```
      ─────────────────────────────────────────────────────────────────────
         name:  <unnamed>
          log:  /Users/nicolaszhang/Downloads/Stata Rec 6/VARandGranger.smcl
     log type:  smcl
    opened on:  10 Nov 2020, 19:04:30

 1 . clear

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

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

 5 .  format monthly_date %tm

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

 7 .  constraint  1  [ChangeInInflationExpectationMIC]L.ChinaReserveChangeInPerce
   > nt  = 0

 8 .  constraint 2 [ChangeInInflationExpectationMIC]L2.ChinaReserveChangeInPercen
   > t  = 0

 9 . constraint 3 [ChangesInEffectiveFedFundRates]L.ChinaReserveChangeInPercent
   > = 0

10 . constraint 4 [ChangesInEffectiveFedFundRates]L2.ChinaReserveChangeInPercent
   >  = 0

11 .
12 .  constraint 5 [ChangeInInflationExpectationMIC]L.ChangeInInflationExpectatio
   > nMIC = 0
```

```
13 .
14 . constraint 6  [ChangeInInflationExpectationMIC]L2.ChangeInInflationExpectat
   > ionMIC = 0

15 .
16 . var InflationMOMLessFoodEnergy  ChangesInEffectiveFedFundRates  ChinaReserv
   > eChangeInPercent      ChangeInInflationExpectationMIC MonthOnMUSgdpChange
   >   if inrange(monthly_date, tm(2012m1), tm(2015m10)), lutstats  dfk constrain
   > ts(1 2 3 4 5 6 )
   Estimating VAR coefficients

   Iteration 1:    tolerance =    .3559116
   Iteration 2:    tolerance =    .2643746
   Iteration 3:    tolerance =    .1763705
   Iteration 4:    tolerance =     .104928
   Iteration 5:    tolerance =   .05714996
   Iteration 6:    tolerance =   .02642176
   Iteration 7:    tolerance =   .01257543
   Iteration 8:    tolerance =   .00606579
   Iteration 9:    tolerance =   .00294447
   Iteration 10:    tolerance =   .00143369
   Iteration 11:    tolerance =   .00069911
   Iteration 12:    tolerance =   .00034116
   Iteration 13:    tolerance =   .00016654
   Iteration 14:    tolerance =   .00008131
   Iteration 15:    tolerance =    .0000397
   Iteration 16:    tolerance =   .00001939
   Iteration 17:    tolerance =   9.467e-06
   Iteration 18:    tolerance =   4.623e-06
   Iteration 19:    tolerance =   2.258e-06
   Iteration 20:    tolerance =   1.102e-06
   Iteration 21:    tolerance =   5.383e-07


   Vector autoregression

   Sample:  2012m1 - 2015m10                    Number of obs    =          46
   Log likelihood =  -104.6684         (lutstats) AIC             =   -13.99806
   FPE         =    8.25e-07                   HQIC             =   -13.25347
   Det(Sigma_ml)  =    9.48e-08                   SBIC             =    -12.0104
```

Equation	Parms	RMSE	R-sq	chi2	P>chi2
InflationMOMLe~y	11	.619859	0.3155	20.08928	0.0284
ChangesInEffec~s	9	.01368	0.0268	6.661015	0.5736
ChinaReserveCh~t	11	1.1919	0.1629	11.07032	0.3521
ChangeInInflat~C	7	10.9681	0.1193	4.901716	0.5565
MonthOnMUSgdpC~e	11	.091425	0.9857	2493.401	0.0000

 (1) **[ChangeInInflationExpectationMIC]L.ChinaReserveChangeInPercent = 0**
 (2) **[ChangeInInflationExpectationMIC]L2.ChinaReserveChangeInPercent = 0**
 (3) **[ChangesInEffectiveFedFundRates]L.ChinaReserveChangeInPercent = 0**
 (4) **[ChangesInEffectiveFedFundRates]L2.ChinaReserveChangeInPercent = 0**
 (5) **[ChangeInInflationExpectationMIC]L.ChangeInInflationExpectationMIC = 0**
 (6) **[ChangeInInflationExpectationMIC]L2.ChangeInInflationExpectationMIC = 0**

```
───────────────────────┬───────────────────────────────────
> ────────────────────
                       │     Coef.   Std. Err.      z    P>│z│     [
> 95% Con
>      f. Interval]
                       │
───────────────────────┼───────────────────────────────────
> ────────────────────
```

InflationMOMLessFoodEnergy
    InflationMOMLessFoodEnergy

```
                   L1. │  -.3048048   .1489846   -2.05   0.041     -.
> 5968093
>        -.0128003

                   L2. │   -.347645   .1551513   -2.24   0.025     -
> .651736
>        -.043554
```

 ChangesInEffectiveFedFundRates

```
                   L1. │   .1136613    8.08407    0.01   0.989     -1
> 5.73082
>         15.95815

                   L2. │  -6.216003   8.098275   -0.77   0.443     -2
> 2.08833
>         9.656326
```

   ChinaReserveChangeInPercent

```
                   L1. │  -.2081972   .0833669   -2.50   0.013     -.
> 3715934
>        -.044801

                   L2. │   .1168357   .0824604    1.42   0.157     -.
> 0447836
>         .2784551
```

ChangeInInflationExpectationMIC

```
                   L1. │   .0206347   .0115756    1.78   0.075     -.
```

```
> 0020532
>              .0433225
                                  L2. |    .0221239    .0113768      1.94    0.052      -.
> 0001742
>              .044422
                                       |

          MonthOnMUSgdpChange          |
                                  L1. |    .4822235    .4433262      1.09    0.277      -.
> 3866799
>             1.351127
                                  L2. |   -.5404148    .4486203     -1.20    0.228      -1
> .419695
>              .3388649
                                       |

                                 _cons |     .052977    .1130423      0.47    0.639      -.
> 1685819
>              .2745358
                                       |
─────────────────────────────────────┼
> ─────────────────
ChangesInEffectiveFedFundRates         |
     InflationMOMLessFoodEnergy        |
                                  L1. |    .0008224    .0031465      0.26    0.794      -.
> 0053447
>              .0069895
                                  L2. |    .0004942    .0033299      0.15    0.882      -.
> 0060323
>              .0070207
                                       |

 ChangesInEffectiveFedFundRates        |
                                  L1. |   -.0627651      .17805     -0.35    0.724      -.
> 4117367
>              .2862066
                                  L2. |    .0958888    .1765756      0.54    0.587       -
> .250193
>              .4419706
                                       |

     ChinaReserveChangeInPercent       |
                                  L1. |    1.55e-19    2.06e-19      0.75    0.453      -2
> .49e-19
>             5.59e-19
                                  L2. |    3.80e-19    8.01e-19      0.47    0.635      -1
> .19e-18
>             1.95e-18
                                       |

ChangeInInflationExpectationMIC        |
                                  L1. |   -.0004158    .0002431     -1.71    0.087      -.
> 0008923
>              .0000608
                                  L2. |   -.0001468    .0002384     -0.62    0.538       -
```

```
> .000614
>            .0003204
                                            |

              MonthOnMUSgdpChange           |
                         L1. |   -.0030842    .0093823    -0.33   0.742     -.
> 0214732
>            .0153048
                         L2. |    .0075373    .0094365     0.80   0.424     -.
> 0109579
>            .0260324
                                            |

                        _cons |   -.0001138     .002402    -0.05   0.962     -.
> 0048217
>            .0045942
─────────────────────────────────────────────┼──────────────────────────────────
> ────────────────────
ChinaReserveChangeInPercent                 |
    InflationMOMLessFoodEnergy              |
                         L1. |    -.073071    .2866884    -0.25   0.799     -.
> 6349699
>            .4888279
                         L2. |   -.0430362    .2986024    -0.14   0.885     -.
> 6282861
>            .5422136
                                            |

 ChangesInEffectiveFedFundRates             |
                         L1. |   -8.384895    15.55185    -0.54   0.590     -3
> 8.86597
>            22.09618
                         L2. |   -11.79543    15.57906    -0.76   0.449     -4
> 2.32983
>            18.73896
                                            |

    ChinaReserveChangeInPercent             |
                         L1. |    .1383991    .1617112     0.86   0.392     -
> .178549
>            .4553471
                         L2. |    .1302325    .1599526     0.81   0.416     -.
> 1832689
>            .4437338
                                            |

ChangeInInflationExpectationMIC             |
                         L1. |    .0361736    .0224699     1.61   0.107     -.
> 0078666
>            .0802137
                         L2. |    .0091685    .0220838     0.42   0.678     -
> .034115
>            .0524519
                                            |
```

```
              MonthOnMUSgdpChange |
                              L1. |    .8076224    .8530604     0.95   0.344    -.
> 8643453
>            2.47959
                              L2. |   -.9273023    .8633383    -1.07   0.283    -2
> .619414
>           .7648096

                            _cons |    .2754132    .2175044     1.27   0.205    -.
> 1508876
>           .7017139
──────────────────────────────────┼────────────────────────────────────────────
> ──────────────
ChangeInInflationExpectationMIC   |
        InflationMOMLessFoodEnergy |
                              L1. |   -2.603339    2.522567    -1.03   0.302    -7
> .547479
>           2.340801
                              L2. |    4.278667    2.606719     1.64   0.101     -
> .830409
>           9.387742

    ChangesInEffectiveFedFundRates |
                              L1. |   -1.351787    139.4366    -0.01   0.992    -2
> 74.6425
>           271.9389
                              L2. |    119.4687    139.6209     0.86   0.392    -1
> 54.1833
>           393.1206

        ChinaReserveChangeInPercent |
                              L1. |   -1.80e-16    1.59e-16    -1.13   0.258    -4
> .91e-16
>           1.31e-16
                              L2. |   -1.89e-16    6.47e-17    -2.92   0.003    -3
> .16e-16
>          -6.22e-17

ChangeInInflationExpectationMIC   |
                              L1. |   -3.26e-19    1.15e-17    -0.03   0.977    -2
> .29e-17
>           2.23e-17
                              L2. |   -4.64e-17    2.31e-17    -2.01   0.044    -9
> .17e-17
>          -1.23e-18

              MonthOnMUSgdpChange |
                              L1. |    1.288145    7.519557     0.17   0.864    -1
> 3.44992
```

```
>         16.02621
                              L2. │  -1.678087   7.560085    -0.22   0.824      -1
> 6.49558
>         13.13941
                                  │
                            _cons │   .0650951    1.92537     0.03   0.973      -3
> .708561
>         3.838751
                                  │
─────────────────────────────────┼───────────────────────────────────────────────
> ──────────────────
MonthOnMUSgdpChange               │
      InflationMOMLessFoodEnergy  │
                              L1. │  -.0205863   .0220535    -0.93   0.351      -.
> 0638103
>         .0226378
                              L2. │  -.0282268     .02298    -1.23   0.219      -.
> 0732669
>         .0168132
                                  │
 ChangesInEffectiveFedFundRates   │
                              L1. │  -.5990161   1.194888    -0.50   0.616      -2
> .940954
>         1.742922
                              L2. │  -.6893044    1.19703    -0.58   0.565      -3
> .035441
>         1.656832
                                  │
    ChinaReserveChangeInPercent   │
                              L1. │  -.0077223   .0128115    -0.60   0.547      -.
> 0328324
>         .0173878
                              L2. │   -.002699   .0126722    -0.21   0.831      -.
> 0275361
>         .0221381
                                  │
ChangeInInflationExpectationMIC   │
                              L1. │  -.0001331   .0017789    -0.07   0.940      -.
> 0036197
>         .0033534
                              L2. │  -5.59e-06   .0017483    -0.00   0.997      -.
> 0034323
>         .0034211
                                  │
          MonthOnMUSgdpChange     │
                              L1. │   1.830256   .0656145    27.89   0.000       1
> .701654
>         1.958858
                              L2. │  -.9366964   .0664315   -14.10   0.000
> -1.0669
```

```
>              -.806493
                                    |
                           _cons |   .0185741   .0167254     1.11   0.267     -
> .014207
>              .0513552
_____
> ────────────────────
```

