

# SHAPE DATA

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In Stata

# YouTube Channel



## Project 1

Rochester Econometrics, Stata for Undergraduates

Each video 5-10 minutes:

- Workflow, Data sets, Data types, Using 'by', Tests, Graphs, Regression, Storing information, Combing data sets, Utilities, Help, Log, & .do files, Exploring data.



# Overview

## Project 1

Why and when to use each tools.

- Reshape      Combine & Separate; Vars & Obs
- Merge        Combine; Datasets, Add Vars & Obs
  
- Append      Combine; Datasets, Add Vars
- Collapse     Combine; Obs

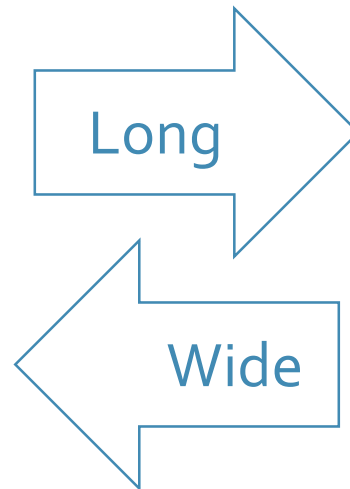
Variables (Cols), Observations (Rows)

# Reshape

- reshape **long** *inc*, i(*id*) j(*year*)

(wide form)

<i>i</i>		<i>x_ij</i>		
<i>id</i>	<i>sex</i>	<i>inc80</i>	<i>inc81</i>	<i>inc82</i>
1	0	5000	5500	6000
2	1	2000	2200	3300
3	0	3000	2000	1000



(long form)

<i>i</i>	<i>j</i>	<i>x_ij</i>	
<i>id</i>	<i>year</i>	<i>sex</i>	<i>inc</i>
1	80	0	5000
1	81	0	5500
1	82	0	6000
2	80	1	2000
2	81	1	2200
2	82	1	3300
3	80	0	3000
3	81	0	2000
3	82	0	1000

# Reshape Long

Convert data from wide to long

- reshape **long** *stub*, i( *id* ) j( *suffix* ) [ options ]

## Options

**long**

*stub*

i( *id* )

j( *suffix* )

## Descriptions

reshape data from **wide** to **long**

variable to be converted

unique id for records in **wide** format

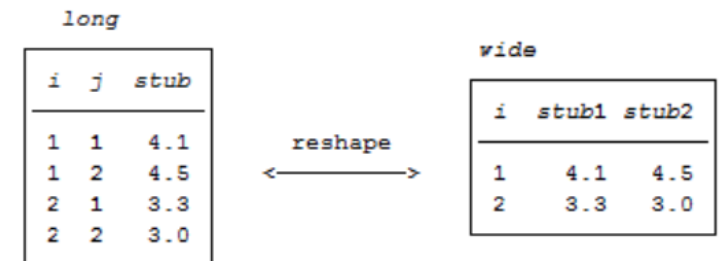
*stub* suffix **given to** *suffix* variable

## Example

[UCLA](#)

## References

[Stata](#)



# Reshape Wide

Convert data from long to wide

- reshape **wide** *stub*, i( *id* ) j( *suffix* ) [ options ]

## Options

**wide**

*stub*

i( *id* )

j( *suffix* )

## Descriptions

reshape data from **long** to **wide**

variable to be converted

unique id for records in **wide** format

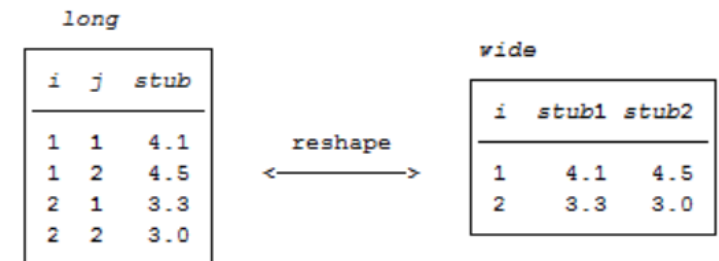
*stub* suffix **given to** *suffix* variable

## Example

[UCLA](#)

## References

[Stata](#)



# Append

## Append datasets

- **append** using *filename* [*filename* ...] [, options]

Options	Descriptions
generate(newvar)	newvar marks source of resulting observations
keep(varlist)	keep specified variables from appending dataset(s)
force	append string to numeric & vice versa without error

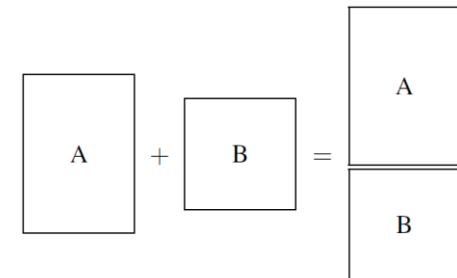
### Example

[UCLA](#)

### References

[Princeton](#)

[Stata](#)



# Merge

## Merge datasets

- **merge** **1:1** *varlist* using *filename* [, options]

**master** : using *filename*

**Merge** on specified key variables in *varlist*

**1:1**

One-to-One

1:m

One-to-Many

m:1

Many-to-One

m:m

Many-to-Many

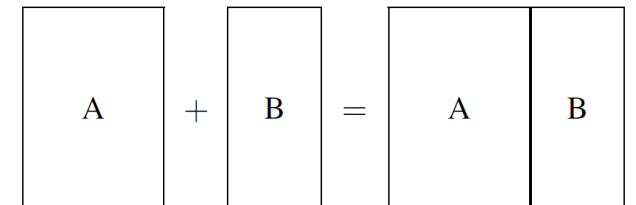
**Example**

[UCLA](#)

**References**

[Princeton](#)

[Stata](#)





# Collapse

Make dataset of summary statistics

- **collapse** [ (*stat*) ] *varlist* [, by(*varlist*) ]

Options	Descriptions
<i>varlist</i>	Calc ( <i>stat</i> ) on <i>varlist</i> , default ( <i>mean</i> )
<i>stat</i>	Mean, Median, Percentiles, SDev, Sums, Count, Min, Max, Range, First, Last values
<b>by</b> ( <i>varlist</i> )	Calc stats over group
Pro Tip	Convert TS data to lower frequency

## Example

[UCLA](#)

[TimeSeries](#)

## References

[Other](#)

[Stata](#)

# Excel Data Tools

2 Excel Tricks 2 Also Remember!

- VLOOKUP, [Link.](#)
- PIVOT TABLES, [Link1](#), [Link2](#).

