Replication Instructions/ Read Me File for 2011 AER Papers and Proceedings

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Because the CogEcon data are not yet publicly available, I have provided only the Stata do-file from my final analysis at this time, plus the detail below about how the dataset was created. If you have any questions, or need more detail to allow for replication, please first read the appendix to this paper, and then feel free to contact me with remaining questions. The do-file for the final analysis is called mcfall_analysis.

To replicate my dataset, you will need to:

(1) Calculate age- and sex-specific annuity prices, using a standard discrete annuity price calculation, with load factor L=0.18, inflation rate 0.028, and nominal interest rate 0.058, along with age- and sex-specific probabilities of being alive in each year from 2009 onward. 'mcfall_imputations' to impute Social Security and defined benefit pension wealth, and 'mcfall_final' to create all necessary variables. You may download life tables from the Social Security Administration's 2006 Period life table, at http://www.ssa.gov/OACT/STATS/table4c6.html.

(2) Use data from the Health and Retirement Study for the future Social Security and defined benefit pension income imputations. You must apply to the Health and Retirement Study for data access. You will then need to download:
    a. Kapinos, Kandice, Charles Brown, Michael Nolte, Helena Stolyarova, and David Weir. 2009. Prospective Social Security Wealth Measures of Pre-Retirees. Public release. Version 3.0.
    b. Health and Retirement Study. 2005. Imputations for Pension-Related Variables. Final. Version 1.0.
    c. RAND version J of the HRS data, for occupation, age and sex variables.

    These imputations provide the expected present discounted value of payments back to 2004. For use in my dataset, I matched CogEcon respondents with those who were in the CogEcon respondents' 2009 age group (5-year groups) in 2004, and inflated the dollar values to reflect 2009 dollars. I used normal retirement age for the Social Security expectations, and expected retirement age for the pension expectations.

(3) Use CogEcon data to create the final analysis variables. The CogEcon data are not yet publicly-available. Please contact Robert J. Willis or Matthew Shapiro at the University of Michigan to ask how to apply for the data. Steps in my final dataset creation process:
    a. Create "in sample" variable to exclude those not working at post-crash survey.
    b. Create spouse age.
    c. Create respondent age at post-crash interview and in July 2008.
    d. Create pre- and post-crash retirement age variables.
    e. Create respondent and spouse earnings variables and present discounted value of future labor income variables using inflation rate 0.028 and nominal interest rate 0.058
    f. Create household housing wealth totals for July 2008 and May/June 2009 using post-crash levels and reported change amounts or percentages. Use only second homes and other real estate.
    g. Create household financial wealth totals and change variables for July 2008 and May/June 2009 using post-crash levels and reported change amounts or percentages.

Bonds are held constant between the pre- and post-crash time periods, because they were not asked about in the post-crash survey.

h. Merge in imputed Social Security and defined benefit wealth (from HRS).
i. Merge in annuity prices (from Social Security Administration life tables).
j. Create pre- and post-crash sustainable consumption measures by dividing assets and expected present discounted value of income flows by annuity price specific to the respondent, holding labor supply constant until pre-crash retirement age.
k. Calculate percent change in sustainable consumption.
l. Calculate additional work years needed to extend work to reach pre-crash sustainable consumption level, given stock and real estate losses.
m. Create stock market optimism indicator (this is re-coded as stock market pessimism in analysis program).