4.July.2011

Assignment 2

Due Date: August 4, 2011, 14:00h

Data Set 2 contains the monthly beer consumption (thousands in liter) between years 1970-2009 in Neverland. Find the most appropriate stochastic time series model capturing the behavior of the beer consumption.

- 1. Analyze the level of the series by descriptive statistics (mean, standard deviation, kurtosis, skewness, Jargue-Bera etc.) and plot the graphs to determine certain patterns.
- 2. Analyze the structure of the series by checking correlogram (ACF, PACF, Q-Statistics and p-values) and check the cut-off points from these graphs.
- 3. Perform unit root test for stationarity.
- 4. Based on the steps above make any transformations or filtering (log, differencing) when necessary.
- 5. Estimate the model.
- 6. Make diagnostic checks.
- 7. Forecast beer consumption for the first 6 months of 2010.
- 8. Interpret your results.

Remark: Each group should submit one set in draft and send a copy of the HW to the instructor by email (sevtap.kestel@vwl.uni-freiburg.de).