```
Saturday August 24 16:27:14 2019 Page 1
. 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

    Generate Matrix
    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
 cd "${root_log}"
C:\Users\fan\Documents\Dropbox (UH-ECON)\Profile Paper\Paper Profile April 2016\stata
. global curlogfile "~\Stata4Econ\matrix\define\basic"
. log using "${curlogfile}" , replace
(note: file C:\Users\fan\Stata4Econ\matrix\define\basic.smcl not found)
      name: <unnamed>
       log: C:\Users\fan\Stata4Econ\matrix\define\basic.smcl
  log type:
             smcl
 opened on: 24 Aug 2019, 16:27:13
 log on
(log already on)
  ///--- 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
          matrix mt bl estd[2,2] = 3
  ///--- Assign value to 4th row, 3nd to 6th matrix mt bl \operatorname{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
```

```
Saturday August 24 16:27:14 2019 Page 2 di el(mt_bl_estd, rownumb(mt_bl_estd, "hhfe"), colnumb(mt_bl_estd, "reg1"))
. ///--- 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
       vilfe
      provfe
morecontrols
. ///--- 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
                                reg3
                                         0
-3
                 1
                            0
                                    0
                    0
      provfe
                    0
morecontrols
. ///--- End Log and to HTML
> log close
      name:
              <unnamed>
       log: C:\Users\fan\Stata4Econ\matrix\define\basic.smcl
 log type: smcl closed on: 24 Aug 2019, 16:27:13
. capture noisily {
. log2html "${curlogfile}", replace
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)