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```
dynare simple_model_kl_2
```

```
Configuring Dynare ...
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[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 4.5.7).
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
      0.9798           0.9798           0
      1.109            1.109           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. = 2384.5164,      time = 0.021
Iter: 2,      err. = 632.9656,       time = 0.004
Iter: 3,      err. = 23.6302,        time = 0.004
Iter: 4,      err. = 0.036943,       time = 0.004
Iter: 5,      err. = 8.9286e-08,     time = 0.004
```

```
Total time of simulation: 0.041
-----
```

Perfect foresight solution found.

-----  
MODEL SIMULATION:

Iter: 1,	err. = 2384.5164,	time = 0.004
Iter: 2,	err. = 632.9656,	time = 0.003
Iter: 3,	err. = 23.6302,	time = 0.004
Iter: 4,	err. = 0.036943,	time = 0.003
Iter: 5,	err. = 8.9286e-08,	time = 0.004

Total time of simulation: 0.023  
-----

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

Total computing time : 0h00m00s

## Graphs

---

```
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(['all wedges']);
snapnow

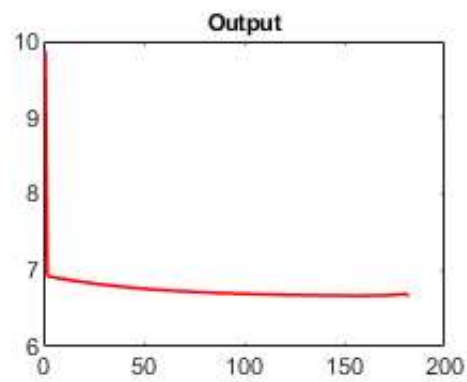
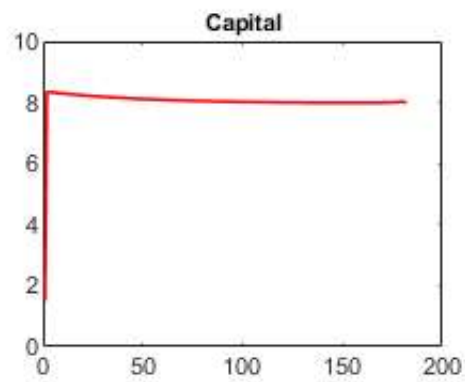
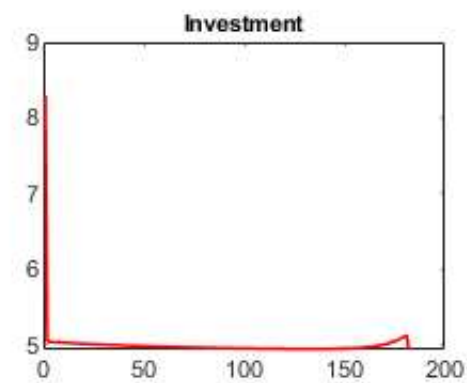
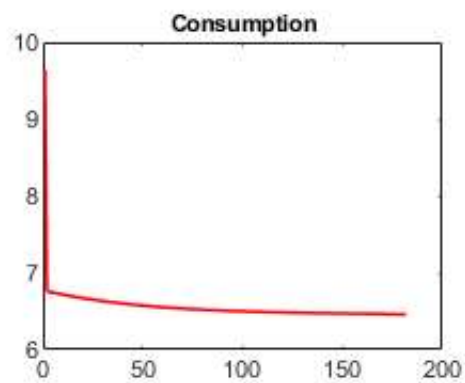
% The k/y its not compatible with the values from the inventory capital
% measure -- too high
figure;
plot(exp(k)./exp(y),'b-','LineWidth',1);
set(gca,'FontSize',8);
%xlim([2003 2017]);
title(['Capital Output Ratio'],'FontSize',8,'FontWeight','bold');
snapnow
% The results are far away from the observed values

