

## Documentation for Dubois, Griffith and O'Connell (2017) "The effects of banning advertising in junk food markets"

### Data sources

The purchase data are from Kantar (see <http://www.kantarworldpanel.com/global>). We use the Worldpanel and Food on-the-go data for the period June 2009 to October 2010. The advertising data are from AC Nielsen (see <http://www.nielsen.com/uk/en.html>) and contain details of advertising in the confectionary and snacks segment from February 2009 to October 2010. Both the Kantar and AC Nielsen data are available commercially. The data are also available at the IFS for the use of academic visitors.

### Programs

#### a) DataSetup

*Createdata.do* extracts relevant purchase data from the Kantar Worldpanel and Food on-the-go and outsheets a set of *.raw* files used as inputs to estimation. It calls the file *createaddata.do*

*createaddata.do* extracts potato chip advertising from the AC Nielson advertising data and combines with Kantar Worldpanel TV viewing behaviour measures

*createadinstr.do* creates control function data used in estimation and presented in the robustness section of the paper

#### b) Analysis

*Run\_discrete\_demand.m* calls one of the files *Run\_fi\_main.m*, *Run\_fotg\_main.m*, *Run\_fi\_cf.m*, *Run\_fotg\_cf.m* which run the programs for either the food in or food on-the-go segment and for either the main results or the control function.

Take *Run\_fi\_main.m* (food in, main results) as an example. This program calls a series of sub-programs which do the following:<sup>1</sup>

- 1) Calls inputs and parameters of problems (*runs\_fi\_main.m*, *parm\_fi\_main.m*)
- 2) Estimates the demand model (*doestimates.m*, *loglik.m*, *llgrad2.m*). The code for estimating the demand parameters builds on code written by Kenneth Train (see <https://eml.berkeley.edu/~train/software.html>).
- 3) Compute price elasticities, advertising effects and marginal costs (*equilibrium.m*, *diselas.m*, *marginalcosts.m*, *finitead\_dis.m*)
- 4) run the advertising ban counterfactual (*simulation.m*, *ComputeWelfare.m*)
- 5) compute Monte Carlo confidence bands

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<sup>1</sup> Note, the programs mentioned are the key ones and are not exhaustive.

### c) Results

*Results\_central.do* is the central file. It calls a series of subroutines. Together these files input and manipulate the output of Analysis and create the tables and figures contained in the paper.

1) *MainResults.do*, *WillingnessToPay.do* and *AdvertisingEffect.do* insheet the output of Analysis and combine together the results for the food at home and on-the-go segments of the market

2) *DataSection.do* and *AdDataSection.do* create the tables and graphs in Section 4.1 (Figures 4.1-4.3 and Tables 4.1-4.4) of the paper

3) *Tables.do* generates the tables of results in Section 4.3-4.5 (Tables 4.5-4.13 and the first panel of Table 4.14) of the paper

4) *Appendix.do* creates tables in the Appendix

5) *ControlFunction\_AdEffects.do* and *ControlFunction\_Tables.do* insheet the control function results and generates in Table in Section 4.6 of the paper (second panel of Table 4.14).