17 .

18 . varstable

Eigenvalue stability condition

Eigenvalue	Modulus
.9050803 + .3198781*i*	.959944
.9050803 - .3198781*i*	.959944
-.1334782 + .6706707*i*	.683824
-.1334782 - .6706707*i*	.683824
.4804679	.480468
-.3602866 + .1525869*i*	.391266
-.3602866 - .1525869*i*	.391266
.3207703 + .2153177*i*	.386336
.3207703 - .2153177*i*	.386336
-.343554	.343554

All the eigenvalues lie inside the unit circle.
VAR satisfies stability condition.

19 . varlmar

Lagrange-multiplier test

lag	chi2	df	Prob > chi2
1	-1.2e+02	25	1.00000
2	-1.6e+02	25	1.00000

H0: no autocorrelation at lag order

20 . vargranger

Granger causality Wald tests

Equation	Excluded	chi2	df	Prob > chi2
InflationMOMLes~y	ChangesInEffect~s	.59158	2	0.744
InflationMOMLes~y	ChinaReserveCha~t	7.0591	2	0.029
InflationMOMLes~y	ChangeInInflati~C	4.2433	2	0.120
InflationMOMLes~y	MonthOnMUSgdpCh~e	1.4887	2	0.475
InflationMOMLes~y	ALL	11.755	8	0.162
ChangesInEffect~s	InflationMOMLes~y	.07907	2	0.961
ChangesInEffect~s	ChinaReserveCha~t	.	0	.
ChangesInEffect~s	ChangeInInflati~C	3.3174	2	0.190
ChangesInEffect~s	MonthOnMUSgdpCh~e	2.4452	2	0.294
ChangesInEffect~s	ALL	5.9962	6	0.424
ChinaReserveCha~t	InflationMOMLes~y	.07288	2	0.964
ChinaReserveCha~t	ChangesInEffect~s	.82799	2	0.661
ChinaReserveCha~t	ChangeInInflati~C	3.29	2	0.193
ChinaReserveCha~t	MonthOnMUSgdpCh~e	1.2156	2	0.545
ChinaReserveCha~t	ALL	6.8631	8	0.551
ChangeInInflati~C	InflationMOMLes~y	4.5077	2	0.105
ChangeInInflati~C	ChangesInEffect~s	.73263	2	0.693
ChangeInInflati~C	ChinaReserveCha~t	.	0	.
ChangeInInflati~C	MonthOnMUSgdpCh~e	.06433	2	0.968
ChangeInInflati~C	ALL	4.9017	6	0.556
MonthOnMUSgdpCh~e	InflationMOMLes~y	1.959	2	0.375
MonthOnMUSgdpCh~e	ChangesInEffect~s	.55638	2	0.757
MonthOnMUSgdpCh~e	ChinaReserveCha~t	.48517	2	0.785
MonthOnMUSgdpCh~e	ChangeInInflati~C	.00921	2	0.995
MonthOnMUSgdpCh~e	ALL	2.4185	8	0.965

```
21 . predict e, resid
   (5 missing values generated)

22 . gen Le=e[_n-1]
   (5 missing values generated)

23 . regress e Le  if inrange(monthly_date, tm(2012m1), tm(2015m10))
```

Source	SS	df	MS		Number of obs	=	46
					F(1, 44)	=	0.51
Model	.20140761	1	.20140761		Prob > F	=	0.4801
Residual	17.4729356	44	.397112172		R-squared	=	0.0114
					Adj R-squared	=	-0.0111
Total	17.6743432	45	.392763182		Root MSE	=	.63017

e	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Le	-.1068222	.1499962	-0.71	0.480	-.4091197	.1954752
_cons	.0003958	.0929149	0.00	0.997	-.1868619	.1876535

```
24 .
25 . var InflationMOMLessFoodEnergy  ChangesInEffectiveFedFundRates  ChinaReserve
   > ChangeInPercent      ChangeInInflationExpectationMIC MonthOnMUSgdpChange
   >  if inrange(monthly_date, tm(2002m1), tm(2011m10)), lutstats  dfk constraint
   > s(1 2 3 4 5 6 )
   Estimating VAR coefficients

   Iteration 1:    tolerance =  .03577572
   Iteration 2:    tolerance =  .02185142
   Iteration 3:    tolerance =  .01491705
   Iteration 4:    tolerance =  .01026129
   Iteration 5:    tolerance =  .00709181
   Iteration 6:    tolerance =  .00491703
   Iteration 7:    tolerance =  .00341668
   Iteration 8:    tolerance =  .00237776
   Iteration 9:    tolerance =  .00165649
   Iteration 10:   tolerance =  .00115486
   Iteration 11:   tolerance =  .00080554
   Iteration 12:   tolerance =  .00056209
   Iteration 13:   tolerance =  .00039231
   Iteration 14:   tolerance =  .00027386
   Iteration 15:   tolerance =  .00019119
   Iteration 16:   tolerance =  .00013349
   Iteration 17:   tolerance =  .00009321
   Iteration 18:   tolerance =  .00006509
   Iteration 19:   tolerance =  .00004545
   Iteration 20:   tolerance =  .00003174
```

```
Iteration 21:    tolerance =  .00002216
Iteration 22:    tolerance =  .00001548
Iteration 23:    tolerance =  .00001081
Iteration 24:    tolerance =  7.548e-06
Iteration 25:    tolerance =  5.271e-06
Iteration 26:    tolerance =  3.681e-06
Iteration 27:    tolerance =  2.571e-06
Iteration 28:    tolerance =  1.795e-06
Iteration 29:    tolerance =  1.254e-06
Iteration 30:    tolerance =  8.755e-07
```

Vector autoregression

```
Sample:  2002m1 - 2011m10                    Number of obs     =        118
Log likelihood = -801.0257      (lutstats) AIC              =  -11.77322
FPE        =    7.59e-06                     HQIC             =  -11.29653
Det(Sigma_ml) =  3.30e-06                    SBIC             =   -10.5992
```

