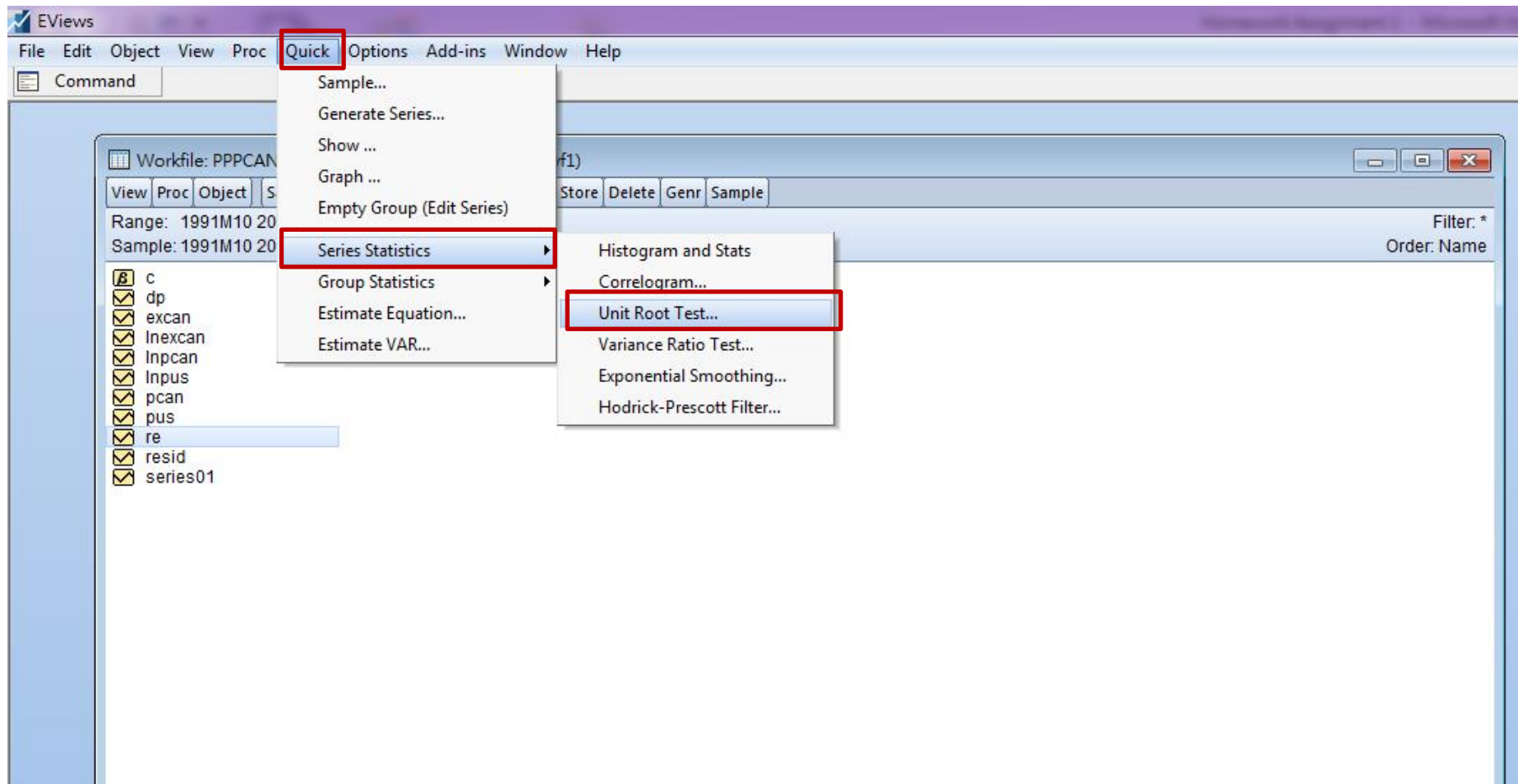


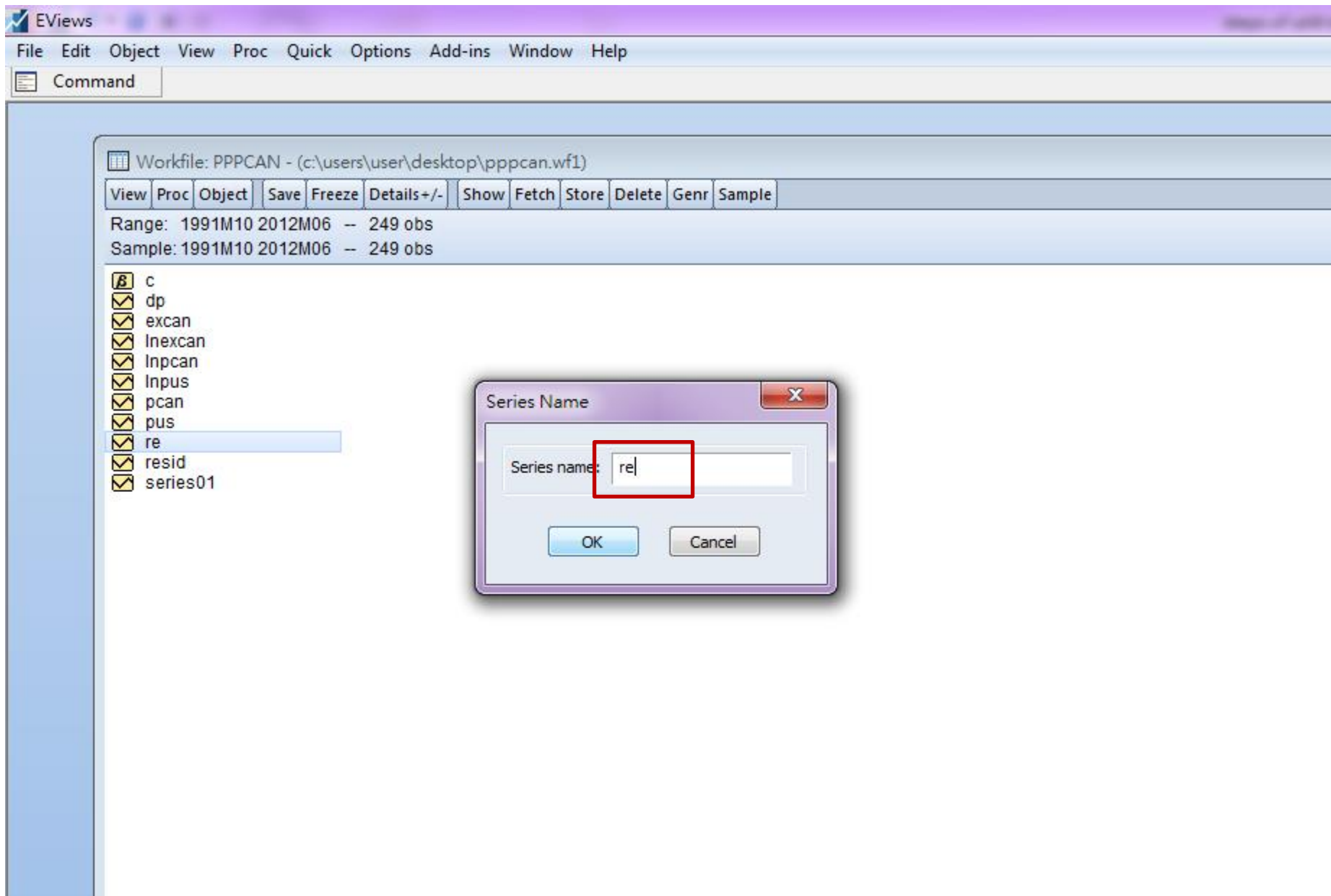
**Examine the stationarity of
real exchange rate by unit root tests**

The operating steps of the conventional unit root tests

- ◆ EViews operating steps are as the followings:
- ◆ Step 1



- ◆ Step 2 - type the name of variable “re”



◆ Step 3 – choose Test type

The screenshot displays the EViews software interface. The main window shows a workfile named 'PPPCAN' with a range and sample from 1991M10 to 2012M06, containing 249 observations. A list of objects is visible on the left, including 'c', 'dp', 'excan', 'Inexcan', 'Inpcan', 'Inpus', 'pcan', 'pus', 're', 'resid', and 'series01'. The 're' object is selected. A 'Unit Root Test' dialog box is open in the foreground. This dialog box has several sections: 'Test type' with a dropdown menu set to 'Augmented Dickey-Fuller'; 'Test for unit root in' with radio buttons for 'Level' (selected), '1st difference', and '2nd difference'; 'Include in test equation' with radio buttons for 'Intercept' (selected), 'Trend and intercept', and 'None'; and 'Lag length' with radio buttons for 'Automatic selection:' (selected) and 'User specified:'. Under 'Automatic selection:', a dropdown menu is set to 'Schwarz Info Criterion' and a text box for 'Maximum lags' is set to '6'. The 'User specified:' option has a text box set to '4'. 'OK' and 'Cancel' buttons are at the bottom right of the dialog box.

