

# How To Choose A Chart - A Statistically Informed Visual Guide With Stata Commands

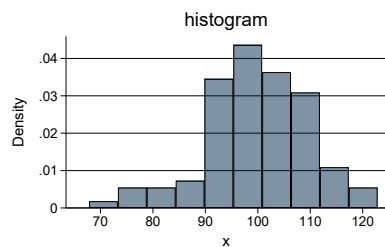
## Continuous

## Continuous by Categorical

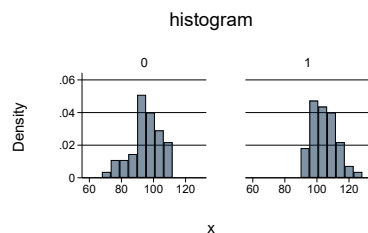
## Categorical

## Categorical by Categorical

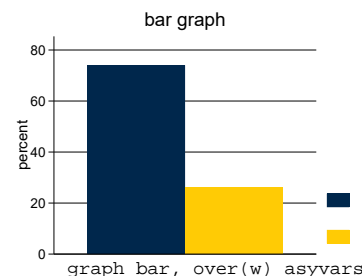
## Continuous by Continuous



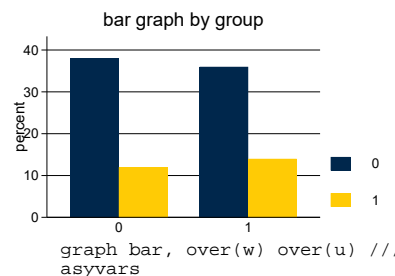
histogram x



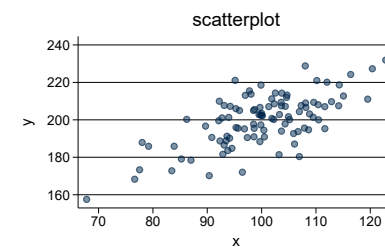
histogram x, by(u)



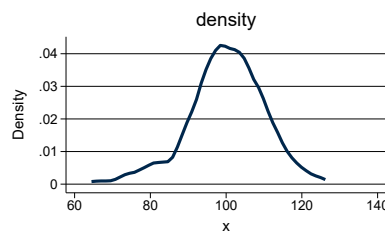
graph bar, over(w) asyvars



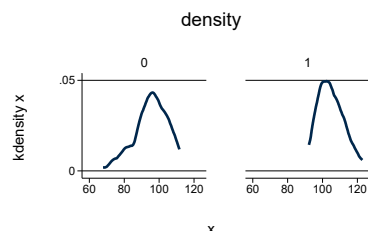
graph bar, over(w) over(u) /// asyvars



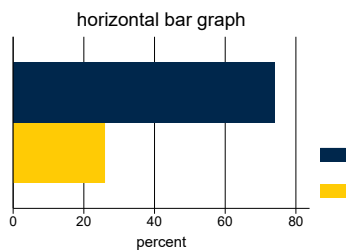
twoway scatter y x



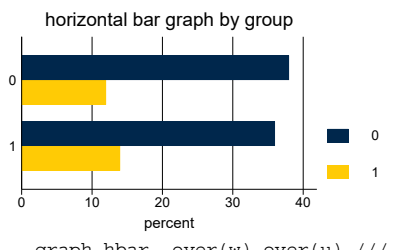
kdensity x



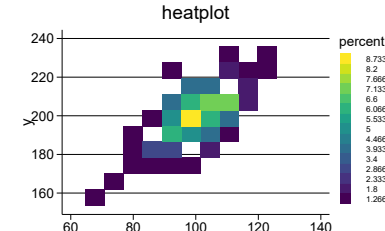
twoway (kdensity x), by(u)



