# Data

We use Nielsen scanner and consumer panel survey data in the estimation. We can share the data with any researchers who subscribe to both data sets.

1. Sales, price, time, product and store id data: intermediatefile_sample_agg_brand_retailer_county_year_month_2010.mat through *_2016.mat. These data are constructed from the Nielsen scanner data.
2. Mapping from store id to retailer id and county id: beerdata_step3_all_var_2010.mat through *_2016.mat. These data are constructed from the Nielsen scanner data.
3. Mapping from brands to brand owners and brewers: beerdata_step2_brewer_owner_08to14.mat. This data set is constructed from the Nielsen scanner data and extensive internet searches.
4. Select market product combinations corresponding with macro beers and top craft beers: choose_mkt_9_2009_2016.mat. The data are based on the Nielsen scanner data and Brewers Association data.
5. Consumer panel survey data: beerdata_micro_2010.mat through *_2016.mat. These data are based on the Nielsen consumer panel survey data.
6. Total alcohol sales data for computing the market size: all_alcohol_sales_2010.mat through *_2016.mat. These data are based on the Nielsen scanner data.
7. Barley prices as instruments for beer prices: barley_price.csv. The data are from Federal Reserve Bank of St. Louis.

# Codes

The folder “code_empirical” includes five subfolders.

To generate tables and figures in the paper,

1. save all data files in a subfolder in “code_empirical” and name this folder “data”
2. run the following scripts sequentially:
    - est_demand.m in 1demand
    - est_fc_step1.m in 2mc
    - est_fc_step2.m in 3fc
    - cf_product_placement.m.m in 4counterfactual
    - gen_tab_fig.m in 5tables_and_figures

Notes:

- set use_scope = false and est_corr = false in est_fc_step2.m for the baseline result
- set use_scope = true and est_corr = false for the robustness analysis allowing for (dis)economies of scope
- set use_scope = false and est_corr = true for the robustness analysis allowing for market-level fixed-cost shock