dynare model_observed

Configuring Dynare ...
[mex] Generalized QZ.
[mex] Sylvester equation solution.
[mex] Kronecker products.
[mex] Sparse kronecker products.
[mex] Local state space iteration (second order).
[mex] Bytecode evaluation.
[mex] k-order perturbation solver.
[mex] k-order solution simulation.
[mex] Quasi Monte-Carlo sequence (Sobol).
[mex] Markov Switching SBVAR.

Using 64-bit preprocessor
Starting Dynare (version 4.5.1).
Starting preprocessing of the model file ...
Found 6 equation(s).
Evaluating expressions...done
Computing static model derivatives:
 - order 1
Computing dynamic model derivatives:
 - order 1
Processing outputs ...
done
Preprocessing completed.

EIGENVALUES:
        Modulus   Real   Imaginary

         0.9589   0.9589   0
          1.134   1.134   0

There are 1 eigenvalue(s) larger than 1 in modulus
for 1 forward-looking variable(s)

The rank condition is verified.

MODEL SIMULATION:

Iter: 1, err. = 4.114,   time = 0.047
Iter: 2, err. = 0.12864,   time = 0
Iter: 3, err. = 0.034526,   time = 0.016
Iter: 4, err. = 0.00079263,   time = 0
Iter: 5, err. = 9.0682e-08,   time = 0

Total time of simulation: 0.079

Perfect foresight solution found.


```
---------------------------------------------------------
```
MODEL SIMULATION:

Iter: 1, err. = 4.114,   time = 0
Iter: 2, err. = 0.12864,   time = 0
Iter: 3, err. = 0.034526,   time = 0.016
Iter: 4, err. = 0.00079263,   time = 0
Iter: 5, err. = 9.0682e-08,   time = 0

Total time of simulation: 0.031
```
---------------------------------------------------------
```

Perfect foresight solution found.

Residuals of the static equations:

Equation number 1 : 0 : Aggregate Output
Equation number 2 : 0 : Euler Equation
Equation number 3 : 0 : Budget Constrain
Equation number 4 : 0 : low-tech capital
Equation number 5 : 0 : total capital
Equation number 6 : 0 : investment

