Data Visualization With Stata (The Basics)

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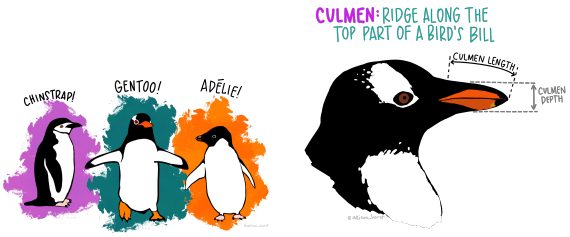
Introduction

99% of data visualization work sometimes seems to consist of creating bar graphs (`graph bar y, over(x)`) and scatterplots (`twoway scatter y x`). (For the sake of completeness, I am also going to mention histograms (`histogram x`).)

This is a quick guide to these ideas using the Palmer Penguins Data.




```
. clear all

. use "https://github.com/agrogan1/newstuff/raw/master/data-visualization-with-Stata-the-basics/
> penguins.dta", clear
```

Histogram: `histogram`

```
. histogram body_mass_g, title("Body Mass of Penguins")
(bin=18, start=2700, width=200)

. graph export myhistogram.png, width(1000) replace
(file myhistogram.png written in PNG format)
```

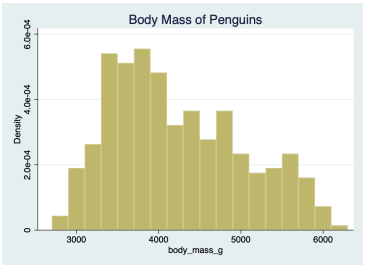


Figure 1: histogram

Bar Graph: `graph bar`

Counting Up Numbers In Each Group

```
. graph bar, over(species) title("Penguin Species")

. graph export mybar1.png, width(1000) replace
(file mybar1.png written in PNG format)
```

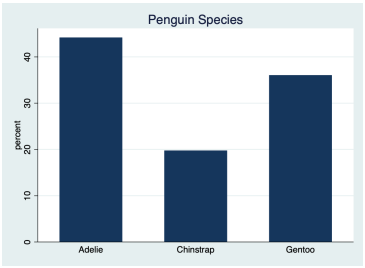


Figure 2: bar graph

Average Of A Continuous Variable Across Groups

```
. graph bar body_mass_g, over(species) title("Body Mass of Penguin Species")

. graph export mybar2.png, width(1000) replace
(file mybar2.png written in PNG format)
```

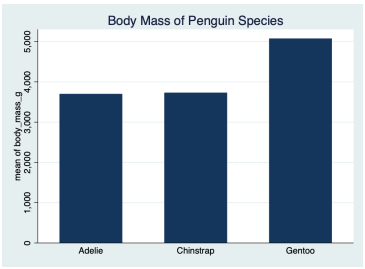


Figure 3: bar graph

Scatterplot: `twoway scatter`

```
. twoway scatter culmen_length_mm body_mass_g, title("Penguin Culmen Length by Body Mass")

. graph export myscatter.png, width(1000) replace
(file myscatter.png written in PNG format)
```

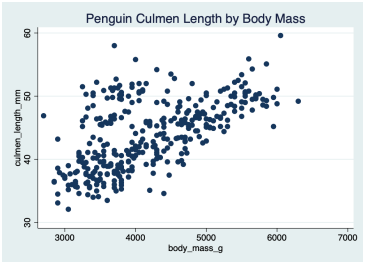


Figure 4: scatterplot