

How to Use Security Analysis to Improve Portfolio Selection

It has been argued convincingly in a series of papers on the Capital Asset Pricing Model that, in the absence of insight generating expectations different from the market consensus, the investor should hold a replica of the market portfolio.¹ A number of empirical papers have demonstrated that portfolios of more than 50–100 randomly selected securities tend to correlate very highly with the market portfolio, so that, as a practical matter, replicas are relatively easy to obtain. If the investor has no special insights, therefore, he has no need of the elaborate balancing algorithms of Markowitz and Sharpe.² On the other hand if he has special insights, he will get little, if any, help from the portfolio-balancing literature on how to translate these insights into the expected returns, variances, and covariances the algorithms require as inputs.

What was needed, it seemed to us, was exploration of the link between conventional subjective, judgmental, work of the security analyst, on one hand—rough cut and not very quantitative—and the essentially objective, statistical approach to portfolio selection of Markowitz and his successors, on the other.

The void between these two bodies of ideas was made manifest by our inability to answer to our own satisfaction the following kinds of questions: Where practical is it desirable to so balance a portfolio between long positions in securities considered underpriced and short positions in securities considered overpriced that market risk is completely eliminated (i.e., hedged)? Or should one strive to diversify a portfolio so completely that only market risk remains? As this implies, in the highly diversified portfolio market sensitivity in individual securities seems to contribute directly to market sensitivity in the overall portfolio, whereas other sources of return variability in individual securities seem to average out. Does this mean that the latter sources

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1. William F. Sharpe, "Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk," *Journal of Finance* 19, no. 3 (September 1964): 425–42; John Lintner, "The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets," *Review of Economics and Statistics* 57, no. 1 (February 1954): 13–37; and Jack L. Treynor's paper, "Toward a Theory of the Market Values of Risky Assets" (unpublished, 1961).

2. Harry Markowitz, *Portfolio Selection: Efficient Diversification of Investments* (New York: John Wiley & Sons, 1959; New Haven, Conn.: Yale University Press, 1970); and William Sharpe, "A Simplified Model for Portfolio Analysis," *Management Science* 9 (January 1963): 277–93.