```
clear all;
close all;
format shortG;
%
[Data,txt]=xlsread('Data_OilPrice_Organiz (2).xlsx');

Oil_t =Data(:,2);
Oil_tlag=Data(:,3);
Growth_GER =Data(:,4);
Growth_UAE=Data(3:end-1,5);
xcons = ones(length(Oil_t),1);
time_trend = [1:1:50]';
vnames=strvcat('Oil(t)','constant','trend','Oil(t-1)'); % input variable
names
results = OLS_demo(Oil_t,[xcons time_trend Oil_tlag]);
prt_reg(results,vnames)
```

```
Dependent Variable =         Oil(t)
R-squared      =    0.6598
sigma^2        =  361.9826
SER        =   19.0258
Durbin-Watson  =    1.7467
Nobs, Nvars    =     50,     3
***************************************************************
Variable     Coefficient      t-statistic     t-probability
constant       16.508179        2.160779        0.035841
trend          -0.012087       -0.063545        0.949602
Oil(t-1)        0.795779        9.371516        0.000000
```

```


shock = results.resid;

vnames1=strvcat('Oil_shock(t)','constant','trend','Growth_GER(t)'); % input
variable names
results_GER = OLS_demo(shock,[xcons time_trend Growth_GER]);
prt_reg(results_GER,vnames1)
```

```
Dependent Variable =    Oil_shock(t)
R-squared      =    0.1000
sigma^2        =  325.7743
SER        =   18.0492
Durbin-Watson  =    1.4931
Nobs, Nvars    =     50,     3
***************************************************************
Variable          Coefficient      t-statistic     t-probability
constant            -7.532828       -1.226478        0.226128
trend                0.097874        0.537796        0.593255
Growth_GER(t)        2.965842        2.285572        0.026834
```

```


shock_uae=shock(3:end-1);
T = length(shock_uae);
time_trend2 = [1:1:T]' ;
xcons = ones(T,1);
```

```
vnames2=strvcat('Oil_shock(t)', 'constant','trend', 'Growth_UAE(t)'); %
input variable names
results_UAE = OLS_demo(shock_uae,[xcons time_trend2 Growth_UAE]);
prt_reg(results_UAE,vnames2)
```

```
Dependent Variable =    Oil_shock(t)
R-squared      =    0.3082
sigma^2        =  251.2104
SER        =   15.8496
Durbin-Watson  =    1.6461
Nobs, Nvars    =     47,     3
***************************************************************
Variable          Coefficient      t-statistic     t-probability
constant           -13.097545       -2.496384        0.016365
trend                0.266961        1.534120        0.132160
Growth_UAE(t)        1.407966        4.377631        0.000073
```