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

**Title:** My Paper

**Authors:** Julian Reif

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.

# Data availability statement

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

# License

The data are licensed under a Creative Commons Attribution 4.0 International Public License. The code is licensed under a Modified BSD License. See **LICENSE.txt** for details.

# 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. The names, installation sources, and installation dates of these packages are available in **scripts/libraries/stata/stata.trk**.

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

* Two add-on packages are required: **tidyverse**, **estimatr**
* These packages can be installed three different ways:[[1]](#footnote-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 53 of **run.do**

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

# 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:

1. Line 18: 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"

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 21 of **run.do**:

global DisableR = 1

# Directory structure

my-project/analysis # Replication package folder

├── data # Read-only (input) data

├── processed # Processed data

├── results # Output files

| ├── figures # Figures (PDF)

| ├── intermediate # Intermediate results

| └── tables # Tables (LaTeX)

├── scripts # Code

| ├── libraries/stata # Add-on Stata packages

| ├── programs # Auxiliary code called by scripts

| ├── 1\_process\_raw\_data.do

| ├── 2\_clean\_data.do

| ├── 3\_regressions.do

| └── 4\_make\_tables\_figures.do

└── run.do # Master script

# Datasets

**Automobile data**

The automobile data are available from Stata (StataCorp, 2017). They 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**.

# References

StataCorp (2017). Stata Statistical Software: Release 15. College Station, TX: StataCorp LLC.

# 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 |  |

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. [↑](#footnote-ref-1)