

## Stata Project

Review:

Fixed Effects Model (FE)

Instrumental Variables (IV)

Two-Stage Least Squares (2SLS)

### 1. A simple practice

Use the `delivery_data.xlsx`

Now, suppose we have panel data of 100 restaurants and their takeaway orders from January to December of last year.

- (1) Import the dataset into Stata
- (2) View data structure, understanding the mean min max of this dataset.
- (3) FE model of how delivery time affects customer satisfaction (Rating), using takeaway price and competitive intensity (number of similar restaurants around) as control variables.
- (4) Use Rain as IV for Delivery time and run 2sls estimation.
- (5) Draw a figure showing the relationship between DeliveryTime and Rating.

### 2. Replication of a paper

Check `Readme.pdf` to better understand the meaning of variables.

Hint: `local/global` helps you to simplify the regression commands

- (1) Read the paper and understand the basics of empirical design
- (2) Run the OLS regressions with FE in table 3
- (3) Run the 2SLS estimation using the instrumental variable `death_of_relative` in table 4