

DISCUSSION OF:  
“WHERE HAVE ALL THE WORKERS GONE?”

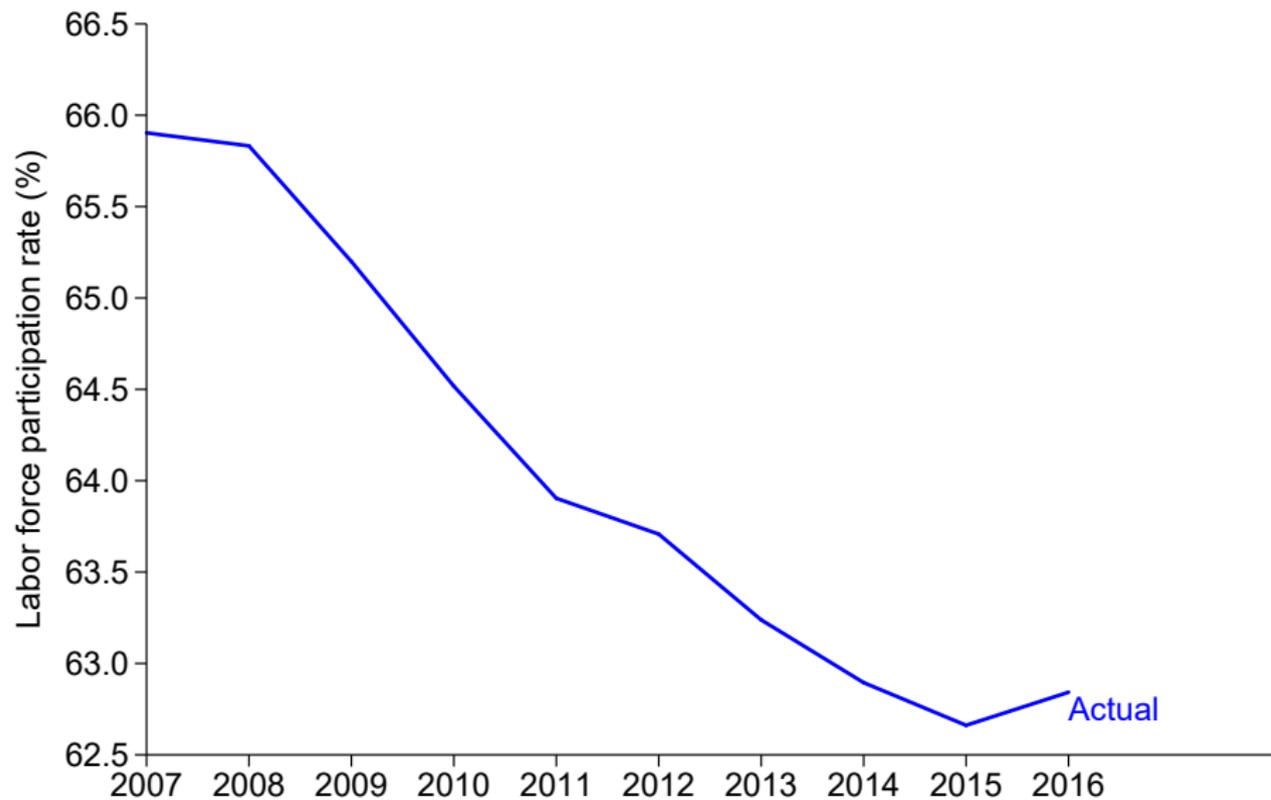
Gabriel Chodorow-Reich  
Harvard University

