Older Workers, Retirement, and Macroeconomic Shocks

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Retirements and macroeconomic shocks

Great Recession and COVID-19

Existing research suggests **retirements rise in recessions**:

- Coile and Levine (2009, 2011) workers more likely to leave the labor force and collect SS sooner if recession late in career; Gordnichenko, Song, and Stolyarov (2013) find flows into retirement increase during times of high unemployment

COVID-19 Pandemic: Steep fall in LFPR of workers 55+, recovery driven by youngest workers

Are these older workers coming back?

This paper

New data for studying retirement transitions

Goal of this paper:

- Introduce new source of data for studying retirement transitions
- Examine how macroeconomic conditions impact retirement flows and ‘unretirement’ flows
- Initial look at retirements in the pandemic

I find that:

- Worker flows to retirement spike early in contractions, suggesting main mechanism is late-career job loss
- Retired workers less likely to return to partial employment in contractions, propensity to return to full-time work is quite low and acyclical

Data
Longitudinal Employer-Household Dynamics data

LEHD is a largely untapped resource for studying retirements:

- Longitudinal quarterly job history/earnings data
- State UI-covered earnings, 48 states, 1990-present

Advantages:

- Longitudinal data, almost complete coverage of older workforce
- Quarterly frequency, better for measuring labor flows than annual SSA data
- Generally, more accessible to researchers than SSA data

Disadvantages:

- Shorter time series, less complete employment coverage than SSA data

Measuring retirement flows

Use large changes in earnings to identify retirement flows

Full-time worker (F):

- real quarterly earnings >= 50% of lifetime max, or F in q-1 and has not entered full or partial retirement

Partially retired (P):

- enters partial retirement in first quarter of 3 quarter spell with earnings < 50% of max

Retired (R):

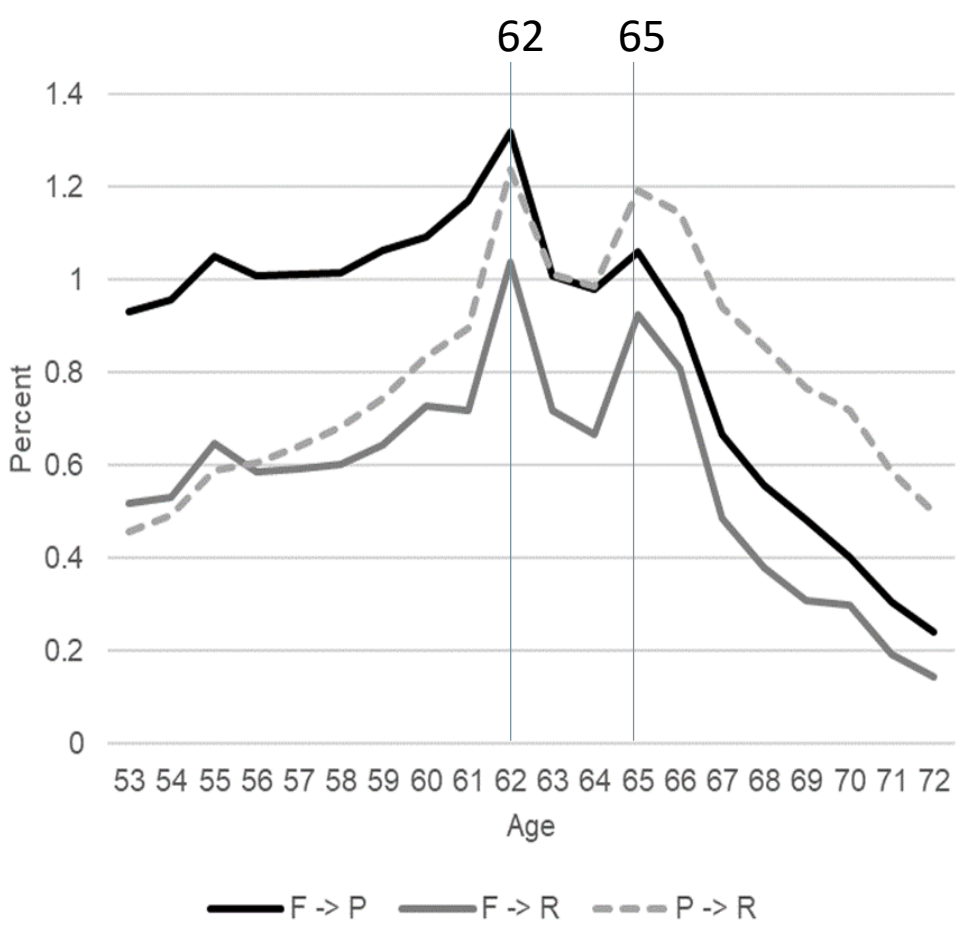
- enters retirement in first quarter of 3 quarter spell with earnings < $1,200

