UCLA Anderson **Fall 2018**
MGMTMFE 400 **Prof. Mikhail Chernov**

Project for Lectures 6/7: Portfolio allocation

The Excel file `lecture6p.xlsx` contains daily market data for Microsoft, Intel, Southwest, McDonald's, and Johnson & Johnson from 12/29/1989 to 9/28/2018, obtained from Yahoo Finance. The file also includes a daily risk-free rate time series from Kenneth French's Data Library. For this problem set, you should calculate time series of weekly returns. Re-use the mean-variance frontier for the Intel-Microsoft combination from the previous assignment.

1. Add remaining stocks to the mix. Compute the mean-variance frontier and plot it on the same chart with the one from the previous question. Indicate the minimum-variance portfolio and the efficient frontier. How do they compare to the ones in the previous question?

2. Add the riskless asset and construct the tangent portfolio for the Intel-Microsoft case. Next, construct the tangent portfolio for the full set of stocks. Compare the Sharpe ratios of the two tangent portfolios.

3. Assume your risk aversion is $A = 5$. What your optimal mix of assets?