Equation	Parms	RMSE	R-sq	chi2	P>chi2
InflationMOMLe~y	11	1.05514	0.2390	46.87674	0.0000
ChangesInEffec~s	9	.125467	0.5015	109.0224	0.0000
ChinaReserveCh~t	11	1.47574	0.1188	15.46062	0.1161
ChangeInInflat~C	7	35.7753	0.0616	7.097471	0.3119
MonthOnMUSgdpC~e	11	.116328	0.9948	20697.71	0.0000

```
 ( 1)   [ChangeInInflationExpectationMIC]L.ChinaReserveChangeInPercent = 0
 ( 2)   [ChangeInInflationExpectationMIC]L2.ChinaReserveChangeInPercent = 0
 ( 3)   [ChangesInEffectiveFedFundRates]L.ChinaReserveChangeInPercent = 0
 ( 4)   [ChangesInEffectiveFedFundRates]L2.ChinaReserveChangeInPercent = 0
 ( 5)   [ChangeInInflationExpectationMIC]L.ChangeInInflationExpectationMIC = 0
 ( 6)   [ChangeInInflationExpectationMIC]L2.ChangeInInflationExpectationMIC = 0
```

```
───────────────────────────┬─────────────────
> ─────────────────
                           │    Coef.   Std. Err.      z     P>|z|      [
> 95% Con
>       f. Interval]
───────────────────────────┼─────────────────
> ─────────────────
InflationMOMLessFoodEnergy │
    InflationMOMLessFoodEnergy │
                        L1. │  -.5434028   .098069    -5.54   0.000    -.
> 7356145
>         -.351191
                        L2. │  -.1996055  .0990351    -2.02   0.044    -.
> 3937108
>         -.0055002
```

```
                                       |
ChangesInEffectiveFedFundRates         |
                             L1. |     .2650514    .8110495     0.33    0.744     -1
> .324576
>            1.854679
                             L2. |     .3591071     .789844     0.45    0.649     -1
> .188959
>            1.907173
                                       |
     ChinaReserveChangeInPercent       |
                             L1. |    -.0796074    .0644936    -1.23    0.217     -.
> 2060126
>            .0467978
                             L2. |    -.0174417    .0678429    -0.26    0.797     -.
> 1504114
>            .115528
                                       |
ChangeInInflationExpectationMIC        |
                             L1. |     .0052615    .0022161     2.37    0.018      .
> 0009181
>            .0096049
                             L2. |     .0053815    .0021581     2.49    0.013      .
> 0011517
>            .0096113
                                       |
          MonthOnMUSgdpChange          |
                             L1. |    -.0189692    .2731481    -0.07    0.945     -.
> 5543295
>            .5163912
                             L2. |     .0423564    .2713384     0.16    0.876      -
> .489457
>            .5741699
                                       |
                           _cons |     .2235787    .2181926     1.02    0.306     -.
> 2040709
>            .6512284
───────────────────────────────────────┼──────────────────────────────────────────
> ───────────────────────
ChangesInEffectiveFedFundRates         |
       InflationMOMLessFoodEnergy      |
                             L1. |     .0087701    .0115796     0.76    0.449     -.
> 0139255
>            .0314656
                             L2. |     .0099851    .0116593     0.86    0.392     -.
> 0128667
>            .0328369
                                       |
  ChangesInEffectiveFedFundRates       |
                             L1. |     .5483652    .0963841     5.69    0.000      .
```

```
> 3594558
>           .7372746
                              L2. |    .0547286    .0938443     0.58    0.560     -.
> 1292028
>            .23866
                                  |

     ChinaReserveChangeInPercent  |
                              L1. |   -2.43e-19    9.01e-19    -0.27    0.787     -2
> .01e-18
>           1.52e-18
                              L2. |    5.85e-20    5.23e-20     1.12    0.263     -4
> .39e-20
>           1.61e-19
                                  |

ChangeInInflationExpectationMIC   |
                              L1. |    -.000073    .0002725    -0.27    0.789      -
> .000607
>           .0004611
                              L2. |    .0001595    .0002669     0.60    0.550     -.
> 0003636
>           .0006826
                                  |

           MonthOnMUSgdpChange    |
                              L1. |    .0849279    .0324439     2.62    0.009      .
> 0213391
>           .1485167
                              L2. |   -.0705112    .0322145    -2.19    0.029     -.
> 1336504
>          -.0073719
                                  |

                            _cons |   -.0062324    .0122097    -0.51    0.610      -
> .030163
>           .0176983
──────────────────────────────────┼──────────────────────────────────────────────
> ─────────────────────
ChinaReserveChangeInPercent        |
     InflationMOMLessFoodEnergy    |
                              L1. |    .1045905    .1373657     0.76    0.446     -.
> 1646413
>           .3738223
                              L2. |    .1132313    .1389895     0.81    0.415     -.
> 1591831
>           .3856456
                                  |

 ChangesInEffectiveFedFundRates   |
                              L1. |    .3538817    1.134537     0.31    0.755     -1
> .869771
>           2.577534
                              L2. |   -1.083891    1.105105    -0.98    0.327     -3
```

```
>   .249857
>         1.082074
                                        |
      ChinaReserveChangeInPercent       |
                              L1.  |    .2132266    .0952464    2.24    0.025     .
> 0265471
>         .3999061
                              L2.  |    .0932434    .1001928    0.93    0.352    -.
> 1031309
>         .2896176
                                        |
ChangeInInflationExpectationMIC         |
                              L1.  |   -.0018004    .0032233   -0.56    0.576    -.
> 0081178
>         .0045171
                              L2.  |    .0011352    .0031384    0.36    0.718    -.
> 0050158
>         .0072863
                                        |
         MonthOnMUSgdpChange            |
                              L1.  |    .4704271    .3822608    1.23    0.218    -.
> 2787902
>         1.219644
                              L2.  |   -.3107745    .3797103   -0.82    0.413    -1
> .054993
>         .433444
                                        |
                            _cons  |    1.599828    .3185342    5.02    0.000     .
> 9755126
>         2.224144
────────────────────────────────────────┼──────────────────────────────────────────
> ────────────────────
ChangeInInflationExpectationMIC         |
      InflationMOMLessFoodEnergy        |
                              L1.  |    3.693253    3.274213    1.13    0.259    -2
> .724087
>         10.11059
                              L2.  |    -2.50027    3.229449   -0.77    0.439    -8
> .829873
>         3.829333
                                        |
  ChangesInEffectiveFedFundRates        |
                              L1.  |     3.69684    27.45166    0.13    0.893    -5
> 0.10742
>         57.5011
                              L2.  |    33.11859    26.66891    1.24    0.214    -1
> 9.15151
>         85.38868
                                        |
```

```
      ChinaReserveChangeInPercent |
                              L1. |    1.47e-17    3.89e-17     0.38    0.706       -6
>  .15e-17
>                      9.09e-17
                              L2. |   -3.01e-16    1.82e-16    -1.65    0.098       -6
>  .57e-16
>                      5.55e-17
                                  |
   ChangeInInflationExpectationMIC |
                              L1. |    1.50e-16    1.74e-17     8.58    0.000        1
>  .16e-16
>                      1.84e-16
                              L2. |    3.60e-17    8.61e-18     4.19    0.000        1
>  .92e-17
>                      5.29e-17
                                  |
             MonthOnMUSgdpChange  |
                              L1. |   -7.163726    9.198335    -0.78    0.436       -2
>  5.19213
>                      10.86468
                              L2. |    5.917194    9.144172     0.65    0.518       -1
>  2.00505
>                      23.83944
                                  |
                            _cons |   -1.967208     3.48128    -0.57    0.572       -8
>  .790391
>                      4.855976
 ─────────────────────────────────┼──────────────────────────────────────────────────
>  ─────────────────────
MonthOnMUSgdpChange               |
       InflationMOMLessFoodEnergy |
                              L1. |   -.0022736    .0108182    -0.21    0.834       -.
>  0234769
>                       .0189297
                              L2. |   -.0108287    .0109321    -0.99    0.322       -.
>  0322551
>                       .0105978
                                  |
    ChangesInEffectiveFedFundRates |
                              L1. |   -.0882351    .0894226    -0.99    0.324       -.
>  2635002
>                         .08703
                              L2. |    .2691962    .0870907     3.09    0.002        .
>  0985015
>                       .4398908
                                  |
      ChinaReserveChangeInPercent |
                              L1. |   -.0060452    .0072879    -0.83    0.407       -.
>  0203291
```

```
>          .0082387
                              L2. │  -.0084099   .0076663    -1.10   0.273     -.
> 0234357
>          .0066158
                                  │

ChangeInInflationExpectationMIC
                              L1. │   .0005252   .0002474     2.12   0.034     .
> 0000403
>          .0010101
                              L2. │   .0001996   .0002409     0.83   0.407    -.
> 0002725
>          .0006717
                                  │

           MonthOnMUSgdpChange
                              L1. │   1.891607   .0301205    62.80   0.000     1
> .832572
>          1.950643
                              L2. │  -.9500198   .0299207   -31.75   0.000    -1
> .008663
>         -.8913763
                                  │

                            _cons │   .0406102   .0245243     1.66   0.098    -.
> 0074565
>          .088677
──────────────────────────────────┼───────────────────────────────────────────
> ──────────────────
```

26 .
27 . varstable

    Eigenvalue stability condition

Eigenvalue	Modulus
.9450933 + .2201106*i*	.970387
.9450933 - .2201106*i*	.970387
.6429621	.642962
-.356167 + .3536436*i*	.501915
-.356167 - .3536436*i*	.501915
.4133146	.413315
.1422332 + .3057536*i*	.337217
.1422332 - .3057536*i*	.337217
-.2136596	.21366
-.1951396	.19514

    All the eigenvalues lie inside the unit circle.
    VAR satisfies stability condition.

28 . varlmar

Lagrange-multiplier test

lag	chi2	df	Prob > chi2
1	-1.1e+03	25	1.00000
2	-1.2e+03	25	1.00000

H0: no autocorrelation at lag order

29 . vargranger

Granger causality Wald tests

Equation	Excluded	chi2	df	Prob > chi2
InflationMOMLes~y	ChangesInEffect~s	.76848	2	0.681
InflationMOMLes~y	ChinaReserveCha~t	1.848	2	0.397
InflationMOMLes~y	ChangeInInflati~C	7.959	2	0.019
InflationMOMLes~y	MonthOnMUSgdpCh~e	.11164	2	0.946
InflationMOMLes~y	ALL	10.76	8	0.216
ChangesInEffect~s	InflationMOMLes~y	.87962	2	0.644
ChangesInEffect~s	ChinaReserveCha~t	.	0	.
ChangesInEffect~s	ChangeInInflati~C	.77513	2	0.679
ChangesInEffect~s	MonthOnMUSgdpCh~e	8.4302	2	0.015
ChangesInEffect~s	ALL	9.8509	6	0.131
ChinaReserveCha~t	InflationMOMLes~y	.82775	2	0.661
ChinaReserveCha~t	ChangesInEffect~s	1.0811	2	0.582
ChinaReserveCha~t	ChangeInInflati~C	.84529	2	0.655
ChinaReserveCha~t	MonthOnMUSgdpCh~e	3.2913	2	0.193
ChinaReserveCha~t	ALL	5.6039	8	0.692
ChangeInInflati~C	InflationMOMLes~y	3.7074	2	0.157
ChangeInInflati~C	ChangesInEffect~s	2.78	2	0.249
ChangeInInflati~C	ChinaReserveCha~t	.	0	.
ChangeInInflati~C	MonthOnMUSgdpCh~e	.75607	2	0.685
ChangeInInflati~C	ALL	7.0975	6	0.312
MonthOnMUSgdpCh~e	InflationMOMLes~y	1.0947	2	0.578
MonthOnMUSgdpCh~e	ChangesInEffect~s	10.73	2	0.005
MonthOnMUSgdpCh~e	ChinaReserveCha~t	2.4696	2	0.291
MonthOnMUSgdpCh~e	ChangeInInflati~C	4.5673	2	0.102
MonthOnMUSgdpCh~e	ALL	16.618	8	0.034

```
30 . predict e2, resid
   (5 missing values generated)

31 . gen Le2=e2[_n-1]
   (5 missing values generated)

32 . regress e2 Le2  if inrange(monthly_date, tm(2002m1), tm(2011m10))
```

