

**st\_numscalar()** — Obtain values from and put values into Stata scalars

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## Description

`st_numscalar(name)` returns the value of the specified Stata numeric scalar, or it returns `J(0,0,.)` if the scalar does not exist.

`st_numscalar(name, value)` sets or resets the value of the specified numeric scalar, assuming `value != J(0,0,.)`. `st_numscalar(name, value)` deletes the specified scalar if `value == J(0,0,.)`. `st_numscalar("x", J(0,0,.)`) erases the scalar `x`, or it does nothing if scalar `x` did not exist.

`st_strscalar(name)` returns the value of the specified Stata string scalar, or it returns `J(0,0,"")` if the scalar does not exist.

`st_strscalar(name, value)` sets or resets the value of the specified scalar, assuming `value != J(0,0,"")`. `st_strscalar(name, value)` deletes the specified scalar if `value == J(0,0,"")`. `st_strscalar("x", J(0,0,""))` erases the scalar `x`, or it does nothing if scalar `x` did not exist.

Concerning deletion of a scalar, it does not matter whether you code `st_numscalar(name, J(0,0,.)`) or `st_strscalar(name, J(0,0,""))`; both yield the same result.

`st_numscalar(name, value, hcat)` and `st_numscalar_hcat(name)` are used to set and query the `hcat` corresponding to an `e()` or `r()` value. They are also rarely used. See [R] [Stored results](#) and [P] [return](#) for more information.

## Syntax

```
real    st_numscalar(string scalar name)
void    st_numscalar(string scalar name, real value)
void    st_numscalar(string scalar name, real value, string scalar hcat)
string  st_numscalar_hcat(string scalar name)

string  st_strscalar(string scalar name)
void    st_strscalar(string scalar name, string value)
```

where

1. Functions allow *name* to be
  - a. global scalar such as "myname",
  - b. `r()` scalar such as "r(mean)",
  - c. `e()` scalar such as "e(N)", or
  - d. `c()` scalar such as "c(namelenchar)".

Note that string scalars never appear in `r()` and `e()`; thus (b) and (c) do not apply to `st_strscalar()`.

2. `st_numscalar(name)` and `st_strscalar(name)` return the value of the specified Stata scalar. They return a  $1 \times 1$  result if the specified Stata scalar exists and return a  $0 \times 0$  result otherwise.
3. `st_numscalar(name, value)` and `st_strscalar(name, value)` set or reset the contents of the specified Stata scalar.
4. `st_numscalar(name, value)` and `st_strscalar(name, value)` delete the specified Stata scalar if `value==J(0,0,.)` (if `value` is  $0 \times 0$ ).
5. `st_numscalar(name, value, hcat)` sets or resets the specified Stata scalar and sets or resets the hidden or historical status when `name` is an `e()` or `r()` value. Allowed `hcat` values are "visible", "hidden", "historical", and a string scalar release number such as such as "10", "10.1", or any string release number matching "`#`[`#`][`.`[`#`[`#`]]". See [\[P\] return](#) for a description of hidden and historical stored results.

When `st_numscalar(name, value)` is used to set an `e()` or `r()` value, its `hcat` is set to "visible".

There is no three-argument form of `st_strscalar()` because there are no `r()` or `e()` string scalar values.

## Remarks and examples

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

See [\[M-5\] st\\_global\(\)](#) and [\[M-5\] st\\_rclear\(\)](#).

## Conformability

`st_numscalar(name)`, `st_strscalar(name)`:

*name:*  $1 \times 1$   
*result:*  $1 \times 1$  or  $0 \times 0$

`st_numscalar(name, value)`, `st_strscalar(name, value)`:

*name:*  $1 \times 1$   
*value:*  $1 \times 1$  or  $0 \times 0$   
*result:* void

`st_numscalar(name, value, hcat)`:

*name:*  $1 \times 1$   
*value:*  $1 \times 1$   
*hcat:*  $1 \times 1$   
*result:* void

`st_numscalar(name)`:

*name:*  $1 \times 1$   
*result:*  $1 \times 1$

## Diagnostics

All functions abort with error if *name* is malformed.

`st_numscalar(name)` and `st_strscalar(name)` return `J(0,0,.)` or `J(0,0,"")` if Stata scalar *name* does not exist. They abort with error, however, if the name is malformed.

`st_numscalar(name, value, hcat)` aborts with error if *hcat* is not an allowed value.

`st_numscalar_hcat(name)` returns "visible" when *name* is not an `e()` or `r()` value and returns "" when *name* is an `e()` or `r()` value that does not exist.

## Also see

[M-5] [st\\_rclear\(\)](#) — Clear `r()`, `e()`, or `s()`

[M-4] [Stata](#) — Stata interface functions