

Package Name: PPUroot

Author: Professor. Ruben Ibarra

Date: /05/01/2012

Add-in type: Series

Default Proc Name: ppuroot

Default Menu Test: Perron unit root test

Interface: Dialog and command line

Description: This add-in performs the Perron (1997) unit root test with a break in the trend function at an unknown time. Applies only to a series object. Critical values are used at the 1%, 5% and 10% level. Is used the "t-sig" method in selecting the truncation lag parameter. In models of constant/intercept and trend/growth, break dates follow the framework of "innovational outlier" (IO: break as evolving more slowly over time), while the constant-trend model, follow the framework of "additive outlier" (AO: break as occurring suddenly). This improves test developed by Zivot-Andrews (1992), as it allows the data generating process, both under the null hypothesis as the alternative hypothesis, subject to structural change.

Dialog:

The Add-in can only be run from a series object. Displays a simple menu that prompts the user to specify the type of structural adjustment (in the intercept, in both intercept and trend, or the trend), and the maximum number of lags for the application of the test. A window will show the main results of the test, that is, the optimal lag, the date of structural change, the value of the test and percentiles at the 1%, 5% and 10% level.

Command Line:

series_name.ppuroot (options)

Options:

lag = *lag* Set the maximum lag to *lag*

model = *key* Set location of structural adjustment date, *key* can be "A" (intercept), "B" (intercept and trend), or "C" (trend)