Frydman and Jin (QJE 2021): Data and Code ReadMe File

The raw data for the experiments in the paper are separated into three Stata data files: finalrisky.dta, perceptual.dta, and final200.dta.

1) finalrisky.dta is a Stata file that contains data from the risky choice task from Experiment 1 (USC lab; $N = 150$ subjects; Feb 2020)

******* VARIABLE DEFINITIONS *******

*x: value of X
*c: value of C
*riskyonleft: equals 1 if risky option was on left part of screen; equals 0 if risky option was on right part of screen
*risky: equals 1 if subject chose risky lottery; equals 0 if subject chose certain option
*rt: response time (seconds)
*trial: trial #
*subj: subjectID (1 to 150)
*highfirst: equals 1 if first condition was high volatility condition; equals 0 if first condition was low volatility condition
*high: equals 1 if trial belongs to high volatility condition; equals 0 if trial belongs to low volatility condition
*match: equals 1 if common trial; equals 0 if non-common trial
*afteradapt: equals 1 if trial is after the initial 30-trial adaptation period in each condition; equals 0 otherwise
*highx: high * x
*highc: high * c

2) perceptual.dta is a Stata file that contains data from the perceptual choice task from Experiment 1 (subjectID matches that from the risky choice task) (USC lab; $N = 150$ subjects; Feb 2020)

******* VARIABLE DEFINITIONS *******

*num: stimulus number
*correct: equals 1 if correct classification; equals 0 if error
*rt: response time (seconds)
*trial: trial #
*subj: subjectID (1 to 150)
*highfirst: equals 1 if first condition was high volatility condition; equals 0 if first condition was low volatility condition
*high: equals 1 if trial belongs to high volatility condition; equals 0 if trial belongs to low volatility condition
*classify: equals 1 if subject classified number as greater than 65; equals 0 if classified as less than 65

*distance: |num – 65|
*highdistance: distance * high
*lrt: log(rt)
*diff: num – 65
*diffhigh: diff * high

3) final200.dta is a Stata file that contains data from Experiment 2 (Prolific; $N = 200$ subjects; Feb 2021)

******* VARIABLE DEFINITIONS *******

*subj: subjectID (1 to 200)
*trial: trial #
*x: value of X
*c: value of C
*riskyonleft: equals 1 if risky option was on left part of screen; equals 0 if risky option was on right part of screen
*risky: equals 1 if subject chose risky lottery; equals 0 if subject chose certain option
*rt: response time (seconds)
*bonus: randomly selected bonus amount
*cond: equals 1 if trial belongs to "increasing" condition; equals 0 if trial belongs to "decreasing" condition
*quiz1: answer to Quiz Question 1 (values "1" or "2"; "1" is correct answer)
*quiz2: answer to Quiz Question 2 (values "1" or "2"; "1" is correct answer)
*match: equals 1 if common trial; equals 0 if non-common trial
*variationflag: equals 1 if subject is to be excluded based on insufficient variation in choice on non-common trials (exclusion criteria are listed in the pre-registration document); equals 0 otherwise
*xcond: x * cond
*correctquiz: equals 1 if subject passed quiz; equals 0 if subject failed quiz
*secondhalf: equals 1 if trial is in second half of condition (after trial 150 in first condition; and after trial 450 in second condition); equals 0 otherwise

****Analysis files for regression tables and in-text statistical tests****

The associated .do files to run the regressions and in-text statistical tests are given by: "regression_exp1_risky.txt", "regression_exp1_perceptual.txt", and "regression_exp2.txt".

****Structural estimation****

Structural estimation was implemented in Matlab. The output of the individually estimated parameters for the perceptual task, and the restricted ($\alpha = 1$) and unrestricted ($\alpha \leq 1$) models for the risky choice task are located in "structural_estimation_output.xlsx".

******Figures******

1) Model-based figures

- **Figure I:** the program that produces Figure I is “plot_Figure_I.m” in the folder figure_files/theory

- **Figure II:** the program that produces Figure II is “plot_Figure_II.m” in the folder figure_files/theory

- **Figure III:** the program that produces Figure III is “plot_Figure_III.m” in the folder figure_files/theory

- **Figure IX:** the program that produces Figure IX is “plot_Figure_IX.m” in the folder figure_files/theory

2) Data-based figures

- **Figure V**

    - **Panel A of Figure V:** the program that produces Panel A of Figure V is “plot_Figure_VA.m” in the folder figure_files/experiment

    - **Panel B of Figure V:** the program that produces Panel B of Figure V is “plot_Figure_VB.m” in the folder figure_files/experiment

- **Figure VI:** the program that produces Figure VI is “plot_Figure_VI.m” in the folder figure_files/experiment

- **Figure VIII:** the program that produces Figure VIII is “plot_Figure_VIII.m” in the folder figure_files/experiment