1. To run the code, one needs to have the following packages installed. To install them, run

install.packages(c(“ggplot2”,”dplyr”,”plyr”,”reshape2”, “tidyr”,”glmnet”,”gamlr”,”xtable”,”Matrix”,”flare”,”expm”,”foreach”,”rmutil”,”tidyverse”,”assertthat”,”iterators”))

1. Go to Start.R:
2. Set directoryname
3. Choose product category for analysis (k) at line 29
4. At Start.R Run first stage (run\_fs = TRUE) or upload saved residuals (run\_fs=FALSE) at line 37
5. To replicate plots Heatmap of cross-price elasticities:

Go to Heatmap.R and set name at line 10

1. To replicate plots OLS vs Ridge for selected categories, go to OLSvsRidge.R

RESULTS LOCATION:

Output /Figures: all figures

Output/ Text: all .csv tables : Own and Cross Price Elasticities from all regressions; .tex file – all own elasticities results in .tex file

1. Output/Figures: Box\*.png – box and whisker plot for average own elasticity for category
2. Output/Figures: Box\*month\*.png – box and whisker plot for average own elasticity for category across months
3. Output/Figures: Hist\*.png – histogram of OLS,Lasso, and Ridge coefficients
4. Output/Figures: OLSvsRidge\*.png – comparison of OLS vs Ridge
5. Output/Figures:HeatMap\*.png – heatmap of cross-price elasticities for categories

Output/Text: CrossPriceEst\*.csv – estimates of cross-price elasticities

: CrossPriceSD\*.csv – standard errors of cross-price elasticities

Output/Text: Own\*.csv – regression results of own price elasticities