estat transition — Display state transition matrix

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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 <u>l</u>evel(#) 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 **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

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