Total computing time : 0h00m00s

Graphs

```matlab
figure;
set(gcf,'Color',[1,1,1]);

subplot(2,2,1);
plot(c,'r-','LineWidth',1);
set(gca,'Fontsize',8);
%xlim([2003 2017]);
title(['Consumption'],'FontSize',8,'FontWeight','bold');


subplot(2,2,2);
plot(i,'r-','LineWidth',1);
set(gca,'Fontsize',8);
%xlim([2003 2017]);
title(['Investment'],'FontSize',8,'FontWeight','bold');
```

```matlab
subplot(2,2,3);
plot(k,'r-','LineWidth',1);
set(gca,'Fontsize',8);
%xlim([2003 2017]);
title(['Capital'],'FontSize',8,'FontWeight','bold');

subplot(2,2,4);
plot(y,'r-','LineWidth',1);
set(gca,'Fontsize',8);
%xlim([2003 2017]);
title(['Output'],'FontSize',8,'FontWeight','bold');
suptitle(['observed policy']);
snapnow

% capital-output ratio
figure;
plot(k./y,'b-','LineWidth',1);
set(gca,'Fontsize',8);
%xlim([2003 2017]);
title(['Capital Output Ratio
 (observed)'],'FontSize',8,'FontWeight','bold');
snapnow


dynare model_simul
```
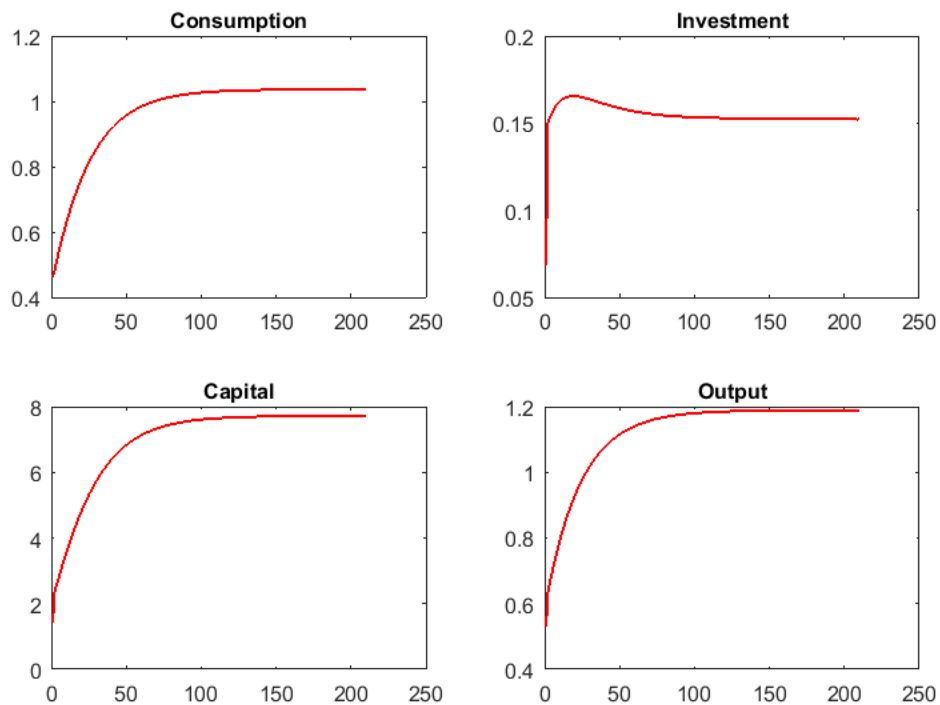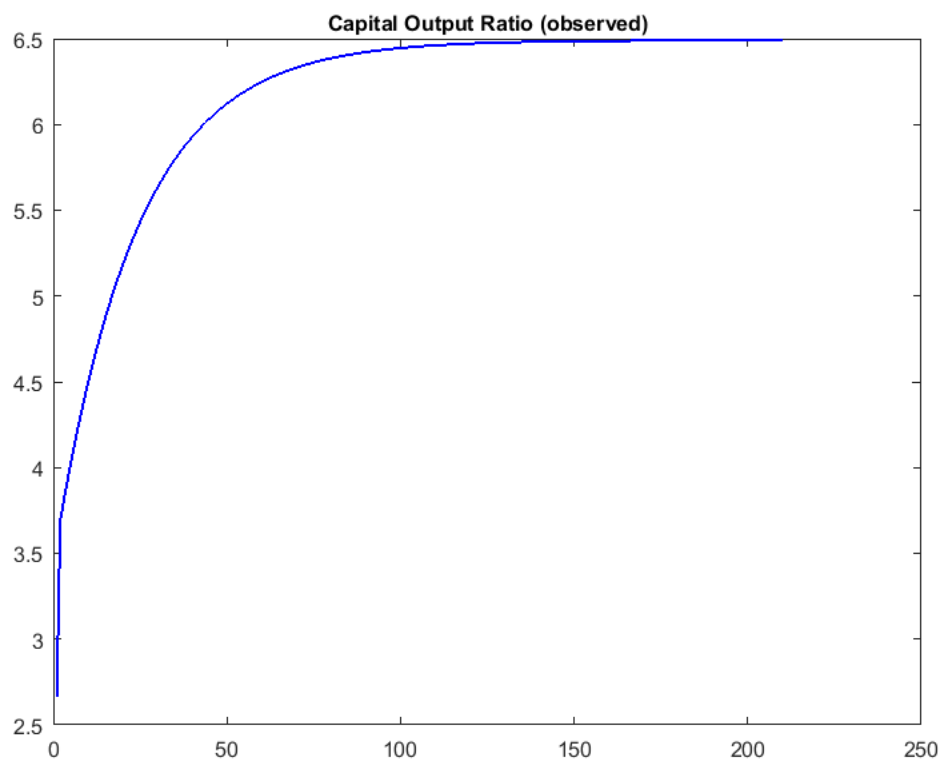