EViews

File Edit Object View Proc Quick Options Add-ins Window Help

Command

Workfile: PPCAN - (c:\users\user\desktop\pppcan.wf1)

View Proc Object Save Freeze Details+/- Show Fetch Store Delete Genr Sample

Range: 1991M10 2012M06 -- 249 obs
Sample: 1991M10 2012M06 -- 249 obs

c
dp
excan
Inexcan
Inpcan
Inpus
pcan
pus
re
resid
series01

Unit Root Test

Test type
Augmented Dickey-Fuller

Test for unit root in
☒ Level
☐ 1st difference
☐ 2nd difference

Include in test equation
☒ Intercept
☐ Trend and intercept
☐ None

Lag length
☒ Automatic selection:
Schwarz Info Criterion
Maximum lags: 6
☐ User specified: 4

OK Cancel

◆ Step 4 – Screen will show the results of unit root test

The screenshot displays the EViews software interface. The main window shows the 'Workfile: PPPCAN - (c:\users\user\desktop\pppcan.wf1)' with a range and sample of 1991M10 to 2012M06, containing 249 observations. A list of series is visible on the left, including 'c', 'dp', 'excan', 'Inexcan', 'Inpcan', 'Inpus', 'pcan', 'pus', 're', 'resid', and 'series01'. The 're' series is selected.

A dialog box titled 'Series: RE Workfile: PPPCAN::Pppcan\' is open, showing the 'Augmented Dickey-Fuller Unit Root Test on RE'. The test results are as follows:

Null Hypothesis: RE has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=6)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.504928	0.5297
Test critical values:		
1% level	-3.456622	
5% level	-2.872998	
10% level	-2.572951	

*Mackinnon (1996) one-sided p-values.

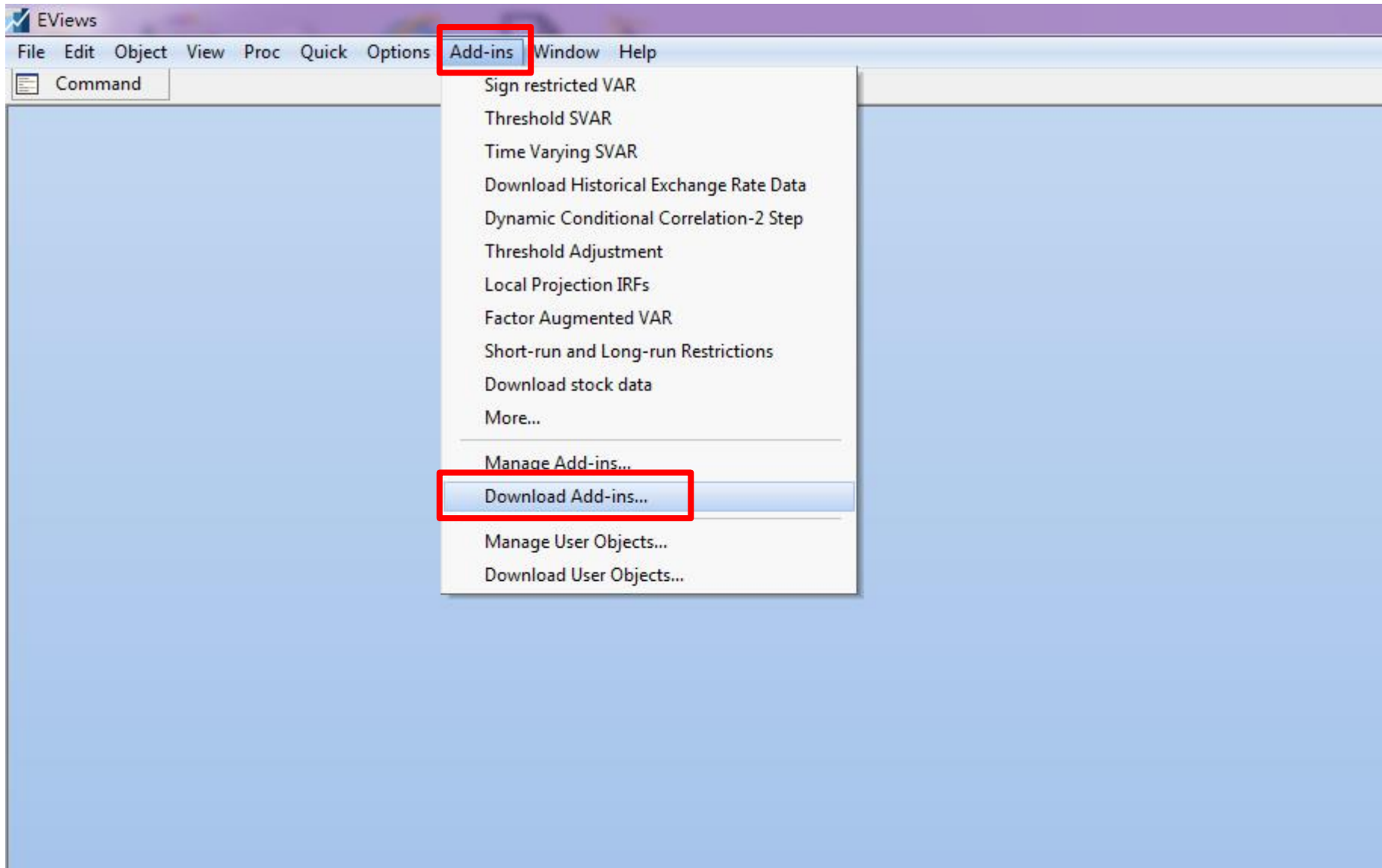
Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RE)
Method: Least Squares
Date: 10/01/17 Time: 20:26
Sample (adjusted): 1991M11 2012M06
Included observations: 248 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RE(-1)	-0.016643	0.011059	-1.504928	0.1336
C	0.003920	0.002915	1.344687	0.1800

