PENN STATE UNIVERSITY
Department of Economics

Econ 597D Sec 001 Computational Economics — Gallant
Project Suggestion 3 — Fall 2015
Due Dec 8, 2015

Replicate the results in Bansal, Gallant, and Tauchen (2007) using the habit model as coded in the case study and the C++ implementation of EMM at

http://www.aronaldg.org/webfiles/arg/emm.

The Bansal, Gallant, and Tauchen (2007) data are in the mcmc case study. Use the same four variables they used and the same SNP specification, which is a one lag homogeneous error VAR. The SNP objective function does not need to be coded because it is part of the EMM distribution. Make sure you use the same prior information they used. Exact replication is probably not possible because they used a different solution method for the habit model.

The EMM distribution is a general purpose implementation of the Chernozhukov and Hong (2003) estimator. The code was developed from the mcmc case study. The distribution includes a User's Guide that explains how to use the program. The default objfun implements EMM with an SNP auxilliary model. The user can supply an objfun that will implement GMM or maximum likelihood as is explained in the User's Guide. The process is similar to the mcmc case study.