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 Github¹ repository (https://github.com/reifjulian/my-project/tree/master/analysis).

Datafile: data/auto.csv

Dataset List

Data file	Source	Notes	Provided
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:
 - o Manually by typing, e.g., install.packages("tidyverse") at the R prompt
 - o Automatically by opening R and running scripts/programs/ install R packages.R
 - o 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)

¹ 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

Figure/Table #	Source script	Line Number	Output File	Notes
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	105	my_regressions.tex	
Table 3	4_make_tables_figures.do	163	my_regressions_with_r.tex	

<u>Help</u>

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