

Mgmt 230: Introductory Statistics
In-class Exercise: Describing Data

Download the Excel Sheet `portfolios.xls`. The Excel Sheet shows the weekly percentage returns of the Dow Jones Industrial index, the S&P 500 index, and Fidelity U.S. bond index. Suppose these returns closely approximate the returns earned from three index mutual funds you are considering investing in. The only columns you need to use in this spreadsheet are the ones labeled, “Change”. These show the percentage growth rates of each of the indices.

1. What is the expected return, variance, and standard deviation for each index?
2. Use the answers from above and the formula for the variance of a combination of random variables to determine the mean, variance, and standard deviation of the following portfolios:
 - (a) 70% Dow Jones, 30% S&P.
 - (b) 70% Dow Jones, 30% Fidelity
3. Compute the mean, variance, and standard deviation of the portfolio: 35% Dow Jones, 35% S&P, and 30% Fidelity.