Source	SS	df	MS		
Model	.011093123	1	.011093123	Number of obs =	118
Residual	131.360485	116	1.13241797	F(1, 116) =	0.01
				Prob > F =	0.9213
				R-squared =	0.0001
				Adj R-squared =	-0.0085
Total	131.371578	117	1.122834	Root MSE =	1.0642

e2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Le2	-.0091951	.0929037	-0.10	0.921	-.1932025	.1748123
_cons	.0000105	.0979631	0.00	1.000	-.1940179	.1940388

```
33 .
34 . constraint 7 [ChangeInInflationExpectationMIC]L3.ChinaReserveChangeInPercent
   >  = 0

35 .   constraint 8 [ChangesInEffectiveFedFundRates]L3.ChinaReserveChangeInPercen
   > t  = 0

36 . constraint 9 [ChangeInInflationExpectationMIC]L3.ChangeInInflationExpectatio
   > nMIC = 0

37 .
38 .
39 .  var InflationMOMLessFoodEnergy  ChangesInEffectiveFedFundRates  ChinaReserv
   > eChangeInPercent     ChangeInInflationExpectationMIC      if inrange(monthl
   > y_date,tm(2012m1), tm(2015m10)), lutstats  dfk constraints(1 2 3 4 5 6 7 8 9
   > ) exog(L3.InflationMOMLessFoodEnergy  L3.ChangesInEffectiveFedFundRates  L3.
   > ChinaReserveChangeInPercent     L3.ChangeInInflationExpectationMIC L3.MonthO
   > nMUSgdpChange)
   Estimating VAR coefficients
```

```
Iteration 1:     tolerance =    .7793447
Iteration 2:     tolerance =    1.758994
Iteration 3:     tolerance =    .4348961
Iteration 4:     tolerance =    .1662801
Iteration 5:     tolerance =    .1033747
Iteration 6:     tolerance =   .06355387
Iteration 7:     tolerance =     .037386
Iteration 8:     tolerance =   .02138624
Iteration 9:     tolerance =   .01203051
Iteration 10:    tolerance =   .00670214
Iteration 11:    tolerance =    .0037131
Iteration 12:    tolerance =   .00205066
Iteration 13:    tolerance =   .00113051
Iteration 14:    tolerance =    .0006226
Iteration 15:    tolerance =   .00034267
Iteration 16:    tolerance =   .00018854
Iteration 17:    tolerance =   .00010371
Iteration 18:    tolerance =   .00005704
Iteration 19:    tolerance =   .00003136
Iteration 20:    tolerance =   .00001725
Iteration 21:    tolerance =   9.483e-06
Iteration 22:    tolerance =   5.214e-06
Iteration 23:    tolerance =   2.866e-06
Iteration 24:    tolerance =   1.576e-06
Iteration 25:    tolerance =   8.662e-07
```

Vector autoregression

```
Sample:  2012m1 - 2015m10              Number of obs   =         46
Log likelihood = -136.6763      (lutstats) AIC         =  -8.297088
FPE        =    .0005011                   HQIC        =  -7.820552
Det(Sigma_ml) =    .000062                 SBIC        =  -7.024989
```

Equation	Parms	RMSE	R-sq	chi2	P>chi2
InflationMOMLe~y	14	.605815	0.3462	23.49918	0.0361
ChangesInEffec~s	11	.013108	0.1065	9.310842	0.5029
ChinaReserveCh~t	14	1.08135	0.3110	34.6092	0.0010
ChangeInInflat~C	8	10.7828	0.1488	5.985545	0.5414

```
 ( 1)   [ChangeInInflationExpectationMIC]L.ChinaReserveChangeInPercent = 0
 ( 2)   [ChangeInInflationExpectationMIC]L2.ChinaReserveChangeInPercent = 0
 ( 3)   [ChangesInEffectiveFedFundRates]L.ChinaReserveChangeInPercent = 0
 ( 4)   [ChangesInEffectiveFedFundRates]L2.ChinaReserveChangeInPercent = 0
 ( 5)   [ChangeInInflationExpectationMIC]L.ChangeInInflationExpectationMIC = 0
 ( 6)   [ChangeInInflationExpectationMIC]L2.ChangeInInflationExpectationMIC = 0
 ( 7)   [ChangeInInflationExpectationMIC]L3.ChinaReserveChangeInPercent = 0
 ( 8)   [ChangesInEffectiveFedFundRates]L3.ChinaReserveChangeInPercent = 0
 ( 9)   [ChangeInInflationExpectationMIC]L3.ChangeInInflationExpectationMIC = 0
```

	Coef.	Std. Err.	z	P>|z|	[

> 95% Con
>   f. Interval]

InflationMOMLessFoodEnergy
InflationMOMLessFoodEnergy

	Coef.	Std. Err.	z	P>|z|
L1.	-.4209349	.1777648	-2.37	0.018	-.

