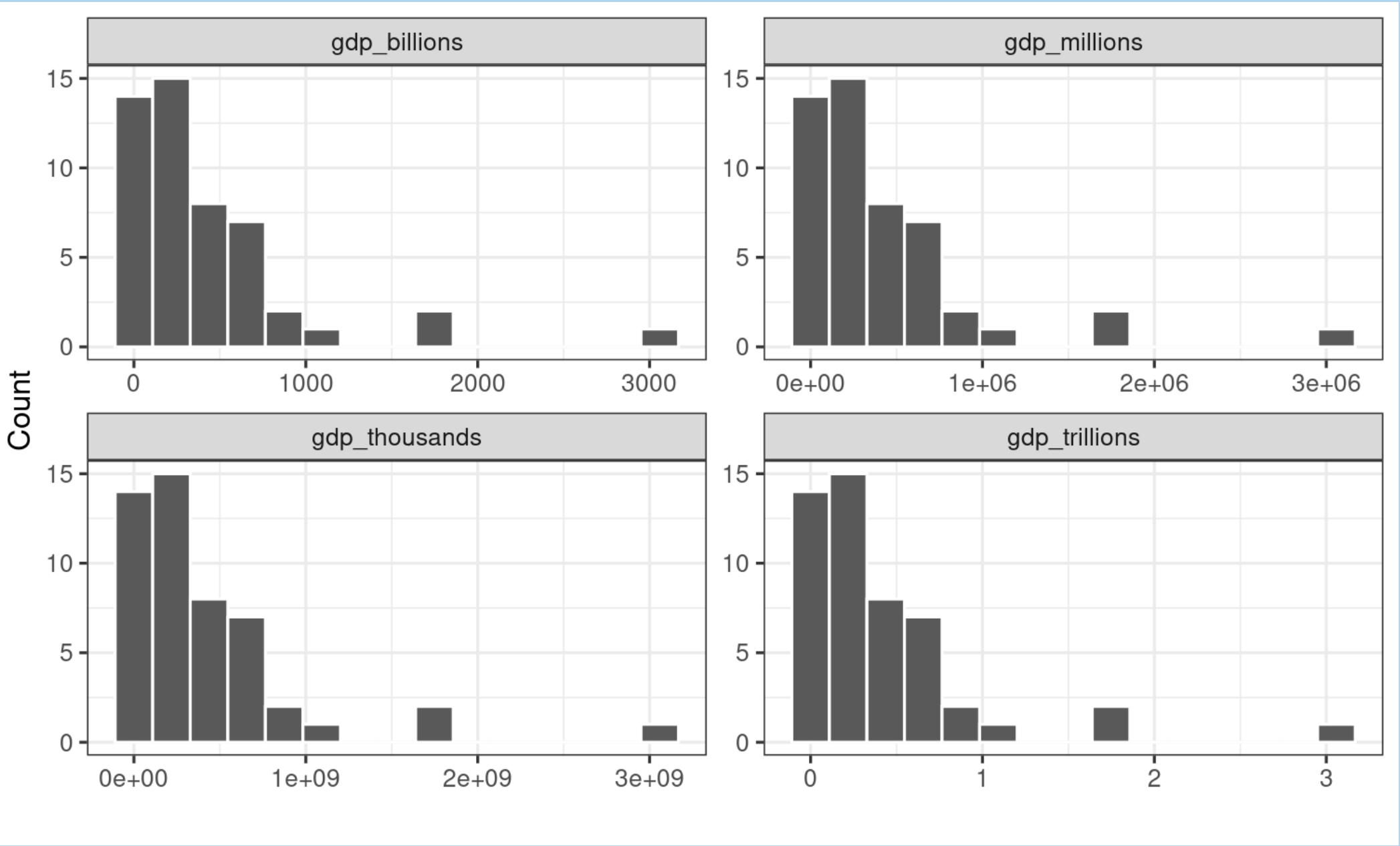
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gdp_millions
gdp_thousands
gdp_trillions
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10
5
0
0
1000
2000
3000
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1e+06
2e+06
3e+06
0e+00
1e+09
2e+09
3e+09
0
1
2
3

Dataset 1

Based on the data for 2020 should states that want to grow the size of their economies focus on increasing college completion (bachelors) or increasing homeownership (homeowner rate)?

