**Codes for the Article “The impact of the Chilean pension withdrawals during the Covid pandemic on the future savings rate”, *Journal of International Money and Finance*, 2022.**

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These codes use the original sources of data to create all the figures and analysis in the JIMF article.

All data files (.dta and .do) are in Stata 15.1 format. Data analysis was performed in a standard notebook with an Intel Core i7-4700HQ 2.40GHz processor with 16.0 GB of RAM and a Stata 15.1 MP-6 license.

This file briefly explains all the codes written to format the data and analyze it for this article. More details and comments about each code are available inside each do file. The zip includes a total of 45 codes.

The work uses the following publicly available datasets from the Chilean Bureau of Statistics: EPF (Family Expenditures Survey), ENE (National Employment Survey), ESI (4th quarter Income-Employment Survey).

Set of Codes 1 (Master file and algorithms):

The “M\_EPF\_analysis.do” do file replicates the analysis of the article, by calling all the algorithms and doing each code in sequenced steps until all the data formatting and analysis is completed.

pctile\_wgts.do // It creates percentiles of a given variable y for each categorical value of x with the associated population weights.

mean\_wgts.do // It creates mean values of a given variable y for each categorical value of x with the associated population weights.

linear\_reg\_impute3.do // This code imputes missing data in Y with a linear regression of the variable Y conditional on observable data X.

Set of Codes 2 (Heterogeneous Labor Market parameterization files from the ENE-ESI datasets):

esi\_format.do // It formats all the ESI waves in a similar way in terms of education, industry and income.

panel\_esi\_allyrs\_FLP.do // It creates a set of panels (rotating samples between 2 years) for the ESI workers in the labor force.

panel\_esi\_ILFP.do // It creates a set of panels (rotating samples between 2 years) for the ESI household members outside of the labor force or in informal work.

panel\_esi\_income\_growth0.do // It calculates the real income growth of different worker types in the ESI data from the rotating panels.

layoff\_jobfind0.do // It creates the job flows (separation rate and job finding rate) for all household members in the data from statistics of similar worker types in the ENE data.

income\_shock0.do // It creates the labor income volatility for all household members in the data estimated from the 538 worker types of the ESI rotating panels.

p\_income.do // creates the permanent labor income for each of the 538 worker types, taking into account their heterogeneous unemployment risk

Consumption\_WageVolatility.do // This file creates the consumption kernel returns and the pension fund returns and its beta values with the unemployment risk and income volatility of the 538 worker types. See Table 1 in the article.

Set of Codes 3 (format and EPF data cleaning files):

EPF\_2017.do // It formats the 2017 wave of the EPF data to obtain the sum of all expenditures and the main demographic and labor variables of the household members

EPF\_2017\_DurSDurNDur\_Tot.do // It formats Durable, Semi-Durable, Non-Durable, and Total Expenditures in the 2017 wave of the EPF data.

format\_epf\_1997.do // It formats the EPF 1997 data with the same variables and formats of other years.

format\_epf\_2007.do // It formats the EPF 2007 data with the same variables and formats of other years.

format\_epf\_2012.do // It formats the EPF 2012 data with the same variables and formats of other years.

format\_epf\_2017.do // It formats the EPF 2017 data with the same variables and formats of other years.

format\_epf\_all.do // It joins all the EPF waves and selects the variables that exist across all waves.

EPF\_labor\_risk\_vintage.do // Add ENE unemployment-income stats for each 1996-2017 quarterly period for the 538 worker types created by Madeira (2015) to the EPF wabes.

EPF\_all\_LFP\_ILFP\_FE\_PW\_PWpast.do // The code imports the life expectancy for men and women in each year and then estimates their future earnings flows from labor, non-labor and pensions for each household in the sample at different moments in time. The population estimates for each age-cohort in each future year are then used to calculate representative values for Chile. This code also calls the files:

income\_potential.do //calculates the permanent income in the EPF data for both male and female spouses in the household)

import\_FE\_PW\_PW\_past.do // matches each household with the labor earnings, expected pension wealth to be accumulated in the future, and the pension wealth accumulated in the past for each worker type and age-cohort),

generate\_FE\_FENL\_PW\_PWpast\_TW\_hh.do //creates the estimates of total wealth from the future earnings, non-labor-earnings, expected pension wealth to be accumulated in the future, and the pension wealth accumulated in the past, for all the households in the EPF data)

generate\_log\_Wealth.do //it creates the discounted present values of all the wealth stocks, it creates smoothed consumption flows from the wealth stocks and the same variables in logarithmic value)

Pension\_tope\_income.do // it takes into account that for higher income workers, the pension contributions and therefore the pension wealth are capped by a top value from the legislation.

Set of Codes 4 (Pension system structure files):

Ingreso\_bruto.do // It calculates the before tax income of each worker.

Pension\_income.do // It calculates the contributory pension income annuity of each retiree.

Pension\_PBS.do // It calculates the Solidarity pension wealth that is available for all age-cohorts between 1997 and 2017.

Pension\_PGU.do // It calculates the Solidarity pension wealth that was legislated in 2022.

Pension\_PBS\_2019.do // It calculates the Solidarity pension wealth that was legislated in 2019.

Pension\_PBS\_2008.do // It calculates the Solidarity pension wealth legislated in 2008.

Pension\_PBS\_PASIS.do // It calculates the Solidarity pension wealth before 2008.

Pension\_PASIS.do // It calculates the Solidarity pension wealth given in 1997 and 1987.

Pension\_Contr\_APS\_total.do // It calculates the Solidarity pension wealth for all age-cohorts between 1997 and 2022.

Pension\_Reparto.do // It calculates how much each household can receive from the future 1%, 2% or 3% Solidarity contributions for the counterfactual future policies.

Pension\_Future.do // It calculates how much each worker can expect to receive in future pensions.

Retiro\_AFP.do // It calculates the amount of cash that each household member could withdraw from each of the three pension withdrawals (August 2020, December 2020, April 2021).

Set of Codes 5 (Analysis files):

PensionReformsFormat.do //global Ewave=`num' // choose 2017 for last wave, choose 2012 for 2012+2017, choose 1997 to get all the waves

Regs\_analysis\_tot.do // This code creates Table 3 and Table 4 in the paper. It also creates Tables A.1, A.2, A.5, A.6, A.7, A.8, A.9, A.10, A.11, A.12, A.13, A.14 in the online appendix. This code also calls this algorithm:

predictLS\_old\_new1.do // This algorithm compute the values of the main outcome variables for all the counterfactual scenarios of each policy across all households and future years.

Tables\_Figures\_RepRatios.do // This code creates Table 8 plus Figure 1 and Figure 2 in the paper. It also creates Table B.4 in the online appendix.

Tables\_SRates.do // This code creates Table 6 and Table 7 in the paper. It also creates Table A.3 and Table A.4 in the online appendix. It also creates Tables B.2 and B.3 in the online appendix.

Tables\_X.do // This code creates the descriptive Table 2 in the paper.