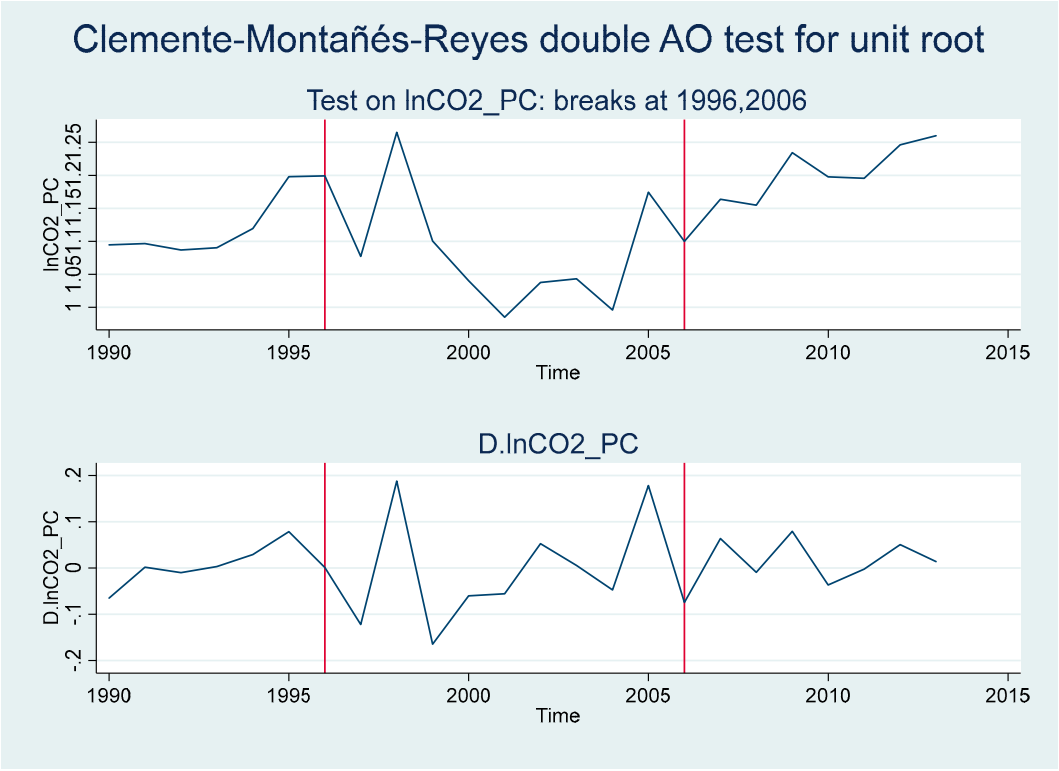
1. Descriptive statistics

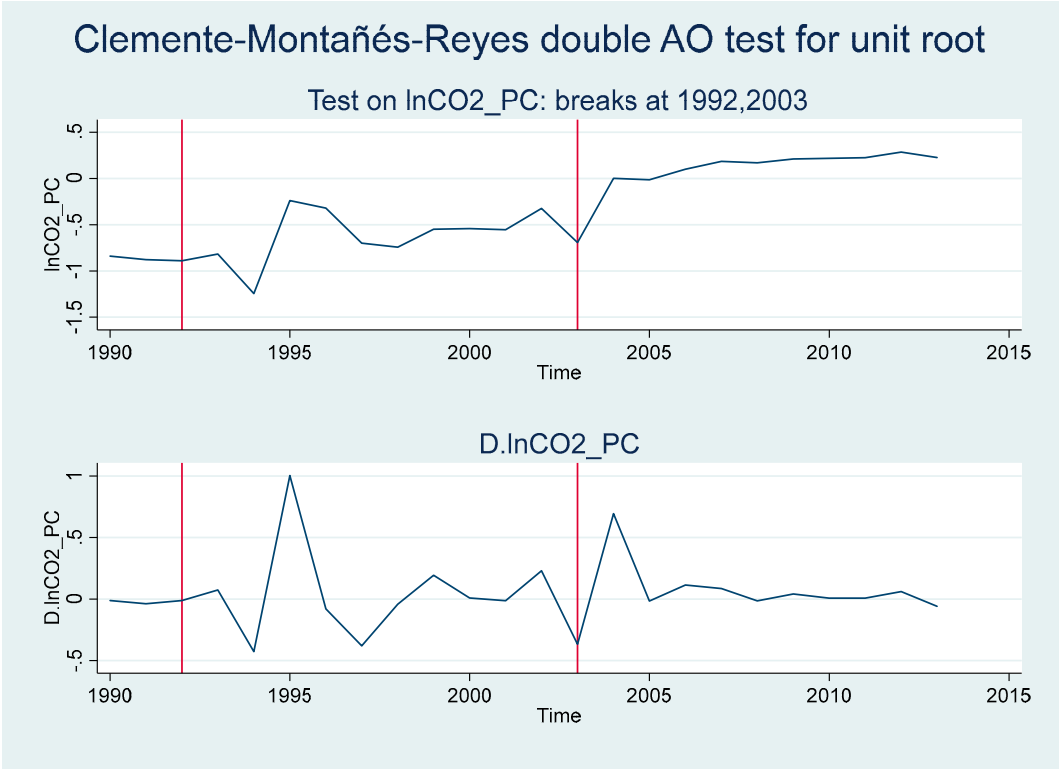
Variable		Mean	Std. Dev.	Min	Max	Observations
CO2_pc	overall	6.931061	10.7971	.0107203	70.04223	N = 947
	between		10.50991	.0298371	51.68478	n = 37
	within		2.960785	-20.03132	25.2885	T = 25.5946
MVA_sh	overall	3.373243	11.49126	-61.93001	140.5818	N = 770
	between		4.37203	-2.517521	17.85542	n = 35
	within		10.95441	-59.6154	142.8964	T = 22
Tertia~H	overall	44.12582	10.00238	10.56928	80.67685	N = 896
	between		9.731648	28.10772	80.10726	n = 36
	within		5.959345	24.47794	90.63082	T = 24.8889
PCI~2011	overall	17807.54	23332.49	545.2958	124024.6	N = 1018
	between		25076.84	746.2983	114777	n = 37
	within		3901.988	-1078.977	38313.54	T = 27.5135
El_fro~s	overall	68.03868	33.82682	0	100	N = 860
	between		33.57601	.4209187	100	n = 32
	within		6.912954	36.17382	102.5705	T = 26.875
Politi~s	overall	5.0518	1.856907	1	7	N = 1139
	between		1.659042	1.806452	7	n = 37
	within		.8737391	1.180832	8.632445	T-bar = 30.7838
Civil_~s	overall	4.924495	1.46293	1	7	N = 1139
	between		1.347328	1.967742	6.967742	n = 37
	within		.609417	3.021269	8.053527	T-bar = 30.7838

