

TIME SERIES ECONOMETRICS

Petr Zemčik, Office: 302, Office hours: tbd, Phone: (+420) 224 005 154

E-mail: petr.zemcik@cerge-ei.cz, Web page: <http://home.cerge-ei.cz/petrz>

DESCRIPTION

There will be four problems worth 30 points in total. The problems will reflect the nature of homework assignments.. The midterm is a **close book exam**. During the exam you can use the following:

- a sheet of A4 paper with your notes from both sides
- a calculator
- a copy of statistical tables with for the following tests (no handwritten notes): normal distribution, F distribution, t distribution, chi-square distribution, cointegration Tables C, D, and E from Enders.

TEXT

Walter Enders (2004), *Applied Econometric Time Series*, 2nd ed., John Wiley & Sons, Inc., New Jersey.

James D. Hamilton (1994), *Time Series Analysis*, Princeton University Press, New Jersey.

COURSE OUTLINE

State Space Models - Kalman Filter

- Hamilton, Ch. 13.1-13.5, HW3, Problems 2-3

Cointegration

- Introduction, Enders, Ch. 6.1-6.3
- Engle-Granger Methodology, Enders 6.4-6.6, Problem 6.4 in Enders (HW4)
- Johansen Methodology, Enders 6.7, 6.8 (only hypothesis testing), 6.9, Appendix 6.2, Problems 6.4-6.5 in Enders (HW4)

GMM

- GMM notes, HW4-problem 2