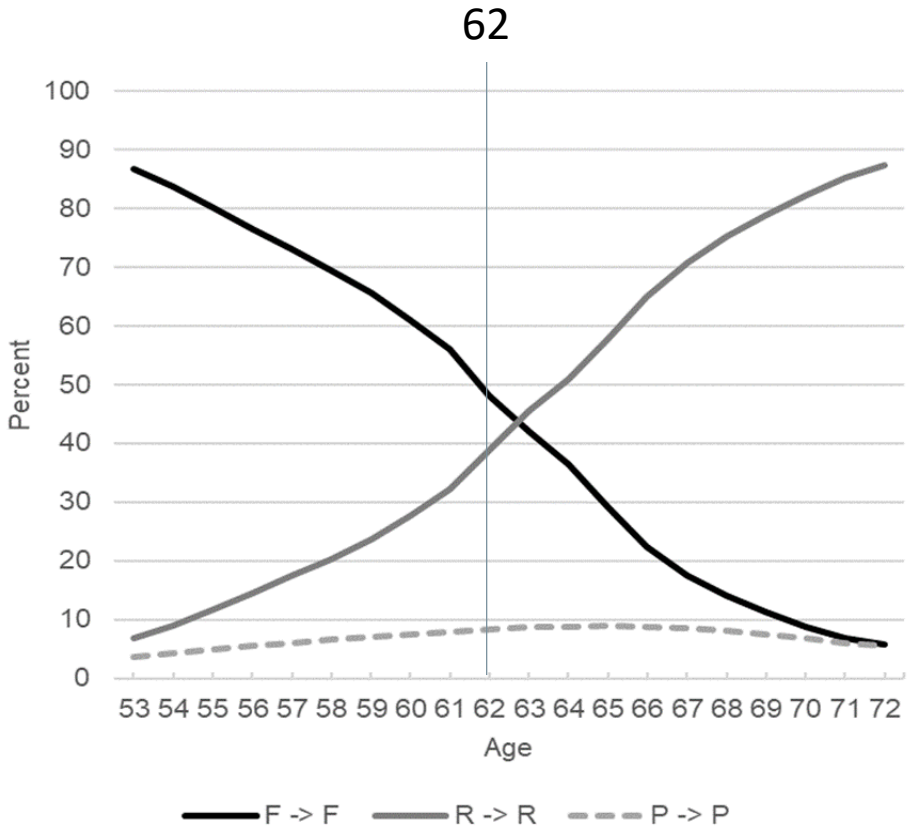
Flows into retirement: F->P, F->R, P->R

Flows out of retirement: R->P, R->F, P->F

Timing of retirements

What do retirement patterns look like in LEHD data?





