Homework 2: R Practice

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INSTRUCTION

- You should submit the Homework 2 before 5/29 class (3:30pm, 5/29).

- There is no late submission (you get zero point if you submit Homework 2 after the above deadline).

- The Howework 2 will account for 5 points in your final grade.

- Total grade of Howework 2 is 100. Question 1 accounts for 20, Question 2 accounts for 20, Question 3 accounts for 20, Question 4 accounts for 20, and Question 5 accounts for 20.

- This homework will help you practice R commands and let you start to work on your term paper.

- Your answers should include the R commands you use, explain their meanings, and your findings.

- Please upload your **answer sheet** and **R script** using this link: **https://www.dropbox.com/request/X76qERgjTBtn25YfA6h0**.

- Format of the file name: StudentID_YourName. For example, r95323010_Tzu_Ting_Yang

1 RESEARCH QUESTION AND READ DATA

1. Write a paragraph to introduce the research question in your term paper

2. Use **read.csv()**, **read.table()**, **read_excel**, **read_dta** or other commands to transform your term paper data into R's data format (Remember you might need to install and load packages, such as **readxl** or **haven**)

2 Examine Data

1. Use **summary()** to display summary statistics for your dataset

3 Create Sample for Analysis

1. Briefly discuss how you construct estimation sample in your term paper

2. Use **mutate()** to generate a variable for your empirical analysis

3. Use **summarise()** to create a new dataset for your empirical analysis

4. Use **full_join()**, **inner_join()**, **right_join()** or **left_join()** to merge the dataset you have created for question 3-2 (previous question)

4 Visualize Data

1. Use any command that in R's graphical packages, such as **ggplot2** or others, to create a graph that can represent one of the findings in your term paper

2. Please explain the main findings of this graph

5 Empirical Analysis

1. Write a paragraph to explain the empirical specification you want to implement in your term paper.

2. Use any command in R's statistical/econometrics packages, such as **lm** or others, to analyze causal relationship in your term paper

3. Please explain your preliminary results