Title

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mi convert — Change style of mi data

Description

`mi convert` converts `mi` data from one style to another.

Menu

Statistics > Multiple imputation

Syntax

`mi convert wide` [, *options*]

`mi convert mlong` [, *options*]

`mi convert flong` [, *options*]

`mi convert flongsep` *name* [, *options*]

options	Description
`clear`	okay to convert if data not saved
`noupdate`	see [MI] **noupdate option**

Options

`clear` specifies that it is okay to convert the data even if the data have not been saved to disk since they were last changed.

`noupdate` in some cases suppresses the automatic `mi update` this command might perform; see [MI] **noupdate option**.

Remarks and examples

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Remarks are presented under the following headings:

Using mi convert as a convenience tool

Some tasks are easier in one style than another. `mi convert` allows you to switch to the more convenient style. It would not be unreasonable for a snippet of a session to read

```
. mi convert wide
. drop if sex=="male"
. mi convert mlong, clear
. replace age2 = age^2
```

This user is obviously exploiting his or her knowledge of [MI] **Styles**. The official way to do the above would be

```
. drop if sex=="male"
. mi update
. mi passive: replace age2 = age^2
```

It does not matter which approach you choose.

Converting from flongsep

If you have flongsep data, it is worth finding out whether you can convert it to one of the other styles. The other styles are more convenient than flongsep, and `mi` commands run faster on them. With your flongsep data in memory, type

```
. mi convert mlong
```

The result will be either success or an insufficient-memory error.

If you wish, you can make a crude guess as to how much memory is required as follows:

1. Use your flongsep data. Type `mi describe`. Write down M, the number of imputations, and write down the number of complete observations, which we will call N, and the number of incomplete observations, which we will call n.
2. With your flongsep data still in memory, type `memory`. Write down the sum of the numbers reported as "data" and "overhead" under the "used" column. We will call this sum S for size.
3. Calculate $T = S + M \times S \times (n/N)$. T is an approximation of the memory your `mi` data would consume in the mlong style. To that, we need to add a bit to account for extra memory used by Stata commands and for variables or observations you might want to add. How much to add is always debatable. For large datasets, add 10% or 5 MB, whichever is smaller.

   For instance, you might have

$$\begin{aligned} M &= 30 \\ N &= 10{,}000 \\ n &= 1{,}500 \\ S &= 8{,}040{,}000 = 8 \text{ MB} \end{aligned}$$

   and thus we would calculate $T = 8 + 30 \times 8 \times (1500/10000) = 44$ MB, to which we would add another 4 or 5 MB, to obtain 48 or 49 MB.

Converting to flongsep

Note that `mi convert`'s syntax for converting to flongsep is

`mi convert flongsep` *name*

You must specify a name, and that name will become the basis for the names of the datasets that comprise the collection of flongsep data. Data for $m = 0$ will be stored in *name*`.dta`; data for $m = 1$, in `_1_`*name*`.dta`; data for $m = 2$, in `_2_`*name*`.dta`; and so on. The files will be stored in the current directory; see the `pwd` command in [D] **cd**.

If you are going to use flongsep data, see *Advice for using flongsep* in [MI] **Styles**. Also see [MI] **mi copy** and [MI] **mi erase**.

Also see

[MI] **Intro** — Introduction to mi

[MI] **Styles** — Dataset styles