Title

stata.com

matsize — Set the maximum number of variables in a model

Description Syntax Option Remarks and examples Also see

Description

`set matsize` sets the maximum matrix size, which influences the number of variables that can be included in any of Stata's estimation commands. For Stata/MP, Stata/SE, and Stata/IC, the default value is 400, but it may be increased or decreased.

Changing `matsize` has no effect on Mata.

Syntax

```
set matsize # [ , permanently ]
```

where $10 \leq \# \leq 11000$ for Stata/MP and Stata/SE and where $10 \leq \# \leq 800$ for Stata/IC.

Option

`permanently` specifies that, in addition to making the change right now, the `matsize` setting be remembered and become the default setting when you invoke Stata.

Remarks and examples

stata.com

`set matsize` controls the internal size of matrices that Stata uses. The default of 400 for Stata/IC, for instance, means that linear regression models are limited to 198 independent variables—198 because the constant uses one position and the dependent variable another, making a total of 200.

You may change `matsize` with data in memory, but increasing `matsize` increases the amount of memory consumed by Stata, increasing the probability of page faults and thus of making Stata run more slowly.

▷ Example 1

We wish to fit a model of `y` on the variables `x1` through `x400`. Without thinking, we type

```
. regress y x1-x400
matsize too small
    You have attempted to create a matrix with more than 400 rows or columns
    or to fit a model with more than 400 variables plus ancillary parameters.
    You need to increase matsize by using the set matsize command; see help
    matsize.
r(908);
```

We realize that we need to increase `matsize`, so we type

```
. set matsize 450
. regress y x1-x400
  (output omitted)
```

◁

Programmers should note that the current setting of `matsize` is stored as the c-class value `c(matsize)`; see [P] **creturn**.

Also see

[R] **query** — Display system parameters

[D] **memory** — Memory management

[U] 6 Managing memory