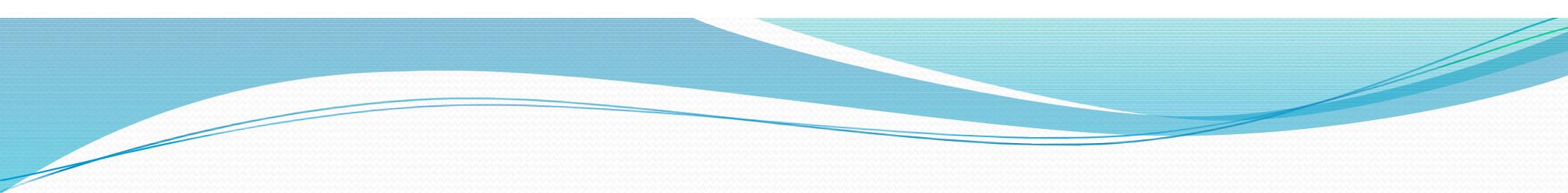


# Retiring from Unemployment: The Role of Personal Finances

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# Framework

- Introduction
- Data
- Empirical Strategy and Results
- Conclusion



- Introduction

# 1. Motivation

- The life satisfaction (LS) of the unemployed increases after retirement, as retirement restores social work norm (Hetschko, Knabe, and Schöb 2019).
- A nonmaterial-based explanation why unemployment reduces LS.
- However, material deprivation can be the root cause (McKee-Ryan and Maitoza 2018).
- Luo (2020) finds that unemployment means insufficient income for living, i.e.,  $\text{income} < \text{minimum required income (MIQ)}$ .

## 2. What I Do

- DiD.

Treatment: unemployment -> retire

Control: employ -> retire

- Entropy balancing (EB) to reweight treatment & control.

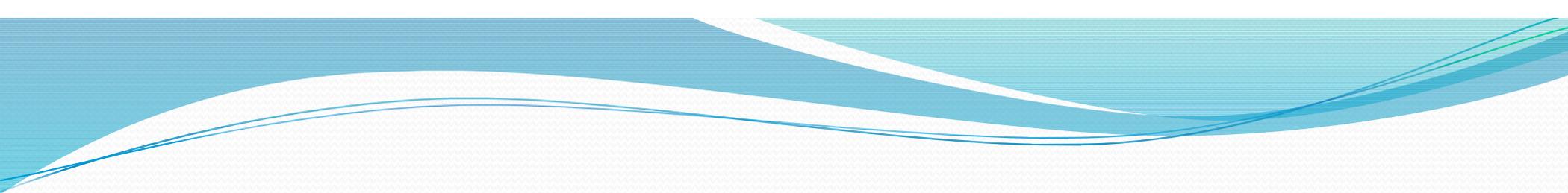
- Variable selection for EB:

- 1: Manually selection

- 2: Automated selection by machine learning algorithm LASSO

## 3. Results

- Average: LS increases from unemployment to retirement.
- Heterogeneity: LS increases mainly concentrated on those with income  $>$  MIQ.
- The role of personal finance is underestimated.

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- Data

# 1. SOEP and Sample Selection

- German SOEP (1984-2018): one of the most utilized datasets in happiness economics.
- 1,456 transitions from unemployment (treatment)
- 3,478 from employment (control).
- 5 years before and after the transition
- Totally 41,920 observations.

## 2. Variables

- *Life satisfaction (LS)*: dependent variable - How satisfied are you with your life?
- *Household income* is the monthly equivalent net household income.
- *Minimum required income (MRI)*: What would you personally consider the minimum net household monthly income that your household would need in your current living situation?

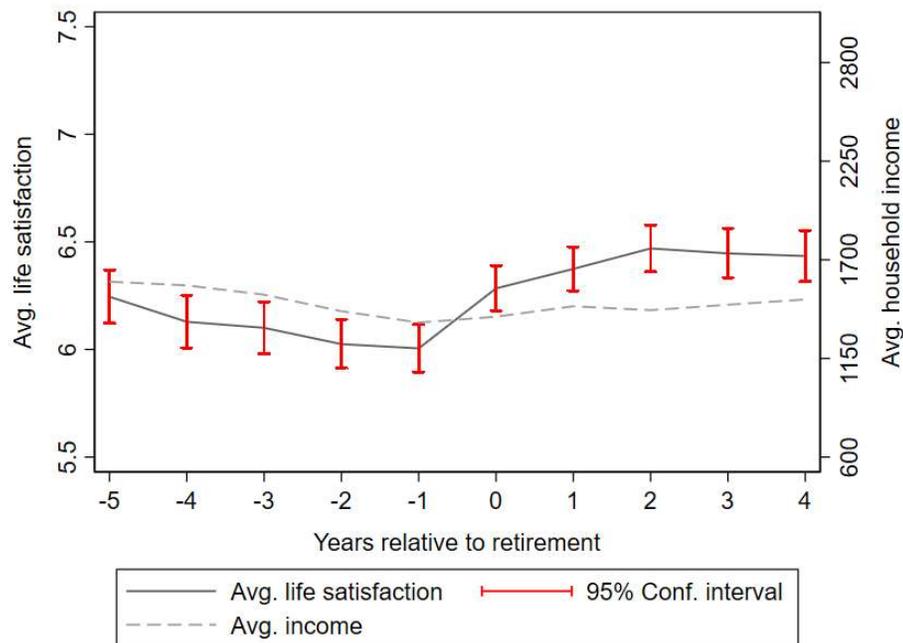
### 3. Summary Statistics

- Treat: income remains similar, LS increases
- Control: income **decreases**, LS remains **similar**

