```
%% Section 3: We load the data or simulate the model using params0
load([pwd,'\ModelSpecification\setupModel'],'setupModel')
data =
dataForSMM(params0,calibrateParams,orderApp,T,selectY,setupModel,setupEPer,appMethod);

% Compute empirical moments
inclMoms = collectMoments(inclMoms_Ey,inclMoms_Eyy,inclMoms_autoEyy,autoLagsIdx);
dataInfo = momentsGMMData(data,autoLagsIdx,inclMoms);

% Transforming params0 for estimation
selectParams  = fieldnames(params0);
params0Values = struc2values(params0,selectParams);

% Test of enought moments for estimation
numMom    = sum(inclMoms);
numParams = size(selectParams,1);
disp(['Parameters to estimate = ', num2str(numParams) ,'. Moments for estimation = ',
num2str(sum(inclMoms))]);
if numMom < numParams
    error('We must have at least as many moments as parameters for GMM')
end

% For CMAES, the standard deviations for the search
Insigma.DELTA           = 0.01;
Insigma.BETTA           = 0.01;
Insigma.B               = 0.1;
Insigma.ETAl            = 1;
Insigma.ETAc            = 1;
Insigma.ALFA            = 0.05;
Insigma.RHOA            = 0.05;
Insigma.RHOD            = 0.05;
Insigma.STDA            = 0.001;
Insigma.STDD            = 0.001;

% For CMAES, the lower and upper bounds for the parameters
lowerBounds.DELTA       = 0;
lowerBounds.BETTA       = 0;
lowerBounds.B           = 0;
lowerBounds.ETAl        = 0;
lowerBounds.ETAc        = 0;
lowerBounds.ALFA        = 0;
lowerBounds.RHOA        = 0;
lowerBounds.RHOD        = 0;
lowerBounds.STDA        = 0;
lowerBounds.STDD        = 0;

upperBounds.DELTA       = 1;
upperBounds.BETTA       = 1;
upperBounds.B           = 1;
upperBounds.ETAl        = 10;
upperBounds.ETAc        = 10;
upperBounds.ALFA        = 1;
upperBounds.RHOA        = 1;
upperBounds.RHOD        = 1;
upperBounds.STDA        = 1;
upperBounds.STDD        = 1;

% Test of all variables names are either estimated or calibrated
paramsTest(allModelParams,params0,calibrateParams)
```