit to the way stocks are sold in the portfolio. Most stocks are sold because they have negative earnings; the only winners that are sold are those that have gone up enough to double the size or price/book criteria. As a result, losses are taken and most profits continue to run.

This provides a beneficial tax effect—realizing losses but deferring most gains. As you can see from Table 2, although the portfolio is ahead \$815,826, taxes have been deferred on \$230,582.

We did not tax-manage the portfolio, but individuals might want to adjust the timing of sales a bit to make losses short-term and gains long-term. However, I emphasize the words “a bit”: A slight variation makes sense, but don't defeat the approach by focusing too much on tax consequences.

TACTICAL CHANGES

During the six-year period, examination of results has led to modification of some of the original criteria. As can be seen in Table 3, turnover can lead to high expenses in terms of commissions and the bid/ask spread (the difference between the highest price offered to buy a stock and the lowest price offered to sell a stock at a particular time). The portfolio rules have been adjusted to reduce turnover rates as well as the cost of turnovers. Based on the additional experience, we are making a few other adjustments.

- In the past, we eliminated stocks with a bid/ask spread of over 8%. We believe it is effective to cut the maximum acceptable spread to 6%. Of course, based on our stock order rules, we try to pay less than the 6% initial spread.
- In 1997 we added the price-to-sales ratio (share price relative to sales per share) as a tiebreaker when more than enough stocks met the other criteria. In practice it turned out that the price-to-sales ratios got very low, and the difference between stocks was too small to be meaningful. While price-to-sales seems to be important, instead of trying to use its small differences to select its stocks, we are putting in

TABLE 2. THE BEGINNING

Realized Capital Gains (as of 12/31/98)

Name (Exchange: Ticker)*	Cost Basis (\$)	Sales (\$)	Gain/-Loss (\$)
Advanced Logic Research	19,080	10,920	-8,160
AEL Industries (M: AELNA)	20,295	16,601	-3,694
Alba Waldensian (A: AWS)	19,913	18,674	-1,239
Allegheny & Western (M: ALGH)	19,870	34,800	14,930
Allied Research Corp. (A: ALR)	19,120	14,880	-4,240
Arrow Automotive (A: AI)	25,400	24,499	-901
Astrosystems Inc. (M: ASTR)	23,485	27,453	3,968
Audiovox Corp. (A: VOX)	73,655	83,717	10,062
Barrys Jewelers Inc. (M: BARY)	24,120	13,943	-10,177
Ben Franklin Retail (M: BFRS)	24,475	26,150	1,675
Bennetton Group SPA (N: BNG)	22,150	23,674	1,524
Brock Candy (M: BRCK)	22,560	49,003	26,443
Bufete Industrial (GBI)	28,084	49,548	21,464
Concord Fabrics (A: CIS)	18,600	17,957	-643
Culbro Corp. (N: CUC)	22,025	21,487	-538
Data Syst's & Software (M: DSSI)	46,355	55,619	9,264
Datron Systems (M: DTSI)	16,970	13,440	-3,530
Diagnostic Retrieval (A: DRS)	22,073	45,426	23,353
Dynamics Corp. of Amer (N: DYA)	19,213	66,110	46,897
EDO Corporation (N: EDO)	41,884	47,634	5,750
Eldec Corporation (M: ELDC)	20,470	48,100	27,630
Fibreboard Corp. (A: FBD)	21,075	66,923	45,848
Fluor Daniel/GTI (M: FDGT)	50,890	48,170	-2,720
Foodarama Supermarket (A: FSM)	20,875	19,099	-1,776
Frequency Electronic (A: FEI)	40,460	187,585	147,125
GBC Technologies (M: GBCT)	17,660	20,900	3,240
Greenman Brothers (A: GMN)	19,260	29,677	10,417
Hampton Industries (A: HAI)	18,090	21,763	3,673
Kahler Corp. (M: KHLR)	20,670	29,680	9,010
LDI Corporation (M: LDIC)	22,560	11,190	-11,370
Lechters, Inc. (M: LECH)	35,680	21,307	-14,373
Luria & Sons (N: LUR)	21,225	20,937	-288
Marsh Supermarkets (M: MARSA)	25,770	23,565	-2,205
Methode Electronic (M: METHA)	21,060	28,440	7,380
Moog Inc. (A: MOG.A)	20,225	75,447	55,222
Motts Holdings Inc. (A: MSM)	20,213	12,660	-7,553
Natural Wonders, Inc. (M: NATW)	49,095	36,414	-12,681
Nuclear Metals Inc. (M: NUCM)	22,220	23,732	1,512
Nycor Inc (M: NYCO)	22,080	10,920	-11,160
Orbit International (M: ORBT)	24,173	21,203	-2,970
Oriole Homes Corp. (A: OHC.B)	39,688	32,266	-7,422
Perini Corporation (A: PCR)	42,138	34,486	-7,652
Proler International (N: PS)	39,365	17,349	-22,016
Ramsay Health Care (M: RHCI)	20,370	27,920	7,550
Rexon Inc. (M: REXN)	20,745	30,130	9,385
Salem Corporation (A: SBS)	20,188	56,086	35,898
Sea Containers Ltd. (N: SCR.B)	45,375	46,048	673
Seaway Food Town (M: SEWY)	20,060	79,417	59,357
Sifco Industries (A: SIF)	18,900	18,039	-861
Spaghetti Warehouse (N: SWH)	35,674	32,885	-2,789
Specialty Chemical (A: CHM)	23,900	17,977	-5,923
Tandy Crafts Inc. (N: TAC)	47,800	45,966	-1,834

