estimates - Save and manipulate estimation results

Description Syntax Remarks and examples Also see

## Description

estimates allows you to store and manipulate estimation results:

- You can save estimation results in a file for use in later sessions.
- You can store estimation results in memory so that you can
  - a. switch among separate estimation results and
  - b. form tables combining separate estimation results.

# Syntax

Command	Reference
Save and use results from disk	
<u>est</u> imates save <i>filename</i>	[R] estimates save
<u>est</u> imates use <i>filename</i>	[R] estimates save
<u>estimates</u> <u>des</u> cribe using <i>filename</i>	[R] estimates describe
<u>est</u> imates esample:	[R] estimates save
Store and restore estimates in memory	
<u>est</u> imates <u>sto</u> re <i>name</i>	[R] estimates store
<u>est</u> imates <u>res</u> tore <i>name</i>	[R] estimates store
<u>est</u> imates query	[R] estimates store
<u>est</u> imates $\overline{d}$ ir	[R] estimates store
<u>est</u> imates drop <i>namelist</i>	[R] estimates store
<u>est</u> imates clear	[R] estimates store
Set titles and notes	
<u>est</u> imates title: <i>text</i>	[R] estimates title
<u>est</u> imates title	[R] estimates title
<u>estimates note</u> s: <i>text</i>	[R] estimates notes
<u>est</u> imates <u>note</u> s	[R] estimates notes
<u>est</u> imates <u>note</u> s <u>l</u> ist	[R] estimates notes
<u>est</u> imates <u>note</u> s drop	[R] estimates notes
Report	
<u>est</u> imates <u>des</u> cribe [ <i>name</i> ]	[R] estimates describe
estimates replay [namelist]	[R] estimates replay

Command, continued	Reference, continued
Tables and statistics	
$\underline{\texttt{est}} \\ \texttt{imates} \\ \underline{\texttt{tab}} \\ \texttt{le} \\ \begin{bmatrix} \textit{namelist} \end{bmatrix}$	[R] estimates table
etable	[R] etable
$\underline{\texttt{est}} \\ \texttt{imates} \\ \underline{\texttt{sel}} \\ \texttt{ected} \\ \begin{bmatrix} \textit{namelist} \end{bmatrix}$	[R] estimates selected
<u>est</u> imates <u>stat</u> s [ <i>namelist</i> ]	[R] estimates stats
estimates for <i>namelist</i> :	[R] estimates for

## **Remarks and examples**

#### stata.com

estimates is for use after you have fit a model, be it with regress, logistic, etc. You can use estimates after any estimation command, whether it be an official estimation command of Stata or a community-contributed one.

estimates has three separate but related capabilities:

- 1. You can save estimation results in a file on disk so that you can use them later, even in a different Stata session.
- 2. You can store up to 300 estimation results in memory so that they are at your fingertips.
- 3. You can make tables comparing any results you have stored in memory.

Remarks are presented under the following headings:

Saving and using estimation results Storing and restoring estimation results Comparing estimation results Jargon

## Saving and using estimation results

After you have fit a model, say, with regress, type

```
. use https://www.stata-press.com/data/r18/auto
(1978 automobile data)
```

. regress mpg weight displ foreign
 (output omitted)

You can save the results in a file:

. estimates save basemodel file basemodel.ster saved

Later, say, in a different session, you can reload those results:

. estimates use basemodel

The situation is now nearly identical to what it was immediately after you fit the model. You can replay estimation results:

. regress (output omitted)

You can perform tests:

. test foreign==0
 (output omitted)

And you can use any postestimation command or postestimation capability of Stata. The only difference is that Stata no longer knows what the estimation sample, e(sample) in Stata jargon, was. When you reload the estimation results, you might not even have the original data in memory. That is okay. Stata will know to refuse to calculate anything that can be calculated only on the original estimation sample.

If it is important that you use a postestimation command that can be used only on the original estimation sample, there is a way you can do that. You use the original data and then use estimates esample: to tell Stata what the original sample was.

See [R] estimates save for details.

### Storing and restoring estimation results

Storing and restoring estimation results in memory is much like saving them to disk. You type

. estimates store base

to save the current estimation results under the name base, and you type

. estimates restore base

to get them back later. You can find out what you have stored by typing

. estimates dir

Saving estimation results to disk is more permanent than storing them in memory, so why would you want merely to store them? The answer is that, once they are stored, you can use other estimates commands to produce tables and reports from them.

See [R] estimates store for details about the estimates store and restore commands.

## Comparing estimation results

Let's say that you have done the following:

```
. use https://www.stata-press.com/data/r18/auto (1978 automobile data)
```

- . regress mpg weight displ (output omitted)
- . estimates store base
- . regress mpg weight displ foreign
   (output omitted)
- . estimates store alt

You can now get a table comparing the coefficients:

. estimates table base alt

Variable	base	alt
weight displacement foreign _cons	00656711 .00528078 40.084522	00677449 .00192865 -1.6006312 41.847949

estimates table can do much more; see [R] estimates table. etable also produces tables from stored estimates, customizes the tables, and exports to a variety of formats, including Word, PDF, LATEX, Excel, and HTML; see [R] etable. Also see [R] estimates stats. estimates stats works like estimates table but produces model comparisons in terms of BIC and AIC.

#### Jargon

You know that if you fit a model, say, by typing

. regress mpg weight displacement

then you can later replay the results by typing

. regress

and you can do tests and calculate other postestimation statistics by typing

- . test displacement==0
- . estat vif
- . predict mpghat

As a result, we often refer to the estimation results or the current estimation results or the most recent estimation results or the last estimation results or the estimation results in memory.

With estimates store and estimates restore, you can have many estimation results in memory. One set of those—the set most recently estimated or the set most recently restored—is the *current* or *active* estimation results, which you can replay, which you can test, or from which you can calculate postestimation statistics.

Current and active are the two words we will use interchangeably from now on.

### Also see

[P] \_estimates — Manage estimation results

Stata, Stata Press, and Mata are registered trademarks of StataCorp LLC. Stata and Stata Press are registered trademarks with the World Intellectual Property Organization of the United Nations. StataNow and NetCourseNow are trademarks of StataCorp LLC. Other brand and product names are registered trademarks or trademarks of their respective companies. Copyright © 1985–2023 StataCorp LLC, College Station, TX, USA. All rights reserved.



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