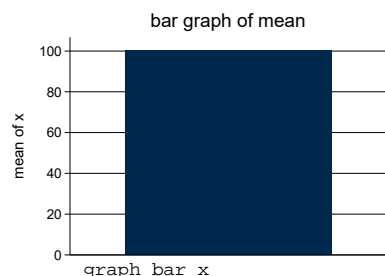
graph hbar, over(w) asyvars



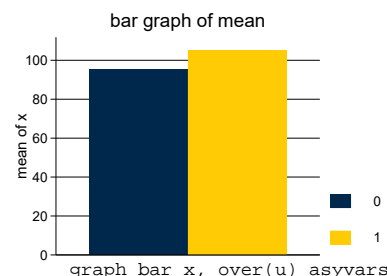
graph hbar, over(w) over(u) /// asyvars



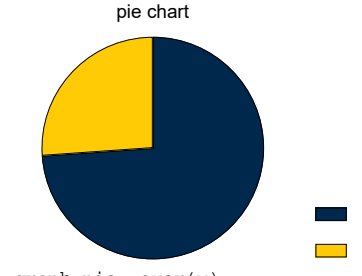
heatplot is a user written command: ssc install heatplot  
heatplot y x



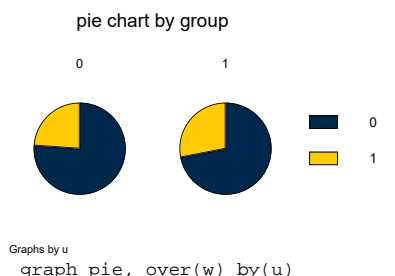
graph bar x



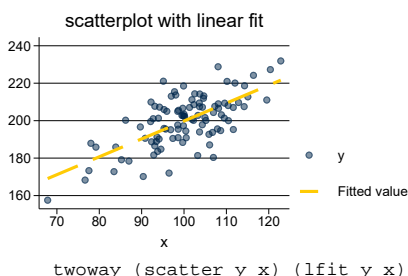
graph bar x, over(u) asyvars



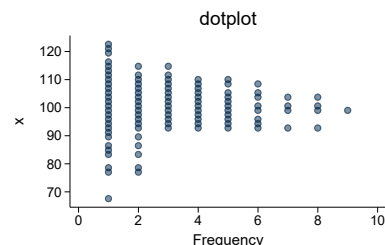
graph pie, over(w)



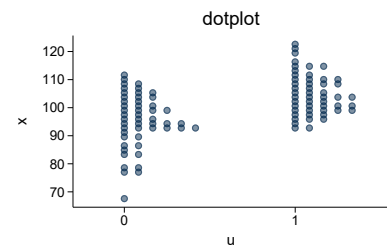
Graphs by u  
graph pie, over(w) by(u)



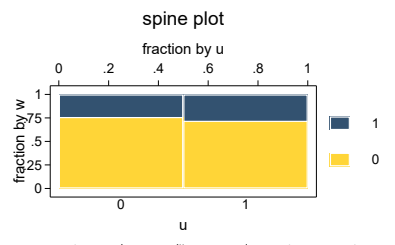
twoway (scatter y x) (lfit y x)



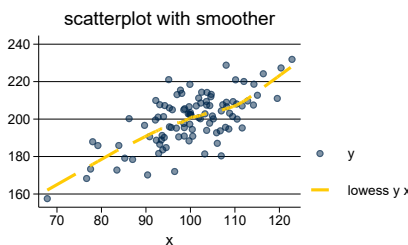
dotplot x



dotplot x, over(u)



spineplot is a user written command: ssc install spineplot  
spineplot w u



twoway (scatter y x) (lowess y x)

Stata is usually very intuitive. The general idea of most Stata commands is `command variable(s), options`.

Often it is not necessary to use any options since the authors of Stata have done such a good job of thinking about the defaults.

Stata commands are in monospaced font.

I try to present the simplest version of a command, but to make this handout occasionally makes use of options like `fcolor` and `mcOLOR` to tweak the color transparency.

I also use the `michigan` graph scheme, linked to below. `set scheme(slcOLOR)` would also work well.

Option `asyvars` is not strictly necessary, but means that bar graphs will have bars of different colors.

`///` represents a line break. On the command line, do not use `///` and type the command on a single line.