2. Structural Break Tests

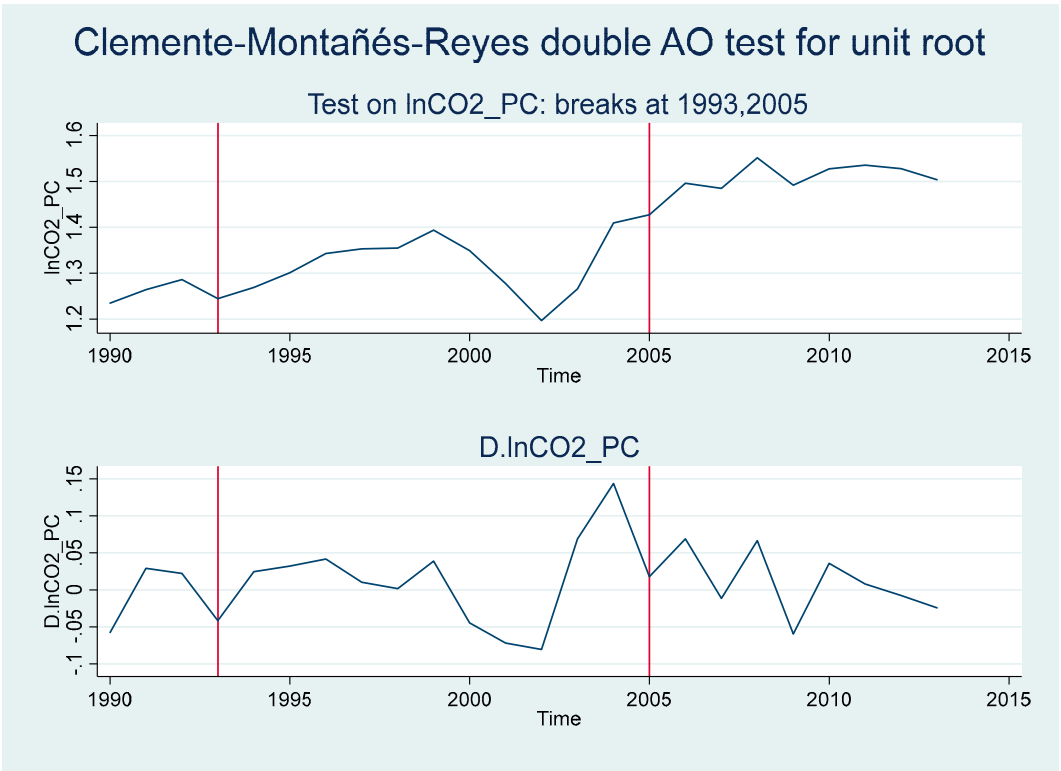
ID=Algeria



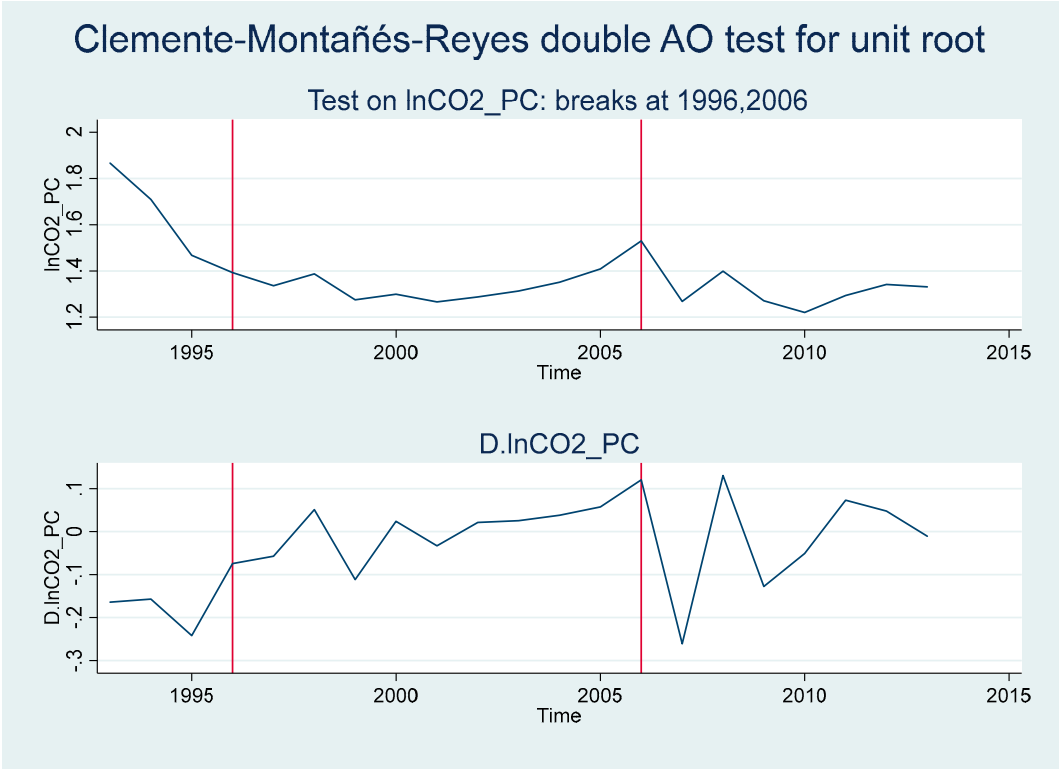
ID=Angola



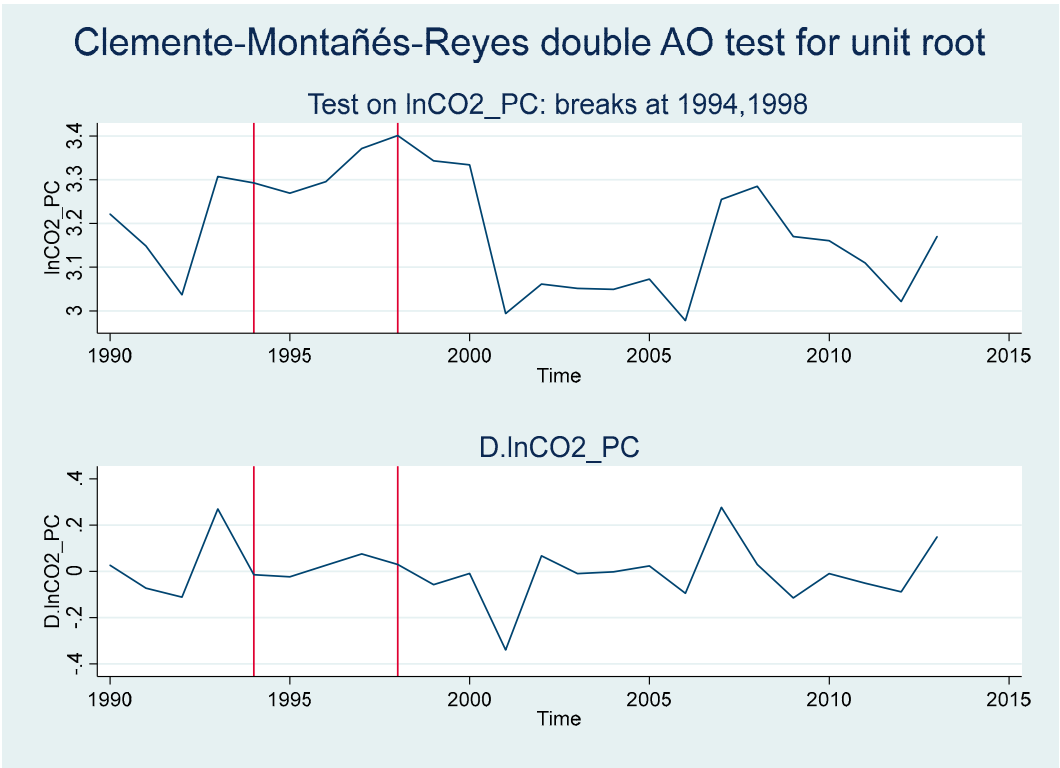
ID=Argentina



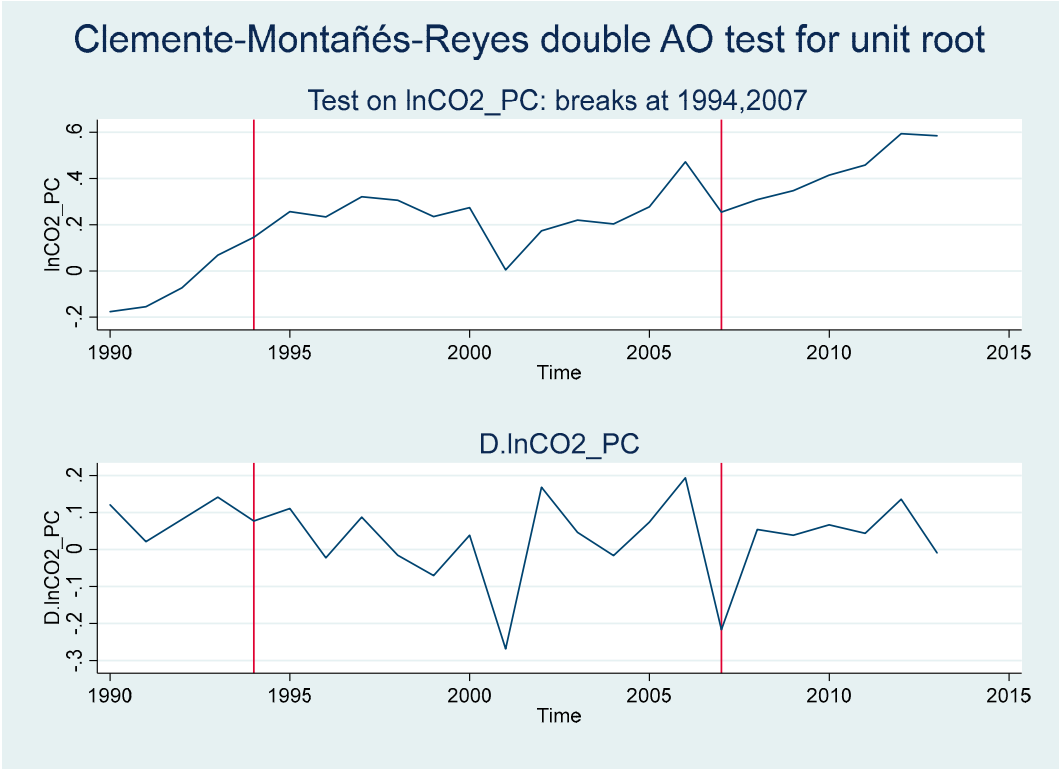
ID=Azerbaijan



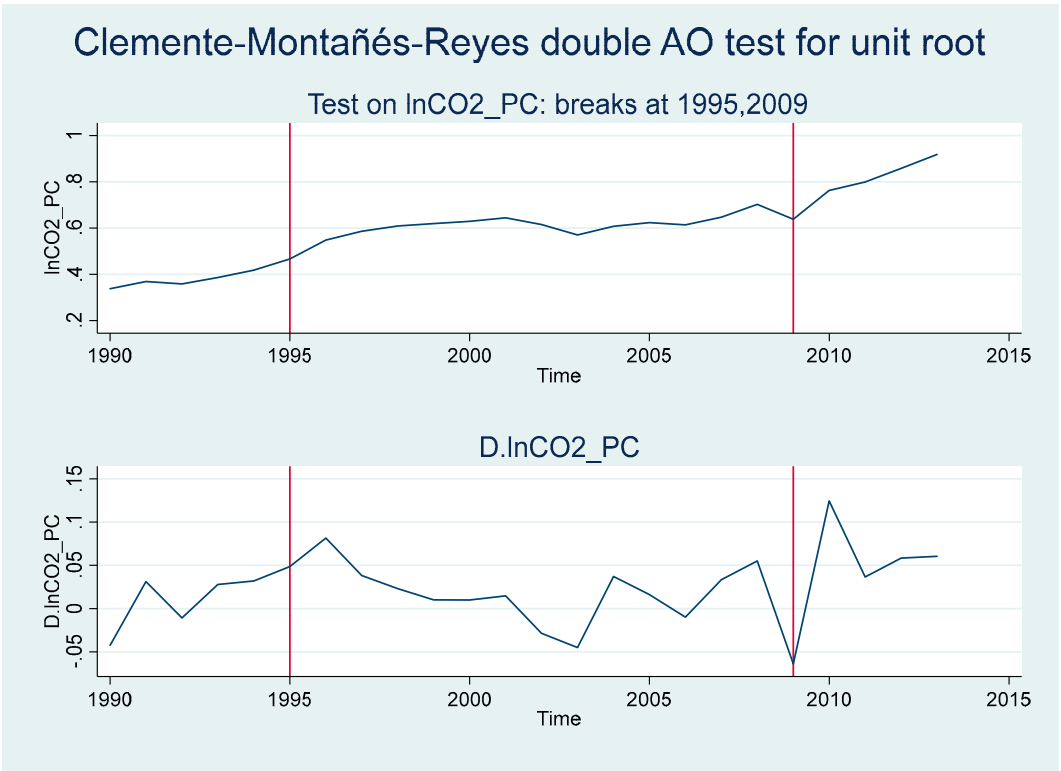
ID=Bahrain



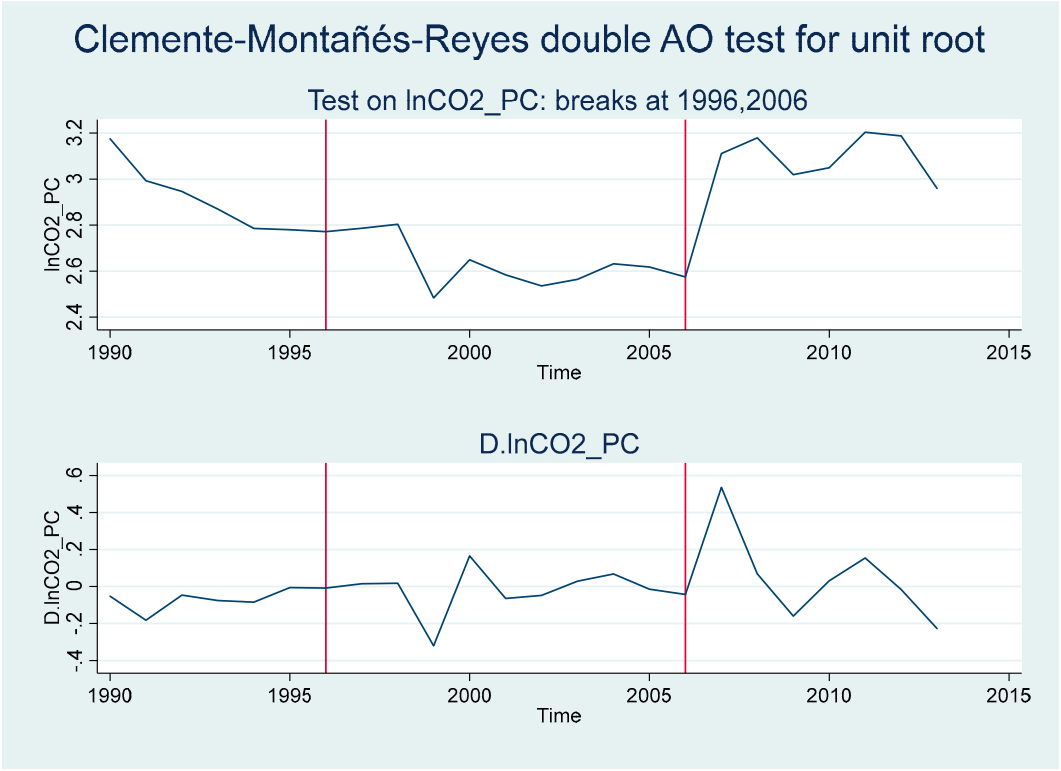
ID=Bolivia



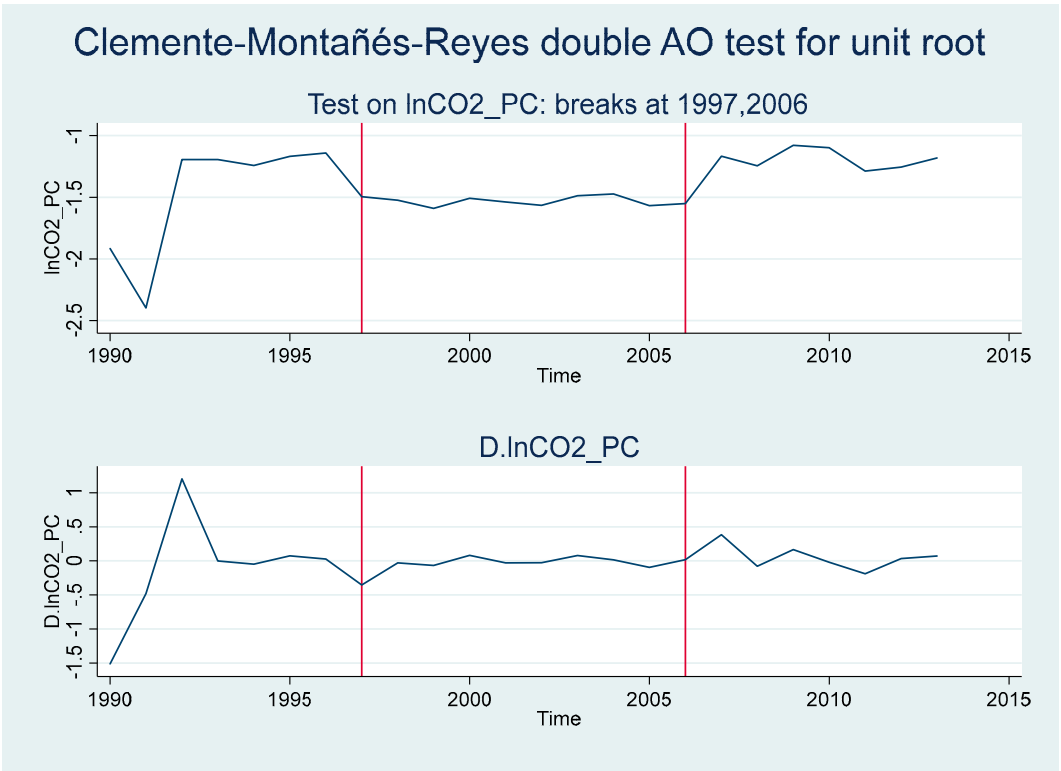
ID=Brazil



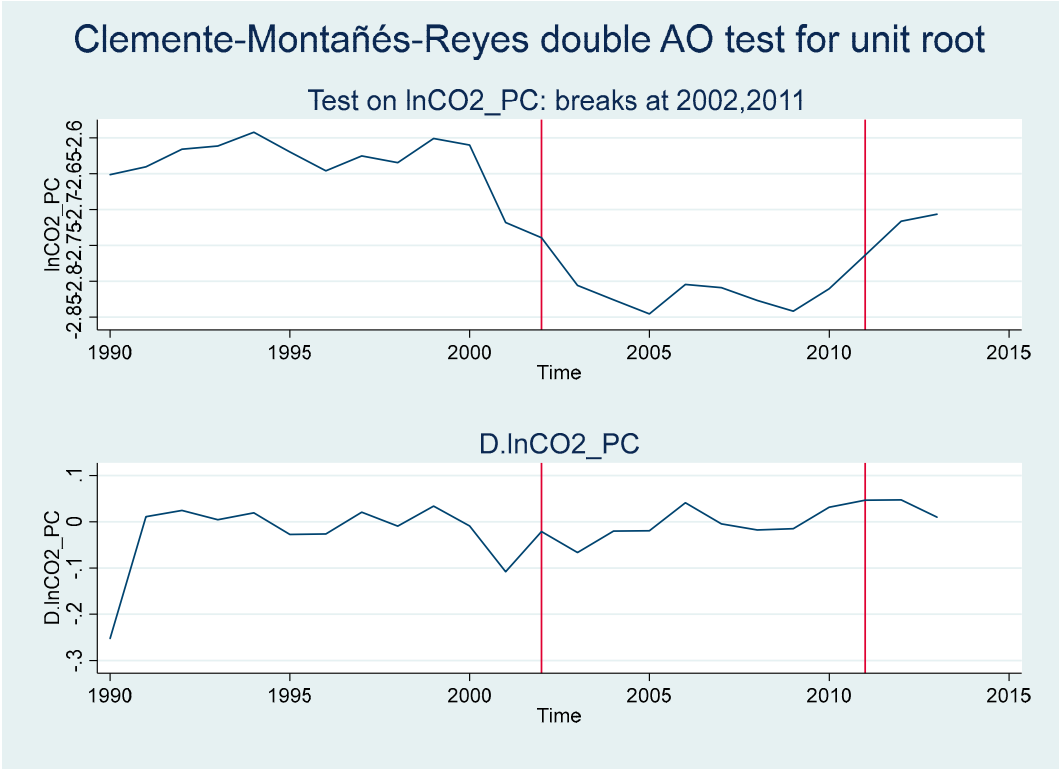
ID=Brunei Darussalam



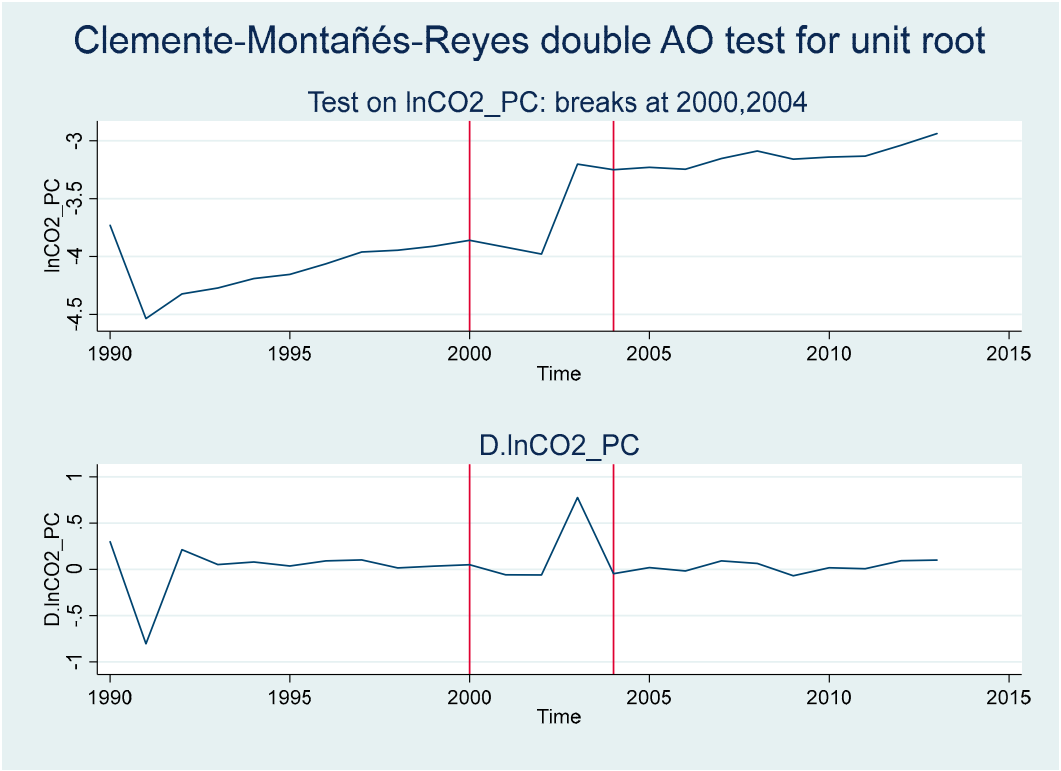
ID=Cameroon



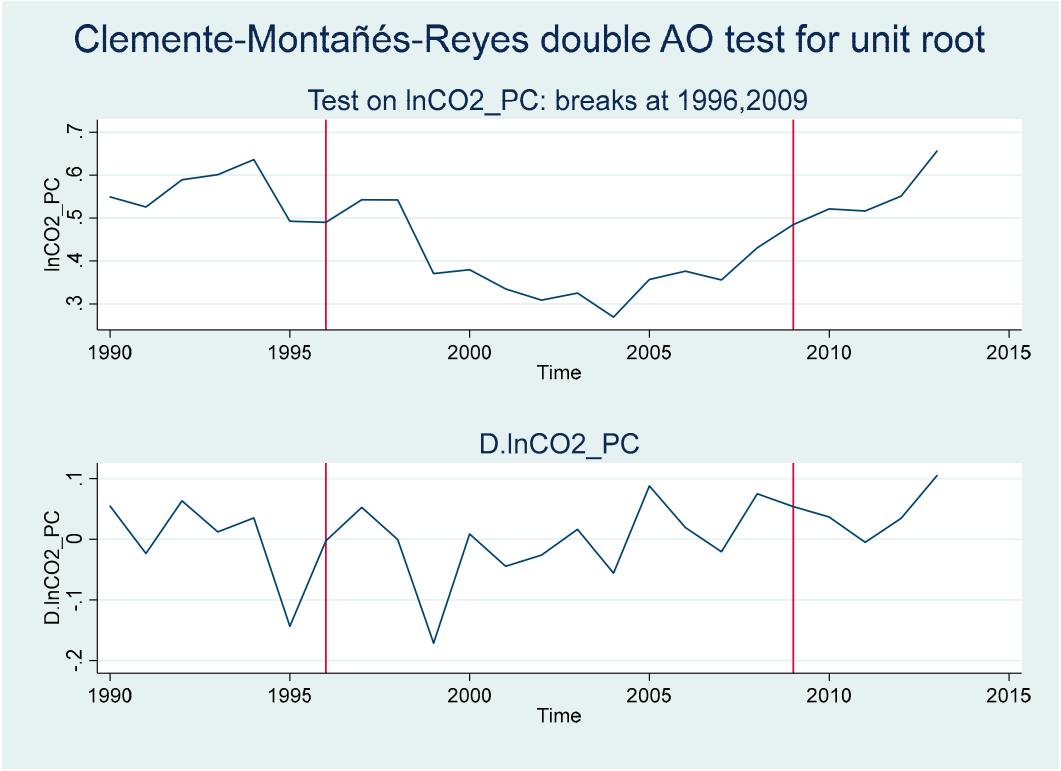
ID=Central African Republic



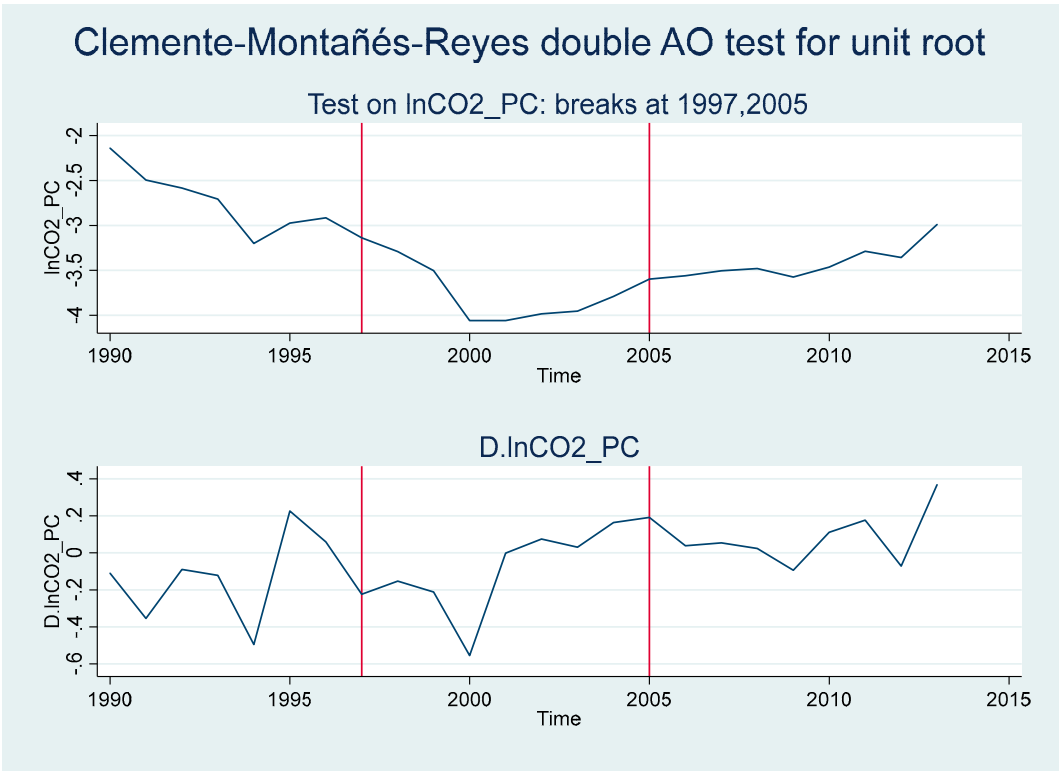
ID=Chad



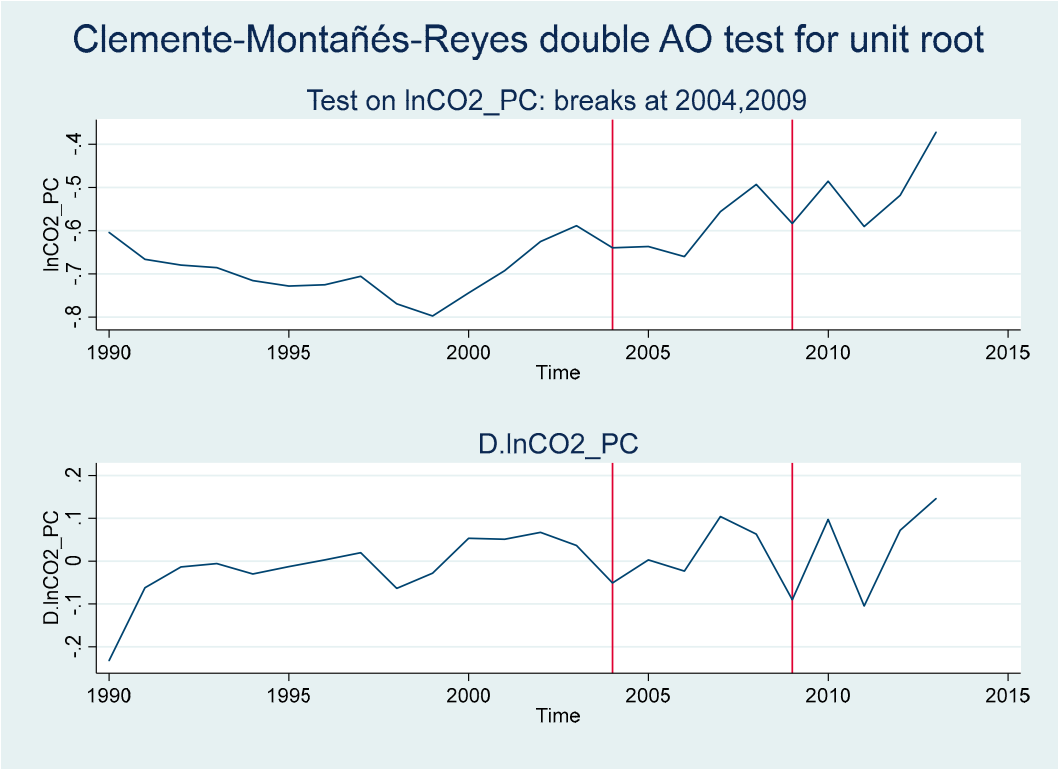
ID=Colombia



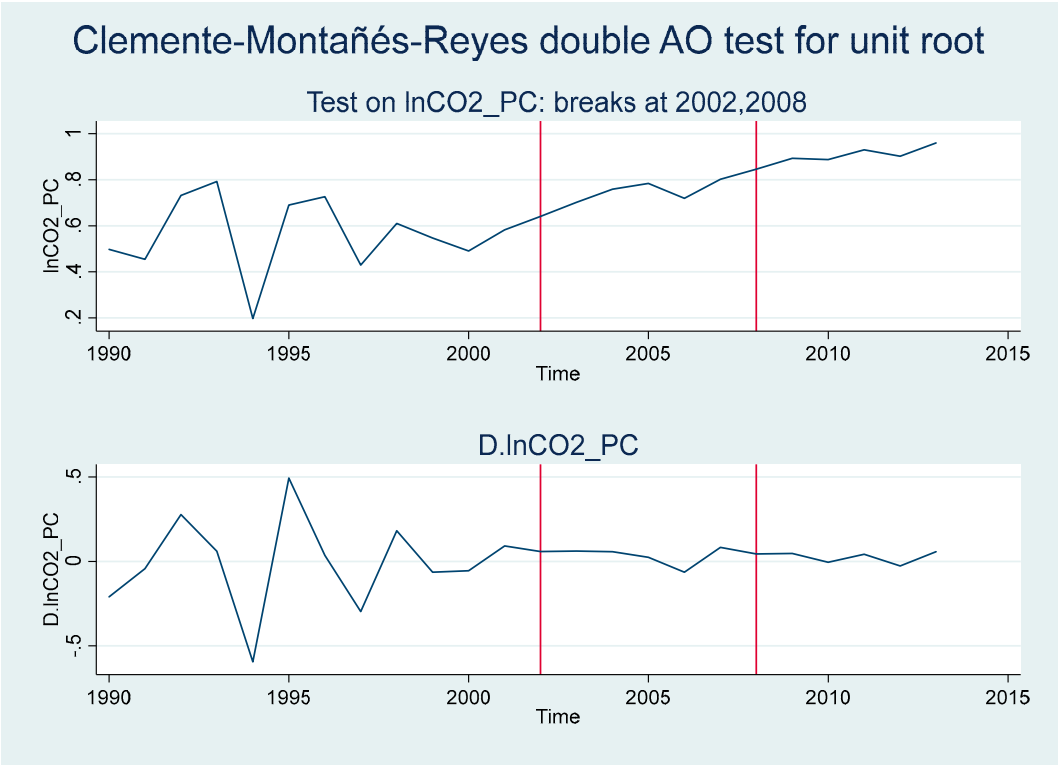
ID=Democratic Republic of Congo



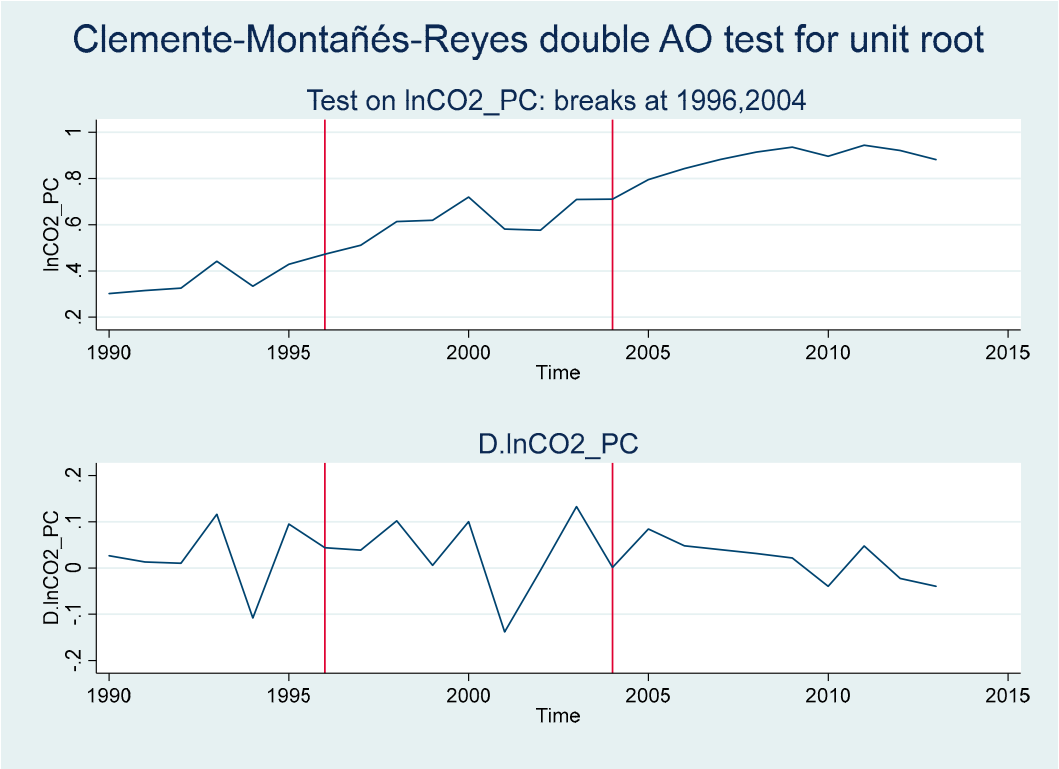
ID=Djibouti



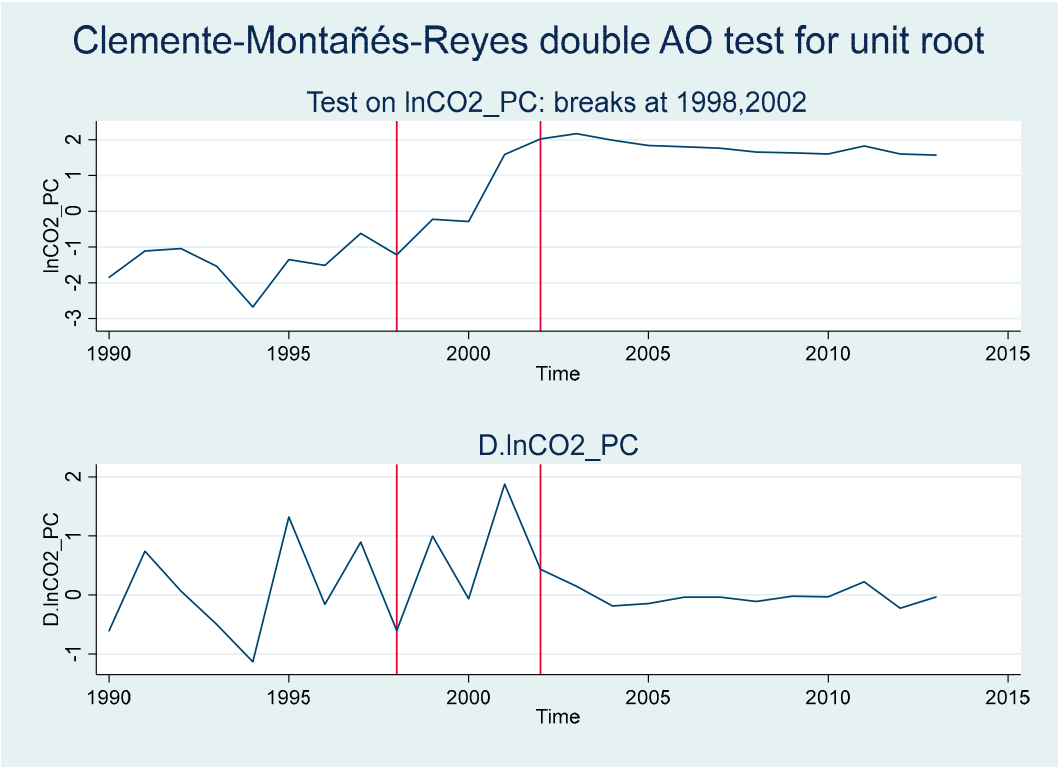
ID=Ecuador



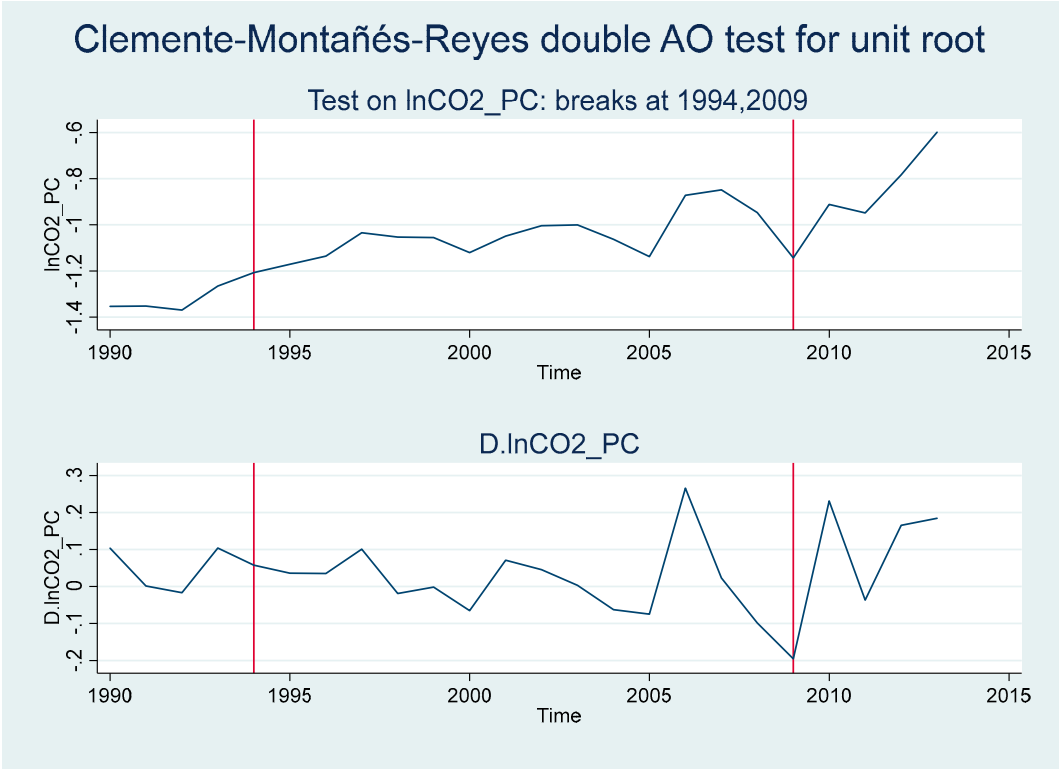
ID=16=Egypt



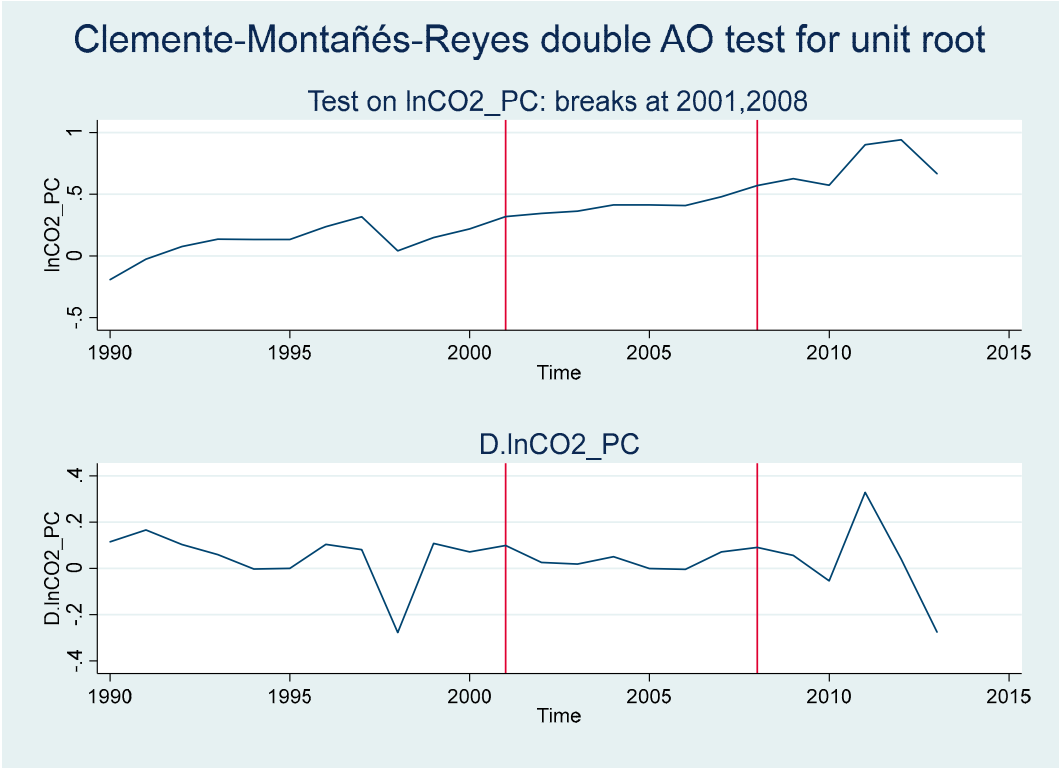
ID=17=Equatorial Quinea



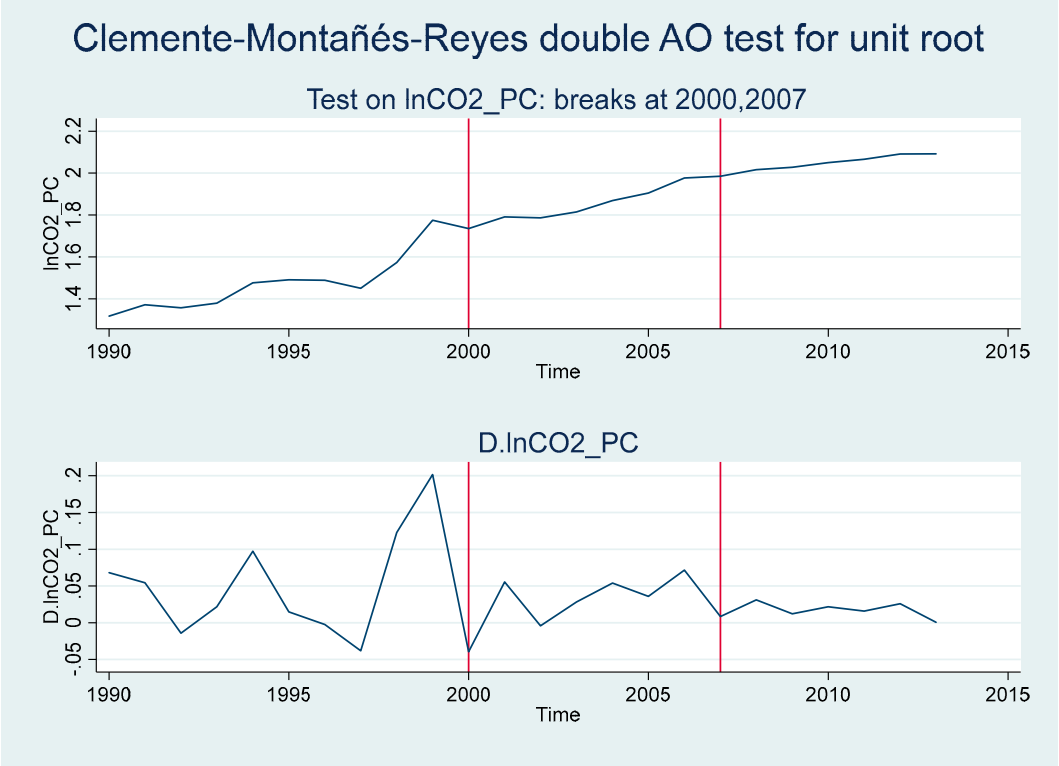
ID=18=Ghana



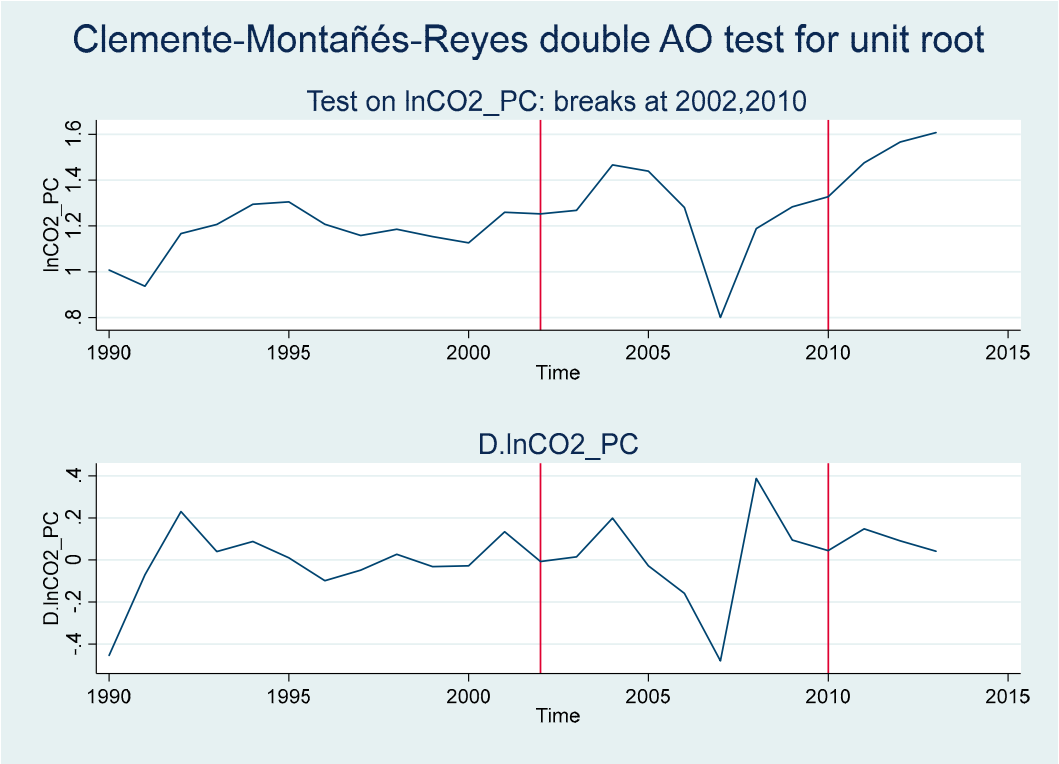
ID=19=Indonesia



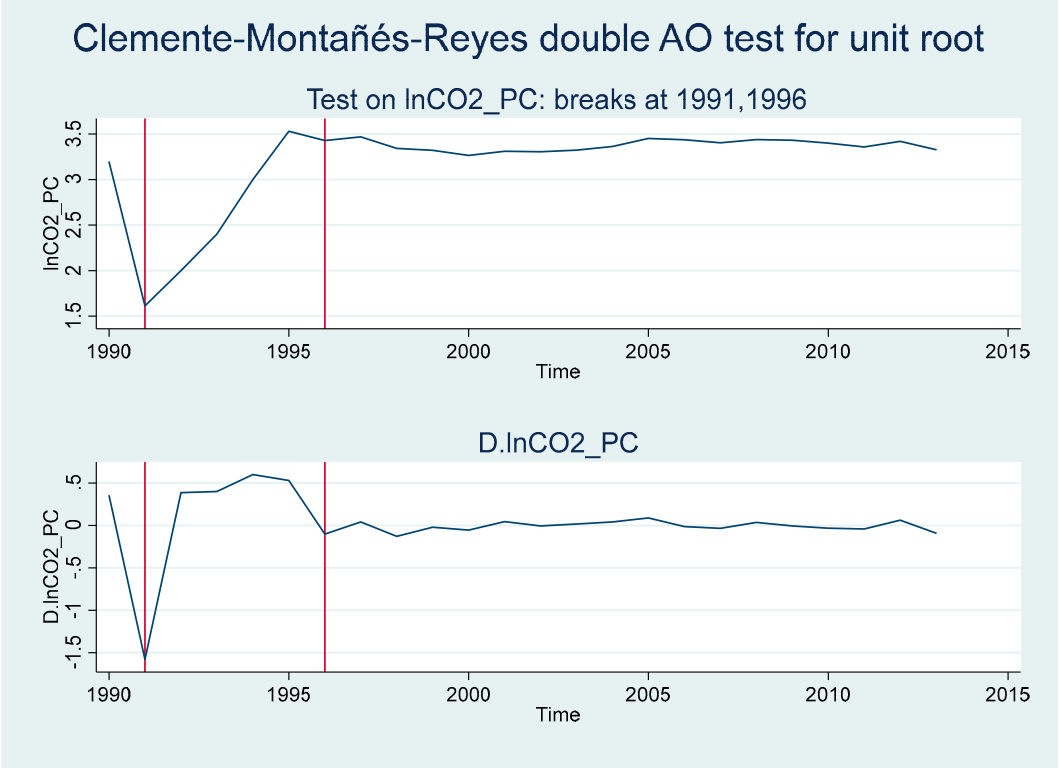
ID=20=Iran



