



# Financial Fables

## The “Right Kind” of Diversification

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Harry Markowitz, the Father of Modern Portfolio Theory, realized that there is a “right” and a “wrong” kind of diversification. He mathematically proved that diversifying by selecting a number of investments with the highest expected returns was not the “right kind” of diversification because it failed to account for risk. “The adequacy of diversification is not dependent solely on the number of different securities held. A portfolio with sixty different railway securities, for example, would not be as well diversified as the same size portfolio with some railroad, some public utility, mining, various sorts of manufacturing, etc. The reason is that it is generally more likely for firms within the same industry to do poorly at the same time than for firms in dissimilar industries.” Because it measures the interrelationship of returns (covariance) among different securities, “variance (or the equivalently, standard deviation), came to mind as a measure of risk for the portfolio.”

Markowitz's notion of diversification is radically different because it seeks to avoid investments that have high covariance to each other in order to reduce portfolio risk. Markowitz states that using the “right kind” of diversification as a guide is what distinguishes “investment behavior” from “speculative behavior.”

The essential aspect of Markowitz's insight is that risk is determined at the portfolio level, based on the contribution of each investment to the risk of the aggregate portfolio. The risk of an investment is never the risk of that individual investment analyzed in isolation. By measuring risk in this way, Markowitz was able to simplify the complicated process of risk analysis down to a two-dimensional process known as mean-variance analysis. The objective is to maximize the expected portfolio return for a given level of risk or conversely to minimize the risk for a desired expected return.

What is interesting is after the almost universal acceptance of Markowitz's theory by the academic community and the over 50 years of empirical evidence validating his approach, speculation based on attempts to maximize returns (the wrong type of diversification) is still ingrained in the culture of many of the most prestigious and well-known wealth management firms. According to Scott Simon, the author of *The Prudent Investor Act, A Guide to Understanding*, “many of these firms fail to use any sort of formal (or informal) risk measurement such as standard deviation when building portfolios for clients. They simply ignore the existence of risk.”

The reduction of diversifiable risk without reducing expected return lies in a combination of statistical portfolio analysis and prudent judgment based on Markowitz's “right kind” of diversification.