

## Modern Portfolio Theory 2.0 - Maximum Diversification

**Michael Adams**  
**Jacksonville University**

*Since Markowitz, portfolio diversification is one of the most recommended and well known investment strategies in theory and practice. In general, diversification is an investment strategy which should reduce risk within a portfolio by investing in different securities. If a price of a security does not move in the same direction like other stocks within the portfolio, a price decrease in that stock can be offset by a price increase in a different stock. For that reason, the volatility (risk) of the entire portfolio is limited although the expected returns of each security and thus the expected return of the portfolio remain unchanged. Mathematically, diversification is measured by how much the holdings in a portfolio are correlated. Naïve diversification focuses on the number of holdings of stocks in a portfolio. However, a real measurement is the pair wise correlations among holdings and their overall resulting standard deviation of the portfolio.*