Federal Reserve Bank of Boston  
October 14, 2016

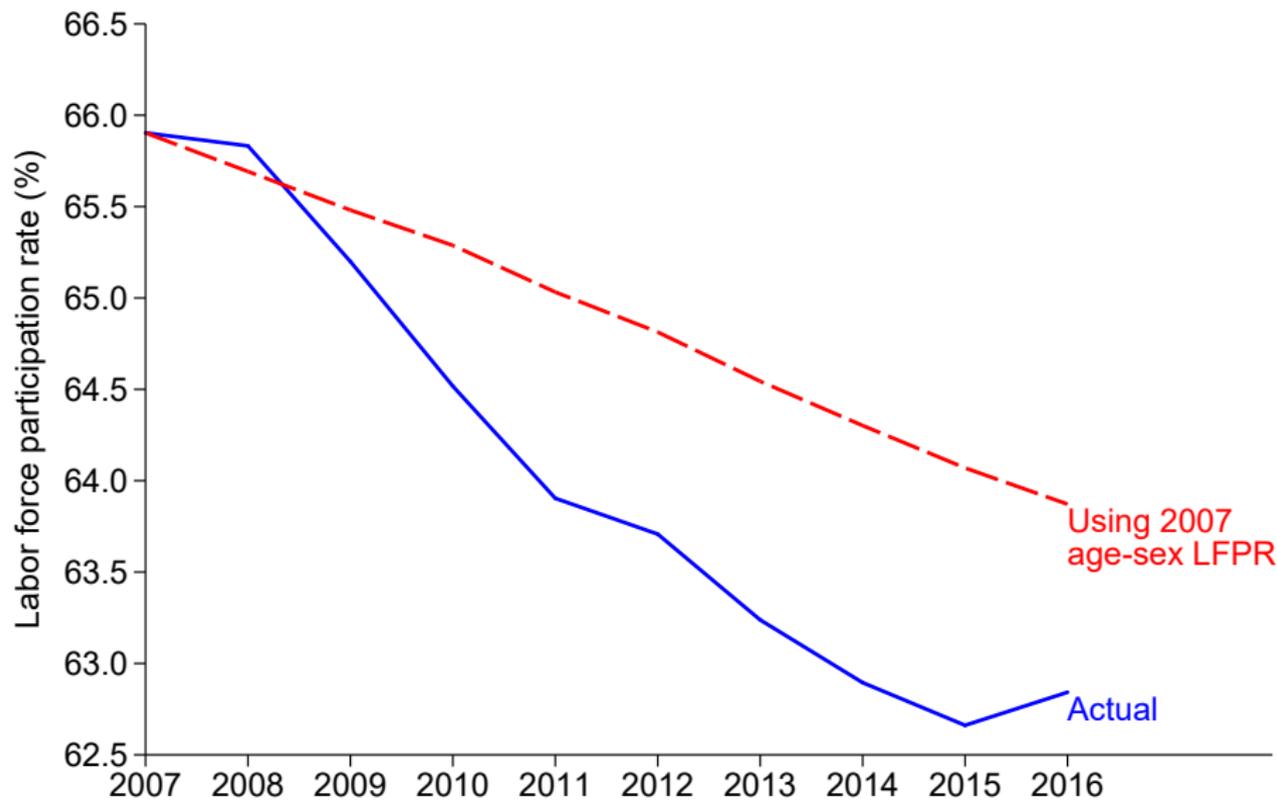
# OVERVIEW OF COMMENTS

- ① Mechanical composition versus within age-sex changes.
- ② Labor supply decision.
- ③ Prime-age workers.
  - ▶ Heterogeneity within group important.
  - ▶ Role of disability.
  - ▶ Role of family structure.
- ④ Well-being.

