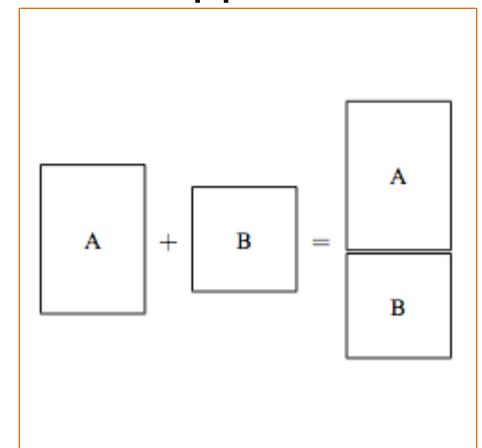
## **Append**

## Merge



$$\begin{bmatrix} & & \\ & A & \end{bmatrix} + \begin{bmatrix} & B & \\ & & \end{bmatrix} = \begin{bmatrix} & A & B \end{bmatrix}$$

#### Example:

A = Data on graduating students from UC Berkeley 2005-2011

B = Data on graduating students from UC Berkeley 2011-2016

A+B = Data on graduating students from UC Berkeley 2005-2016

#### Example:

A = Questionnaire part 1 taken by graduating students in 2015

B = Questionnaire part 2 taken by graduating students in 2015

A+B = Questionnaire 1 & 2 data for graduating students in 2015

## Append

Data on families 1 and 2

| famid | childid | age | gender |
|-------|---------|-----|--------|
| 1     | 1       | 9   | 1      |
| 1     | 2       | 6   | 0      |
| 1     | 3       | 3   | 0      |
| 2     | 1       | 8   | 0      |
| 2     | 2       | 6   | 1      |
| 2     | 3       | 2   | 1      |



Data on family 3

| famid | childid | age | gender |
|-------|---------|-----|--------|
| 3     | 1       | 6   | 0      |
| 3     | 2       | 4   | 1      |
| 3     | 3       | 2   | 0      |

| famid | childid | age | gender |
|-------|---------|-----|--------|
| 1     | 1       | 9   | 1      |
| 1     | 2       | 6   | 0      |
| 1     | 3       | 3   | 0      |
| 2     | 1       | 8   | 0      |
| 2     | 2       | 6   | 1      |
| 2     | 3       | 2   | 1      |
| 3     | 1       | 6   | 0      |
| 3     | 2       | 4   | 1      |
| 3     | 3       | 2   | 0      |

# Merge

Data on variables: income and unemployment insurance

| id | inc80 | inc81 | inc82 | ue80 | ue81 | ue82 |  |
|----|-------|-------|-------|------|------|------|--|
| 1  | 5000  | 5500  | 6000  | 0    | 1    | 0    |  |
| 2  | 2000  | 2200  | 3300  | 1    | 0    | 0    |  |
| 3  | 3000  | 2000  | 1000  | 0    | 0    | 1    |  |



Data on variables: sex

| id | sex |
|----|-----|
| 1  | 0   |
| 2  | 1   |
| 3  | 0   |



| id | inc80 | inc81 | inc82 | ue80 | ue81 | ue82 | sex |
|----|-------|-------|-------|------|------|------|-----|
| 1  | 5000  | 5500  | 6000  | 0    | 1    | 0    | 0   |
| 2  | 2000  | 2200  | 3300  | 1    | 0    | 0    | 1   |
| 3  | 3000  | 2000  | 1000  | 0    | 0    | 1    | 0   |

# Reshape

### Wide

| id | sex | inc80 | inc81       | inc82 | ue80 | ue81 | <b>ue82</b> |
|----|-----|-------|-------------|-------|------|------|-------------|
| 1  | 0   | 5000  | <b>5500</b> | 6000  | 0    | 1    | 0           |
| 2  | 1   | 2000  | 2200        | 3300  | 1    | 0    | 0           |
| 3  | 0   | 3000  | 2000        | 1000  | 0    | 0    | 1           |

### Long

| id | year | sex | inc  | ue |
|----|------|-----|------|----|
| 1  | 80   | 0   | 5000 | 0  |
| 1  | 81   | 0   | 5500 | 1  |
| 1  | 82   | 0   | 6000 | 0  |
| 2  | 80   | 1   | 2000 | 1  |
| 2  | 81   | 1   | 2200 | 0  |
| 2  | 82   | 1   | 3300 | 0  |
| 3  | 80   | 0   | 3000 | 0  |
| 3  | 81   | 0   | 2000 | 0  |
| 3  | 82   | 0   | 1000 | 1  |

### Macros

- Macros are names you can give to various objects in stata including strings, estimation results, or any numerical value you want it to represent.
- Global macro remains in memory for the session
- Local macro exists only within the block of code you run

## Macros: Syntax

- After you have created a global or a local macro and you want to `call' it, you need to use a specific syntax for each:
  - For global: use \$ in front of the global macro's name (e.g. \$mymacro)
  - For local: use ` ' to envelope the local macro's name (e.g. `mymacro').
    - Note: The two apostrophes are different.