> 7693475
>   -.0725223

| L2. | -.3705439 | .1578024 | -2.35 | 0.019 | -. |

> 6798309
>   -.061257

ChangesInEffectiveFedFundRates

| L1. | -.0190861 | 8.489985 | -0.00 | 0.998 | -1 |

> 6.65915
>   16.62098

| L2. | -8.068017 | 8.27118 | -0.98 | 0.329 | -2 |

> 4.27923
>   8.143197

ChinaReserveChangeInPercent

| L1. | -.2309308 | .0879322 | -2.63 | 0.009 | -. |

> 4032748
>   -.0585868

| L2. | .1027562 | .0865018 | 1.19 | 0.235 | -. |

> 0667842
>   .2722966

ChangeInInflationExpectationMIC

| L1. | .0249073 | .0138803 | 1.79 | 0.073 | -. |

> 0022976
>   .0521123

| L2. | .0205913 | .0173005 | 1.19 | 0.234 | - |

> .013317
>   .0544995

```
                InflationMOMLessFoodEnergy │
                                      L3. │   -.2905184    .1758026     -1.65    0.098     -.
> 6350852
>           .0540484                        │

 ChangesInEffectiveFedFundRates           │
                                      L3. │   -1.014105      8.55205     -0.12    0.906     -1
> 7.77582
>          15.74761                        │

     ChinaReserveChangeInPercent           │
                                      L3. │     .069492     .0883384      0.79    0.431     -.
> 1036482
>           .2426321                        │

ChangeInInflationExpectationMIC           │
                                      L3. │   -.0028388     .0131463     -0.22    0.829     -.
> 0286051
>           .0229276                        │

           MonthOnMUSgdpChange             │
                                      L3. │   -.0997422     .1432601     -0.70    0.486     -.
> 3805269
>           .1810425                        │

                                    _cons │    .0394435     .1172537      0.34    0.737     -.
> 1903695
>           .2692565                        │
─────────────────────────────────────────┼─────────────────────────────────────────────────
> ─────────────────────
ChangesInEffectiveFedFundRates           │
       InflationMOMLessFoodEnergy          │
                                      L1. │    .0027556     .0033855      0.81    0.416     -.
> 0038798
>            .009391                        │
                                      L2. │    .0014779     .0033036      0.45    0.655     -.
> 0049971
>           .0079528                        │

 ChangesInEffectiveFedFundRates           │
                                      L1. │   -.041929     .1786015     -0.23    0.814     -.
> 3919815
>           .3081235                        │
                                      L2. │     .08882     .1770392      0.50    0.616     -.
> 2581705
>           .4358106                        │

     ChinaReserveChangeInPercent           │
                                      L1. │    2.94e-19     2.27e-19      1.30    0.195     -1
```

```
>  .51e-19
>           7.39e-19
                               L2. |    3.66e-19    2.73e-19      1.34   0.180      -1
>  .69e-19
>           9.02e-19
                                   |
ChangeInInflationExpectationMIC    |
                               L1. |   -.0004155    .0002807     -1.48   0.139      -.
> 0009657
>           .0001347
                               L2. |    -.000082    .0003443     -0.24   0.812      -.
> 0007568
>           .0005928
                                   |
     InflationMOMLessFoodEnergy    |
                               L3. |    .0057681     .003616      1.60   0.111      -.
> 0013192
>           .0128554
                                   |
  ChangesInEffectiveFedFundRates   |
                               L3. |   -.0321066    .1763194     -0.18   0.856      -.
> 3776863
>           .3134731
                                   |
     ChinaReserveChangeInPercent   |
                               L3. |   -1.64e-18    1.00e-18     -1.63   0.103      -3
>  .60e-18
>           3.28e-19
                                   |
ChangeInInflationExpectationMIC    |
                               L3. |     .000024    .0002667      0.09   0.928      -.
> 0004987
>           .0005468
                                   |
         MonthOnMUSgdpChange       |
                               L3. |    .0049287    .0030222      1.63   0.103      -.
> 0009946
>            .010852
                                   |
                             _cons |    -.000423    .0023864     -0.18   0.859      -.
> 0051001
>           .0042542
-----------------------------------+-------------------------------------------------
> ------------------
ChinaReserveChangeInPercent        |
     InflationMOMLessFoodEnergy    |
                               L1. |    .0706521    .3090269      0.23   0.819      -.
> 5350295
>           .6763338
```

```
                           L2. │    .1840803    .2790439     0.66    0.509     -.
> 3628356
>            .7309962
                               │
  ChangesInEffectiveFedFundRates │
                           L1. │    4.973126    14.98114     0.33    0.740     -2
> 4.38937
>            34.33563
                           L2. │   -11.54752    14.62464    -0.79    0.430     -4
> 0.21129
>            17.11625
                               │
      ChinaReserveChangeInPercent │
                           L1. │    .1466027    .1401618     1.05    0.296     -.
> 1281094
>            .4213149
                           L2. │    .1345314    .1378817     0.98    0.329     -.
> 1357118
>            .4047747
                               │
ChangeInInflationExpectationMIC │
                           L1. │    .0613199     .022287     2.75    0.006      .
> 0176381
>            .1050017
                           L2. │    .0435289    .0277722     1.57    0.117     -.
> 0109037
>            .0979614
                               │
     InflationMOMLessFoodEnergy │
                           L3. │    .7858073    .3086315     2.55    0.011      .
> 1809008
>            1.390714
                               │
  ChangesInEffectiveFedFundRates │
                           L3. │   -10.52805    15.05713    -0.70    0.484     -4
> 0.03948
>            18.98339
                               │
      ChinaReserveChangeInPercent │
                           L3. │    .3351847    .1408093     2.38    0.017      .
> 0592036
>            .6111658
                               │
ChangeInInflationExpectationMIC │
                           L3. │    .0120334    .0211095     0.57    0.569     -.
> 0293404
>            .0534073
                               │
          MonthOnMUSgdpChange │
```

```
                             L3. │   -.2309346   .2543068    -0.91   0.364      -.
> 7293667
>              .2674975

                            _cons │    .1394905    .206791     0.67   0.500      -.
> 2658124
>              .5447934
─────────────────────────────────┼──────────────────────────────────────────────
> ─────────────────
ChangeInInflationExpectationMIC  │
        InflationMOMLessFoodEnergy │
                             L1. │   -3.630097   2.728783    -1.33   0.183      -8
> .978412
>              1.718219
                             L2. │    3.780112   2.674063     1.41   0.157      -1
> .460954
>              9.021179

  ChangesInEffectiveFedFundRates │
                             L1. │   -13.04182   142.0625    -0.09   0.927      -2
> 91.4792
>              265.3955
                             L2. │    121.8256    139.851     0.87   0.384      -1
> 52.2772
>              395.9285

      ChinaReserveChangeInPercent │
                             L1. │   -3.42e-16   4.81e-16    -0.71   0.476      -1
> .28e-15
>              6.00e-16
                             L2. │   -3.65e-16   1.83e-16    -1.99   0.046      -7
> .25e-16
>             -6.33e-18

ChangeInInflationExpectationMIC  │
                             L1. │    4.77e-16   1.18e-16     4.04   0.000       2
> .45e-16
>              7.08e-16
                             L2. │    7.58e-16   2.06e-16     3.69   0.000       3
> .55e-16
>              1.16e-15

        InflationMOMLessFoodEnergy │
                             L3. │   -3.095857   2.857812    -1.08   0.279      -8
> .697066
>              2.505353

  ChangesInEffectiveFedFundRates │
                             L3. │   -8.750163   141.4489    -0.06   0.951      -2
```

```
> 85.9849
>          268.4846
                                      |

      ChinaReserveChangeInPercent    |
                              L3.     |    1.66e–15    8.29e–16    2.00    0.045    3
> .33e–17
>          3.28e–15
                                      |

ChangeInInflationExpectationMIC      |
                              L3.     |    6.67e–16    2.19e–16    3.05    0.002    2
> .38e–16
>          1.10e–15
                                      |

          MonthOnMUSgdpChange         |
                              L3.     |   –.3971169    2.479484   –0.16    0.873   –5
> .256815
>          4.462582
                                      |

                            _cons     |    .1110332     1.96062    0.06    0.955   –3
> .731711
>          3.953777
                                      |
─────────────────────────────────────┴───────────────────────────────────────────
> ─────────────────────
```

40 .
41 . varstable

    Eigenvalue stability condition

Eigenvalue	Modulus
–.1956088 + .7099084*i*	.736365
–.1956088 – .7099084*i*	.736365
.4463562	.446356
–.4360225 + .01884875*i*	.43643
–.4360225 – .01884875*i*	.43643
.2859243 + .2372709*i*	.371551
.2859243 – .2372709*i*	.371551
–.07120341	.071203

    All the eigenvalues lie inside the unit circle.
    VAR satisfies stability condition.

42 . varlmar

Lagrange-multiplier test

lag	chi2	df	Prob > chi2
1	-98.1601	16	1.00000
2	-1.1e+02	16	1.00000

H0: no autocorrelation at lag order

43 . vargranger

Granger causality Wald tests

Equation	Excluded	chi2	df	Prob > chi2
InflationMOMLes~y	ChangesInEffect~s	.9528	2	0.621
InflationMOMLes~y	ChinaReserveCha~t	7.8056	2	0.020
InflationMOMLes~y	ChangeInInflati~C	3.2651	2	0.195
InflationMOMLes~y	ALL	10.499	6	0.105
ChangesInEffect~s	InflationMOMLes~y	.74665	2	0.688
ChangesInEffect~s	ChinaReserveCha~t	.	0	.
ChangesInEffect~s	ChangeInInflati~C	3.5465	2	0.170
ChangesInEffect~s	ALL	4.3231	4	0.364
ChinaReserveCha~t	InflationMOMLes~y	.43999	2	0.803
ChinaReserveCha~t	ChangesInEffect~s	.75153	2	0.687
ChinaReserveCha~t	ChangeInInflati~C	8.0712	2	0.018
ChinaReserveCha~t	ALL	10.407	6	0.109
ChangeInInflati~C	InflationMOMLes~y	4.8788	2	0.087
ChangeInInflati~C	ChangesInEffect~s	.767	2	0.681
ChangeInInflati~C	ChinaReserveCha~t	.	0	.
ChangeInInflati~C	ALL	5.2971	4	0.258

```
44 . predict ee, resid
   (6 missing values generated)

45 . gen Lee=ee[_n-1]
   (6 missing values generated)

46 . regress ee Lee  if inrange(monthly_date,tm(2012m1), tm(2015m10))
```

Source	SS	df	MS	Number of obs	=	46
				F(1, 44)	=	0.19
Model	.074159589	1	.074159589	Prob > F	=	0.6617
Residual	16.8083958	44	.382008996	R-squared	=	0.0044
				Adj R-squared	=	-0.0182
Total	16.8825554	45	.375167899	Root MSE	=	.61807

ee	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Lee	-.0659965	.1497869	-0.44	0.662	-.3678721	.2358791
_cons	-.0007634	.0911457	-0.01	0.993	-.1844555	.1829288

```
47 .
48 . var InflationMOMLessFoodEnergy  ChangesInEffectiveFedFundRates  ChinaReserv
   > eChangeInPercent     ChangeInInflationExpectationMIC    MonthOnMUSgdpChange
   >    if inrange(monthly_date,tm(2002m1), tm(2011m10)), lutstats  dfk constrain
   > ts(1 2 3 4 5 6 7 8 9) exog(L3.InflationMOMLessFoodEnergy  L3.ChangesInEffect
   > iveFedFundRates  L3.ChinaReserveChangeInPercent     L3.ChangeInInflationExpe
   > ctationMIC L3.MonthOnMUSgdpChange)
   Estimating VAR coefficients

   Iteration 1:    tolerance =   .0281746
   Iteration 2:    tolerance =   .02457617
   Iteration 3:    tolerance =   .01805793
   Iteration 4:    tolerance =   .01332071
   Iteration 5:    tolerance =   .00987151
   Iteration 6:    tolerance =   .00734025
   Iteration 7:    tolerance =   .00547167
   Iteration 8:    tolerance =   .0040863
   Iteration 9:    tolerance =   .00305587
   Iteration 10:   tolerance =   .00228762
   Iteration 11:   tolerance =   .0017138
   Iteration 12:   tolerance =   .00128465
   Iteration 13:   tolerance =   .00096338
   Iteration 14:   tolerance =   .00072268
   Iteration 15:   tolerance =   .00054224
   Iteration 16:   tolerance =   .00040693
   Iteration 17:   tolerance =   .00030543
   Iteration 18:   tolerance =   .00022927
```

```
Iteration 19:    tolerance =  .00017211
Iteration 20:    tolerance =  .00012921
Iteration 21:    tolerance =  .00009701
Iteration 22:    tolerance =  .00007283
Iteration 23:    tolerance =  .00005468
Iteration 24:    tolerance =  .00004106
Iteration 25:    tolerance =  .00003083
Iteration 26:    tolerance =  .00002315
Iteration 27:    tolerance =  .00001738
Iteration 28:    tolerance =  .00001305
Iteration 29:    tolerance =  9.798e-06
Iteration 30:    tolerance =  7.357e-06
Iteration 31:    tolerance =  5.524e-06
Iteration 32:    tolerance =  4.148e-06
Iteration 33:    tolerance =  3.114e-06
Iteration 34:    tolerance =  2.338e-06
Iteration 35:    tolerance =  1.756e-06
Iteration 36:    tolerance =  1.318e-06
Iteration 37:    tolerance =  9.900e-07
```

Vector autoregression

```
Sample:  2002m1 - 2011m10                  Number of obs    =        118
Log likelihood = -705.3026      (lutstats) AIC              =  -11.33377
FPE        =    .0000172                    HQIC             =  -10.85708
Det(Sigma_ml) =  5.13e-06                   SBIC             =  -10.15975
```

