

```

. clear

.
. /*
> Back to Fan's Stata4Econ or other repositories:
> - http://fanwangecon.github.io
> - http://fanwangecon.github.io/Stata4Econ
> - http://fanwangecon.github.io/R4Econ
> - http://fanwangecon.github.io/M4Econ
> - http://fanwangecon.github.io/CodeDynaAsset/
> - http://fanwangecon.github.io/Math4Econ/
> - http://fanwangecon.github.io/Stat4Econ/
> - http://fanwangecon.github.io/Tex4Econ
>
> Stata matrix basic generation and matrix slicing
>
> 1. Generate Matrix
> 2. Replace single cell values from matrix
> 3. Replace subset of matrix by row or column array
> 4. Row and Column Names
> 5. Retrieve matrix row and column values
>
> */
.
. ///--- Start log
> set more off

. capture log close _all

.
. cd "${root_log}"
C:\Program Files (x86)\Stata14

. global st_link "/matrix/define/basic"

. global curlogfile "~/Stata4Econ/${st_link}"

. global st_logname "matrix_select_subset"

. log using "${curlogfile}" , replace name($st_logname)


---


      name: matrix_select_subset
      log: C:\Users\fan\Stata4Econ\matrix\define\basic.smcl
      log type: smcl
      opened on: 6 Oct 2019, 18:49:17

. log on $st_logname
(log already on)

.
. ///-- Site Link: Fan's Project Reusable Stata Codes Table of Content
> di "https://fanwangecon.github.io/"
https://fanwangecon.github.io/

. di "https://fanwangecon.github.io/Stata4Econ/"
https://fanwangecon.github.io/Stata4Econ/

.
. ///-- File Title
> global filetitle "Stata Matrix Slicing, Select Subset of Matrix Values, Subset of Rows and Columns"

.
.
. ///--- Generate matrix with all 0
> scalar it_rowcnt = 4

. scalar it_colcnt = 6

. scalar bl_fillval = 0

. matrix mt_bl_estd = J(it_rowcnt, it_colcnt, bl_fillval)

.
. ///--- Give Matrix Row and Column Names
> matrix rownames mt_bl_estd = hhfe vilfe provfe morecontrols

. matrix colnames mt_bl_estd = reg1 reg2 reg3 reg4 reg5 reg6

.
. ///--- Assign value to matrix cell single
> matrix mt_bl_estd[rownumb(mt_bl_estd, "hhfe"), colnumb(mt_bl_estd, "reg1")] = 1

```

```
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. matrix mt_bl_estd[2,2] = 3
```

```
. ///--- Assign value to 4th row, 3rd to 6th
> matrix mt_bl_estd[4,3] = (9,8,7,6)
```

```
. ///--- Assign value to 4th column, 2nd 3rd values
> matrix mt_bl_estd[2,4] = (-3\ -44.3)
```

```
. ///--- Obtain value from matrix
> scalar bl_hhfe_reg1 = mt_bl_estd[rownumb(mt_bl_estd, "hhfe"), colnumb(mt_bl_estd, "reg1")]
```

```
. di bl_hhfe_reg1
```

```
1
```

```
. di e1(mt_bl_estd, rownumb(mt_bl_estd, "hhfe"), colnumb(mt_bl_estd, "reg1"))
```

```
1
```

```
. ///--- Select a column from matrix
```

```
> matrix mt_bl_estd_colreg1 = mt_bl_estd[1..., colnumb(mt_bl_estd, "reg1")]
```

```
. matrix list mt_bl_estd_colreg1
```

```
mt_bl_estd_colreg1[4,1]
```

```
      reg1
      hhfe 1
      vilfe 0
      provfe 0
morecontrols 0
```

```
. ///--- Get Row and Column Names
```

```
> global st_colnames : colnames mt_bl_estd
```

```
. di "${st_colnames}"
```

```
reg1 reg2 reg3 reg4 reg5 reg6
```

```
. global st_rownames : rownames mt_bl_estd
```

```
. di "${st_rownames}"
```

```
hhfe vilfe provfe morecontrols
```

```
. ///--- Show Matrix
```

```
> matrix list mt_bl_estd
```

```
mt_bl_estd[4,6]
```

```
      reg1  reg2  reg3  reg4  reg5  reg6
      hhfe  1    0    0    0    0    0
      vilfe  0    3    0   -3    0    0
      provfe  0    0    0  -44.3  0    0
morecontrols  0    0    9    8    7    6
```

```
. ///--- End Log and to HTML
```

```
> log close _all
```

```
name: matrix_select_subset
```

```
log: C:\Users\fan\Stata4Econ\matrix\define\basic.smcl
```

```
log type: smcl
```

```
closed on: 6 Oct 2019, 18:49:17
```

```
. capture noisily {
```

```
. log2html "${curlogfile}", replace title($filetitle (<a href="https://github.com/FanWangEcon/Stata4Econ/blob/master${st_l  
> nk}.do">DO</a>, more see: <a href="https://fanwangecon.github.io/">Fan</a> and <a href="https://fanwangecon.github.io/Stata  
> 4Econ">Stata4Econ</a>))
```

```
HTML log file ~/Stata4Econ/matrix/define/basic.html created
```

```
. }
```

```
. ///--- to PDF
```

```
> capture noisily {
```

```
. // translator query Results2pdf
```

```
. translator set Results2pdf logo off
```

```
. translator set Results2pdf fontsize 8
```

```
. translator set Results2pdf pagesize letter
```

```
. translator set Results2pdf lmargin 0.2
```

```
. translator set Results2pdf rmargin 0.2
```

```
. translator set Results2pdf tmargin 0.2
```

```
. translator set Results2pdf bmargin 0.2
```

```
. translate @Results "${curlogfile}.pdf", replace translator(Results2pdf)
```