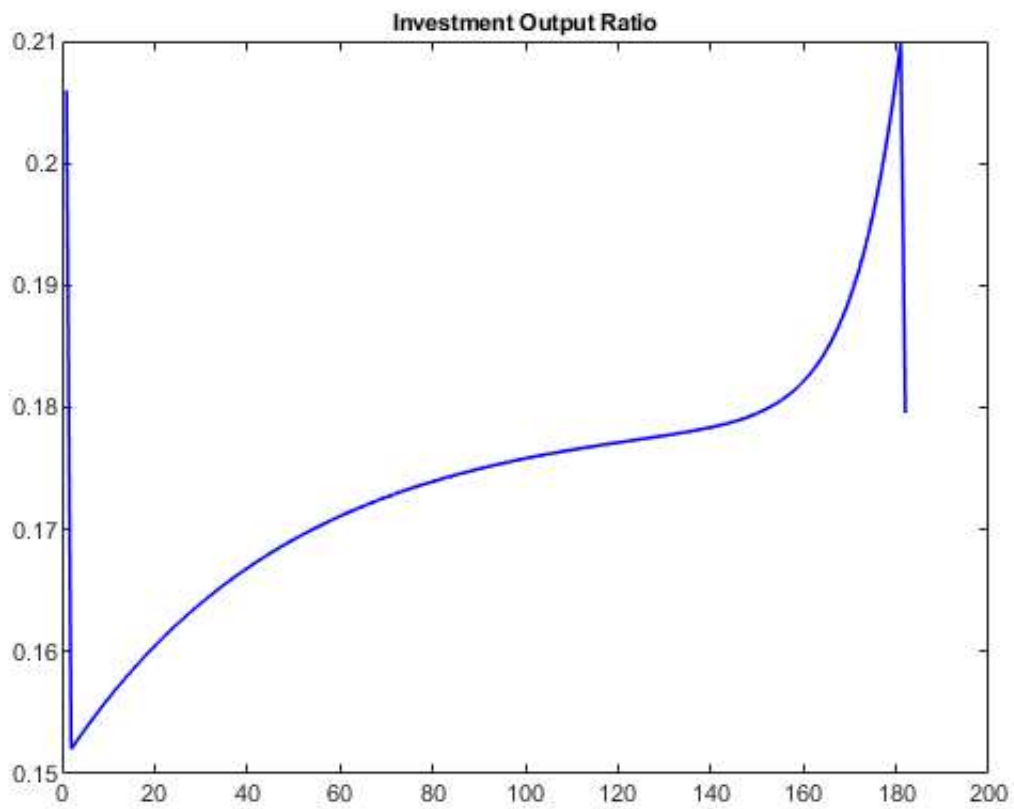
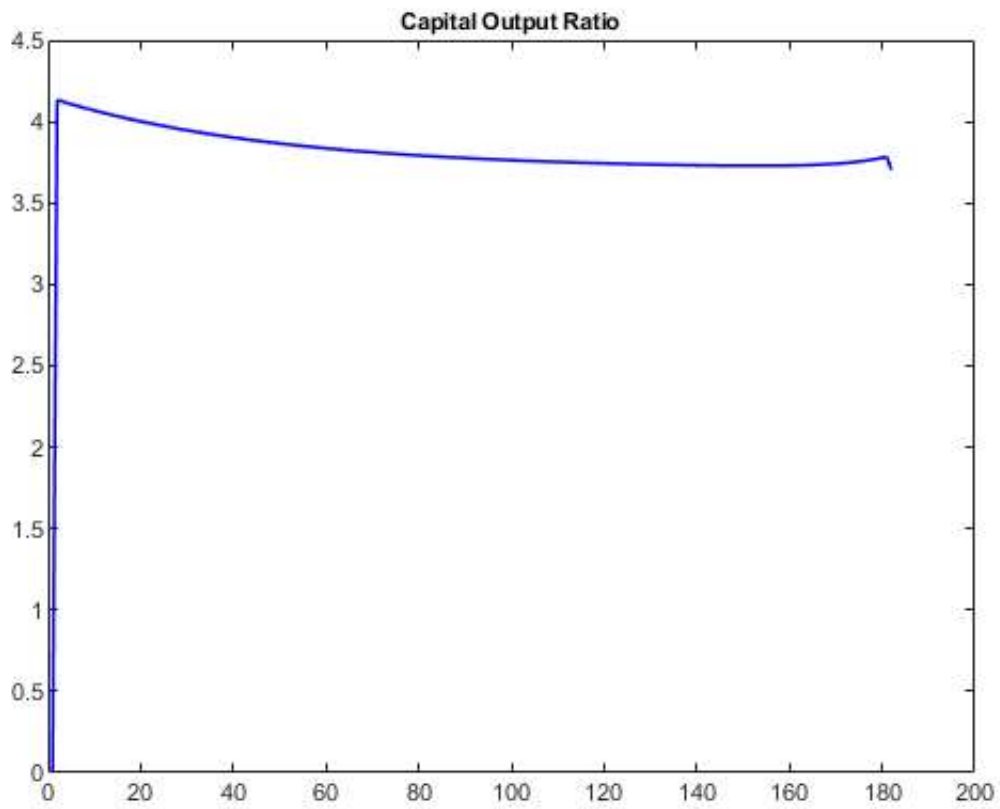
% the i/y is ok
figure;
plot(exp(i)./exp(y),'b-','LineWidth',1);
set(gca,'FontSize',8);
%xlim([2003 2017]);
title(['Investment Output Ratio'],'FontSize',8,'FontWeight','bold');
snapnow

[c(2)-9.63 y(2)-9.87 i(2)-8.28]

[c(end)-9.60 y(end)-9.77 i(end)-7.9]

```





ans =

-2.8683    -2.9434    -3.2372

ans =

-3.1435    -3.1156    -2.9629

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