Equation	Parms	RMSE	R-sq	chi2	P>chi2
InflationMOMLe~y	16	1.00127	0.3147	56.21803	0.0000
ChangesInEffec~s	13	.124525	0.5090	107.556	0.0000
ChinaReserveCh~t	16	1.4098	0.1958	25.35702	0.0453
ChangeInInflat~C	10	35.4782	0.0771	8.669362	0.4683
MonthOnMUSgdpC~e	16	.056913	0.9988	83254.19	0.0000

```
 ( 1)   [ChangeInInflationExpectationMIC]L.ChinaReserveChangeInPercent = 0
 ( 2)   [ChangeInInflationExpectationMIC]L2.ChinaReserveChangeInPercent = 0
 ( 3)   [ChangesInEffectiveFedFundRates]L.ChinaReserveChangeInPercent = 0
 ( 4)   [ChangesInEffectiveFedFundRates]L2.ChinaReserveChangeInPercent = 0
 ( 5)   [ChangeInInflationExpectationMIC]L.ChangeInInflationExpectationMIC = 0
 ( 6)   [ChangeInInflationExpectationMIC]L2.ChangeInInflationExpectationMIC = 0
 ( 7)   [ChangeInInflationExpectationMIC]L3.ChinaReserveChangeInPercent = 0
 ( 8)   [ChangesInEffectiveFedFundRates]L3.ChinaReserveChangeInPercent = 0
 ( 9)   [ChangeInInflationExpectationMIC]L3.ChangeInInflationExpectationMIC = 0
```

```
 > ─────────────────
                                    |    Coef.   Std. Err.      z    P>|z|       [
```

```
> 95% Con
>      f. Interval]
```
─────────────────────────────────────┼──
```
> ───────────────────
```
InflationMOMLessFoodEnergy │
    InflationMOMLessFoodEnergy │
```
                        L1. │   -.5575281    .0976959    -5.71   0.000    -.
> 7490086
>        -.3660475
                        L2. │   -.3055477    .1141943    -2.68   0.007    -.
> 5293645
>        -.0817309
                            │
 ChangesInEffectiveFedFundRates │
                        L1. │    .4555732    .7996718     0.57   0.569    -1
> .111755
>        2.022901
                        L2. │    .8535732    .9008604     0.95   0.343    -.
> 9120807
>        2.619227
                            │
   ChinaReserveChangeInPercent │
                        L1. │   -.0771454    .0639037    -1.21   0.227    -.
> 2023943
>        .0481035
                        L2. │   -.0222487    .0679399    -0.33   0.743    -.
> 1554084
>        .1109111
                            │
ChangeInInflationExpectationMIC │
                        L1. │    .0025709    .0024957     1.03   0.303    -.
> 0023207
>        .0074624
                        L2. │    .0022888     .002834     0.81   0.419    -.
> 0032658
>        .0078434
                            │
          MonthOnMUSgdpChange │
                        L1. │   -.3595439    .8743385    -0.41   0.681    -2
> .073216
>        1.354128
                        L2. │     .75589    1.686915     0.45   0.654    -2
> .550403
>        4.062183
                            │
   InflationMOMLessFoodEnergy │
                        L3. │   -.1691219    .0991822    -1.71   0.088    -.
> 3635155
>        .0252716
```

```
                                      │
ChangesInEffectiveFedFundRates        │
                                L3.   │  -.9650824    .7966817    -1.21   0.226       -
> 2.52655
>           .5963852

                                      │
       ChinaReserveChangeInPercent    │
                                L3.   │  -.0303529    .0675105    -0.45   0.653      -.
> 1626709
>           .1019652
                                      │
ChangeInInflationExpectationMIC       │
                                L3.   │  -.0046513    .0023859    -1.95   0.051      -.
> 0093276
>           .0000251
                                      │
          MonthOnMUSgdpChange         │
                                L3.   │  -.3658578    .8817034    -0.41   0.678      -2
> .093965
>           1.362249
                                      │
                              _cons   │   .2940171    .2478833     1.19   0.236      -.
> 1918251
>           .7798594
──────────────────────────────────────┼──────────────────────────────────────────────
> ─────────────────
ChangesInEffectiveFedFundRates        │
      InflationMOMLessFoodEnergy      │
                                L1.   │    .006447    .0120295     0.54   0.592      -.
> 0171304
>           .0300243
                                L2.   │   .0021434    .0138794     0.15   0.877      -.
> 0250597
>           .0293465
                                      │
 ChangesInEffectiveFedFundRates       │
                                L1.   │   .5558522    .0992519     5.60   0.000
> .361322
>           .7503824
                                L2.   │   .0351308    .1118698     0.31   0.753      -.
> 1841299
>           .2543915
                                      │
       ChinaReserveChangeInPercent    │
                                L1.   │   5.30e-20    9.12e-19     0.06   0.954       -1
> .74e-18
>           1.84e-18
                                L2.   │   6.36e-20    3.50e-19     0.18   0.856       -6
> .23e-19
```

```
>           7.50e-19
                                    |
ChangeInInflationExpectationMIC     |
                              L1.    |     .0000119     .0003165      0.04     0.970     -.
> 0006084
>            .0006323
                              L2.    |     .0002401     .0003602      0.67     0.505     -.
> 0004659
>            .0009461
                                    |
          MonthOnMUSgdpChange        |
                              L1.    |     .0517859     .1071719      0.48     0.629     -.
> 1582671
>             .261839
                              L2.    |    -.0070772      .206586     -0.03     0.973     -.
> 4119782
>            .3978238
                                    |
     InflationMOMLessFoodEnergy      |
                              L3.    |    -.0130933     .0121253     -1.08     0.280     -.
> 0368585
>             .010672
                                    |
 ChangesInEffectiveFedFundRates      |
                              L3.    |     .0472779     .0986173      0.48     0.632     -.
> 1460084
>            .2405642
                                    |
     ChinaReserveChangeInPercent     |
                              L3.    |    -6.75e-19     9.67e-19     -0.70     0.485     -2
> .57e-18
>            1.22e-18
                                    |
ChangeInInflationExpectationMIC     |
                              L3.    |    -.0000419      .000306     -0.14     0.891     -.
> 0006416
>            .0005579
                                    |
          MonthOnMUSgdpChange        |
                              L3.    |    -.0333846     .1083195     -0.31     0.758     -.
> 2456869
>            .1789176
                                    |
                            _cons    |     -.005244     .0124401     -0.42     0.673     -.
> 0296261
>            .0191381
────────────────────────────────────┼────────────────────────────────────────────────────
> ──────────────────────
ChinaReserveChangeInPercent          |
```

```
      InflationMOMLessFoodEnergy  |
                             L1.  |    .0932791    .1377643     0.68    0.498      -
> .176734
>            .3632922
                             L2.  |    .1651053    .1613611     1.02    0.306     -.
> 1511567
>            .4813673
                                  |
  ChangesInEffectiveFedFundRates  |
                             L1.  |    .0180801    1.126325     0.02    0.987     -2
> .189475
>            2.225636
                             L2.  |   -2.728087    1.268808    -2.15    0.032     -5
> .214905
>           -.2412685
                                  |
      ChinaReserveChangeInPercent  |
                             L1.  |    .2213118    .0941299     2.35    0.019      .
> 0368205
>             .405803
                             L2.  |    .0677589    .1000753     0.68    0.498     -.
> 1283851
>            .2639028
                                  |
ChangeInInflationExpectationMIC   |
                             L1.  |    .0006744    .0036266     0.19    0.852     -.
> 0064336
>            .0077824
                             L2.  |    .0032698     .004118     0.79    0.427     -.
> 0048012
>            .0113409
                                  |
            MonthOnMUSgdpChange    |
                             L1.  |   -.3887268    1.232979    -0.32    0.753     -2
> .805322
>            2.027868
                             L2.  |    1.394171    2.378859     0.59    0.558     -3
> .268307
>            6.056648
                                  |
      InflationMOMLessFoodEnergy  |
                             L3.  |    .0506039    .1401552     0.36    0.718     -.
> 2240952
>             .325303
                                  |
  ChangesInEffectiveFedFundRates  |
                             L3.  |     3.09676    1.122852     2.76    0.006      .
> 8960105
>            5.297509
```

```
                   ChinaReserveChangeInPercent
                                          L3. │    .1116979    .0994427      1.12   0.261      -.
>  0832063
>          .3066021
                                              │
  ChangeInInflationExpectationMIC
                                          L3. │    .0022477     .003466      0.65   0.517      -.
>  0045455
>          .0090409
                                              │
                      MonthOnMUSgdpChange
                                          L3. │   -.9768639    1.242955     -0.79   0.432      -3
>  .413011
>          1.459283
                                              │
                                        _cons │    1.41096    .3625582      3.89   0.000       .
>  7003592
>          2.121561
─────────────────────────────────────────────┼───────────────────────────────────────────────
>  ─────────────────────
  ChangeInInflationExpectationMIC │
            InflationMOMLessFoodEnergy │
                                          L1. │     3.3894    3.396507      1.00   0.318      -3
>  .267631
>          10.04643
                                          L2. │   -3.138613    3.861886     -0.81   0.416      -1
>  0.70777
>          4.430544
                                              │
  ChangesInEffectiveFedFundRates │
                                          L1. │    7.039518    28.21297      0.25   0.803      -4
>  8.25689
>          62.33593
                                          L2. │    18.64786     31.7907      0.59   0.557      -4
>  3.66076
>          80.95648
                                              │
          ChinaReserveChangeInPercent │
                                          L1. │   -5.73e-16    1.64e-15     -0.35   0.727      -3
>  .79e-15
>          2.64e-15
                                          L2. │   -6.78e-17    7.93e-16     -0.09   0.932      -1
>  .62e-15
>          1.49e-15
                                              │
  ChangeInInflationExpectationMIC │
                                          L1. │    4.52e-16    5.43e-17      8.32   0.000       3
>  .46e-16
```

	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]