NNER'S PORTFOLIO

Realized Capital Gains Continued (as of 12/31/98)

Name (Exchange: Ticker)	Cost Basis (\$)	Sales (\$)	Gain/-Loss (\$)
TCI International (M: TCII)	19,758	15,679	-4,079
Todd Shipyards Corp. (N: TOD)	20,775	25,662	4,887
Transzonic Cosmetic (A: TNZ)	26,975	58,000	31,025
Unitel Video Inc. (A: UNV)	24,849	21,763	-3,086
USA Classic Inc. (M: USCL)	25,548	27,390	1,842
Village Supermarket (M: VLGEA)	19,370	18,690	-680
Washington Homes (N: WHI)	33,475	27,352	-6,123
Watsco Inc. (N: WSO)	24,875	68,323	43,448
Worldway Corp. (N: WCN)	21,300	25,300	4,000
Total Realized Capital Gains			511,769

Unrealized Capital Gains (as of 12/31/98)

Name (Exchange: Ticker)	Cost Basis (\$)	Value (12/31/98) (\$)	Gain/-Loss (\$)
AMREP Corp. New (N: AXR)	52,985	63,750	10,765
Applied Extrusion (M: AETC)	58,160	64,000	5,840
Baltek Corp. (M: BTEK)	55,990	62,213	6,223
Beazer Homes US (N: BZH)	59,293	92,500	33,207
BRT Realty Trust (N: BRT)	35,240	51,000	15,760
Catherines Stores (M: CATH)	47,335	108,750	61,415
Continental Materials (A: CUO)	32,600	91,250	58,650
Ecology & Environment (A: EEI)	34,087	37,000	2,913
Federal Screw Works (M: FSCR)	11,810	49,000	37,190
Green Mountain Power Corp. (N: GMP)	68,542	42,000	-26,542
Int'l Shipholding (N: ISH)	59,275	54,908	-4,367
Liberty Homes (M: LIBHA)	45,618	46,750	1,132
McRae Industries (A: MRIA)	29,137	26,250	-2,887
Noland Company (M: NOLD)	45,570	57,600	12,030
Oilgear Company (M: OLGR)	28,825	33,550	4,725
Paragon Trade (N: PTB)	60,360	25,500	-34,860
PDK Labs Inc. (M: PDKL)	50,740	29,380	-21,360
Providence & Worcester (A: PWX)	37,680	63,750	26,070
PS Group Holdings (N: PSG)	53,930	47,000	-6,930
Raytech Corp. (N: RAY)	64,991	30,188	-34,803
Sea Containers (N: SCR.B)	37,825	58,876	21,051
Sonesta Intl Hotels (M: SNSTA)	20,620	52,000	31,380
Taco Cabana Inc. (M: TACO)	57,927	93,000	35,073
Trans-Lux (A: TLX)	25,731	24,638	-1,093
Total Unrealized Capital Gains			230,582

Summary

Portfolio Value 12/31/98 (\$)	1,319,810
Portfolio Value 12/31/92 (\$)	503,984
Total Gains (\$)	815,826
Realized Capital Gains (\$)	511,769
Unrealized Capital Gains (\$)	230,582
Dividends or Interest (\$)	73,475

Exchange Key:
N = New York Stock Exchange
A = American Stock Exchange
M = Nasdaq

*Ticker and exchange at time of sale. Please note that some are no longer listed due to mergers, name changes, etc.

an overall criteria that the price-to-sales ratio must be less than 1. We then go back to choosing in order of price-to-book ratio to break ties if all other criteria are met.

SOME OBSERVATIONS

In a portfolio of this type with extreme value criteria, there should not be many big losers. In fact, there have been only 12 positions over six years with losses of over 25%. On the other hand, the high portfolio returns have been the result of one or two stocks a year with exceptional returns (over 100%).

As can be seen from the average monthly returns over the six-year period (Table 4), there is a bit of a January effect, but August and September are stronger. The volatility from month to month is very high, and the variations by month could easily be due to chance.

We have monitored the stocks we have sold as well as those in the portfolio. Portfolio performance tests the validity of our buy rules, but information on whether our sell rules are valid requires maintaining a simulated portfolio of stocks sold. Over the years, this portfolio has had positive returns, but considerably less than our real portfolio.

