Regression II



USC SPEC Lab Spring 2025

The goal: This module aims to deepen our regression analysis skills by examining results, exploring variable correlations through preliminary visualizations, and running multivariate regressions—including both linear and logistic models—to better understand complex relationships among variables. We'll document findings clearly with well-structured, professional tables using the stargazer and texreg packages.

1. Introductory Videos How to Read a Regression Table

Running Linear Regressions in R

Making Regression Tables in R Using Stargazer

Extracting Regression Results Part 1

Extracting Regression Results Part 2

2. Walk Through Work

Walkthrough 1: Visualizing & Analyzing Regressions Results with texreg

Multivariate regression analysis & production of publication-quality regression tables using the texreg package.

Walkthrough 2: Visualizing & Analyzing Regressions Results with stargazer

Multivariate regression analysis, interpretation of regression results, visualization of correlations with ggplot2 & production of regression tables using the stargazer package.

3. Group Work

Practicing with IDC Powersharing Data

4. Individual Work

Homework Problem Set with Productive Pacifists Data

Resources

R Studio Cheat Sheets

• Data Transformation with dplyr

- Data Import with readr, readxl, and googlesheets4
- ggplot2 cheatsheet
- Stargazer cheatsheet
- <u>Texreg cheatsheet</u>