Retired

Full-time

Initial retirement spells

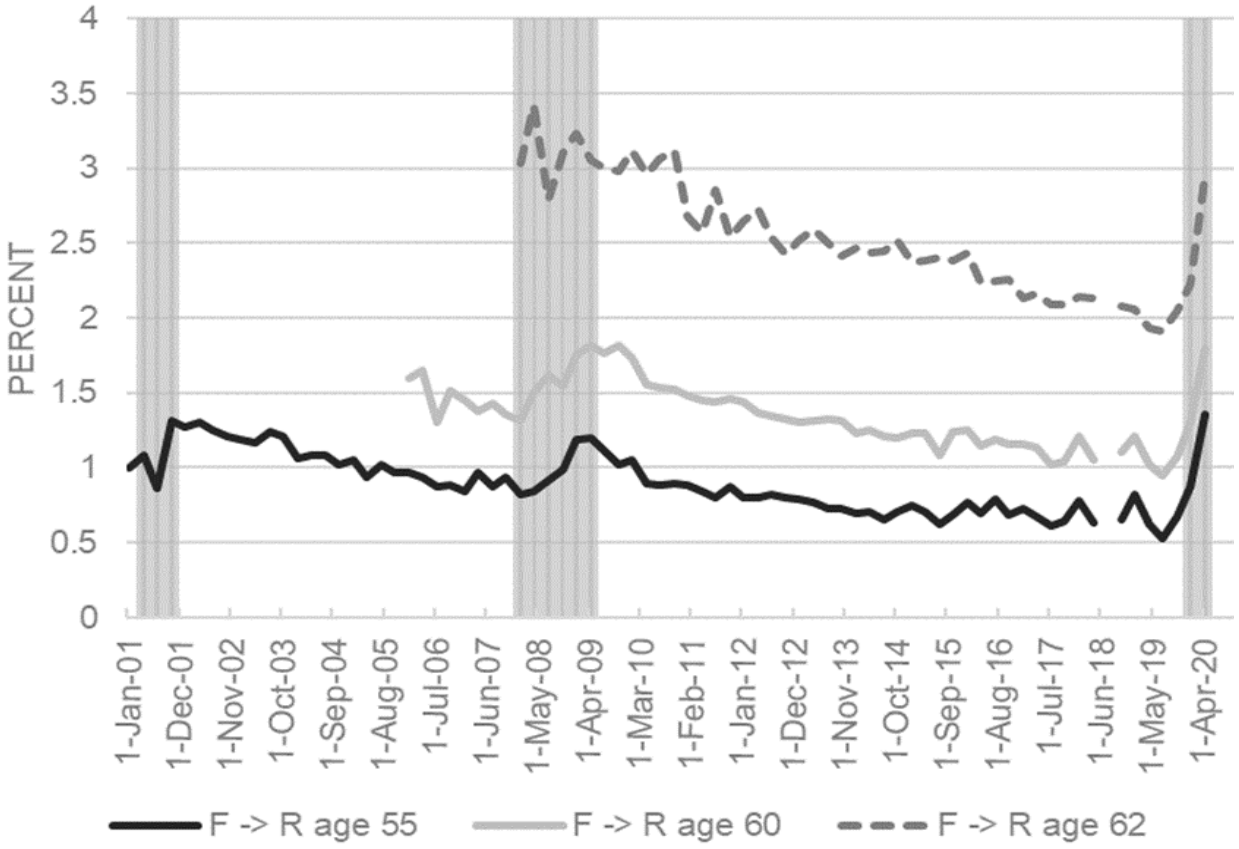
Retirement spells are long, but partial retirement spells are short

Initial retirement (R) spell	
Average age at entry	61.0 years
Average length of spell	5.5 years
Working full-time at entry into spell (F->R)	50.3%
Partially retired when entered spell (P->R)	49.7%
Still retired in 2021	70.3%
Returned to partial retirement earnings	23.2%
Returned to full-time career earnings	6.5%
Initial partial retirement (P) spell	
Average age at entry	60.2 years
Average length of spell	1.2 years
Still partially retired in 2021	6.9%
Transitioned to retirement (P->R)	65.3%
Returned to full-career earnings (P->F)	27.7%