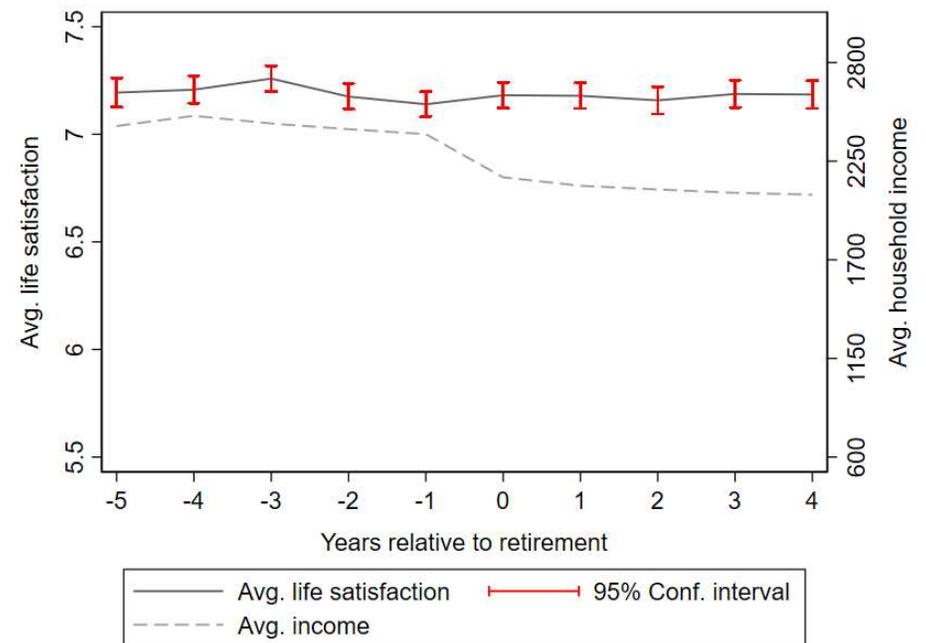
Group Subgroup	Treat		Control	
	<u>Unemploy</u> (1)	Retire (2)	Employ (3)	Retire (4)
Life satisfaction (0-10)	6.09 (2.1)	6.39 (1.96)	<b>7.19</b> (1.67)	<b>7.18</b> (1.74)
Household income	1471 (995)	1430 (825)	<b>2445</b> (2091)	<b>2104</b> (1311)
Observations	6181	6194	14381	15164

## 4. Visualization

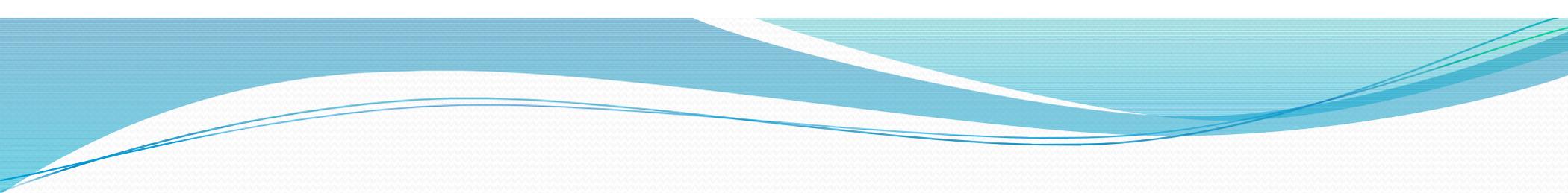
- Treat: income remains similar, LS increases
- Control: income **decreases**, LS remains **similar**



Treatment



Control

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- Empirical Strategy and Results

# 1. Identification

- DiD: remove the “pure retirement” effect.

$$LS_{it} = \alpha_i + \beta RETIRE + \gamma T + \delta (RETIRE \times T) + \theta X_{it} + \varepsilon_{it}$$

- Individual fixed effects (FE): eliminate bias caused by selection of time-invariant **unobservables**.
- Entropy balancing (EB) matching: eliminate bias caused by selection of **observables**.
  - 2 procedures used in control variable selection:
    - manual selection
    - machine learning algorithm Lasso

## 2. Replication

- LS increases for unemployment to retire.

Dependent Variable: Life Satisfaction			
	(1) No matching	(2) EB manual	(3) EB Lasso
Retire	0.111*** (0.0268)	-0.235* (0.125)	0.0691 (0.0467)
Treat × retire	0.207*** (0.0397)	0.391*** (0.134)	0.152*** (0.0512)
Log income	0.369*** (0.0371)		
Observations	38,760	38,413	35,888
R-square	0.019	0.141	0.108

## 2. Heterogeneity

- Divide  $Treat \times retire$  by if income  $>$  MIQ
- Increase in LS is mostly concentrated on those income  $>$  MIQ

Dependent Variable: Life Satisfaction

	(1) No matching	(2) EB manual	(3) EB Lasso
Retire	0.110*** (0.0268)	-0.235* (0.125)	0.0674 (0.0468)
Treat $\times$ retire (Income $\leq$ MIQ)	0.0993 (0.0752)	0.269* (0.146)	0.0355 (0.0851)
(Income $>$ MIQ)	0.223*** (0.0603)	0.460*** (0.144)	0.171** (0.0714)
Log income	0.368*** (0.0371)		
Observations	38,760	38,413	35,888
R-square	0.019	0.141	0.108

- Robustness tests.

# Conclusion

- LS increases from unemployment to retirement.
- However, LS increases mostly concentrated on those with income > Minimum required income (MIQ).
- The role of personal finance is underestimated in the literature.