> 5.59e-16

	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
L2.	2.77e-16	5.19e-17	5.35	0.000	1.76e-16	3.79e-16
MonthOnMUSgdpChange						
L1.	14.5029	30.43917	0.48	0.634	-45.15678	74.16258
L2.	-37.5935	58.75253	-0.64	0.522	-152.7464	77.55935
InflationMOMLessFoodEnergy						
L3.	-1.527609	3.34268	-0.46	0.648	-8.07914	5.023923
ChangesInEffectiveFedFundRates						
L3.	19.19755	27.85631	0.69	0.491	-35.39981	73.7949
ChinaReserveChangeInPercent						
L3.	-1.06e-16	6.64e-16	-0.16	0.873	-1.41e-15	1.20e-15
ChangeInInflationExpectationMIC						
L3.	-2.92e-17	1.04e-17	-2.82	0.005	-4.95e-17	-8.91e-18
MonthOnMUSgdpChange						
L3.	22.64609	30.82427	0.73	0.463	-37.76837	83.06055
_cons	-1.712007	3.542905	-0.48	0.629	-8.655973	5.231959

MonthOnMUSgdpChange

InflationMOMLessFoodEnergy	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
L1.	.0014308	.005556	0.26	0.797	-.0094587	.0123203
L2.	.0007126	.006499	0.11	0.913	-.	

```
> 0120251
>            .0134504
                                        |
  ChangesInEffectiveFedFundRates        |
                            L1. | -.0074854   .0454591   -0.16   0.869    -.
> 0965837
>            .0816129
                            L2. |  .1114199   .0512111    2.18   0.030     .
> 0110479
>            .2117919
                                        |
     ChinaReserveChangeInPercent        |
                            L1. | -.0014312   .0036817   -0.39   0.697    -.
> 0086472
>            .0057849
                            L2. |  -.000944   .0039143   -0.24   0.809    -.
> 0086159
>            .0067278
                                        |
ChangeInInflationExpectationMIC         |
                            L1. | -.0002399   .0001439   -1.67   0.096    -.
> 0005219
>            .0000422
                            L2. | -.0001087   .0001634   -0.66   0.506    -.
> 0004289
>            .0002116
                                        |
           MonthOnMUSgdpChange          |
                            L1. |  2.673716   .0497215   53.77   0.000     2
> .576264
>            2.771169
                            L2. | -2.509592   .0959296  -26.16   0.000     -
> 2.69761
>           -2.321573
                                        |
      InflationMOMLessFoodEnergy        |
                            L3. | -.0005849   .0056452   -0.10   0.917    -.
> 0116492
>            .0104795
                                        |
  ChangesInEffectiveFedFundRates        |
                            L3. |  .0611954   .0453005    1.35   0.177     -
> .027592
>            .1499828
                                        |
     ChinaReserveChangeInPercent        |
                            L3. |  .0018562   .0038895    0.48   0.633    -.
> 0057672
>            .0094796
```

```
                                     │
ChangeInInflationExpectationMIC      │
                         L3. │    -.0000243    .0001376    -0.18    0.860      -
> .000294
>              .0002453
                                     │
            MonthOnMUSgdpChange      │
                         L3. │     .8172244    .0501347    16.30    0.000      .
> 7189623
>              .9154866
                                     │
                        _cons │     .0073749    .0142505     0.52    0.605     -.
> 0205555
>              .0353054
─────────────────────────────────────┼──────────────────────────────────────────
> ─────────────────────
```

49 .
50 . varstable

Eigenvalue stability condition

Eigenvalue	Modulus
1.333198 + .8478557*i*	1.57996
1.333198 - .8478557*i*	1.57996
.6493596	.64936
-.2993616 + .4442326*i*	.535686
-.2993616 - .4442326*i*	.535686
.371332	.371332
.05577886 + .2434984*i*	.249805
.05577886 - .2434984*i*	.249805
-.1532845 + .02620492*i*	.155508
-.1532845 - .02620492*i*	.155508

At least one eigenvalue is at least 1.0.
VAR does not satisfy stability condition.

```
51 .  var InflationMOMLessFoodEnergy ChangesInEffectiveFedFundRates  ChinaReserv
   > eChangeInPercent     ChangeInInflationExpectationMIC       if inrange(monthl
   > y_date,tm(2002m1), tm(2011m10)), lutstats  dfk constraints(1 2 3 4 5 6 7 8 9
   > ) exog(L3.InflationMOMLessFoodEnergy L3.ChangesInEffectiveFedFundRates  L3.
   > ChinaReserveChangeInPercent     L3.ChangeInInflationExpectationMIC L3.MonthO
   > nMUSgdpChange)
   Estimating VAR coefficients

   Iteration 1:    tolerance =  .01750229
   Iteration 2:    tolerance =  .01111783
   Iteration 3:    tolerance =  .00837094
   Iteration 4:    tolerance =  .00626212
   Iteration 5:    tolerance =  .00467425
   Iteration 6:    tolerance =  .00348343
   Iteration 7:    tolerance =  .00259286
   Iteration 8:    tolerance =  .00192825
   Iteration 9:    tolerance =  .00143304
   Iteration 10:   tolerance =  .00106447
   Iteration 11:   tolerance =  .00079041
   Iteration 12:   tolerance =  .00058674
   Iteration 13:   tolerance =  .00043547
   Iteration 14:   tolerance =  .00032314
   Iteration 15:   tolerance =  .00023977
   Iteration 16:   tolerance =  .00017789
   Iteration 17:   tolerance =  .00013197
   Iteration 18:   tolerance =   .0000979
   Iteration 19:   tolerance =  .00007262
   Iteration 20:   tolerance =  .00005387
   Iteration 21:   tolerance =  .00003996
   Iteration 22:   tolerance =  .00002964
   Iteration 23:   tolerance =  .00002199
   Iteration 24:   tolerance =  .00001631
   Iteration 25:   tolerance =   .0000121
   Iteration 26:   tolerance =  8.973e-06
   Iteration 27:   tolerance =  6.656e-06
   Iteration 28:   tolerance =  4.937e-06
   Iteration 29:   tolerance =  3.662e-06
   Iteration 30:   tolerance =  2.716e-06
   Iteration 31:   tolerance =  2.015e-06
   Iteration 32:   tolerance =  1.494e-06
   Iteration 33:   tolerance =  1.108e-06
   Iteration 34:   tolerance =  8.222e-07


   Vector autoregression
```

```
Sample:  2002m1 – 2011m10              Number of obs    =        118
Log likelihood = –886.4107     (lutstats) AIC             =   –4.592991
FPE        =    .0130874                  HQIC            =   –4.287912
Det(Sigma_ml) =  .0058849                 SBIC            =   –3.841619


Equation              Parms      RMSE     R-sq      chi2     P>chi2
─────────────────────────────────────────────────────────────────────
InflationMOMLe~y        14     .998718   0.3182   56.73357   0.0000
ChangesInEffec~s        11     .128817   0.4745   95.91071   0.0000
ChinaReserveCh~t        14     1.42979   0.1728   22.27579   0.0512
ChangeInInflat~C         8     35.701    0.0655   7.441178   0.3844
─────────────────────────────────────────────────────────────────────
```

