

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

**Title:** My Paper

**Author:** Julian Reif

## **Directory Structure**

The original, raw data are stored in CSV format in the folder: **data**

All results (LaTeX tables and PDF figures) are outputted into the folder: **results**

All code is stored in the folder: **scripts**

## **Data Availability Statement**

The automobile data used to support the findings of this study have been deposited in a Github<sup>1</sup> repository (<https://github.com/reifjulian/my-project/tree/master/analysis>).

Datafile: **data/auto.csv**

## **Dataset List**

<b>Data file</b>	<b>Source</b>	<b>Notes</b>	<b>Provided</b>
data/auto.csv	Stata		Yes
processed/auto.dta	Stata	Cleaned version of auto.csv, serves as input for the main analysis	Yes

## **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:
  - 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)

---

<sup>1</sup> Github is not a proper data archive. For AEA publications, you can deposit your materials at the AEA Data and Code Archive.

## Descriptions of Scripts

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

**\_install\_stata\_packages** is provided for pedagogical purposes only. It shows how to automate the installation of Stata add-on packages into a local library. It should *\*not\** in general be included as part of a replication package. It is unnecessary because the required packages are already available in **/scripts/libraries/stata**.

**1\_process\_raw\_data.do** imports the raw automobile data and saves it in Stat format.

**2\_clean\_data.do** processes the automobile data and prepares it for analysis.

**3\_regressions.do** 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** creates figures and tables, saving them to **results/figures** and **results/tables**.

## Memory and Runtime Requirements

This analysis requires minimal memory and processing resources. The analysis 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.

## Instructions

Executing the Stata script **run.do** will run the analysis and generate all tables and figures. Before running this script, you must make two edits to lines 20 and 21 of **run.do**:

1. Line 20: Define a global macro, **MyProject**, that points to the directory containing this README file
2. Line 21: Define a global macro, **RSCRIPT\_PATH**, that points to your R executable

For example, those two lines should look something like the following:

---

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

```
global RSCRIPT_PATH "C:/Program Files/R/R-3.6.0/bin/x64/Rscript.exe"
```

---

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
```

---

## **Lists of Tables and Figures**

<b>Figure/Table #</b>	<b>Source script</b>	<b>Line Number</b>	<b>Output File</b>	<b>Notes</b>
Figure 1	4_make_tables_figures.do	21	price_histogram.pdf	
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	

## **Help**

Contact email: [jreif@illinois.edu](mailto:jreif@illinois.edu)

Web guide: <https://reifjulian.github.io/guide/>