observed policy

Capital Output Ratio (observed)

```
Configuring Dynare ...
[mex] Generalized QZ.
[mex] Sylvester equation solution.
[mex] Kronecker products.
[mex] Sparse kronecker products.
[mex] Local state space iteration (second order).
[mex] Bytecode evaluation.
[mex] k-order perturbation solver.
[mex] k-order solution simulation.
[mex] Quasi Monte-Carlo sequence (Sobol).
[mex] Markov Switching SBVAR.

Using 64-bit preprocessor
Starting Dynare (version 4.5.1).
Starting preprocessing of the model file ...
Found 6 equation(s).
Evaluating expressions...done
Computing static model derivatives:
 - order 1
Computing dynamic model derivatives:
 - order 1
Processing outputs ...
done
Preprocessing completed.
```

```
EIGENVALUES:
        Modulus              Real           Imaginary

        0.9589              0.9589                 0
         1.134               1.134                 0


There are 1 eigenvalue(s) larger than 1 in modulus
for 1 forward-looking variable(s)

The rank condition is verified.


-----------------------------------------------------
MODEL SIMULATION:

Iter: 1,  err. = 4.0728,   time = 0.062
Iter: 2,  err. = 0.15046,   time = 0
Iter: 3,  err. = 0.13114,   time = 0.016
Iter: 4,  err. = 0.0060254,   time = 0
Iter: 5,  err. = 2.9128e-06,   time = 0.015

Total time of simulation: 0.093
-----------------------------------------------------

Perfect foresight solution found.


-----------------------------------------------------
MODEL SIMULATION:

Iter: 1,  err. = 4.0728,   time = 0
Iter: 2,  err. = 0.15046,   time = 0.015
Iter: 3,  err. = 0.13114,   time = 0
Iter: 4,  err. = 0.0060254,   time = 0.016
Iter: 5,  err. = 2.9128e-06,   time = 0

Total time of simulation: 0.031
-----------------------------------------------------

Perfect foresight solution found.




Residuals of the static equations:

Equation number 1 : 0 : Aggregate Output
Equation number 2 : 0 : Euler Equation
Equation number 3 : 0 : Budget Constrain
Equation number 4 : 0 : low-tech capital
Equation number 5 : 0 : total capital
```

