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

Problems for Lecture 5

1. The file `p5-sp500.csv` contains daily returns for the (CRSP) S&P500 value-weighted index with dividends (column vwretd) from 1/3/1972 through 12/30/2017. Download the daily U.S. Treasury yield curve from here. That file has the daily parameters for the Nelson-Siegel-Svensson yield curve model discussed in class. With those parameters, you can calculate a zero-coupon bond yield for any maturity. For the (CRSP) S&P500 with dividends, what was the average arithmetic and geometric historical mean rate of return for daily returns, for monthly returns, for annual returns from 1/3/1972 through 12/30/2017, and for 5-year returns from 1/3/1972 through 12/30/2016? Make sure to annualize the returns you report.