 (1)   **[ChangeInInflationExpectationMIC]L.ChinaReserveChangeInPercent = 0**
 (2)   **[ChangeInInflationExpectationMIC]L2.ChinaReserveChangeInPercent = 0**
 (3)   **[ChangesInEffectiveFedFundRates]L.ChinaReserveChangeInPercent = 0**
 (4)   **[ChangesInEffectiveFedFundRates]L2.ChinaReserveChangeInPercent = 0**
 (5)   **[ChangeInInflationExpectationMIC]L.ChangeInInflationExpectationMIC = 0**
 (6)   **[ChangeInInflationExpectationMIC]L2.ChangeInInflationExpectationMIC = 0**
 (7)   **[ChangeInInflationExpectationMIC]L3.ChinaReserveChangeInPercent = 0**
 (8)   **[ChangesInEffectiveFedFundRates]L3.ChinaReserveChangeInPercent = 0**
 (9)   **[ChangeInInflationExpectationMIC]L3.ChangeInInflationExpectationMIC = 0**

```
───────────────────────────────────────────┬───────────────────────────────
> ───────────────────────                   │
                                            │     Coef.   Std. Err.      z    P>|z|     [
> 95% Con                                   │
>       f. Interval]                        │
───────────────────────────────────────────┼───────────────────────────────
> ───────────────────────                   │
InflationMOMLessFoodEnergy                  │
    InflationMOMLessFoodEnergy              │
                          L1.   │  –.5544094   .0958282   –5.79   0.000    –.
> 7422293                                   │
>        –.3665895                           │
                          L2.   │  –.2975412   .1119691   –2.66   0.008    –.
> 5169965                                   │
>        –.0780859                           │
                                            │
 ChangesInEffectiveFedFundRates             │
                          L1.   │   .5225825   .7630078    0.68   0.493    –.
> 9728853                                   │
>          2.01805                           │
                          L2.   │   .8750978   .8864809    0.99   0.324    –.
> 8623729                                   │
>          2.612568                          │
                                            │
    ChinaReserveChangeInPercent             │
                          L1.   │  –.0763637   .0629858   –1.21   0.225    –.
> 1998136
```

```
>         .0470862
                             L2. │  -.0175164   .0667764    -0.26   0.793    -.
> 1483958
>         .1133629
                                 │
ChangeInInflationExpectationMIC  │
                             L1. │   .0021101   .0024404     0.86   0.387     -
> .002673
>         .0068932
                             L2. │   .0020989   .0027713     0.76   0.449    -.
> 0033328
>         .0075306
                                 │
      InflationMOMLessFoodEnergy │
                             L3. │  -.1645655   .0972569    -1.69   0.091    -.
> 3551856
>         .0260546
                                 │
  ChangesInEffectiveFedFundRates │
                             L3. │  -1.087981   .7481959    -1.45   0.146    -2
> .554418
>         .3784563
                                 │
      ChinaReserveChangeInPercent │
                             L3. │  -.0259427   .0663049    -0.39   0.696    -.
> 1558978
>         .1040125
                                 │
ChangeInInflationExpectationMIC  │
                             L3. │  -.0046668   .0023506    -1.99   0.047    -.
> 0092739
>        -.0000597
                                 │
            MonthOnMUSgdpChange   │
                             L3. │   .0465759   .0719499     0.65   0.517    -.
> 0944433
>         .1875952
                                 │
                           _cons │    .269559   .2417621     1.11   0.265    -.
> 2042861
>         .7434041
─────────────────────────────────┼──────────────────────────────────────────
> ─────────────────
ChangesInEffectiveFedFundRates   │
      InflationMOMLessFoodEnergy │
                             L1. │   .0047393   .0122535     0.39   0.699    -.
> 0192772
>         .0287558
                             L2. │   -.000612   .0141435    -0.04   0.965    -.
```

```
>  0283327
>             .0271087
                                  |
 ChangesInEffectiveFedFundRates   |
                            L1.   |    .6179873    .098091     6.30   0.000       .
> 4257326
>             .8102421
                            L2.   |    .0422766   .1141581     0.37   0.711      -.
> 1814691
>             .2660222
                                  |
     ChinaReserveChangeInPercent   |
                            L1.   |    1.87e-19   9.59e-19     0.20   0.845      -1
> .69e-18
>             2.07e-18
                            L2.   |    4.73e-19   5.52e-19     0.86   0.392      -6
> .09e-19
>             1.55e-18
                                  |
ChangeInInflationExpectationMIC   |
                            L1.   |    .0001732     .00032     0.54   0.588      -.
> 0004541
>             .0008004
                            L2.   |    .0004143    .000364     1.14   0.255      -.
> 0002992
>             .0011278
                                  |
      InflationMOMLessFoodEnergy   |
                            L3.   |    -.015541   .0123524    -1.26   0.208      -.
> 0397513
>             .0086693
                                  |
 ChangesInEffectiveFedFundRates   |
                            L3.   |    .0408036   .0960694     0.42   0.671      -.
> 1474888
>             .2290961
                                  |
     ChinaReserveChangeInPercent   |
                            L3.   |   -3.96e-19   5.97e-19    -0.66   0.507      -1
> .57e-18
>             7.74e-19
                                  |
ChangeInInflationExpectationMIC   |
                            L3.   |     .000059    .000311     0.19   0.850      -.
> 0005505
>             .0006685
                                  |
            MonthOnMUSgdpChange   |
                            L3.   |    .0035878   .0089421     0.40   0.688      -.
```

```
> 0139384
>              .0211141
                                                   |
                                _cons |   -.002617   .0126705    -0.21   0.836      -.
> 0274507
>              .0222168
──────────────────────────────────────────────────┼──────────────────────────────────
> ─────────────────────
ChinaReserveChangeInPercent                        |
          InflationMOMLessFoodEnergy               |
                                   L1. |   .0902347   .1373473     0.66   0.511       -
> .178961
>              .3594304
                                   L2. |   .1623519   .1607355     1.01   0.312      -.
> 1526839
>              .4773876
                                                   |
   ChangesInEffectiveFedFundRates                  |
                                   L1. |   .4950434   1.092788     0.45   0.651      -1
> .646782
>              2.636869
                                   L2. |  -2.656432   1.269441    -2.09   0.036      -5
> .144491
>             -.1683737
                                                   |
      ChinaReserveChangeInPercent                  |
                                   L1. |   .2357168   .0936941     2.52   0.012        .
> 0520798
>              .4193539
                                   L2. |   .0780395   .0993328     0.79   0.432      -.
> 1166491
>              .2727282
                                                   |
ChangeInInflationExpectationMIC                    |
                                   L1. |   .0007612   .0035839     0.21   0.832      -.
> 0062632
>              .0077856
                                   L2. |   .0038365   .0040698     0.94   0.346      -.
> 0041401
>              .0118131
                                                   |
       InflationMOMLessFoodEnergy                  |
                                   L3. |   .0434347   .1396217     0.31   0.756      -.
> 2302187
>              .3170881
                                                   |
   ChangesInEffectiveFedFundRates                  |
                                   L3. |   2.840699   1.072014     2.65   0.008        .
> 7395902
```

```
>           4.941808                 |

         ChinaReserveChangeInPercent |
                               L3.   |   .1140006    .0986313     1.16   0.248     -.
> 0793132
>           .3073145                 |

 ChangeInInflationExpectationMIC     |
                               L3.   |   .0026839    .0034513     0.78   0.437     -.
> 0040805
>           .0094483                 |

              MonthOnMUSgdpChange    |
                               L3.   |   .0138902    .1033015     0.13   0.893     -
> .188577
>           .2163573                 |

                             _cons   |   1.360829    .3574352     3.81   0.000     .
> 6602693
>           2.061389                 |
─────────────────────────────────────┼──────────────────────────────────────────────
> ─────────────────
ChangeInInflationExpectationMIC      |
      InflationMOMLessFoodEnergy     |
                               L1.   |   3.393686     3.36596     1.01   0.313     -3
> .203474
>           9.990847                 |
                               L2.   |   -3.08259    3.834088    -0.80   0.421     -1
> 0.59726
>           4.432084                 |

 ChangesInEffectiveFedFundRates      |
                               L1.   |  -1.220779    27.11028    -0.05   0.964     -5
> 4.35595
>            51.9144                 |
                               L2.   |   17.08131    31.55868     0.54   0.588     -4
> 4.77257
>           78.93519                 |

         ChinaReserveChangeInPercent |
                               L1.   |  -6.00e-18    1.16e-16    -0.05   0.959     -2
> .34e-16
>           2.22e-16                 |
                               L2.   |   6.30e-16    2.81e-16     2.25   0.025      8
> .01e-17
>           1.18e-15                 |

 ChangeInInflationExpectationMIC     |
                               L1.   |   2.74e-16    3.51e-17     7.81   0.000      2
```

```
>  .05e-16
>           3.43e-16
                              L2. |    1.70e-16    4.27e-17     3.98    0.000        8
> .64e-17
>           2.54e-16
                                   |
      InflationMOMLessFoodEnergy |
                              L3. |   -1.503546    3.317849    -0.45    0.650       -8
> .006411
           4.999319
                                   |
  ChangesInEffectiveFedFundRates |
                              L3. |    25.92051    26.39167     0.98    0.326       -2
> 5.80621
           77.64724
                                   |
      ChinaReserveChangeInPercent |
                              L3. |   -1.92e-16    1.57e-16    -1.22    0.221       -4
> .99e-16
           1.15e-16
                                   |
ChangeInInflationExpectationMIC |
                              L3. |    2.26e-17    8.69e-18     2.59    0.009        5
> .51e-18
           3.96e-17
                                   |
            MonthOnMUSgdpChange |
                              L3. |   -.8190517    2.476817    -0.33    0.741       -5
> .673523
              4.03542
                                   |
                            _cons |     -1.8622    3.511226    -0.53    0.596       -8
> .744076
           5.019677
```

> ──────────────────

```
52 .
53 . varstable
```

Eigenvalue stability condition

Eigenvalue	Modulus
.7068817	.706882
-.2973719 + .4373115*i*	.52884
-.2973719 - .4373115*i*	.52884
.4074656	.407466
.05483747 + .2498468*i*	.255794
.05483747 - .2498468*i*	.255794
-.1649919 + .01090558*i*	.165352
-.1649919 - .01090558*i*	.165352

All the eigenvalues lie inside the unit circle.
VAR satisfies stability condition.

```
54 . varlmar
```

Lagrange-multiplier test

lag	chi2	df	Prob > chi2
1	-8.8e+02	16	1.00000
2	-8.8e+02	16	1.00000

H0: no autocorrelation at lag order

```
55 . vargranger
```

Granger causality Wald tests

Equation	Excluded	chi2	df	Prob > chi2
InflationMOMLes~y	ChangesInEffect~s	2.8537	2	0.240
InflationMOMLes~y	ChinaReserveCha~t	1.7704	2	0.413
InflationMOMLes~y	ChangeInInflati~C	.8191	2	0.664
InflationMOMLes~y	ALL	5.0397	6	0.539
ChangesInEffect~s	InflationMOMLes~y	.22594	2	0.893
ChangesInEffect~s	ChinaReserveCha~t	.	0	.
ChangesInEffect~s	ChangeInInflati~C	1.3517	2	0.509
ChangesInEffect~s	ALL	1.5636	4	0.815
ChinaReserveCha~t	InflationMOMLes~y	1.0461	2	0.593
ChinaReserveCha~t	ChangesInEffect~s	4.8674	2	0.088
ChinaReserveCha~t	ChangeInInflati~C	1.1435	2	0.565

ChinaReserveCha~t		ALL	6.9399	6	0.326

ChangeInInflati~C	InflationMOMLes~y	3.4648	2	0.177
ChangeInInflati~C	ChangesInEffect~s	.36347	2	0.834
ChangeInInflati~C	ChinaReserveCha~t	.	0	.
ChangeInInflati~C	ALL	3.6188	4	0.460

56 . predict ee2, resid
   (6 missing values generated)

57 . gen Lee2=ee2[_n-1]
   (6 missing values generated)

58 . regress ee2 Lee2   if inrange(monthly_date,tm(2002m1), tm(2011m10))

Source	SS	df	MS		Number of obs	=	118
					F(1, 116)	=	0.47
Model	.475418509	1	.475418509		Prob > F	=	0.4941
Residual	117.222301	116	1.01053708		R-squared	=	0.0040
					Adj R-squared	=	-0.0045
Total	117.69772	117	1.00596342		Root MSE	=	1.0053

ee2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Lee2	-.0634878	.0925611	-0.69	0.494	-.2468166	.119841
_cons	-.0000873	.0925413	-0.00	0.999	-.183377	.1832024

59 .
60 . log off
        name: **<unnamed>**
         log: **/Users/nicolaszhang/Downloads/Stata Rec 6/VARandGranger.smcl**
    log type: **smcl**
   paused on: **10 Nov 2020, 19:10:25**