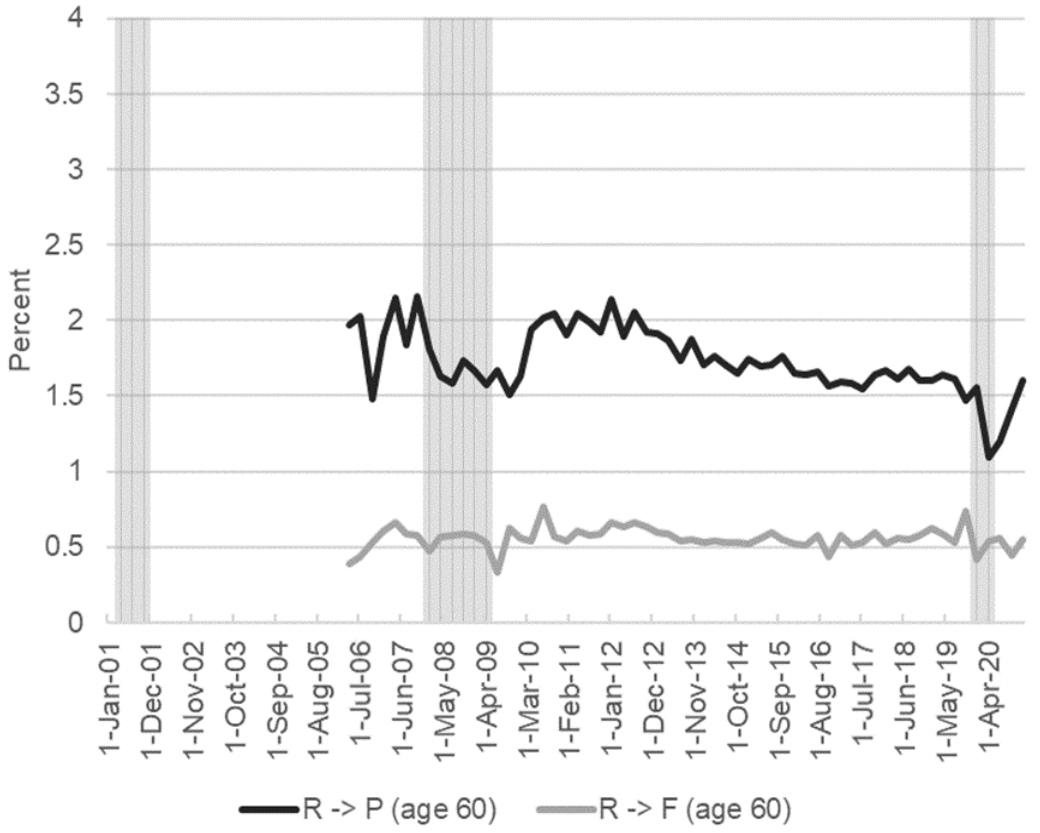
Cyclicality of retirement

Descriptive evidence

Transitions from full-time worker into retirement



'Unretirements' (retired before age 60)



Cyclical regressions
Method

To more formally estimate impact of macro conditions on retirement, estimate the following regression:

$$Prob_{it}\,(X \rightarrow Y) = \alpha + \beta cycle_t + \gamma X_{it} + \mu t_t + \varepsilon_{it}$$

Where:

- **LHS**: Probability a worker undergoes a retirement flow
- **Cycle**: quarterly cyclical indicator (change UI rate)
- **X**: matrix of worker characteristics
- **t**: seasonal fixed effects and a time trend