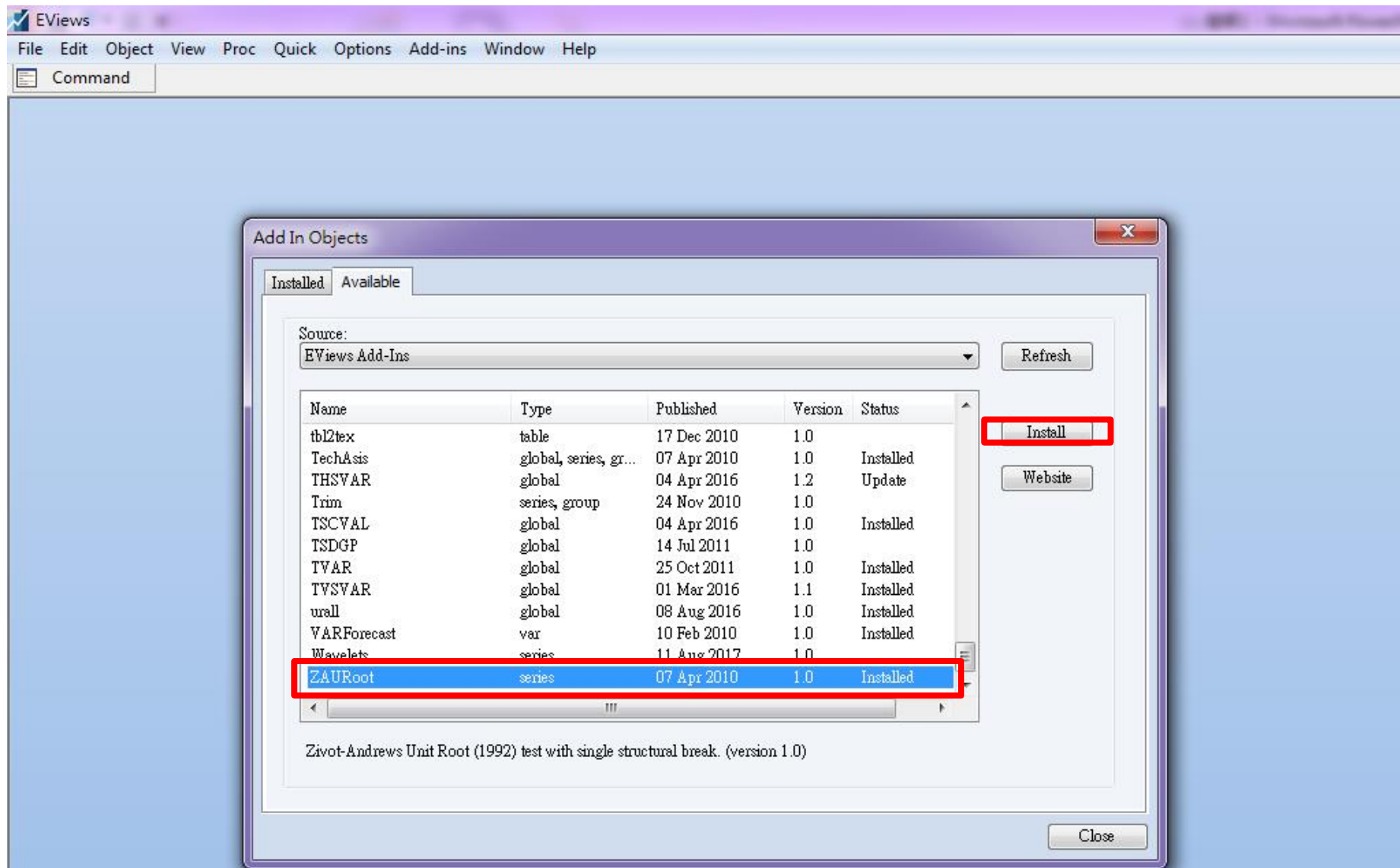
Zivot Andrews unit root test with structural break