Since one of the most common sins among individuals is to sell too soon, I suggest all investors maintain a simulated portfolio of stocks sold to validate their own sell rules.

THE PAST YEAR

In 1998, the Beginner's Portfolio fell behind the S&P 500 cumulatively for the first time. Last year was indeed the year of the large-capitalization stock. It was the fourth year in a row that large caps outperformed small caps. Four years is the longest number of years in a row that has been true. If history repeats, small caps should re-emerge starting in 1999. That prospect seemed unlikely in the early part of the year, but as we move into summer small caps have caught up. In any event, your small-cap portfolio should only be a segment of your total portfolio.

THE INTERMEDIATE PORTFOLIO

As you may remember, in 1998 we began another portfolio—The Intermediate Portfolio—that left more discretion to the individual investor (see the February 1998 *AAII Journal*). One year is too short a time for any

insights or rule changes for this portfolio. The portfolio was down 6.2% in 1998 since it also is a small stock portfolio.

I will update you on this portfolio later in the year, and we will include it with the Beginner's Portfolio analysis in the future. ♦

TABLE 3.
MISCELLANEOUS PORTFOLIO STATISTICS

Annual turnover rate (approximate)*	40%–25%
Cost of turnover—sell and buy (approximate)—commissions and spread	5%
Portfolio turnover cost per year—% of portfolio value (approximate)	2.0%–1.25%

*Changed rules has this going down toward 25%.

TABLE 4.
AVERAGE RETURNS BY MONTH

	Return (%)
January	2.76
February	1.55
March	1.58
April	–0.86
May	1.01
June	1.64
July	0.15
August	4.18
September	3.08
October	1.94
November	0.13
December	1.70
All Months	1.56

BEGINNER'S PORTFOLIO RULES

PURCHASE AND SALE RULES

Stock purchases must meet these criteria:

- No bulletin board or pink sheet stocks.
- Price-to-book-value ratio is less than 0.85. (This figure will change gradually with overall market value.)
- Market capitalization is between \$17 million and \$125 million (will also change).
- The firm's last quarter and last 12 months' earnings from continuing operations were positive.
- No financial stocks or limited partnerships will be purchased.
- The share price is greater than \$4.
- In order to reduce turnover by avoiding stocks that are forever marginal, do not re-buy a stock that was sold within two years.
- Note first item under stock order rules concerning spreads when buying shares.
- Price-to-sales ratio less than 1.00.

Stocks are sold if any of the following occurs:

- If last 12 months' earnings are negative, put stock on probation. If a subsequent quarter has negative earnings prior to 12-month earnings becoming positive, sell the stock.
- The stock's price-to-book-value ratio goes above 2½ times the initial criteria.
- Market capitalization goes above 2½ times the initial criteria.

STOCK ORDER RULES

- If the quoted bid-ask spread is more than 6% (ask price minus bid price, divided by asked price), eliminate the stock from consideration. Better to stretch other criteria, if necessary, than pay high spreads.
- Eliminate stocks if the average daily volume is not twice the volume needed for the position. The spread will be too high and not negotiable either now or when sold.
- Market orders are not used. Instead, orders are placed between the bid and ask prices unless the difference between the two is 4% or less, in which case purchases are placed at

the offer price and sales are placed at the bid price.

- For Nasdaq stocks, it appears to be better to use day orders. If the order is not filled, place it again in a few days with a slight adjustment. In NYSE and Amex stocks, use good-till-canceled (GTC) orders to keep place in line in the specialist's books. If market isn't close to desired price, adjust in a few days with a new GTC order.
- If price changes cause a stock to become ineligible (due to changes in price-to-book-value ratio or market capitalization) when only part of the order has been filled, keep what is already purchased and cancel the balance of the order.

MANAGEMENT RULES

- Decisions are made only at the end of each quarter. In order to react to the majority of earnings reports as early as possible, consider doing the quarterly reviews early in February, May, August, and November. Be consistent.
- Best judgment is used for tenders or mergers, but all criteria must be obeyed.
- At end of quarter, if receipts from stocks sold exceed requirements for new purchases, keep the excess receipts—up to 5% of portfolio value—in cash until next quarter. If the excess receipts are greater than 5% of the total portfolio value, distribute the amount above 5% to smaller holdings that still qualify as buys. Buy in efficient quantities. If over 10% of portfolio is in cash, move the market capitalization screen up a bit (for instance, from \$125 million to \$140 million) to find new qualifying stocks.
- At end of quarter, if receipts from stocks sales are insufficient to buy all newly qualifying stocks, buy in order of lowest price-to-sales ratio in amounts equal to the average holding.
- Divide the portfolio so that there are at least 10 stocks. For portfolios over \$100,000, investing in 15 to 20 stocks is sufficient. More than 20 stocks are not needed until the portfolio exceeds \$1 million.