Readme-do-files-for the voxA

Date: 2016-09-20

Revised: 2017-06-21

These files are the data and do-files necessary to replicate the results from:

Ottoni-Wilhelm, Mark, Vesterlund , Lise, & Xie, Huan. (2017). “Why Do People Give? Testing Pure and Impure Altruism.”. *American Economic Review*.

How to get started

The do-files should run after you do two things to line up your directory structure with the directory structure we used in the project:

1. Edit the voxAdir.ado to change the “root” directory to where you are storing the “voxA” files. For example, our root is in red:

   "C:\Users\mowilhel\Documents\voxA\Work\\`ddddd'"

   Change the red text in the ado-file to where you have stored the “voxA” files.

   And then store this ado-file in a directory that your Stata always checks.

   Every do-file, near its beginning, executes “voxAdir.ado”.

2. Edit the “include” files.

   Each of the sub-folders---“DataClean”, “DescStats”, “Figures” and “Models”---has its own “include” file.

   For example, in “DataClean”, the include file is: “voxA-cr-dirInclude-001A.do”. Every “DataClean” do-file has near the beginning the command:

   include "voxA-cr-dirInclude-001A.do"

Inside the “include” file are mappings between the directories where files are stored and a collection of local macros. All the “DataClean” do-files use those local macros to figure where the input dta_files are stored.

For each “include” file, line up the “Root” directory-path so that it matches your “root” directory. For instance, for us the source data are stored in:

“C:\Users\mowilhel\Documents\voxA\Work\Datasets\Source”

And in the include file we have:

```
local Drive "C"

local Root "`Drive':\Users\mowilhel\Documents\"

local dirSourceIN
     "`Root'\\voxA\Work\Datasets\Source"
```

Again, change the red text (also change the local macro setting “C” as the “Drive”, if necessary) to where you have stored the “voxA” files.

As already mentioned, each do-file then has two commands near the very top (continuing with the “DataClean” directory example):

```
voxAdir DataClean
include "voxA-cr-dirInclude-001A.do"
```

If you have stored the “voxAdir.ado” file where your Stata can find it, the ado-file when executed will set your working directory to where "voxA-cr-dirInclude-001A.do" is stored (that is, in “DataClean”). If inside the “include” file you have lined up your root directory correctly, the do-file you are running will be able to find all the input files you need (and it will write the output file to the correct storage location).

Data creation files

voxA-cr000A_v01a-SummaryFile.do

Reads in the source data from the experiment. Make sure there is a unique id for each participant. Do a minimal amount of renaming, if necessary for the variable names to make sense.

Input: April_2007_data.txt
April_2007_survey_data.txt
April_data_order question-2015.txt

Output: voxA-cr000A_v01a-SummaryFile.dta

voxA-cr001A_v01a-DecisionsWIDE.do

Creates the “implicit” source variables [i.e., Ggov, y, z (social income) and G (public good)], and a set of parallel clones with suffixes 1-6, that will be easier to “xtset”.

Input: voxA-cr000A_v01a-SummaryFile.dta

Output: Same as do-file name.

voxA-cr011A_v01a-BoundaryDecisions.do

Creates the dummy variable indicators of decisions that hit a corner at $0 or a corner at $40/$46:

ZeroMaxCorn NoTrunc AlwaysZero AlwaysMax AlwaysCorn NcensorZero NcensorMax

Input: voxA-cr001A_v01a-DecisionsWIDE.dta

Output: Same as do-file name.

voxA-cr012A_v01a-AverageGiving.do

Creates hAvg, average giving per participant.

Input: voxA-cr001A_v01a-DecisionsWIDE.dta

Output: Same as do-file name.

voxA-cr021A_v01a-DecisionsLONG.do

Re-shapes the data to LONG. Create dummy for high govt provision. Also a dummy for high income ($46).

Create interaction variables: Ggov_GovtHigh and y_GovtHigh.

Generate "Lower" and "Upper" censoring levels for each Budget.

Input: voxA-cr001A_v01a-DecisionsWIDE.dta

voxA-cr011A_v01a-BoundaryDecisions.dta
(for checking purposes only).

Output: Same as do-file name.

Descriptive statistics files

voxA-ds001A_v01a-AveragesCorners.do

Calculates the averages and percentages discussed in the paper.

Input: voxA-cr021A_v01a-DecisionsLONG.dta
voxA-cr011A_v01a-BoundaryDecisions.dta

Output: None.

voxA-ds101A_v01a-IndividAlphasBetas.do

Summary statistics for the individual-level estimates of α_i and β_i, i = 1, 2, . . . , 85. Counts the preference-types: impure altruism types, pure altruism types and pure warm glow types.