- Part1: How to download ZA program file
- Part 2: The operating steps of examining ZA unit root test

download ZA program file (1)



download ZA program file (2)



◆ Step 1 – Functions “Add-ins” -> Zivot-Andrews unit root test

The screenshot shows the EViews software interface. The 'Add-ins' menu is open, and the 'Zivot-Andrews unit root test' option is highlighted with a red box. The background shows the 'Workfile: PPPCAN - (c:\users\user\d)' with a range of 1991M10 to 2012M06. The left pane lists several series, including 're' which is selected. The right pane shows the 'Series: RE' properties, including 'Null Hypothesis: Exogenous: Con' and 'Lag Length: 0 (A)'. The bottom pane shows the 'Augmented Dick' test results, including 'Test critical value' and 'Mackinnon (199)'.

Workfile: PPPCAN - (c:\users\user\d)

Range: 1991M10 2012M06 -- 249 obs
Sample: 1991M10 2012M06 -- 249 obs

Series: RE W

View Proc Object

Null Hypothesis: Exogenous: Con
Lag Length: 0 (A)

Augmented Dick
Test critical value

*Mackinnon (199)

Augmented Dick
Dependent Variable: RE
Method: Least Squares
Date: 10/01/17
Sample (adjusted): 1991M10 2012M06
Included observations: 248 after adjustments

Variable Coefficient Std. Error t-Statistic Prob.

Sign restricted VAR
Threshold SVAR
Time Varying SVAR
Download Historical Exchange Rate Data
Dynamic Conditional Correlation-2 Step
Threshold Adjustment
Local Projection IRFs
Factor Augmented VAR
Short-run and Long-run Restrictions
Download stock data
More...

Spectral Analysis
Zivot-Andrews unit root test
Perron unit root test
Run ARDL Bound Approach
Exponential Smoothing
STAR
Technical Analysis of single series of stock data
Right Tailed ADF tests
Manage Add-ins...
Download Add-ins...
Manage User Objects...
Download User Objects...

- ◆ Step 2 – (1) select model type (A -intercept ; B – trend; C-Both)
(2) select a max lag length

Workfile: PPCAN - (c:\users\user\desktop\pppcan.wf1)

Range: 1991M10 2012M06 -- 249 obs
Sample: 1991M10 2012M06 -- 249 obs

Filter: *
Order: Name

Series: RE Workfile: PPCAN::Pppcan\

View Proc Object Properties Print Name Freeze Push Sample Genr Sheet Graph

Augmented Dickey-Fuller Unit Root Test on RE

Null Hypothesis: RE has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=6)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.504928	0.5297
Test critical values:		
1% level	-3.456622	
5% level	-2.872998	
10% level	-2.572951	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RE)
Method: Least Squares
Date: 10/01/17 Time: 20:26
Sample (adjusted): 1991M11 2012M06
Included observations: 248 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RE(-1)	-0.016643	0.011059	-1.504928	0.1336
C	0.003920	0.002915	1.344687	0.1800

Zivot-Andrews test

Select a break location
A - Intercept

Select a maximum lag length
6

OK Cancel

◆ Step 3 – Screen will show the results of ZA unit root test

