

## FINANCIAL TIME SERIES ANALYSIS AND ECONOMETRICS II

### Exercises 6.

Download from Yahoo web-site(<http://finance.yahoo.com/>) NASDAQ weekly series starting from January 1990.

1. Test the normality of the returns using Jarque-Bera. Your conclusion?
2. Test the normality of the series using GMM specification for the first four moments. Is your conclusion consistent with the above result?
3. Test whether the returns are  $t$ -distributed with some location parameter  $\mu$ , scale parameter  $\sigma$  and degrees of freedom  $\nu$  using the GMM approach by specifying the first four moment conditions.
4. Consider Example 4.4 in the notes. Get the data and estimate the model consumption based CAPM parameters. Use as in the original example lags 1-4 of `cinst` and `rinst` as instruments. In the estimation select GMM (HAC) and select from the options `Simultaneous updating`, which corresponds iterative GMM.