

## ANOTHER LOOK AT MUTUAL FUND PERFORMANCE

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Recent studies of mutual funds have all arrived at the same conclusion: mutual fund performance has been inferior to the performance of the market indices. One of the most prominent of these studies was conducted by William F. Sharpe. He showed that if his measure of mutual fund performance, the reward-to-variability ratio, is calculated net of management expenses for each fund in his sample of thirty-four, then the average value of this ratio over the thirty-four funds is significantly less than the same measure applied to the Dow Jones Industrials over the 1954-1963 period.<sup>1</sup> From this evidence, Sharpe concluded that average mutual fund performance was distinctly inferior to an investment in the Dow Jones Industrial Average. It is the intent of this paper to show that if another variable, namely the third moment of the fund's annual rate of return, is introduced into the investor's decision process, Sharpe's conclusion must be altered.<sup>2</sup>

Does the third moment, a measure of the direction and size of a distribution's tail, provide information deemed significant by the prospective investor? Previous empirical work indicates that such information is significant.<sup>3</sup> If the sample estimates of mean, standard deviation, and third moment for each fund for the 1954-1963 period are reasonably accurate measures of investor expectations with respect to the parameters of the fund's annual return distribution (an assumption made by Sharpe), then the following regression verifies previous empirical results,

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<sup>1</sup>William Sharpe, "Mutual Fund Performance," *Journal of Business* (January 1966).

<sup>2</sup>The annual rate of return for a fund is defined as the sum of dividends, capital gains distributions, and the change in net asset value divided by the beginning of year net asset value; it is, therefore, a measure of net performance--gross yield less the expenses of management and administration.

<sup>3</sup>See, for example, Fred D. Arditti, "Risk and the Required Return on Equity," *Journal of Finance* (March 1967).