THE UNIVERSITY OF CHICAGO
Graduate School of Business
Business 41914, Spring Quarter 2007, Mr. Ruey S. Tsay

Homework Assignment 5

Note:

- You may discuss problems with other students, but must hand in your OWN solutions.
- You may use any software to do the empirical analysis even though I use SCA, SPlus or R in the demonstration.
- The assignment is due in one week once assigned.

1. Consider the monthly U.S. interest rate data from June 1, 1976 to April 2007. Let z_{1t} be the monthly seven-year constant maturity rates and z_{2t} be the two-year constant maturity rates. The data are obtained from the Federal Reserve Bank of St. Louis. Are the two interest series co-integrated? Why? Build a bivariate model for the series.
2. Consider the data set "hw4a.txt". Find the Kronecker indices of the system $\boldsymbol{z}_t$.
3. Consider the data set "hw4b.txt". Find the Kronecker indices of the system $\boldsymbol{z}_t$.
4. Obtain a vector model for the data set in "hw4b.txt".