Model 1: Regress GDP (billions) on bachelors' degrees

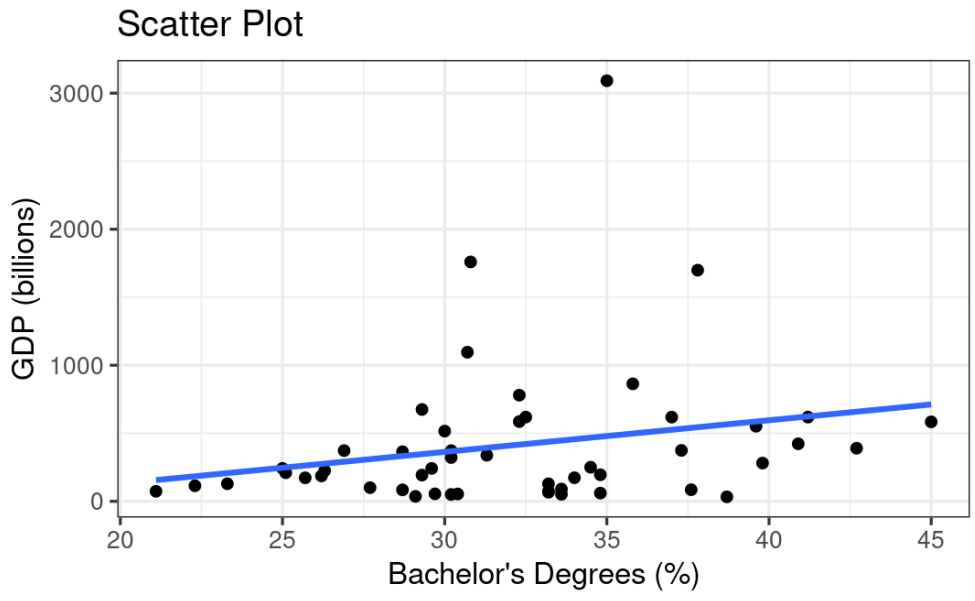
Model 2: Regress GDP (billions) on homeownership rates

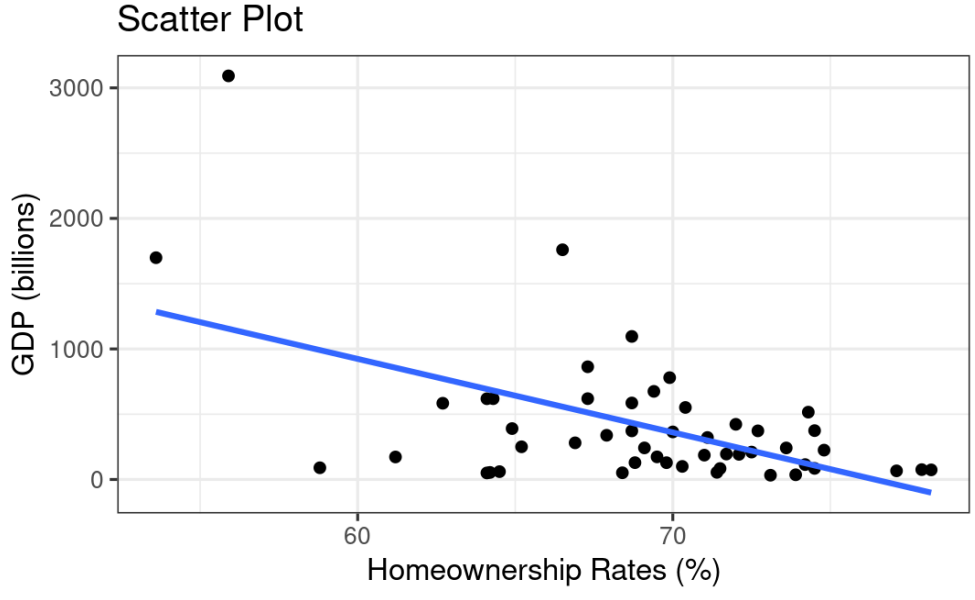
1. Fit the models, check the scatter plots, and evaluate using our four steps

2. Make predictions (with 95% PIs)

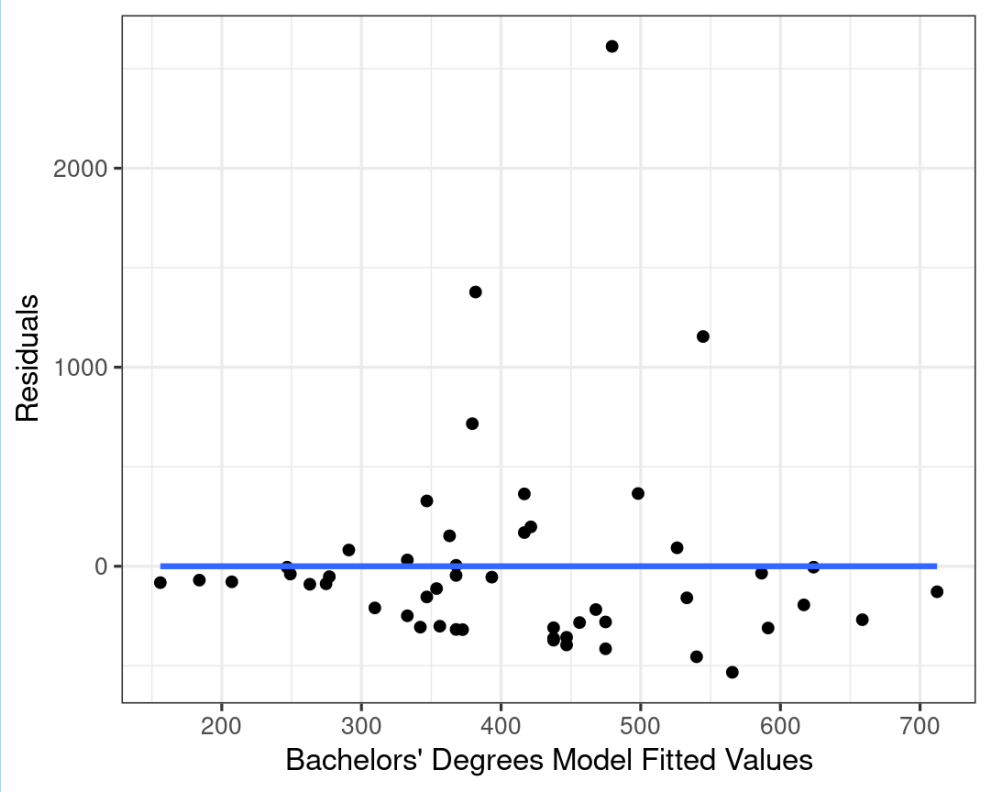
    - Model 1: Mean bachelors' degrees
    - Model 2: Mean homeownership rates

