

# Topic 5: Examining Categorical Data

STOR 155: Introduction to Data Models and Inference

Dr. Teressa Bergland

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# Announcements + Warm-Up

Course PSAs:

- Homework 4 due **TODAY, Friday 9/05 on WebAssign**
- Homework 5 due **Monday, 9/08**

Warm-Up:

- Brainstorm! Think of a categorical variable for something you'd like to study.
- You can use the same population you proposed in Topic 2 or pick a new one!



# Contingency Tables

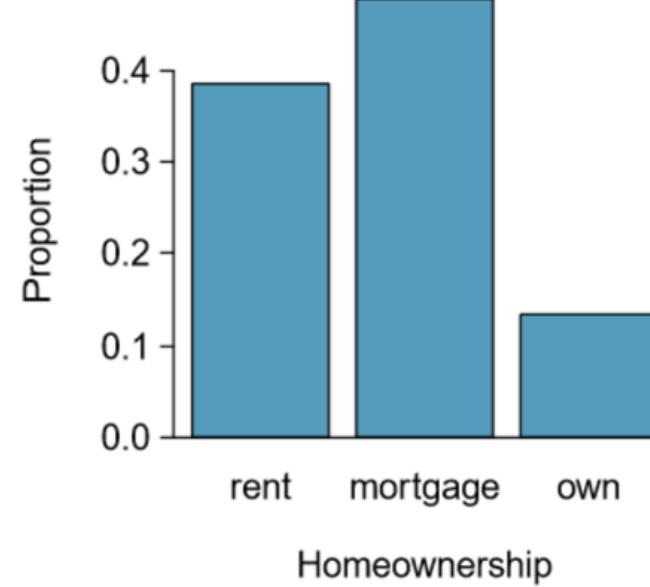
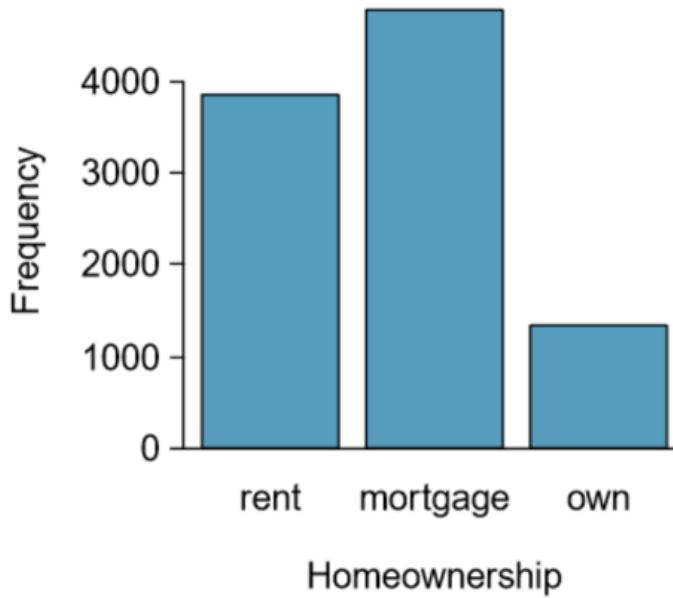
Question: Does there appear to be a relationship between loan application type and homeownership status?

		homeownership			Total
		rent	mortgage	own	
app_type	individual	3496	3839	1170	8505
	joint	362	950	183	1495
	Total	3858	4789	1353	10000

Examine row proportions!

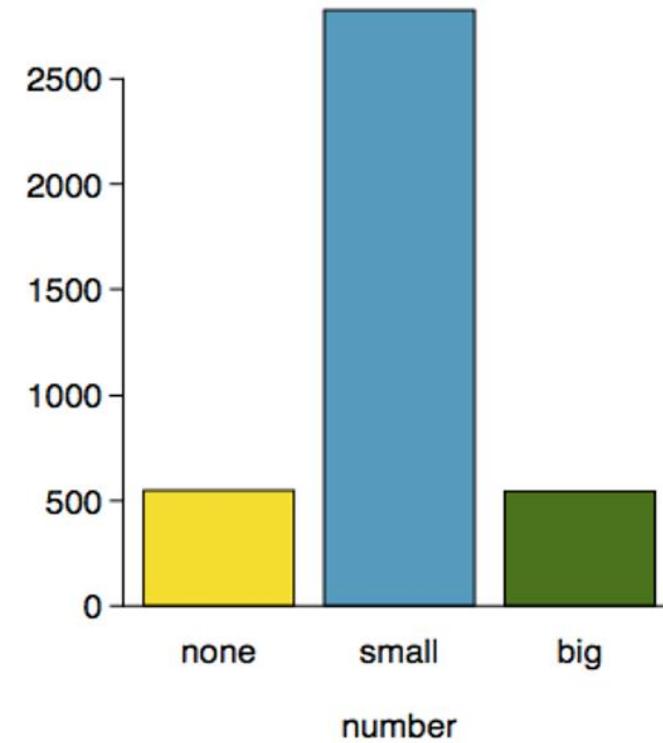
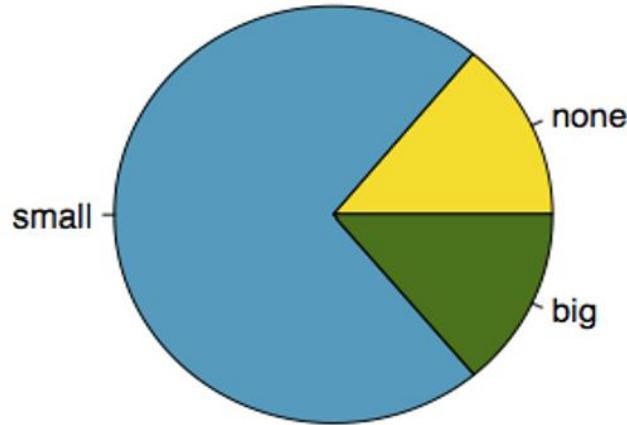


# Bar Plots



Note: these are NOT histograms!

# Pie Charts vs. Bar Plots



# Side-by-Side Plots

