

This directory contains data and code that replicates tables and figures for the following paper:

Title: My paper

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One master script runs all of the code. The analysis requires minimal memory and processing resources. It was last run on a Windows 10 Desktop with 32 gigabytes of RAM and an i7-8700 CPU 3.20 GHz processor. The runtime was less than one minute.

Software requirements

Stata version 15 or higher

- Add-on packages are included in **scripts/libraries/stata** and do not need to be installed by user

R version 3.6.0 or higher (available for free from: <https://cloud.r-project.org>)

- Two add-on packages are required: **tidyverse**, **estimatr**
- These packages can be installed three different ways:¹
 - Manually by typing, e.g., **install.packages("tidyverse")** at the R prompt
 - Automatically by opening R and running **scripts/programs/_install_R_packages.R**
 - Automatically by uncommenting line 52 of **run.do**
- Note: **scripts/programs/_confirm_version.R** checks that these add-ons have been installed and are up to date

Note: if you don't wish to install R, the R portion of the analysis can be disabled (see **Instructions** below)

Directory structure

```
my-project          # Replication package folder
├── data             # Read-only data
├── results          # Output files
│   ├── figures      # Figures (PDF)
│   ├── intermediate # Intermediate results
│   └── tables       # Tables (LaTeX)
├── scripts          # Code
│   ├── libraries/stata # Add-on Stata packages
│   ├── programs      # R scripts and custom Stata ado files
│   ├── 1_process_raw_data.do
│   ├── 2_clean_data.do
│   ├── 3_regressions.do
│   └── 4_make_tables_figures.do
└── run.do           # Master script
```

¹ For those interested, the script **_install_R_packages.R** includes commented out code showing how to install R packages locally into **scripts/libraries/R**, so that users do not need to install the packages themselves. Doing this may use up a lot of disk space, however.

Instructions

Executing the master script **run.do** will run the analysis and generate all tables and figures. Before running this script, you must make one edit to line 20:

1. Line 20: Define a global macro, **MyProject**, that points to the directory containing this README file

For example, that line should look something like the following:

```
global MyProject "C:/Users/jdoe/my-project/analysis"
```

The R portion of the analysis requires the add-on packages listed in the **Software Requirements** section above. Follow the instructions outlined in that section to install those packages.

If R is not available on your system, you can disable the R portion of the analysis by setting the global macro **DisableR** equal to 1 in line 24 of **run.do**:

```
global DisableR = 1
```

Data availability statement

We certify that the authors of the manuscript have legitimate access and permission to use the data employed in this manuscript.

Datasets

Automobile data

The automobile data are available in Stata and can be obtained by executing the following code at the Stata prompt:

```
sysuse auto, clear
```

This replication package includes a CSV version of those data. The file is located here:

```
/data/auto.csv
```

Descriptions of scripts

run.do is a master script that sets up the environment, creates output folders, and then calls other scripts.

1_process_raw_data.do

This script imports the raw automobile data and saves it in Stata format.

2_clean_data.do

This script processes the automobile data and prepares it for analysis.

3_regressions.do

This script estimates regression models in Stata, and calls an R script that estimates additional regression models in R. The raw regression results are saved in **results/intermediate**.

4_make_tables_figures.do

This script creates figures and tables, saving them to **results/figures** and **results/tables**.

Lists of exhibits

| Figure | Source script | Line number | Output file | Notes |
|----------|--------------------------|-------------|---------------------|-------|
| Figure 1 | 4_make_tables_figures.do | 21 | price_histogram.pdf | |

| Table | Source script | Line number | Output file | Notes |
|---------|--------------------------|-------------|---------------------------|-------|
| Table 1 | 4_make_tables_figures.do | 64 | my_summary_stats.tex | |
| Table 2 | 4_make_tables_figures.do | 109 | my_regressions.tex | |
| Table 3 | 4_make_tables_figures.do | 167 | my_regressions_with_r.tex | |