Cyclical regressions: flows into retirement

	Prob (F -> R)						*Prob (F -> P)*					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Intercept	1.35	1.05	1.01	1.01	1.20	1.20	2.09	1.72	1.87	1.87	1.47	1.47
	(0.006)	*(0.006)*	*(0.006)*	*(0.006)*	*(0.007)*	*(0.007)*	*(0.008)*	*(0.008)*	*(0.009)*	*(0.009)*	*(0.010)*	*(0.010)*
Δ UI rate	0.15	0.16	0.16	0.16	0.16	0.25	0.21	0.22	0.22	0.23	0.22	0.24
	(0.001)	*(0.001)*	*(0.001)*	*(0.001)*	*(0.001)*	*(0.003)*	*(0.001)*	*(0.001)*	*(0.001)*	*(0.002)*	*(0.001)*	*(0.003)*
Age - 55		0.18	0.18	0.18	0.18	0.18		0.21	0.21	0.21	0.21	0.21
		(0.001)	*(0.001)*	*(0.001)*	*(0.001)*	*(0.001)*		*(0.001)*	*(0.001)*	*(0.001)*	*(0.001)*	*(0.001)*
Female			0.07	0.07					-0.31	-0.31		
			(0.003)	*(0.003)*					*(0.005)*	*(0.005)*		
*Female * Δ UI*				0.00						-0.03		
				(0.002)						*(0.002)*		
2nd earnings					-0.17	-0.17					0.11	0.11
quintile					*(0.005)*	*(0.005)*					*(0.006)*	*(0.006)*
3rd earnings					-0.16	-0.16					0.17	0.17
quintile					*(0.005)*	*(0.005)*					*(0.007)*	*(0.007)*
4th earnings					-0.18	-0.18					0.22	0.22
quintile					*(0.005*	*(0.005)*					*(0.007)*	*(0.007)*
5th earnings					-0.24	-0.24					0.83	0.83
quintile					*(0.005)*	*(0.005)*					*(0.009)*	*(0.009)*
*2nd quintile * Δ UI*						-0.09						-0.01
						(0.004)						*(0.004)*
*3rd quintile * Δ UI*						-0.11						-0.04
						(0.004)						*(0.004)*
*4th quintile * Δ UI*						-0.13						-0.05
						(0.003)						*(0.004)*
*5th quintile * Δ UI*						-0.12						0.00

Cyclical regressions

Flows out of retirement

	Prob (R->P)			*Prob (P->F)*			*Prob (R -> F)*		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Intercept	3.47	3.60	3.02	12.05	12.31	14.80	1.48	1.48	1.55
	(0.016)	*(0.017)*	*(0.016)*	*(0.059)*	*(0.068)*	*(0.06)*	*(0.011)*	*(0.012)*	*(0.012)*
Δ UI rate	-0.021		-0.022	-0.046		-0.044	0.003		0.003
	(0.001)		*(0.001)*	*(0.005)*		*(0.005)*	*(0.001)*		*(0.000)*
UI rate		*-0.015*			*-0.029*			*-0.000*	
		(0.001)			*(0.005)*			*(0.000)*	
Age - 55	-0.163	-0.164	-0.167	-0.706	-0.706	-0.691	-0.096	-0.096	-0.094
	(0.001)	*(0.001)*	*(0.001)*	*(0.004)*	*(0.004)*	*(0.004)*	*(0.001)*	*(0.001)*	*(0.001)*
2nd quintile			0.330			-1.98			-0.118
			(0.009)			*(0.049)*			*(0.006)*
3rd quintile			0.462			-3.44			-0.166
			(0.009)			*(0.046)*			*(0.006)*
4th quintile			0.554			-4.15			-0.166
			(0.009)			*(0.046)*			*(0.006)*
5th quintile			0.929			-2.18			0.167
			(0.010)			*(0.049)*			*(0.008)*

To sum up

On macroeconomic conditions and retirements:

- LEHD data provide additional evidence that retirements increase in recessions. Flows to retirement rise in contractions, suggesting mechanism is late-career job loss.
- 'Unretirements' are less cyclically sensitive than retirements. R->P and P->F flows are slightly cyclical, but cyclical effect is very small. Age and income are instead key drivers.

LEHD to study retirements:

- The method described in this paper can match many of the features of retirement flows found in other data, LEHD may be an underutilized data resource for studying retirement