Equation number 6 : 0 : investment

Total computing time : 0h00m00s

Graphs

```matlab
figure;
set(gcf,'Color',[1,1,1]);

subplot(2,2,1);
plot(c,'r-','LineWidth',1);
set(gca,'Fontsize',8);
%xlim([2003 2017]);
title(['Consumption'],'FontSize',8,'FontWeight','bold');


subplot(2,2,2);
plot(i,'r-','LineWidth',1);
set(gca,'Fontsize',8);
%xlim([2003 2017]);
title(['Investment'],'FontSize',8,'FontWeight','bold');


subplot(2,2,3);
plot(k,'r-','LineWidth',1);
set(gca,'Fontsize',8);
%xlim([2003 2017]);
title(['Capital'],'FontSize',8,'FontWeight','bold');

subplot(2,2,4);
plot(y,'r-','LineWidth',1);
set(gca,'Fontsize',8);
%xlim([2003 2017]);
title(['Output'],'FontSize',8,'FontWeight','bold');
suptitle(['alternative policy']);
snapnow

% capital-output ratio
figure;
plot(k./y,'b-','LineWidth',1);
set(gca,'Fontsize',8);
%xlim([2003 2017]);
title(['Capital Output Ratio
 (alternative)'],'FontSize',8,'FontWeight','bold');
snapnow


%load -mat modelsimul
%load -mat modelobser
```
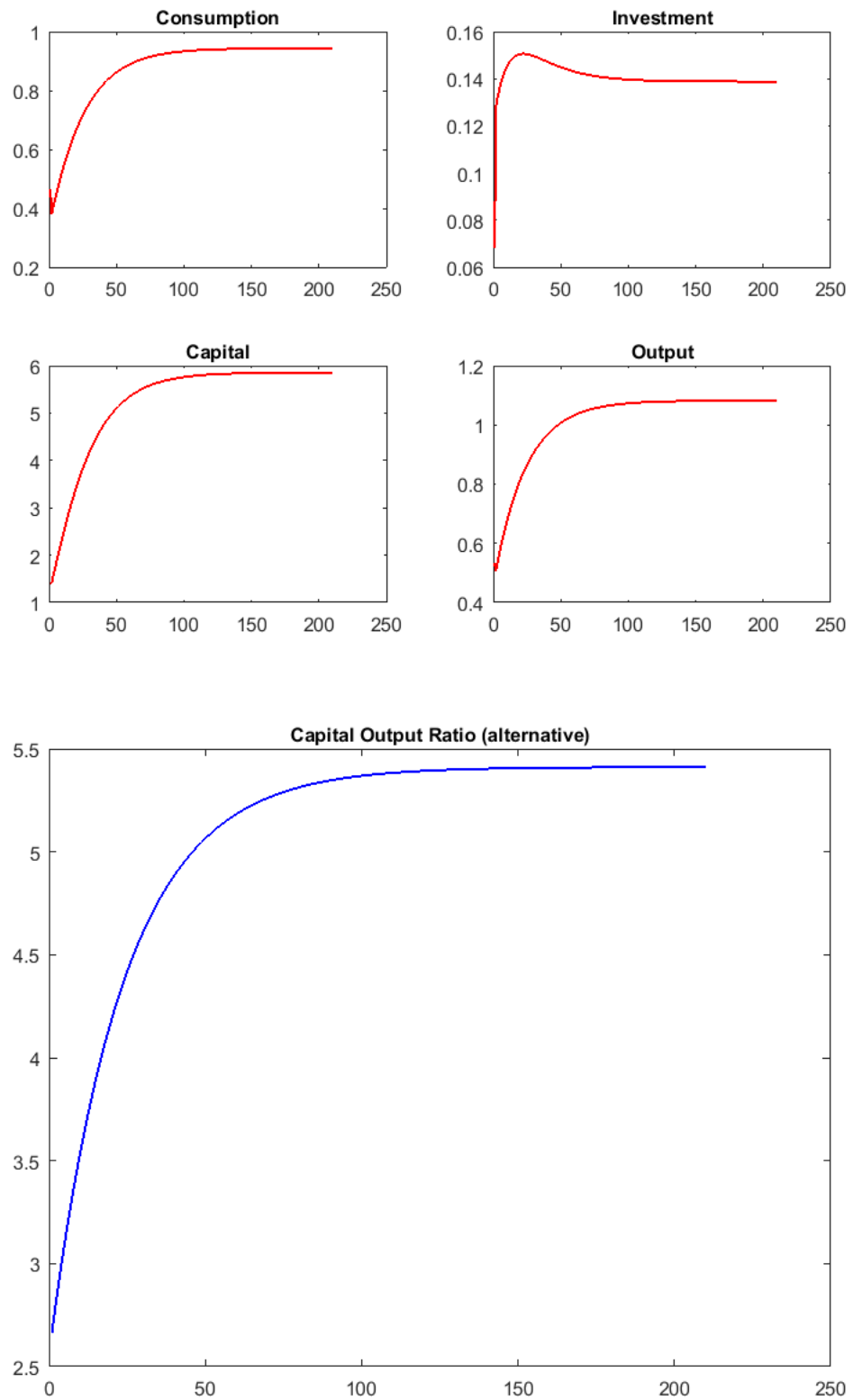
alternative policy