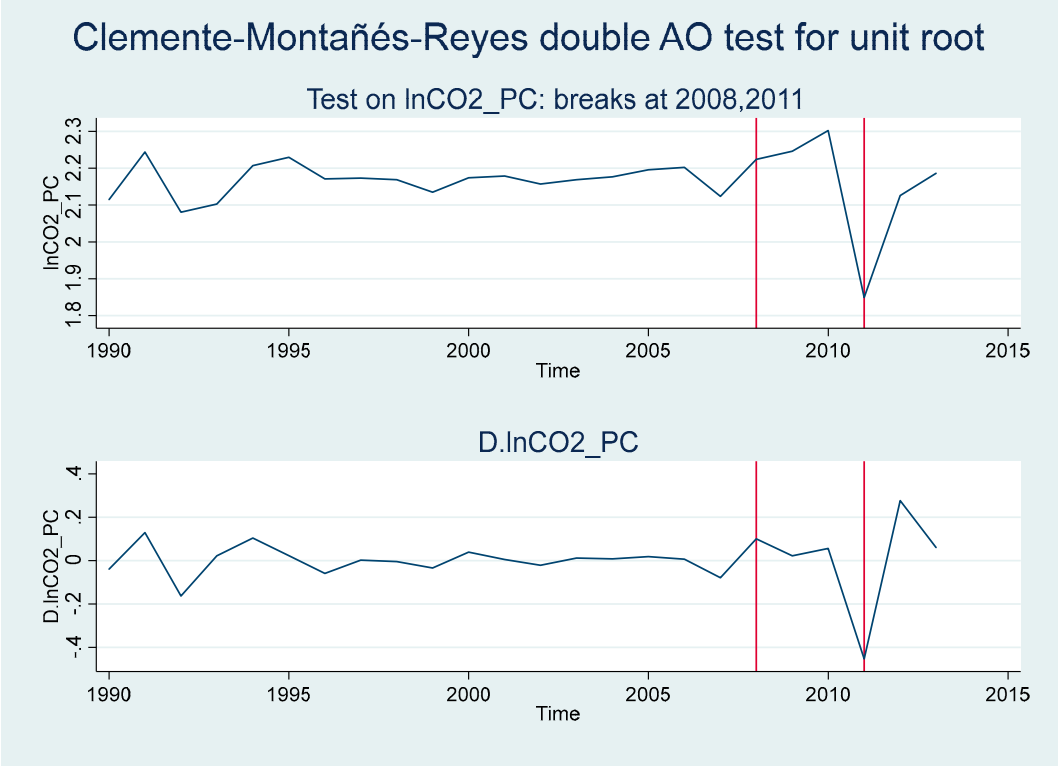
ID=21=Iraq



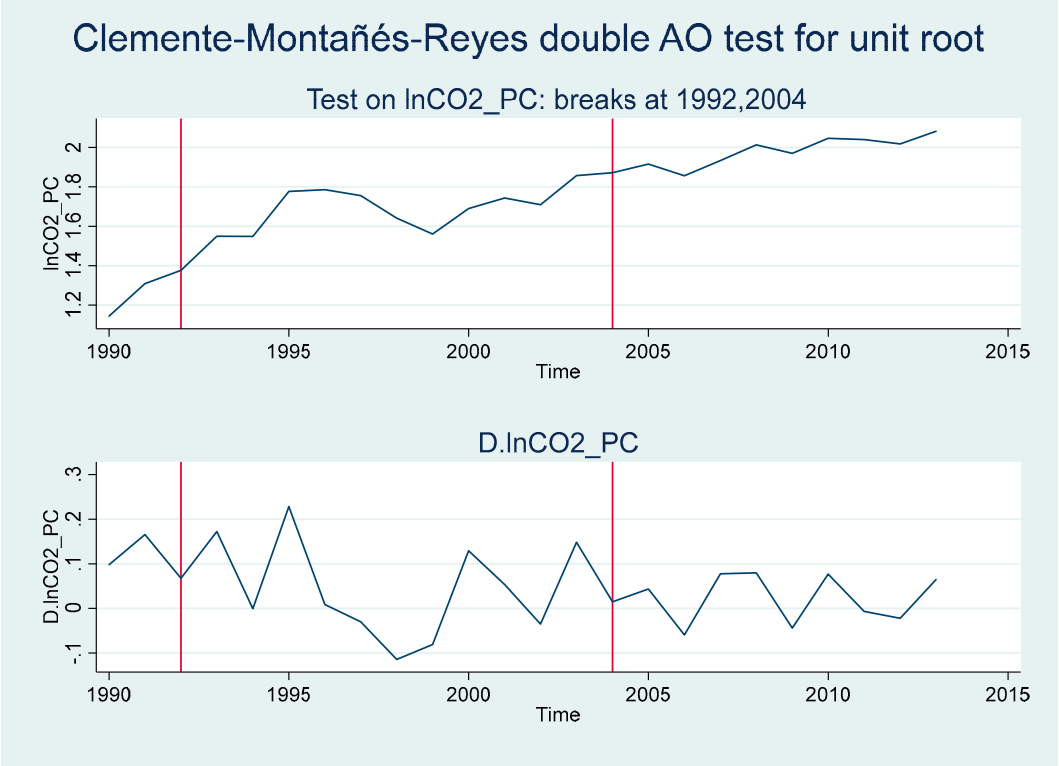
ID=22=Kuwait



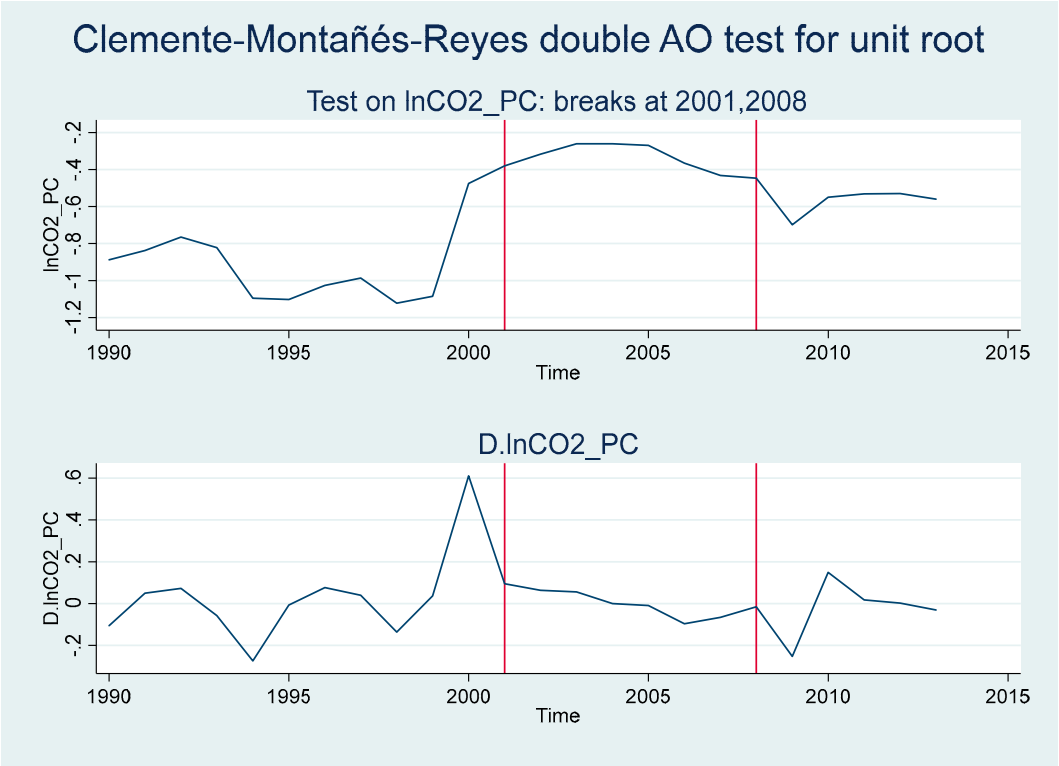
ID=23=Libya



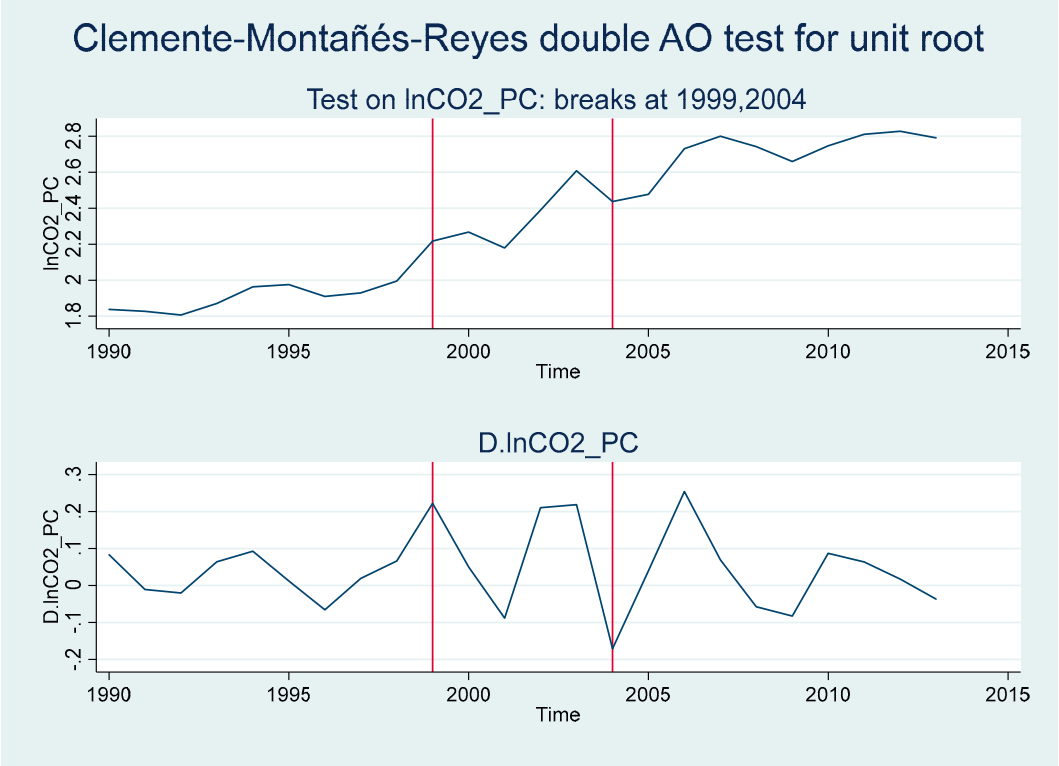
ID=24=Malaysia



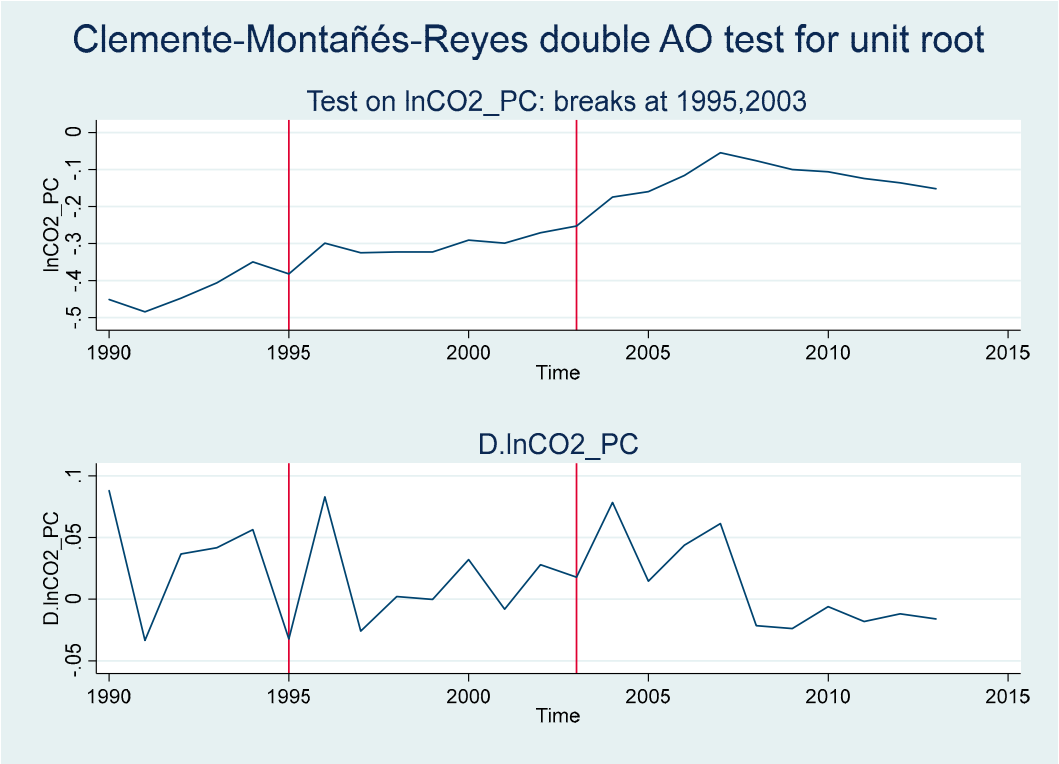
ID=25=Nigeria



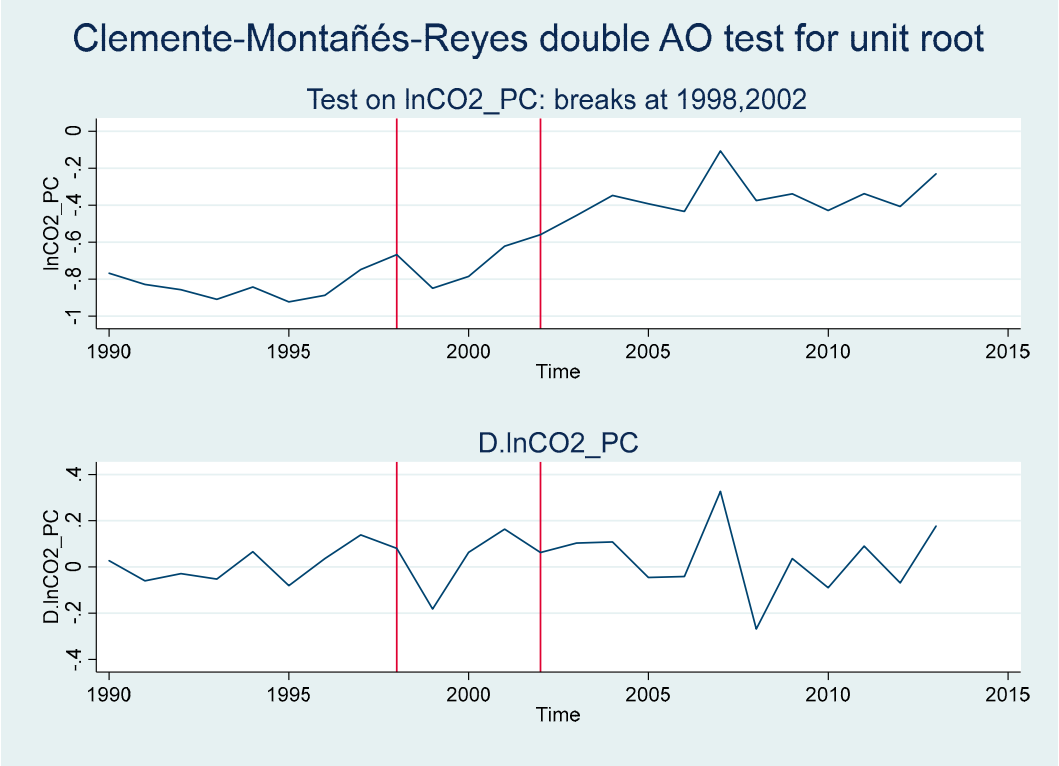
ID=26=Oman



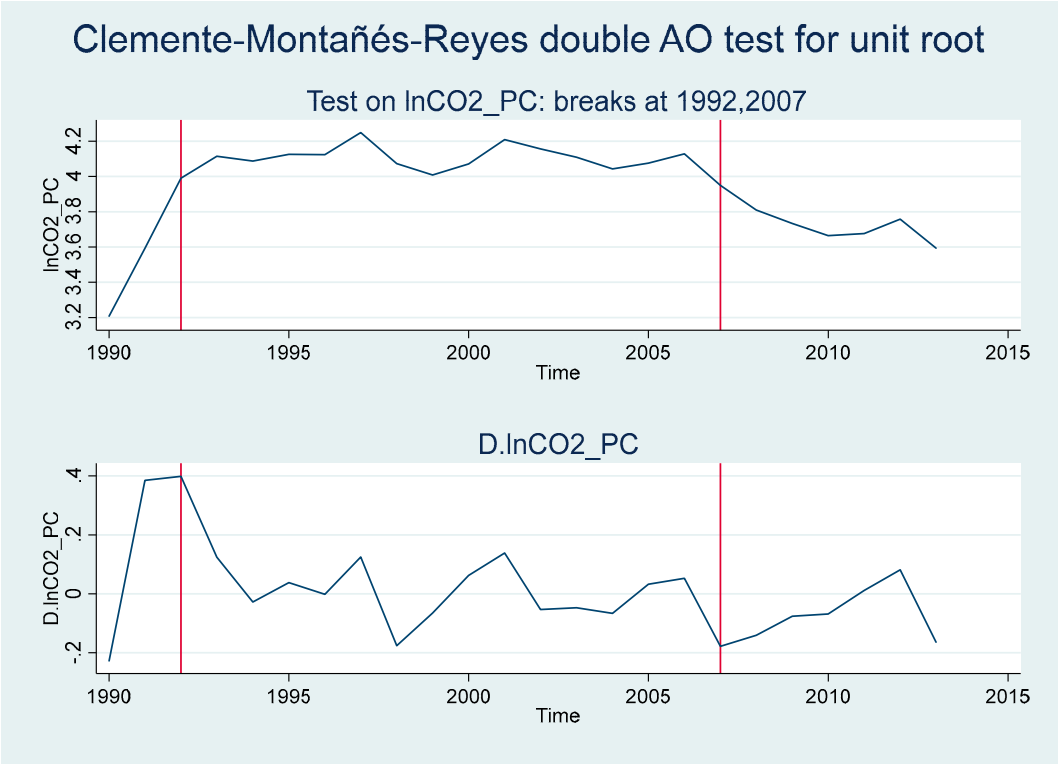
ID=27=Pakistan



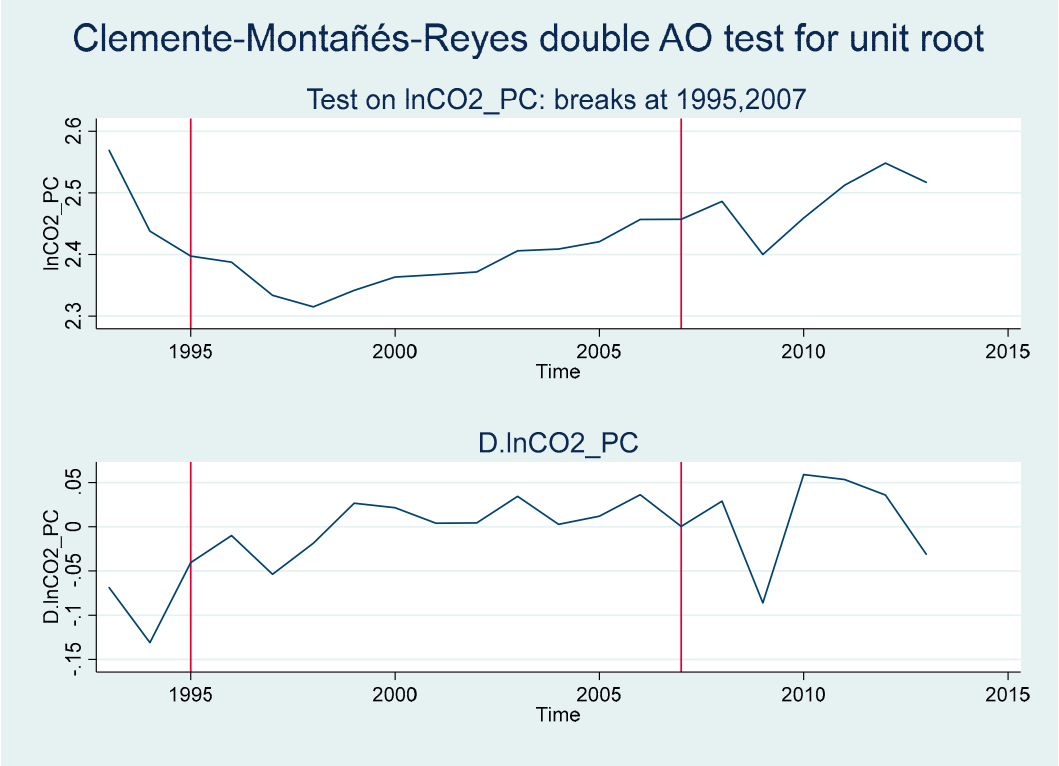
ID=28= Papua New Guinea



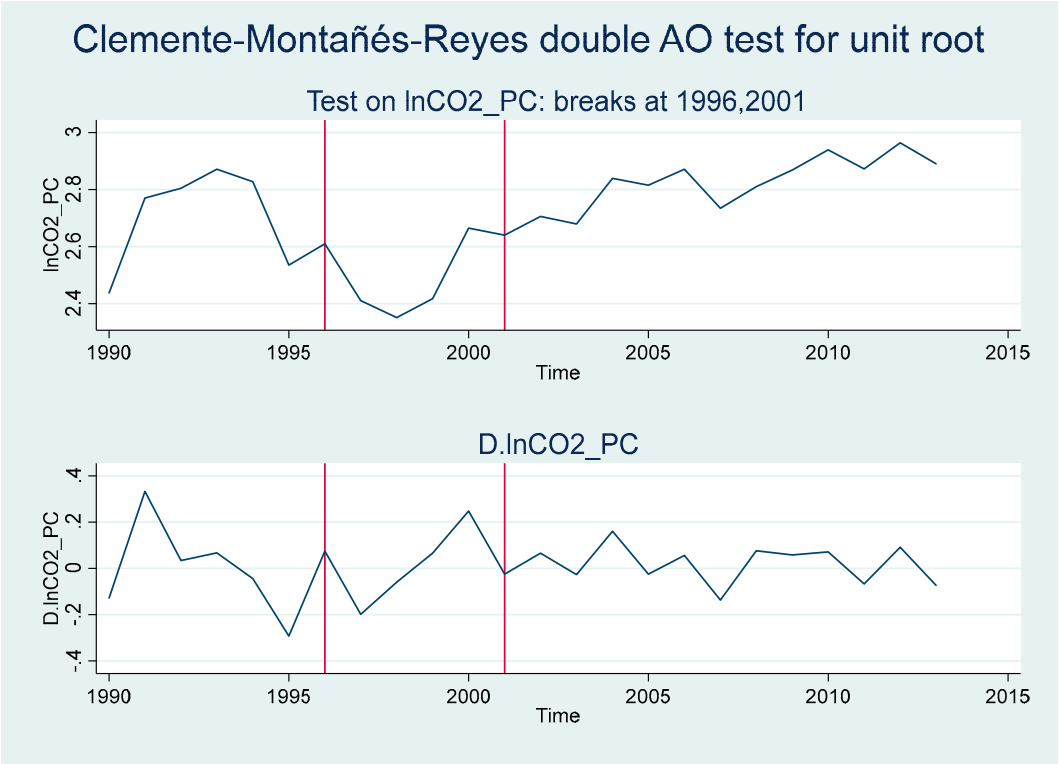
ID=29=Qatar



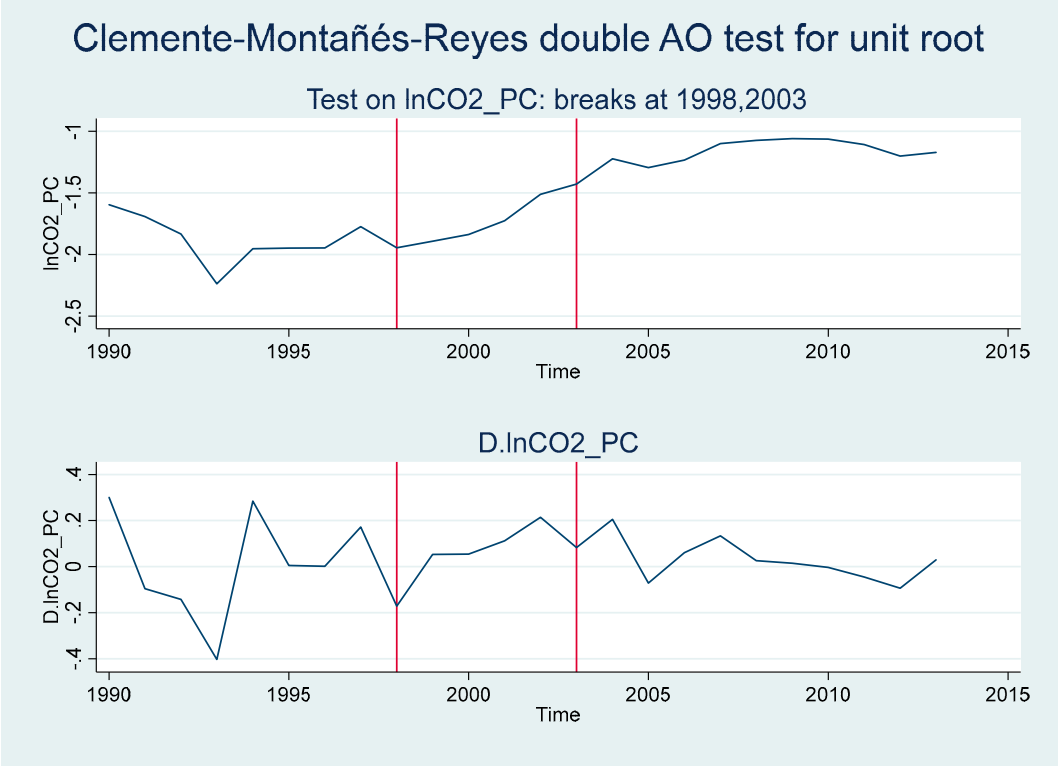
ID=30=Russia



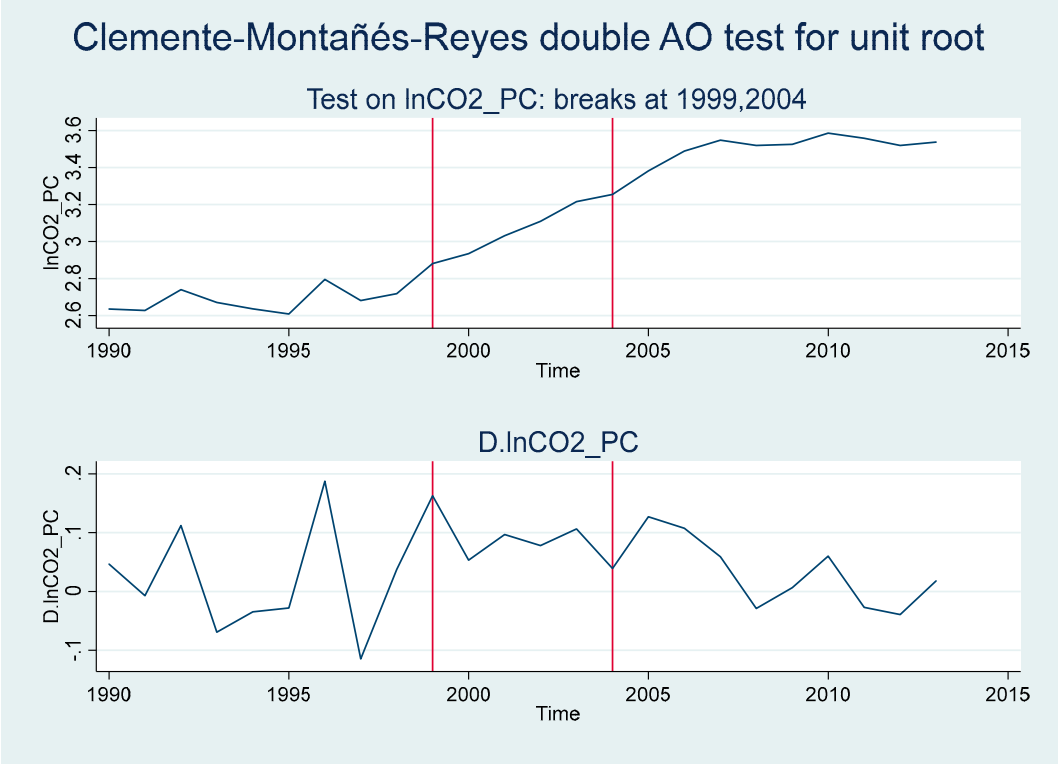
ID=31=Saudi Arabia



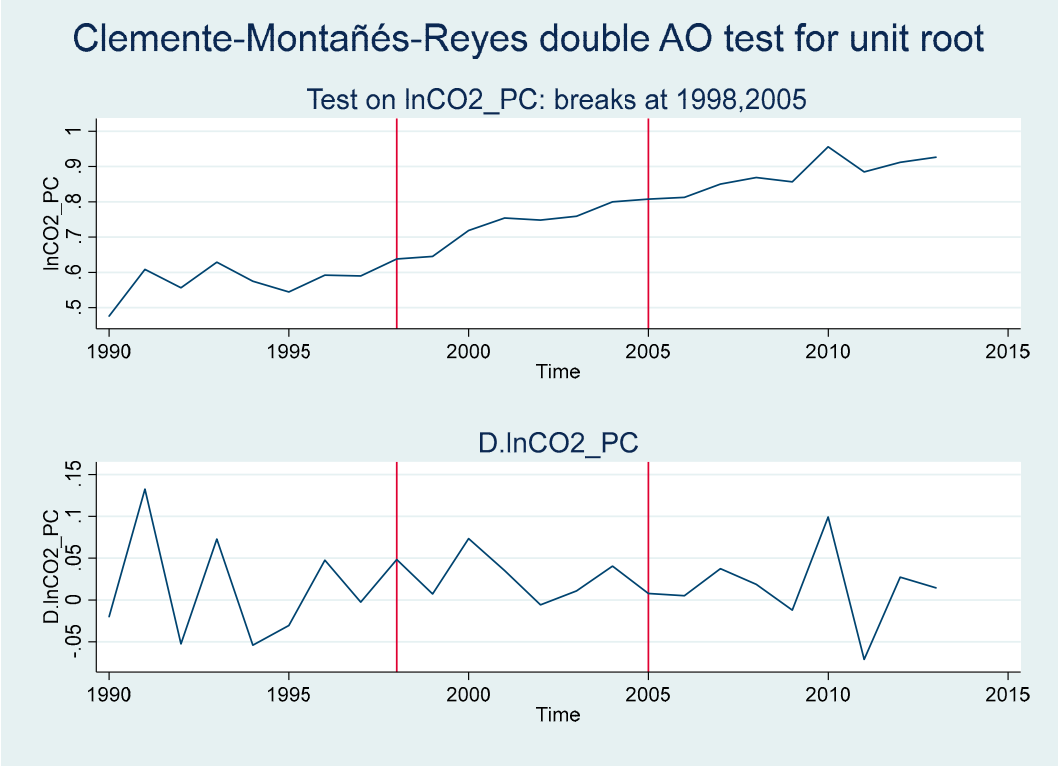
ID=32=Sudan



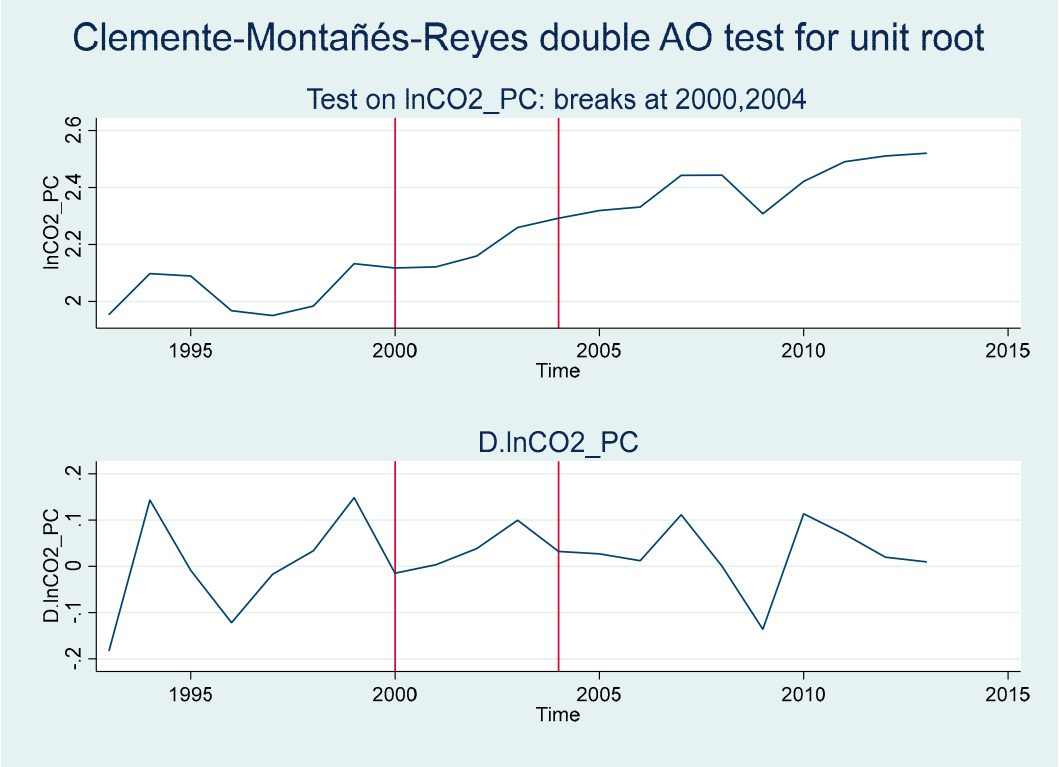
ID=33=Trinidad and Tonago



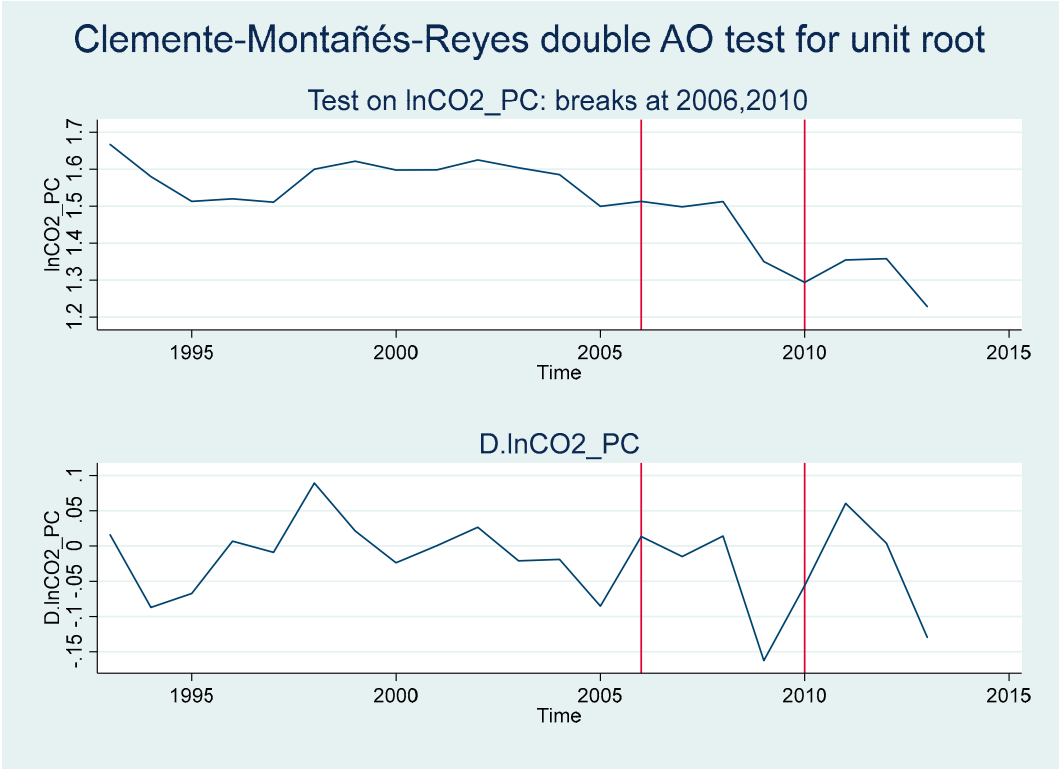
ID=34=Tunisia



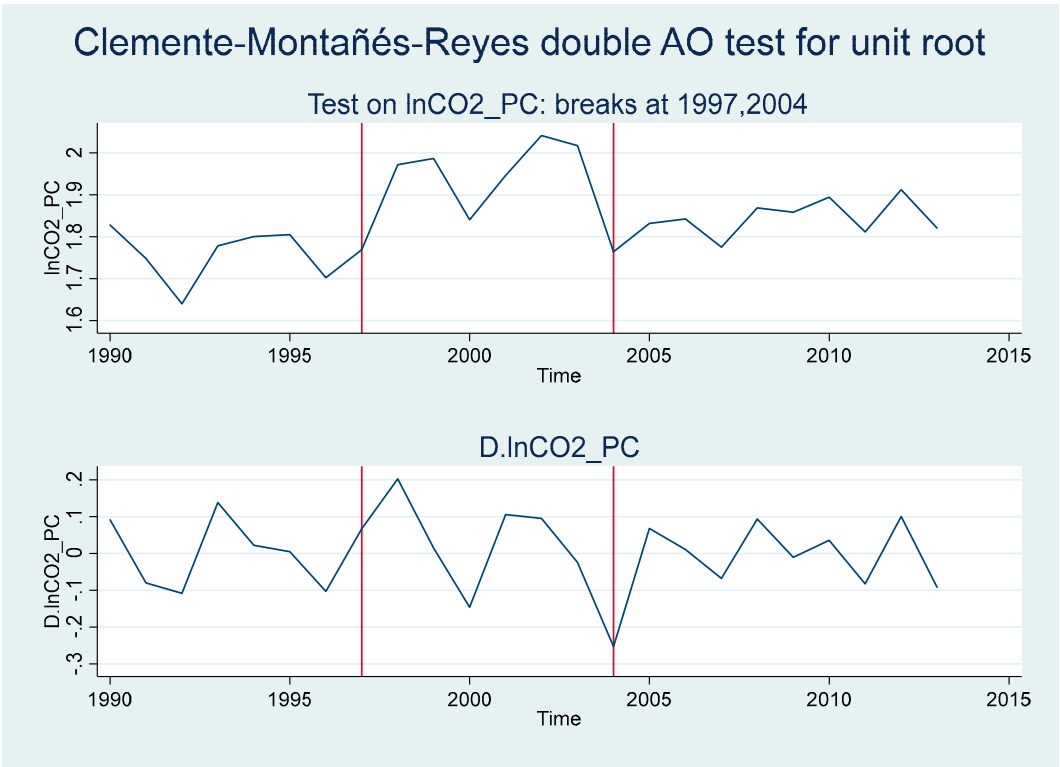
ID=35=Turkmenistan



ID=36=Uzbekistan



ID=37=Venezuela



UNIT ROOT TESTS

```
Fisher-type unit-root test for ln_PCI
Based on augmented Dickey-Fuller tests
---------------------------------------
Ho: All panels contain unit roots           Number of panels       =     37
Ha: At least one panel is stationary        Avg. number of periods =  27.51

