Replication files for the papers:

"A Quasi–Maximum Likelihood Approach for Large, Approximate Dynamic Factor Models,"
The Review of Economics and Statistics, MIT Press, vol. 94(4), pages 1014-1024, November 2012.

Catherine Doz, Universite' Cergy-Pontoise

Domenico Giannone, Universite' Libre de Bruxelles, ECARES and CEPR

Lucrezia Reichlin, London Business School and CEPR

Programs are also available at: http://homepages.ulb.ac.be/~dgiannon/

This is the main file that performs a Montecarlo evaluation of the QML and two steps estimates of the common factors.

The output of this program are the measures of performance reported in the paper.

It uses the following functions.

sim_mod: generates time series from the simulation model.

DynFA: extracts the unobservable factors using three different methods

- QML: Max Likelihood estimates using the Expectation Maximization (EM) algorithm (Doz, Giannone and Reichlin, 2012)

- TWO STEP: Principal components + Kalman filtering
  Doz, Catherine & Giannone, Domenico & Reichlin, Lucrezia, 2011. "A two-step estimator for large approximate dynamic factor models based on Kalman filtering," Journal of Econometrics, Elsevier, vol. 164(1), pages 188-205, September.

- PC: principal components