

ECO374 Homework 4, Due August 9th

1. **[4.5pts]** Consider the Canadian Monthly Expenditure data (log, \$billions, HWdata.xls) that I showed you in previous lectures.
 - a. Estimate deterministic component(s) of the time series, report your estimation results, and plot the fitted values.
 - b. **Is the residual series stationary?** Which model you think is appropriate for the residuals.
 - c. Make forecasts for 24 periods.
2. **[3pts]** Consider the series of U.S. 3-month Treasury bill rates analyzed in file 7. SE-TAR.Rmd. Raise the SETAR model threshold to 7%, re-run the R-file, and compare the model .t (AIC) and Mean Absolute Percentage Error (MAPE) with the original results for the 6% threshold. Which threshold (6% or 7%) is more suitable for this data set? How about 5%?