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Not included                  Cross-sectional means removed
Drift term:   Included                      ADF regressions: 1 lag
------------------------------------------------------------------------------
                                  Statistic      p-value
------------------------------------------------------------------------------
 Inverse chi-squared(72)   P       230.7357       0.0000
 Inverse normal            Z        -9.4022       0.0000
 Inverse logit t(184)      L*      -10.1353       0.0000
 Modified inv. chi-squared Pm       13.2280       0.0000
------------------------------------------------------------------------------
 P statistic requires number of panels to be finite.
 Other statistics are suitable for finite or infinite number of panels.
------------------------------------------------------------------------------

. xtunitroot fisher lnCO2_PC , dfuller drift demean lags(1)

Fisher-type unit-root test for lnCO2_PC
Based on augmented Dickey-Fuller tests
---------------------------------------
Ho: All panels contain unit roots           Number of panels       =     37
Ha: At least one panel is stationary        Avg. number of periods =  25.59

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Not included                  Cross-sectional means removed
Drift term:   Included                      ADF regressions: 1 lag
------------------------------------------------------------------------------
                                  Statistic      p-value
------------------------------------------------------------------------------
 Inverse chi-squared(74)   P       274.9648       0.0000
 Inverse normal            Z       -11.3715       0.0000
 Inverse logit t(189)      L*      -12.2506       0.0000
 Modified inv. chi-squared Pm       16.5192       0.0000
------------------------------------------------------------------------------
 P statistic requires number of panels to be finite.
 Other statistics are suitable for finite or infinite number of panels.
------------------------------------------------------------------------------

. xtunitroot fisher lnMVA , dfuller drift demean lags(1)

Fisher-type unit-root test for lnMVA
Based on augmented Dickey-Fuller tests
---------------------------------------
Ho: All panels contain unit roots           Number of panels       =     33
