

# Guide to Replication Package

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This document provides an overview of the files in the replication package for the paper “Market Counterfactuals and the Specification of Multi-Product Demand: A Nonparametric Approach,” by Giovanni Compiani.

- The folder labeled `montecarlos` contains the files needed to replicate the Monte Carlo simulations in the main text. Specifically, the key scripts are:

- `script_figure1`
- `script_figure2`
- `script_figure3`
- `script_table2`
- `script_table3`,

which replicate each of the corresponding figures and tables in the paper. The simulations in the online appendix can be replicated by changing the relevant parameters (e.g., number of observations or number of products).

- The folder labeled `application` contains the files needed to replicate the results in the empirical application. Specifically,
  - `estimation_NDP` estimates the nonparametric model
  - `estimation_BCS` estimates the parametric (mixed-logit) model used as a comparison
  - `script_cf_passthrough` performs the tax pass-through counterfactual
  - `script_cf_nevo` performs the “portfolio effect” counterfactual.
- The folder `cvx` contains the convex programming software used to estimate the non-parametric model.
- Note that the data for the empirical application is from Nielsen and thus cannot be posted. The paper contains details on how to obtain the sample used for estimation.