

Unit Root Test Ver.1

Documentation File

Peace be upon you

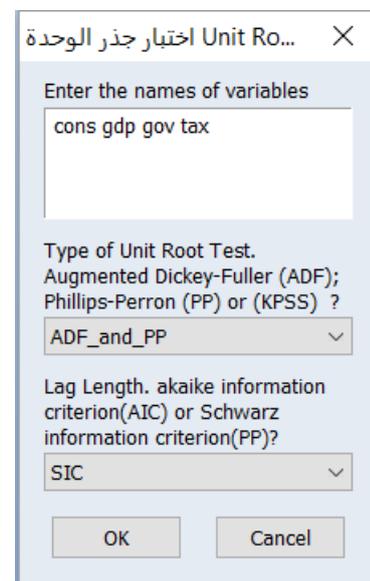
I present to you this version of the "Unit Root Test Ver.1" to tests the stability of the time series and unit root tests. It is software provides an exceptional effort had to be done to make these tests, especially for the case of a large number of them.

This software allows for ADF; PP and Kpss test. It can deal with a number exceeds 1500 variables.

Installing software

So that the software is set up, you must follow these steps:

- 1- open the file "urallinstaller1";
- 2- Run the program from the Run option at the top and the far right of the code window;
- 3- Close the software and open any Eviews database;
- 4- Go to the Add-in list you will find the "Unit Root Test ver.1" option on first list;
- 5- Select the test and start work.



How the software works.

The software is very easy.

1. Enter the variables that you want to test its stability, add a space between each of them;
2. You can select the type of test that you want to be implemented among the three options can be selected or ADF&PP for options ADF_and_PP.
3. Must choose a criterion that is determine the maximum number of lags in equations for estimating tests, SIC or AIC, as in the picture bellow.

After pressing the "OK" button, we will get the test results table as in the pictures.

UNIT ROOT TEST TABLE (PP)

		<u>At Level</u>			
		CONS	GDP	GOV	TAX
With Constant	t-Statistic	1.1132	-0.2987	0.5482	0.4885
	Prob.	0.9975	0.9211	0.9878	0.9859
With Constant & Trend	t-Statistic	n0	n0	n0	n0
	Prob.	0.0052	0.0000	0.0000	0.0062
Without Constant & Trend	t-Statistic	5.5705	4.3599	8.4234	3.7669
	Prob.	1.0000	1.0000	1.0000	1.0000
		n0	n0	n0	n0
		<u>At First Difference</u>			
		d(CONS)	d(GDP)	d(GOV)	d(TAX)
With Constant	t-Statistic	-28.1350	-29.7046	-27.7364	-31.2515
	Prob.	0.0000	0.0001	0.0000	0.0001
With Constant & Trend	t-Statistic	-36.7185	-29.5375	-28.3409	-33.8723
	Prob.	0.0001	0.0001	0.0001	0.0001
Without Constant & Trend	t-Statistic	-19.5720	-18.0269	-15.5537	-23.4950
	Prob.	0.0000	0.0000	0.0000	0.0000
		***	***	***	***

UNIT ROOT TEST TABLE (ADF)

		<u>At Level</u>			
		CONS	GDP	GOV	TAX
With Constant	t-Statistic	1.5015	-0.5088	0.7202	0.9208
	Prob.	0.9993	0.8849	0.9923	0.9956
With Constant & Trend	t-Statistic	n0	n0	n0	n0
	Prob.	0.7264	0.3995	0.2693	0.7590
Without Constant & Trend	t-Statistic	2.9659	2.6215	4.3229	3.2785
	Prob.	0.9993	0.9979	1.0000	0.9997
		n0	n0	n0	n0
		<u>At First Difference</u>			
		d(CONS)	d(GDP)	d(GOV)	d(TAX)
With Constant	t-Statistic	-3.0286	-3.5544	-5.3844	-5.5715
	Prob.	0.0346	0.0079	0.0000	0.0000
With Constant & Trend	t-Statistic	-5.6097	-3.5497	-5.4598	-5.7859
	Prob.	0.0000	0.0381	0.0001	0.0000
Without Constant & Trend	t-Statistic	-1.6279	-1.6529	-2.5151	-3.4072
	Prob.	0.0975	0.0928	0.0120	0.0008
		**	***	***	***
With Constant & Trend	t-Statistic	-5.6097	-3.5497	-5.4598	-5.7859
	Prob.	0.0000	0.0381	0.0001	0.0000
Without Constant & Trend	t-Statistic	-1.6279	-1.6529	-2.5151	-3.4072
	Prob.	0.0975	0.0928	0.0120	0.0008
		*	*	**	***

Notes: (*)Significant at the 10%; (**)Significant at the 5%; (***) Significant at the 1%. and (no) Not Significant
*MacKinnon (1996) one-sided p-values.

This Result is The Out-Put of Program Has Developed By:

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Results will vary for the KPSS test. It will be as in bellow:

UNIT ROOT TEST RESULTS TABLE (KPSS)

Null Hypothesis: the variable is stationary

		<u>At Level</u>			
		CONS	GDP	GOV	TAX
With Constant	t-Statistic Prob.	1.4331 ***	1.4861 ***	1.4881 ***	1.4095 ***
With Constant & Trend	t-Statistic Prob.	0.3594 ***	0.1485 **	0.2072 **	0.3226 ***
Without Constant & Trend	t-Statistic Prob.	=====	=====	=====	=====
		<u>At First Difference</u>			
		d(CONS)	d(GDP)	d(GOV)	d(TAX)
With Constant	t-Statistic Prob.	0.3707 *	0.0563 n0	0.1404 n0	0.2362 n0
With Constant & Trend	t-Statistic Prob.	0.0517 n0	0.0549 n0	0.0679 n0	0.0538 n0
Without Constant & Trend	t-Statistic Prob.	=====	=====	=====	=====

Notes:

- a: (*)Significant at the 10%; (**)Significant at the 5%; (***) Significant at the 1% and (no) Not Significant
- b: Lag Length based on SIC
- c: Probability based on Kwiatkowski-Phillips-Schmidt-Shin (1992, Table 1)

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