

**estimates save** — Save and use estimation results

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## Description

`estimates save filename` saves the current (active) estimation results in *filename*.

`estimates use filename` loads the results saved in *filename* into the current (active) estimation results.

In both cases, if *filename* is specified without an extension, `.ster` is assumed.

`estimates esample:` (note the colon) resets `e(sample)`. After `estimates use filename`, `e(sample)` is set to contain 0, meaning that none of the observations currently in memory was used in obtaining the estimates.

`estimates esample` (without a colon) displays how `e(sample)` is currently set.

## Quick start

Save current estimation results to `mymodels.ster`

```
estimates save mymodels
```

Add current estimation results to existing file `mymodels.ster`

```
estimates save mymodels, append
```

Make active third estimation results saved in `mymodels.ster`

```
estimates use mymodels, number(3)
```

Reset `e(sample)` to original estimation sample assuming command `regress y x1 x2`

```
estimates esample: y x1 x2
```

## Menu

Statistics > Postestimation

## Syntax

```
estimates save filename [, append replace]
```

```
estimates use filename [, number(#)]
```

```
estimates esample: [varlist] [if] [in] [weight]  
[, replace stringvars(varlist) zeroweight]
```

```
estimates esample
```

## Options

`append`, used with `estimates save`, specifies that results be appended to an existing file. If the file does not already exist, a new file is created.

`replace`, used with `estimates save`, specifies that *filename* can be replaced if it already exists.

`number(#)`, used with `estimates use`, specifies that the #th set of estimation results from *filename* be loaded. This assumes that multiple sets of estimation results have been saved in *filename* by `estimates save, append`. The default is `number(1)`.

`replace`, used with `estimates esample:`, specifies that `e(sample)` can be replaced even if it is already set.

`stringvars(varlist)`, used with `estimates esample:`, specifies string variables. Observations containing variables that contain "" will be omitted from `e(sample)`.

`zeroweight`, used with `estimates esample:`, specifies that observations with zero weights are to be included in `e(sample)`.

## Remarks and examples

[stata.com](http://www.stata.com)

See [\[R\] estimates](#) for an overview of the `estimates` commands.

For a description of `estimates save` and `estimates use`, see [Saving and using estimation results](#) in [\[R\] estimates](#).

The rest of this entry concerns `e(sample)`.

Remarks are presented under the following headings:

*Setting e(sample)*

*Resetting e(sample)*

*Determining who set e(sample)*

## Setting e(sample)

After `estimates use filename`, the situation is nearly identical to what it was immediately after you fit the model. The one difference is that `e(sample)` is set to 0.

`e(sample)` is Stata's function to mark which observations among those currently in memory were used in producing the estimates. For instance, you might type

```
. use https://www.stata-press.com/data/r16/auto
(1978 Automobile Data)
. regress mpg weight displ if foreign
(output omitted)
. summarize mpg if e(sample)
(output omitted)
```

and `summarize` would report the summary statistics for the observations `regress` in fact used, which would exclude not only observations for which `foreign = 0` but also any observations for which `mpg`, `weight`, or `displ` was missing.

If you saved the above estimation results and then reloaded them, however, `summarize mpg if e(sample)` would produce

```
. summarize mpg if e(sample)
```

Variable	Obs	Mean	Std. Dev.	Min	Max
mpg	0				

Stata thinks that none of these observations was used in producing the estimates currently loaded.

What else could Stata think? When you `estimates use filename`, you do not have to have the original data in memory. Even if you do have data in memory that look like the original data, they might not be. Setting `e(sample)` to 0 is the safe thing to do. There are some postestimation statistics, for instance, that are appropriate only when calculated on the estimation sample. Setting `e(sample)` to 0 ensures that if you ask for one of them, you will get back a null result.

We recommend that you leave `e(sample)` set to 0. But what if you really need to calculate that postestimation statistic? Well, you can get it, but you are going to be responsible for setting `e(sample)` correctly. Here we just happen to know that all the observations with `foreign = 1` were used, so we can type

```
. estimates esample: if foreign
```

If all the observations had been used, we could simply type

```
. estimates esample:
```

The safe thing to do, however, is to look at the estimation command—`estimates describe` will show it to you—and then type

```
. estimates esample: mpg weight displ if foreign
```

We include all observations with `foreign = 1`, excluding any with missing values in the `mpg`, `weight`, or `displ` variable, that are to be treated as the estimation sample.

## Resetting `e(sample)`

`estimates esample:` will allow you to not only set but also reset `e(sample)`. If `e(sample)` has already been set (say that you just fit the model) and you try to set it, you will see

```
. estimates esample: mpg weight displ if foreign
no; e(sample) already set
r(322);
```

Here you can specify the `replace` option:

```
. estimates esample: mpg weight displ if foreign, replace
```

We do not recommend resetting `e(sample)`, but the situation can arise where you need to. Imagine that you `estimates use filename`, you set `e(sample)`, and then you realize that you set it wrong. Here you would want to reset it.

### Determining who set e(sample)

`estimates esample` without a colon will report whether and how `e(sample)` was set. You might see

```
. estimates esample
   e(sample) set by estimation command
```

or

```
. estimates esample
   e(sample) set by user
```

or

```
. estimates esample
   e(sample) not set (0 assumed)
```

### Stored results

`estimates esample` without the colon saves macro `r(who)`, which will contain `cmd`, `user`, or `zero'd`.

### Also see

[R] [estimates](#) — Save and manipulate estimation results