```
        Augmented Dickey-Fuller Test

data:  i.ts[, 1]
Dickey-Fuller = -7.1634, Lag order = 7, p-value = 0.01
alternative hypothesis: stationary

        Augmented Dickey-Fuller Test

data:  c.ts[, 1]
Dickey-Fuller = -7.3068, Lag order = 7, p-value = 0.01
alternative hypothesis: stationary

        Augmented Dickey-Fuller Test

data:  r.ts[, 1]
Dickey-Fuller = -5.1807, Lag order = 7, p-value = 0.01
alternative hypothesis: stationary

        Augmented Dickey-Fuller Test

data:  sfs.ts[, 1]
Dickey-Fuller = -5.1891, Lag order = 5, p-value = 0.01
alternative hypothesis: stationary

        Augmented Dickey-Fuller Test

data:  i.ts[, 2]
Dickey-Fuller = -4.2325, Lag order = 7, p-value = 0.01
alternative hypothesis: stationary

        Augmented Dickey-Fuller Test

data:  c.ts[, 2]
Dickey-Fuller = -3.3352, Lag order = 7, p-value = 0.06531
alternative hypothesis: stationary

        Augmented Dickey-Fuller Test

data:  r.ts[, 2]
Dickey-Fuller = -4.7476, Lag order = 7, p-value = 0.01
alternative hypothesis: stationary

        Augmented Dickey-Fuller Test

data:  sfs.ts[, 2]
Dickey-Fuller = -2.1497, Lag order = 5, p-value = 0.5132
alternative hypothesis: stationary
```

```
VAR Estimation Results:
=======================

Estimated coefficients for equation Return:
===========================================
Call:
Return = Return.l1 + CI.l1 + const

   Return.l1        CI.l1        const
-0.005258650 -0.001578553  0.042921136


Estimated coefficients for equation CI:
=======================================
Call:
CI = Return.l1 + CI.l1 + const

 Return.l1      CI.l1      const
 3.0990363  0.9471461 -0.5583080

$Granger

        Granger causality H0: Return do not Granger-cause CI

data:  VAR object V.i
F-Test = 8.0238, df1 = 1, df2 = 708, p-value = 0.004748


$Instant

        H0: No instantaneous causality between: Return and CI

data:  VAR object V.i
Chi-squared = 0.0111, df = 1, p-value = 0.9163

$Granger

        Granger causality H0: CI do not Granger-cause Return

data:  VAR object V.i
F-Test = 3.1439, df1 = 1, df2 = 708, p-value = 0.07664


$Instant

        H0: No instantaneous causality between: CI and Return
```

```
data:  VAR object V.i
Chi-squared = 0.0111, df = 1, p-value = 0.9163

VAR Estimation Results:
=======================

Estimated coefficients for equation Return:
===========================================
Call:
Return = Return.l1 + CI.l1 + const

    Return.l1         CI.l1         const
 2.920105e-02 -4.989372e-05  2.621078e-02


Estimated coefficients for equation CI:
=======================================
Call:
CI = Return.l1 + CI.l1 + const

 Return.l1      CI.l1      const
 0.6623284  0.9817357 -0.2843260

$Granger

        Granger causality H0: Return do not Granger-cause CI

data:  VAR object V.c
F-Test = 0.9374, df1 = 1, df2 = 708, p-value = 0.3333


$Instant

        H0: No instantaneous causality between: Return and CI

data:  VAR object V.c
Chi-squared = 1.7719, df = 1, p-value = 0.1832

$Granger

        Granger causality H0: CI do not Granger-cause Return

data:  VAR object V.c
F-Test = 0.004, df1 = 1, df2 = 708, p-value = 0.9498
```

```
$Instant

        H0: No instantaneous causality between: CI and Return

data:  VAR object V.c
Chi-squared = 1.7719, df = 1, p-value = 0.1832

VAR Estimation Results:
=======================

Estimated coefficients for equation Return:
===========================================
Call:
Return = Return.l1 + CI.l1 + const

   Return.l1        CI.l1        const
 0.008194411 -0.001079858  0.042444428


Estimated coefficients for equation CI:
=======================================
Call:
CI = Return.l1 + CI.l1 + const

 Return.l1      CI.l1      const
3.97460394 0.90443029 0.08913053

$Granger

        Granger causality H0: Return do not Granger-cause CI

data:  VAR object V.r
F-Test = 8.6984, df1 = 1, df2 = 708, p-value = 0.00329


$Instant

        H0: No instantaneous causality between: Return and CI

data:  VAR object V.r
Chi-squared = 2.6327, df = 1, p-value = 0.1047

$Granger

        Granger causality H0: CI do not Granger-cause Return

data:  VAR object V.r
```

```
F-Test = 1.2651, df1 = 1, df2 = 708, p-value = 0.2611


$Instant

        H0: No instantaneous causality between: CI and Return

data:  VAR object V.r
Chi-squared = 2.6327, df = 1, p-value = 0.1047

VAR Estimation Results:
=======================

Estimated coefficients for equation Return:
===========================================
Call:
Return = Return.l1 + CI.l1 + const

   Return.l1        CI.l1        const
 0.003786633 -0.000323535  0.049750393


Estimated coefficients for equation CI:
=======================================
Call:
CI = Return.l1 + CI.l1 + const

 Return.l1      CI.l1      const
-0.6289857  0.9331965  0.2308466

$Granger

        Granger causality H0: Return do not Granger-cause CI

data:  VAR object V.sfs
F-Test = 0.0935, df1 = 1, df2 = 420, p-value = 0.7599


$Instant

        H0: No instantaneous causality between: Return and CI

data:  VAR object V.sfs
Chi-squared = 5.0329, df = 1, p-value = 0.02487

$Granger
```

```
	Granger causality H0: CI do not Granger-cause Return

data:  VAR object V.sfs
F-Test = 0.1489, df1 = 1, df2 = 420, p-value = 0.6998


$Instant

	H0: No instantaneous causality between: CI and Return

data:  VAR object V.sfs
Chi-squared = 5.0329, df = 1, p-value = 0.02487
```