

Title

dsimih etodta — save dsimih results in e() as a dsimih file

Syntax

dsimih etodta filename [, replace]

Description

dsimih etodta exports **dsimih** results in **e()** to files. They contain dynamic simulation results generated by <u>dsimih create</u>. These files are regular Stata data set files. They do contain additional information required for the correct functioning of **dsimih** subcommands. These files are therefore referred to as **dsimih files**.

It is important to note that you may not modify the data in these files. If you do so, **dsimih** will not accept them anymore as input for its subcommands.

Abbreviations, definitions, notation, syntax elements

This help entry uses terminology defined in svarih and dsimih.

Options

replace permits dsimih etodta to overwrite an existing file.

Remarks

Remarks are presented under the following headings:

File extensions
dsimih files
Do not change the data in dsimih files
The using modifier in dsimih subcommands

File extensions

If *filename* is specified without an extension, **.dta** is assumed. You may wish to save all of your **dsimih files** with a **.dsimih** extension. If so, specify the extension in *filename* explicitly.

dsimih files

dsimih files are regular Stata data set files but they do contain additional information required for the correct functioning of dsimih subcommands. The files therefore can only be properly constructed by dsimih etodta and by the saving() option of dsimih create.

dsimih files are just one possibility where dsimih results can be stored.
dsimih results can be stored in and retrieved from three locations: e(), .ster
files, and dsimih files. .ster files are Stata estimation results files. See
estimates save. Do not confuse dsimih files with .ster files. Whenever a
dsimih help file talks about dsimih files, it refers to dsimih results stored in
regular Stata data set files. These files can have extensions other than .dta,
.dsimih for example.

dsimih files contain the following 12 variables, in the same order:

variable name description

regime regime #

step forecast step/horizon impulse impulse variable response response variable

sirf SIRF

sirf_seasmp SIRF: asymptotic standard error

sirf_sebs SIRF: standard error, parametric bootstrap sirf_sebsp SIRF: standard error, residual bootstrap

sfevd SFEVD

sfevd_seasmp SIRF: asymptotic standard error

sfevd_sebs SIRF: standard error, parametric bootstrap sfevd_sebsp SIRF: standard error, residual bootstrap

Variables 'sirf' and 'sfevd' will never contain missing values. By contrast, the variables that carry their standard errors may contain missing values.

The first four variables uniquely identify observations.

The sort order is regime-impulse-response-step.

Do not change the data in dsimih files

dsimih will detect any changes in the data in dsimih files. If it does, it will
refuse to do anything with these files.

If you need to change and re-save the data, save either the original or the modified file under a different name.

The using modifier in dsimih subcommands

<u>dsimih describe</u>, <u>dsimih use</u>, <u>dsimih table</u>, and <u>dsimih graph</u> have a <u>using</u> modifier that allows to access DS results stored in files. Note that **dsimih use** does not have an explicit **using** keyword since the command name renders it redundant. For simplicity, the optional *filename* in **dsimih use** is also referred to as its optional **using** modifier.

The following is true for all four subcommands:

- The using modifier is optional. The default is to access DS results in e().
- The *filename* in the **using** modifier can be a <u>ster</u> file or a <u>dsimih file</u>.
 If *filename* does not have a file extension, **dsimih** looks for files with
- If filename does not have a file extension, **dsimih** looks for files with extensions .ster and .dta. If it finds none, it complains. If it finds both a .dta and a .ster file called *filename*, it complains. If it finds just one of the two, it uses it.
- filename can have other extensions than .dta or .ster. In these cases, dsimih treats it as a Stata data set file.

It is important to understand that dsimih will never access data that you have in data set memory. It either accesses e() (then the using modifier was omitted) or a file (then the using modifier was used). For example, the command sequence

- . estimates use file1.ster
- . dsimih use, clear
- . estimates use file2.ster
- . dsimih table sirf

will first load the contents of the estimation results file file1.ster into e(). Presuming that it contains svarih results, the second command will load DS results now stored in e() into data set memory. The third command places another set of DS results in e(), and these results are displayed by the dsimih table statement.

Examples

Excecuting the following statements will change current e()-results.

Bootstrap replication numbers are set to values that are inappropriate for analysis but appropriate for quick execution of example statements.

Generate example estimates (see svarih examples):

```
. webuse lutkepohl2
. svarih examples bac first , ereplace
. dsimih describe , modelstats cmdline
. dsimih create
. version 11.2: set seed 123456
. dsimih create , bs fromb reps(10)
. version 11.2: set seed 123456
. dsimih create , bsp fromb reps(10)
```

. dsimih describe

Save DS results created in e() to a dsimih file. The default file extension is .dta.

```
. dsimih etodta dsimih examplefile , replace
. describe using dsimih examplefile.dta
```

We could have saved the file under a different extension, say, .dsimih. The file would still be a regular Stata data set file.

```
. dsimih etodta dsimih examplefile2.dsimih , replace
. describe using dsimih examplefile2.dsimih
```

The DS results in dsimih files can be accessed by dsimih subcommands via their using modifier.

```
. dsimih describe using dsimih examplefile.dta , all
. dsimih table sfevd using dsimih examplefile.dta , regime(2) impulse(*inc)
    step(1/4 8)
. dsimih graph sirf using dsimih examplefile2.dsimih , regime(2)
    impulse(*inc) ustep(6)
. dsimih use dsimih examplefile2.dsimih , clear
. describe
```

Changing the data will invalidate **dsimih files** files for usage with **dsimih** subcommands:

```
. use dsimih examplefile2.dsimih
. drop if regime==2
. save, replace
. capture noisily dsimih describe using dsimih examplefile2.dsimih
. erase dsimih examplefile.dta
. erase dsimih examplefile2.dsimih
```

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<u>Also see</u>

Help: [TS] irf, dsimih, dsimih create, dsimih table, dsimih graph, dsimih describe, dsimih use, dsimih drop