Ha: At least one panel is stationary        Avg. number of periods =  22.30

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Not included                  Cross-sectional means removed
Drift term:   Included                      ADF regressions: 1 lag
------------------------------------------------------------------------------
                                  Statistic      p-value
------------------------------------------------------------------------------
 Inverse chi-squared(66)   P       181.6436       0.0000
 Inverse normal            Z        -7.9936       0.0000
 Inverse logit t(169)      L*       -8.1860       0.0000
 Modified inv. chi-squared Pm       10.0655       0.0000
------------------------------------------------------------------------------
 P statistic requires number of panels to be finite.
 Other statistics are suitable for finite or infinite number of panels.
------------------------------------------------------------------------------
```

```
. xtunitroot fisher lnTVA , dfuller drift demean lags(1)
could not compute test for panel 32

Fisher-type unit-root test for lnTVA
Based on augmented Dickey-Fuller tests
```

Ho: All panels contain unit roots — Number of panels = 34
Ha: At least one panel is stationary — Avg. number of periods = 23.24

AR parameter: Panel-specific — Asymptotics: T -> Infinity
Panel means: Included
Time trend: Not included — Cross-sectional means removed
Drift term: Included — ADF regressions: 1 lag

		Statistic	p-value
Inverse chi-squared(66)	P	155.0986	0.0000
Inverse normal	Z	-6.9903	0.0000
Inverse logit t(169)	L*	-6.9170	0.0000
Modified inv. chi-squared	Pm	7.7550	0.0000

P statistic requires number of panels to be finite.
Other statistics are suitable for finite or infinite number of panels.

```
. xtunitroot fisher ln_PCI2 , dfuller drift demean lags(1)
could not compute test for panel 14

Fisher-type unit-root test for ln_PCI2
Based on augmented Dickey-Fuller tests
```

Ho: All panels contain unit roots — Number of panels = 37
Ha: At least one panel is stationary — Avg. number of periods = 27.51

AR parameter: Panel-specific — Asymptotics: T -> Infinity
Panel means: Included
Time trend: Not included — Cross-sectional means removed
Drift term: Included — ADF regressions: 1 lag

		Statistic	p-value
Inverse chi-squared(72)	P	230.7357	0.0000
Inverse normal	Z	-9.4022	0.0000
Inverse logit t(184)	L*	-10.1353	0.0000
Modified inv. chi-squared	Pm	13.2280	0.0000

