
```

name: <unnamed>
log: /Users/nicolaszhang/Downloads/Stata Rec 6/CointegrationTests.smcl
log type: smcl
opened on: 10 Nov 2020, 18:33:39

```

```

1 . clear

2 .
3 . import excel "/Users/nicolaszhang/Downloads/InflationvReservesForStatawGDP
> .xlsx", sheet("InflationvReservesForStata") firstrow
(13 vars, 479 obs)

4 . gen monthly_date = mofd(date )
(2 missing values generated)

5 .
6 .
7 . format monthly_date %tm

8 .
9 . tset monthly_date
time variable: monthly_date, 1980m9 to 2020m5
delta: 1 month

10 .
11 . vecrank InflationMOMLessFoodEnergy ChangesInEffectiveFedFundRates ChinaRe
> serveChangeInPercent MonthOnMUSgdpChange ChangeInInflationExpectationMIC
> if inrange(monthly_date, tm(2012m1),tm(2015m12)), lags(3) max levela

```

Johansen tests for cointegration

```

>
Trend: constant Number of obs = 4
> 8
Sample: 2012m1 - 2015m12 Lags =
> 3

```

```

> -
maximum trace 5% critical 1% critica
> 1

```

rank	parms	LL	eigenvalue	statistic	value	value
0	55	-118.54011		124.4416	68.52	76.07
1	64	-93.881269	0.64208	75.1240	47.21	54.46
2	71	-70.673226	0.61978	28.7079*1*5	29.68	35.65
3	76	-59.842807	0.36318	7.0470	15.41	20.04
4	79	-56.350387	0.13543	0.0622	3.76	6.65
5	80	-56.319291	0.00129			

```

> -

```

```

maximum                                max      5% critical  1% critica
> 1
  rank   parms      LL      eigenvalue  statistic      value      value
    0     55   -118.54011      0.64208    49.3177    33.46    38.77
    1     64   -93.881269      0.61978    46.4161    27.07    32.24
    2     71   -70.673226      0.36318    21.6608    20.97    25.52
    3     76   -59.842807      0.13543      6.9848    14.07    18.63
    4     79   -56.350387      0.00129      0.0622     3.76     6.65
    5     80   -56.319291      0.00129      0.0622     3.76     6.65

```

> -

```

12 .
13 . vecrank InflationMOMLessFoodEnergy      ChinaReserveChangeInPercent      if inra
> nge(monthly_date, tm(2012m1),tm(2015m12)), lags(3) max ic levela

```

Johansen tests for cointegration

```

>
Trend: constant                                Number of obs =      4
> 8
Sample: 2012m1 - 2015m12                                Lags =
> 3

```

```

> -
maximum                                trace      5% critical  1% critica
> 1
  rank   parms      LL      eigenvalue  statistic      value      value
    0     10   -139.93725      0.54492    39.6004    15.41    20.04
    1     13   -121.04264      0.03703      1.8112*1*5     3.76     6.65
    2     14   -120.13702      0.03703      1.8112*1*5     3.76     6.65

```

```

> -
maximum                                max      5% critical  1% critica
> 1
  rank   parms      LL      eigenvalue  statistic      value      value
    0     10   -139.93725      0.54492    37.7892    14.07    18.63
    1     13   -121.04264      0.03703      1.8112     3.76     6.65
    2     14   -120.13702      0.03703      1.8112     3.76     6.65

```

```

> -
maximum                                SBIC      HQIC      AIC
  rank   parms      LL      eigenvalue  statistic      value      value
    0     10   -139.93725      0.54492    6.637219    6.394704    6.247385
    1     13   -121.04264      0.03703    6.091894*  5.776624*  5.58511
    2     14   -120.13702      0.03703    6.13481    5.795289    5.589043

```

> -

