Tips on running bayesm:

- 1. you need to "load" the package by using the library command, library(bayesm). If you want to avoid loading the package everytime, put library(bayesm) in your .Rprofile file.
- 2. If you don't know much about R, read "Some Useful R Pointers." bayesm has many functions defined in it. The "turn-key" or "end-user" functions start with the letter r, e.g. rmnpGibbs is the Gibbs Sampler for the multinomial probit model.
- 3. Check the examples. Each function has an example file. To view the example for a function, use the R command? function, e.g. ?rmnpGibbs. The example will be listed at the bottom of the displayed help text. You can also find the examples in the R program directory tree, e.g. C:\Program Files\R\rw2001\library\bayesm\R-ex. You may have to unzip these files.
- 4. The best way is work with *bayesm* functions is to copy the examples into a .R file and then edit the file to read in your own data and run the function. At first, use as many defaults as possible (e.g. Priors) to make sure that the function is working properly on your example.

Tips on using MCMC methods:

- 1. If you are unfamiliar with MCMC methods, read chapter 3 of *Bayesian Statistics and Marketing*. Try some of our test examples first, before trying your own data.
- 2. The "output" of an MCMC method is a set of draws of the parameters. You must decide how many draws and also how do analyze the draws produced. Unlike most classical methods, the MCMC methods provide an estimate of the entire posterior distribution, not just a few moments. Summarize the distribution by using histograms or quantiles. Resist the temptation to simply report the posterior mean and posterior standard deviation! For non-normal distributions, these moments have little meaning!
- 3. Most of the MCMC methods implemented in bayesm run very fast so it is possible to make 10,000s of draws even for relatively large datasets in less than ½ hour in most cases less than 5 minutes. Use this power where possible. Only the hierarchical models, rhierLinearModel, rmnlRwMixture, and rscaleUsage will take appreciably longer (> one half hour, in some cases several hours will be required).
- 4. If you are having problems with using too much memory, set keep in the Mcmc parameter list to more than 1.