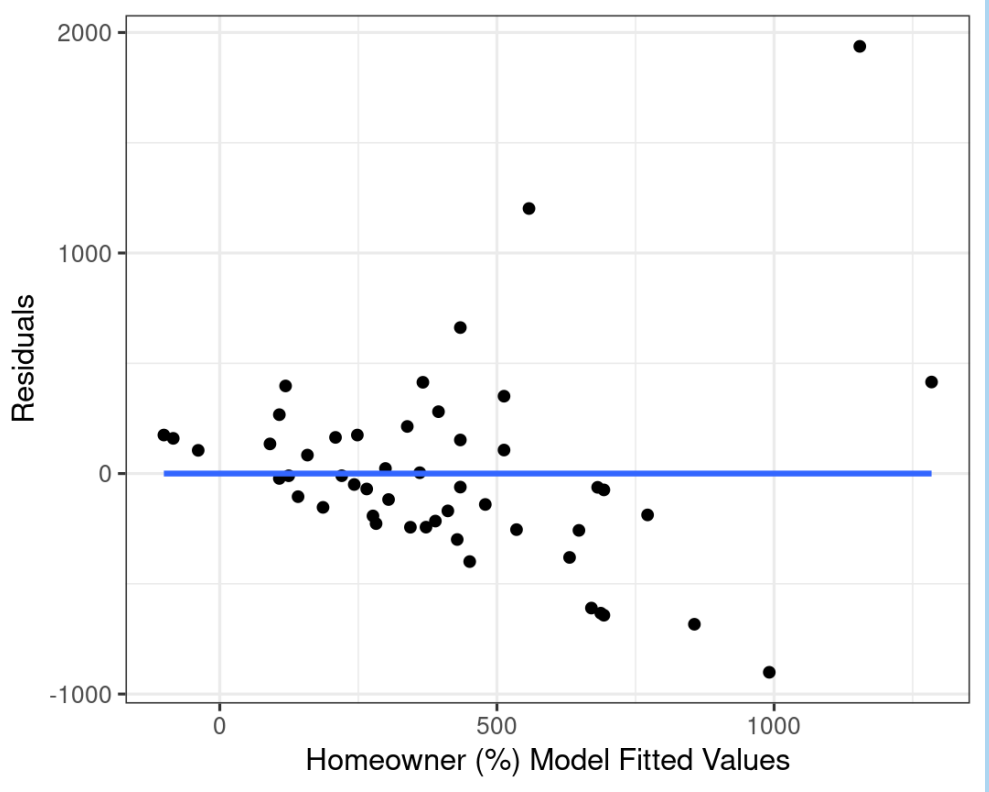
	GDP (Billions USD)	
	(1)	(2)
Bachelors	23.27	
	(14.12)	
Homeownership		-56.30*
		(12.70)
Constant	-335.02	4,301.63*
	(460.39)	(879.84)
Observations	50	50
Adjusted R^2	0.03	0.28
Residual Std. Error (df = 48)	528.11	457.31
Note:		*p<0.05





Step 4: Check the Residuals





Make Predictions (with 95%)

Prediction	Low	Estimate	High
Mean Bachelors' Degrees	-642.9	$413.3	1469.6
Mean Homeownership Rate	-501.1	$413.6	1328.2

Make Predictions (with 95%)

Prediction	Low	Estimate	High
Mean Bachelors' Degrees	-642.9	$413.3	1469.6
Mean Homeownership Rate	-501.1	$413.6	1328.2

- What is the effect of **increasing bachelors** from the mean by 10%?
- What is effect of **decreasing homeownership** from the mean by 10%?

Prediction	Low	Estimate	High
Mean Bachelors' Degrees	-642.9	$413.3	1469.6
Bachelors' Degrees + 10%	-567.9	$488	1544.5

Prediction	Low	Estimate	High
Mean Homeownership Rate	-501.1	$413.6	1328.2
Homeownership - 10%	-112.5	$802	1716.8