Practical Considerations for a Special Small Cap Portfolio

By James B. Cloonan

In September of last year, I discussed the research done by Professors Eugene Fama and Kenneth French that indicated strong support for previous research showing that stocks of small capitalization companies have higher returns than those of large capitalization companies.

The research also showed that low price-to-book-value ratio stocks had higher returns, and this was in addition to any smallness effect. Companies in the lowest 10% of market capitalization *and* the lowest 10% of price/book were the best performers of all, 23% a year return versus 15% for the market as a whole during the period from 1963 through 1990.

In the column, I pointed out that this 1% of the market (10% of 10%) was not highly liquid and much more suitable for individual investors than for large institutions. Since this research and its applications were of particular importance to the individual investor, I felt it was desirable to test the theory with a real portfolio to examine practical problems.

I began buying stocks in November and was about fully invested by January 1, 1993, which will be the start date for performance evaluation. Much was learned from accumulating the portfolio. I did the buying of each issue in two stages, partly so as not to impact the market too much and partly so I could try more strategies in placing orders.

The selection rules were as follows:

- Price-to-book ratio (price per share divided by book value per share) was less than 0.61. This was the cut-off for the lowest 10%.
- Market capitalization (share price times number of shares outstanding) was between $11 million and $55 million. This was the lowest 10% after eliminating the extremely small stocks that would have been left out of the original research on small stocks. The Shadow Stock series also does this.
- For the same reasons, companies with negative earnings were eliminated.
- Previous research and the Fama and French research had eliminated financial companies, and these were also eliminated in this portfolio.
- For practical reasons based on past experience with transaction costs, only stocks with prices above $4 were considered.
- All stocks were NYSE, Amex, or NASDAQ National Market System.

The above screens applied to the database I used yielded 28 stocks. The particular database used will make somewhat of a difference, but with diversification, long-term differences in performance should be minimal.

After some experimentation, I followed these rules in placing the stock orders:

- In my purchases, I never placed a market order—an order to buy at the best available price. However, I did place buy orders at the ask price (the lowest price acceptable to a potential seller) if the spread between the bid (the highest price acceptable to a potential buyer) and the ask was ⅜ ($0.375) or less.
- Most orders were limit orders placed approximately halfway between the bid and ask on a "good-till-canceled" basis.
- If an order was not filled at all within a week or if the bid and ask moved up, I increased my bid price (subject to the next rule below), but I never placed an order at the ask unless the bid/ask spread was ⅜ or less.
- If the stock moved up, I would increase my price, but not if the price I bid would have caused the stock to be disqualified either on a price/book or market capitalization basis. I lost three of my 28 original stocks because of price increases.
- There were a number of orders that were only partially

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filled, but not as many as I expected, since the average order was 1,000 shares with a value of $10,000. My experience indicates it is generally possible to place an order valued at $20,000 at a time without impacting prices, and commissions will be less than placing two $10,000 orders. Most individuals will not be buying this quantity at a single time for this segment of their portfolio, so liquidity should not be a problem.

• Since the lower capitalization stocks had higher returns, I did not weight purchases by market capitalization, and instead attempted to buy approximately equal dollar amounts of each stock. However, in practice this was not always accomplished, since on some stocks I received partial fills and then the stock went up so much it no longer qualified for the portfolio. This will always be a problem and it must simply be ignored.

As more time goes by, I will report on the performance of the portfolio and of the practical problems of maintaining the portfolio and eliminating stocks. The stock composition of a portfolio will always be dependent on when it is started. For instance, I used all the dollars available to purchase the original portfolio; since that time, several new stocks have met the criteria, but they cannot be added to the portfolio until funds are available from sales.

For the individual who can buy $5,000 of a stock at a time and who has a little patience, transaction costs—which includes commissions and the bid/ask spread—for each way should be less than 4% (1% commissions and 3% bid/ask spread). In my purchases, commissions were 0.8%, but they would have been 0.5% if I wasn't experimenting. I bought in an active market and many purchases were made halfway between bid and ask. I may have been able to sell at the same price within a short time period—you are never sure unless you have both a buy and sell order in together. My total transaction costs were about 3%. That is not bad for a long-term holding.

Because of the timing problem and because I don't want to influence the performance of the stocks, I will refrain from naming the portfolio of stocks—at least for the time being.

More discussion about the portfolio will follow in a few months.

AAII Allocation Survey: Where Individuals Commit their Assets

Each month, a selected group of AAII members are asked to calculate the percentage of their portfolio invested in five categories of assets. During January, the percentage of individual investors' portfolios committed to stocks, bonds, and bond funds rose. During the same period, the portion allocated to stock funds and cash declined.

The dashed lines in the historical graph indicate the average allocation of each category over the duration of the survey. The graph indicates where individuals commit their assets over time. It is an average; individual portfolios should vary according to personal circumstances and risk tolerances.

It is interesting to note that while investor sentiment varies widely over time, individual investors' actual allocation of assets remains remarkably stable, indicating that investors on average do not tend to make major portfolio changes based on short-term impulses.

Survey results are available to members on AAII's electronic bulletin board system. Data is updated usually by the second business day of each month. It can be found in the Text directory in AAIIPORT.TXT and in the Spread directory in AAIIPORT.WKS. The telephone numbers are (312) 280-8565 for 2400 baud and (312) 280-9043 for 9600 baud.