estat transition — Display state transition matrix

Description

`estat transition` displays the estimated state transition matrix of the state-space form of a DSGE model.

Quick start

Display the estimated transition matrix

`estat transition`

Same as above, but with 90% confidence intervals

`estat transition, level(90)`

Menu for estat

Statistics > Postestimation

Syntax

`estat transition` [, `compact post level(#)` *display_options*]

`collect` is allowed; see **[U] 11.1.10 Prefix commands**.

Options

`compact` reports only the coefficient values of the estimated policy matrix and displays these coefficients in matrix form.

`post` causes `estat transition` to behave like a Stata estimation (e-class) command. `estat transition` posts the state transition matrix to `e()`, so you can treat it as you would results from any other estimation command.

`level(#)` specifies the confidence level, as a percentage, for confidence intervals. The default is `level(95)` or as set by `set level`; see **[U] 20.8 Specifying the width of confidence intervals**.

display_options: `noci`, `nopvalues`, `cformat(%`*fmt*`)`, `pformat(%`*fmt*`)`, `sformat(%`*fmt*`)`, and `nolstretch`; see **[R] Estimation options**.

Remarks and examples

The state transition matrix is part of the state-space form of a DSGE model. It specifies the transition matrix of the model's state variables.

For examples, see **[DSGE] Intro 1**, **[DSGE] Intro 3a**, and **[DSGE] Intro 3b**.

Stored results

estat transition stores the following in r():

Matrices

r(transition)	estimated transition matrix
r(b)	estimates
r(V)	variance–covariance matrix of the estimates

If post is specified, estat transition also stores the following in e():

Macros

e(properties)	b V

Matrices

e(transition)	estimated transition matrix
e(b)	estimates
e(V)	variance–covariance matrix of the estimates

Methods and formulas

Entries in the state transition matrix $\mathbf{H}$ are functions of the structural parameter vector $\boldsymbol{\theta}$. Standard errors for entries in $\widehat{\mathbf{H}}$ are calculated using the delta method.

Also see

[DSGE] **dsge** — Linear dynamic stochastic general equilibrium models

[DSGE] **dsge postestimation** — Postestimation tools for dsge

[DSGE] **dsgenl** — Nonlinear dynamic stochastic general equilibrium models

[DSGE] **dsgenl postestimation** — Postestimation tools for dsgenl

[DSGE] **Intro 1** — Introduction to DSGEs

For suggested citations, see the FAQ on citing Stata documentation.