



# Final Project Presentation

Christian Ercoli, Jason Perillo



## Is there a direct correlation between benefits given by a political party and unemployment rate?

Statistical Model: An Ordinary Least Squares (OLS) regression model was defined:

$$\text{unemployment\_diff } i = \beta_0 + \beta_1 \cdot \text{benefits\_diff } i + \epsilon_i .$$

Data we needed: Political Party of each state during time (2021,2024), Unemployment Rate, and benefits given that year.

What would we test? See if there is a difference between the two years in their rates and benefits.

## There is No Direct Relationship Between Changes in Unemployment Rates and Changes in Benefits

P value- 0.291 (Greater than 0.05) It suggests that the observed data is likely to have occurred even if the null hypothesis were true. Therefore...

Null Hypothesis: The null hypothesis was formulated as stating no linear relationship between the change in unemployment rate (unemployment\_diff) and the change in maximum weekly benefits (benefits\_diff).

