

DYNARE COURSE

Application 1

Exercises

1. `simple.mod`
 - (a) Run `simple/simple.mod`. If something isn't working, it must be a problem with Dynare installation. Ask for help.
 - (b) Look at the content of `simple.m`, `simple_static.m`, and `simple_dynamic.m`.
 - (c) Add an option to `stoch_simul` so as to only see the useful part of the IRFs.
 - (d) Modify the value of the parameters one at the time and observe the changes on
 - i. the reduced form coefficients,
 - ii. the moment of the endogenous variables,
 - iii. the IRFs.
 - (e) Identify inf_{t-1} in `simple1_static.m` and in `simple1_dynamic.m`
 - (f) Check by hand the derivative of the third equation with respect to inf_t in `simple1_dynamic.m`
2. Dynare syntax

In the `syntax` subdirectory, each of the files `a1.mod`, ..., `a8.mod` and `b1.mod`, ..., `b5.mod` contains one, or rarely two, syntax mistakes. Find them. When you find a mistake, but don't know how to correct, look into the other files. They are all variations on a same theme.
3. Perform forecasting experiments in model `simple1.mod` using the information contained in the slides that wasn't covered this morning.
4. Try a forecast starting from the steady state. Are you surprised by the outcome?
5. Try to modify `fs2000A.mod` in order to obtain the portfolio adjustment cost model (see papers by Schorfheide and by Nason and Cogley)