P statistic requires number of panels to be finite.
Other statistics are suitable for finite or infinite number of panels.

```
. xtunitroot fisher ln_Power_fossils , dfuller drift demean lags(1)

Fisher-type unit-root test for ln_Power_fossils
Based on augmented Dickey-Fuller tests
-------------------------------------------------
Ho: All panels contain unit roots           Number of panels       =     32
Ha: At least one panel is stationary        Avg. number of periods =  26.41

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Not included                  Cross-sectional means removed
Drift term:   Included                      ADF regressions: 1 lag
------------------------------------------------------------------------------
                                  Statistic      p-value
------------------------------------------------------------------------------
 Inverse chi-squared(64)   P       187.9303       0.0000
 Inverse normal            Z        -8.5332       0.0000
 Inverse logit t(164)      L*       -8.7981       0.0000
 Modified inv. chi-squared Pm       10.9540       0.0000
------------------------------------------------------------------------------
 P statistic requires number of panels to be finite.
 Other statistics are suitable for finite or infinite number of panels.
------------------------------------------------------------------------------

. xtunitroot fisher lnOil_Sh , dfuller drift demean lags(1)

Fisher-type unit-root test for lnOil_Sh
Based on augmented Dickey-Fuller tests
-------------------------------------------
Ho: All panels contain unit roots           Number of panels       =     35
Ha: At least one panel is stationary        Avg. number of periods =  27.57

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Not included                  Cross-sectional means removed
Drift term:   Included                      ADF regressions: 1 lag
------------------------------------------------------------------------------
                                  Statistic      p-value
------------------------------------------------------------------------------
 Inverse chi-squared(70)   P       276.0013       0.0000
 Inverse normal            Z       -11.3804       0.0000
 Inverse logit t(179)      L*      -12.6740       0.0000
 Modified inv. chi-squared Pm       17.4103       0.0000
------------------------------------------------------------------------------
 P statistic requires number of panels to be finite.
 Other statistics are suitable for finite or infinite number of panels.
------------------------------------------------------------------------------

. xtunitroot fisher lnOil2 , dfuller drift demean lags(1)

Fisher-type unit-root test for lnOil2
Based on augmented Dickey-Fuller tests
-------------------------------------------
Ho: All panels contain unit roots           Number of panels       =     35
Ha: At least one panel is stationary        Avg. number of periods =  27.57

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Not included                  Cross-sectional means removed
Drift term:   Included                      ADF regressions: 1 lag
------------------------------------------------------------------------------
                                  Statistic      p-value
------------------------------------------------------------------------------
 Inverse chi-squared(70)   P       276.0013       0.0000
 Inverse normal            Z       -11.3804       0.0000
 Inverse logit t(179)      L*      -12.6740       0.0000
 Modified inv. chi-squared Pm       17.4103       0.0000
------------------------------------------------------------------------------
 P statistic requires number of panels to be finite.
 Other statistics are suitable for finite or infinite number of panels.
------------------------------------------------------------------------------
```

```
. xtunitroot fisher lnOil2 , dfuller drift demean lags(0)

Fisher-type unit-root test for lnOil2
Based on augmented Dickey-Fuller tests
--------------------------------------

Ho: All panels contain unit roots           Number of panels       =     35
Ha: At least one panel is stationary        Avg. number of periods =  27.57

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Not included                  Cross-sectional means removed
Drift term:   Included                      ADF regressions: 0 lags
------------------------------------------------------------------------------
                                  Statistic      p-value
------------------------------------------------------------------------------
 Inverse chi-squared(70)   P       319.7655       0.0000
 Inverse normal            Z       -12.0282       0.0000
 Inverse logit t(179)      L*      -14.5201       0.0000
 Modified inv. chi-squared Pm       21.1090       0.0000
------------------------------------------------------------------------------
 P statistic requires number of panels to be finite.
 Other statistics are suitable for finite or infinite number of panels.
------------------------------------------------------------------------------

. xtunitroot fisher Tertiary_SH , dfuller drift demean lags(0)

Fisher-type unit-root test for Tertiary_SH
Based on augmented Dickey-Fuller tests
--------------------------------------

Ho: All panels contain unit roots           Number of panels       =     36
Ha: At least one panel is stationary        Avg. number of periods =  24.89

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Not included                  Cross-sectional means removed
Drift term:   Included                      ADF regressions: 0 lags
------------------------------------------------------------------------------
                                  Statistic      p-value
------------------------------------------------------------------------------
 Inverse chi-squared(72)   P       251.1424       0.0000
 Inverse normal            Z       -10.6446       0.0000
 Inverse logit t(184)      L*      -11.3085       0.0000
 Modified inv. chi-squared Pm       14.9285       0.0000
------------------------------------------------------------------------------
 P statistic requires number of panels to be finite.
 Other statistics are suitable for finite or infinite number of panels.
------------------------------------------------------------------------------

. xtunitroot fisher Tertiary_SH , dfuller drift demean lags(1)

Fisher-type unit-root test for Tertiary_SH
Based on augmented Dickey-Fuller tests
--------------------------------------

Ho: All panels contain unit roots           Number of panels       =     36
Ha: At least one panel is stationary        Avg. number of periods =  24.89

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Not included                  Cross-sectional means removed
Drift term:   Included                      ADF regressions: 1 lag
------------------------------------------------------------------------------
                                  Statistic      p-value
------------------------------------------------------------------------------
 Inverse chi-squared(72)   P       250.2823       0.0000
 Inverse normal            Z       -10.7436       0.0000
 Inverse logit t(184)      L*      -11.3178       0.0000
 Modified inv. chi-squared Pm       14.8569       0.0000
------------------------------------------------------------------------------
 P statistic requires number of panels to be finite.
 Other statistics are suitable for finite or infinite number of panels.
------------------------------------------------------------------------------

. xtunitroot fisher Tertiary_SH , dfuller drift demean lags(2)

Fisher-type unit-root test for Tertiary_SH
Based on augmented Dickey-Fuller tests
--------------------------------------

Ho: All panels contain unit roots           Number of panels       =     36
Ha: At least one panel is stationary        Avg. number of periods =  24.89

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Not included                  Cross-sectional means removed
Drift term:   Included                      ADF regressions: 2 lags
------------------------------------------------------------------------------
```

```
. xtunitroot fisher Tertiary_SH , dfuller drift demean lags(2)

Fisher-type unit-root test for Tertiary_SH
Based on augmented Dickey-Fuller tests
------------------------------------------

Ho: All panels contain unit roots           Number of panels       =     36
Ha: At least one panel is stationary        Avg. number of periods =  24.89

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Not included                  Cross-sectional means removed
Drift term:   Included                      ADF regressions: 2 lags
------------------------------------------------------------------------------
                                  Statistic      p-value
------------------------------------------------------------------------------
 Inverse chi-squared(70)   P       221.7354       0.0000
 Inverse normal            Z        -9.4771       0.0000
 Inverse logit t(179)      L*       -9.9982       0.0000
 Modified inv. chi-squared Pm       12.8240       0.0000
------------------------------------------------------------------------------
 P statistic requires number of panels to be finite.
 Other statistics are suitable for finite or infinite number of panels.
------------------------------------------------------------------------------

. xtunitroot fisher Tertiary_SH , dfuller drift demean lags(3)

Fisher-type unit-root test for Tertiary_SH
Based on augmented Dickey-Fuller tests
------------------------------------------

Ho: All panels contain unit roots           Number of panels       =     36
Ha: At least one panel is stationary        Avg. number of periods =  24.89

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Not included                  Cross-sectional means removed
Drift term:   Included                      ADF regressions: 3 lags
------------------------------------------------------------------------------
                                  Statistic      p-value
------------------------------------------------------------------------------
 Inverse chi-squared(66)   P       248.5776       0.0000
 Inverse normal            Z       -10.5236       0.0000
 Inverse logit t(169)      L*      -11.6362       0.0000
 Modified inv. chi-squared Pm       15.8913       0.0000
------------------------------------------------------------------------------
 P statistic requires number of panels to be finite.
 Other statistics are suitable for finite or infinite number of panels.
------------------------------------------------------------------------------

. xtunitroot fisher Tertiary_SH , dfuller drift demean lags(4)
could not compute test for panel 14

Fisher-type unit-root test for Tertiary_SH
Based on augmented Dickey-Fuller tests
------------------------------------------

Ho: All panels contain unit roots           Number of panels       =     36
Ha: At least one panel is stationary        Avg. number of periods =  24.89

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Not included                  Cross-sectional means removed
Drift term:   Included                      ADF regressions: 4 lags
------------------------------------------------------------------------------
                                  Statistic      p-value
------------------------------------------------------------------------------
 Inverse chi-squared(64)   P       202.2672       0.0000
 Inverse normal            Z        -9.0300       0.0000
 Inverse logit t(164)      L*       -9.4862       0.0000
 Modified inv. chi-squared Pm       12.2212       0.0000
------------------------------------------------------------------------------
 P statistic requires number of panels to be finite.
 Other statistics are suitable for finite or infinite number of panels.
------------------------------------------------------------------------------

. xtunitroot fisher ln_PCI, dfuller trend lags(1)
```

```
. xtunitroot fisher ln_PCI, dfuller trend lags(1)
(129 missing values generated)
could not compute test for panel 14

Fisher-type unit-root test for ln_PCI
Based on augmented Dickey-Fuller tests
---------------------------------------

Ho: All panels contain unit roots           Number of panels       =     37
Ha: At least one panel is stationary        Avg. number of periods =  27.51

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Included
Drift term:   Not included                  ADF regressions: 1 lag
```

		Statistic	p-value
Inverse chi-squared(72)	P	163.6694	0.0000
Inverse normal	Z	-1.9384	0.0263
Inverse logit t(184)	L*	-3.6691	0.0002
Modified inv. chi-squared	Pm	7.6391	0.0000

P statistic requires number of panels to be finite.
Other statistics are suitable for finite or infinite number of panels.

```
. xtunitroot fisher lnCO2_PC , dfuller trend lags(1)
(200 missing values generated)

Fisher-type unit-root test for lnCO2_PC
Based on augmented Dickey-Fuller tests
---------------------------------------

Ho: All panels contain unit roots           Number of panels       =     37
Ha: At least one panel is stationary        Avg. number of periods =  25.59

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Included
Drift term:   Not included                  ADF regressions: 1 lag
```

		Statistic	p-value
Inverse chi-squared(74)	P	153.2999	0.0000
Inverse normal	Z	-2.5360	0.0056
Inverse logit t(184)	L*	-3.4090	0.0004
Modified inv. chi-squared	Pm	6.5184	0.0000

P statistic requires number of panels to be finite.
Other statistics are suitable for finite or infinite number of panels.

```
. xtunitroot fisher lnMVA , dfuller trend lags(1)
(411 missing values generated)

Fisher-type unit-root test for lnMVA
Based on augmented Dickey-Fuller tests
```

Ho: All panels contain unit roots		Number of panels	= 33
Ha: At least one panel is stationary		Avg. number of periods	= 22.30
AR parameter: Panel-specific		Asymptotics: T -> Infinity	
Panel means: Included			
Time trend: Included			
Drift term: Not included		ADF regressions: 1 lag	

		Statistic	p-value
Inverse chi-squared(66)	P	156.7716	0.0000
Inverse normal	Z	-2.9703	0.0015
Inverse logit t(164)	L*	-4.8288	0.0000
Modified inv. chi-squared	Pm	7.9007	0.0000

P statistic requires number of panels to be finite.
Other statistics are suitable for finite or infinite number of panels.

```
. xtunitroot fisher lnTVA , dfuller trend lags(1)
(357 missing values generated)
could not compute test for panel 32

Fisher-type unit-root test for lnTVA
Based on augmented Dickey-Fuller tests
```

Ho: All panels contain unit roots		Number of panels	= 34
Ha: At least one panel is stationary		Avg. number of periods	= 23.24
AR parameter: Panel-specific		Asymptotics: T -> Infinity	
Panel means: Included			
Time trend: Included			
Drift term: Not included		ADF regressions: 1 lag	

		Statistic	p-value
Inverse chi-squared(66)	P	67.3797	0.4297
Inverse normal	Z	0.8475	0.8016
Inverse logit t(169)	L*	0.7663	0.7777
Modified inv. chi-squared	Pm	0.1201	0.4522

P statistic requires number of panels to be finite.
Other statistics are suitable for finite or infinite number of panels.

```
. xtunitroot fisher d.lnTVA , dfuller trend lags(1)
(391 missing values generated)

Fisher-type unit-root test for D.lnTVA
Based on augmented Dickey-Fuller tests
-------------------------------------------

Ho: All panels contain unit roots           Number of panels       =     33
Ha: At least one panel is stationary        Avg. number of periods =  22.91

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Included
Drift term:   Not included                  ADF regressions: 1 lag
```

		Statistic	p-value
Inverse chi-squared(66)	P	122.8421	0.0000
Inverse normal	Z	-4.0080	0.0000
Inverse logit t(169)	L*	-4.1743	0.0000
Modified inv. chi-squared	Pm	4.9475	0.0000

P statistic requires number of panels to be finite.
Other statistics are suitable for finite or infinite number of panels.

```
. xtunitroot fisher Tertiary_SH , dfuller trend lags(1)
(251 missing values generated)

Fisher-type unit-root test for Tertiary_SH
Based on augmented Dickey-Fuller tests
-------------------------------------------

Ho: All panels contain unit roots           Number of panels       =     36
Ha: At least one panel is stationary        Avg. number of periods =  24.89

AR parameter: Panel-specific                Asymptotics: T -> Infinity
Panel means:  Included
Time trend:   Included
Drift term:   Not included                  ADF regressions: 1 lag
```

		Statistic	p-value
Inverse chi-squared(72)	P	61.6897	0.8017
Inverse normal	Z	0.2822	0.6111
Inverse logit t(179)	L*	0.1342	0.5533
Modified inv. chi-squared	Pm	-0.8592	0.8049

P statistic requires number of panels to be finite.
Other statistics are suitable for finite or infinite number of panels.

```
. xtunitroot fisher d.Tertiary_SH , dfuller trend lags(1)
(287 missing values generated)
```

Fisher-type unit-root test for D.Tertiary_SH
Based on augmented Dickey-Fuller tests

Ho: All panels contain unit roots		Number of panels	= 36
Ha: At least one panel is stationary		Avg. number of periods	= 23.89
AR parameter: Panel-specific		Asymptotics: T -> Infinity	
Panel means: Included			
Time trend: Included			
Drift term: Not included		ADF regressions: 1 lag	

		Statistic	p-value
Inverse chi-squared(72)	P	319.9763	0.0000
Inverse normal	Z	-11.4625	0.0000
Inverse logit t(179)	L*	-13.9495	0.0000
Modified inv. chi-squared	Pm	20.6647	0.0000

P statistic requires number of panels to be finite.
Other statistics are suitable for finite or infinite number of panels.

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