**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
```

As above, but with 90% confidence intervals

```
estat transition, level(90)
```

**Menu for estat**

Statistics > Postestimation

**Syntax**

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

**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(%)`, `pformat(%)`, `sformat(%)`, 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 $\theta$. Standard errors for entries in $\hat{H}$ 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