Input: voxA-mod101A-v01a-IndvidEstimates-2017-06-20--16-38.dta

Output: None.

Note: The input file comes from the model estimation do-file "voxA-mod101A-v01a-IndvidEstimates.do"; this do-file is described below.

Model estimation files

voxA-mod001C-v01a-RandomEffectsTobit.do

Estimates the Random Effects Tobit version of the Table 2 results that are very briefly mentioned in footnote 15.

Input: voxA-cr021A_v01a-DecisionsLONG.dta

Output: None.

voxA-mod002A-v01a-Kbb-TwoSide-Kuf.do

Generates the results presented in the VOX (2017) paper, Table 2:

1. Balanced-budget crowd-out (Kbb), LO; Linear-Fixed Effects
2. Balanced-budget crowd-out, HI; Linear-Fixed Effects
3. Kbb, LO; Corners, Alan et al (2014).
4. Kbb, HI; Corners, Alan et al (2014).
5. Kbb, LO and HI in one model; Corners, Alan et al (2011).
6. Unfunded crowd-out (Kuf), LO and HI in one model; Corners, Alan et al (2014).

Input: voxA-cr021A_v01a-DecisionsLONG.dta

Output: None.

voxA-mod003A-v01a-IncomeEffects-TwoSide.do

Estimates income effects discussed in fn. 16.

Input: voxA-cr021A_v01a-DecisionsLONG.dta

Output: None.

voxA-mod005A-v01a-CobbDougRepresentative.do

Estimates the Cobb-Douglas alpha and beta, based on the quadratic solution to the FOC——the α = .594, β = .021.

Input: voxA-cr001A_v01a-DecisionsWIDE.dta

Output: None.

voxA-mod101A-v01a-IndvidEstimates.do

Estimate the Impure altruism, Pure altruism and Pure warm glow Cobb-Douglas specifications for each individual participant.

Loop through all i = 1, 2, …, 85 participants. Check the "sensibility" of the results, i.e.,

$0 < \alpha < 1$

$0 < \beta < 1$

$0 < \alpha + \beta < 1$ (for the impure altruism model).

Among the models with sensible results, pick the one that has the biggest loglikelihood.

Inputs: voxA-cr021A_v01a-DecisionsLONG.dta
voxA-cr011A_v01a-BoundaryDecisions

Output: voxA-mod101A-v01a-IndvidEstimates-2017-06-20--16-38.dta

Note: The Output file containing the (α, β) estimates is time-stamped (e.g., "2017-06-20--16-38") to prevent inadvertent over-writing of the estimates by a later re-running of this do-file..

voxA-mod102A-v01a-IndvidEstimatesPredictRMSE.do

Predicts giving at each of the six budget decisions, using each individual's alpha, beta estimates (heterogeneous) from the Cobb-Douglas specification.

The predicted giving is then used to calculate the root-mean square error of the crowd-out predictions.

Inputs: voxA-cr001A_v01a-DecisionsWIDE.dta

voxA-mod101A-v01a-IndvidEstimates-2017-06-20--16-38.dta

Output: None.

voxA-mod103A-v01a-RepresentativeEstimatesPredictRMSE.do

Predicts giving at each of the six budget decisions using the representative estimates of α and β, e.g., α = .569 and β = .026 (these are the estimates for the n = 78 participants for whom we can estimate their individual α_i and β_i.).

Otherwise this do-file is identical to "voxA-mod102A-v01a-IndvidEstimatesPredictRMSE.do", described just above.

Inputs: voxA-cr001A_v01a-DecisionsWIDE.dta

voxA-mod101A-v01a-IndvidEstimates-2017-06-20--16-38.dta

Output: None.

Figures

voxA-fig001A-v01a-Figure01-Multiple_alphas_betas.do

Produces the Figure 1 graph that shows multiple (α, β) pairs that have their balanced-budget crowd out–G_{-i} functions passing through the same point at (G_{-i}, Kbb) = ($10, -.80).

Input: None.

Output: None.

voxA-fig002A-v01a-Figure02.do

Produces the summary statistics for the α_i, β_i Cobb-Douglas preference parameters. Produces Figure 2 scatter plot of α_i, β_i.

Input: icd001-2014-02-19.mmat
(85 x 4 matrix with alpha, beta).

Output: None.

voxA-fig019A-v01a-LargeEconomy-q1PLUSq2.do

Does the “large economy” calculation discussed in footnote 19.

Input: icd001-2014-02-19.mmat
(85 x 4 matrix with alpha, beta).

Output: None.