

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 llevel(#) 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

<code>r(transition)</code>	estimated transition matrix
<code>r(b)</code>	estimates
<code>r(V)</code>	variance-covariance matrix of the estimates

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

Macros

<code>e(properties)</code>	b V
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Matrices

<code>e(transition)</code>	estimated transition matrix
<code>e(b)</code>	estimates
<code>e(V)</code>	variance-covariance matrix of the estimates

Methods and formulas

Entries in the state transition matrix \mathbf{H} are functions of the structural parameter vector θ . Standard errors for entries in $\hat{\mathbf{H}}$ 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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