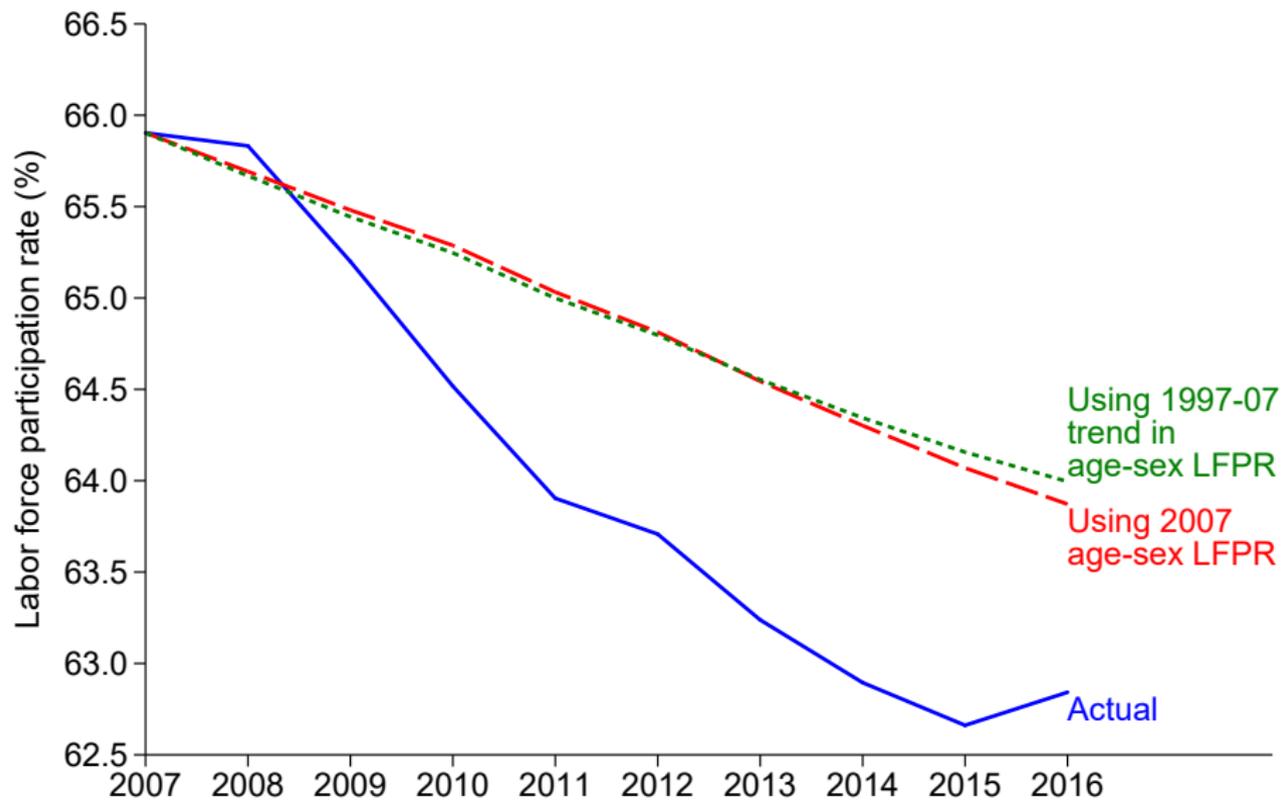
# AGE-SEX DEMOGRAPHIC COMPOSITION



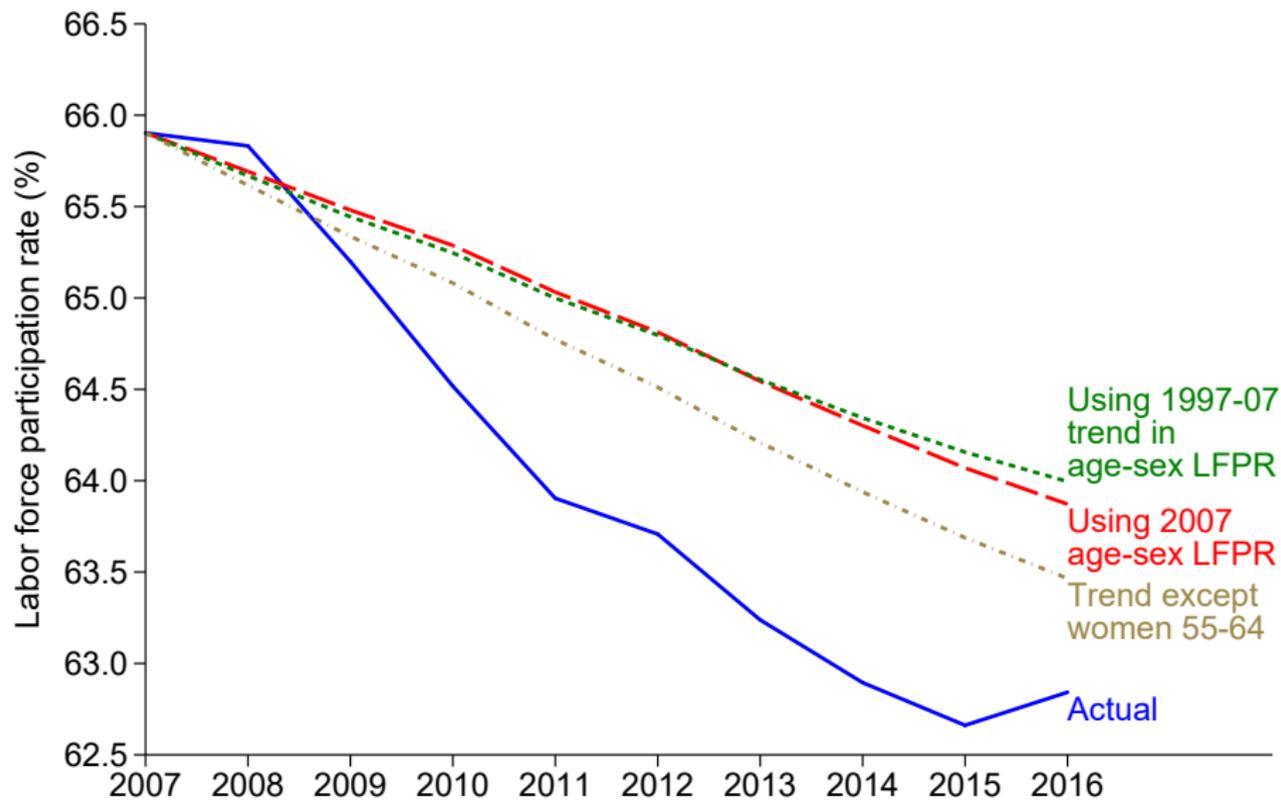
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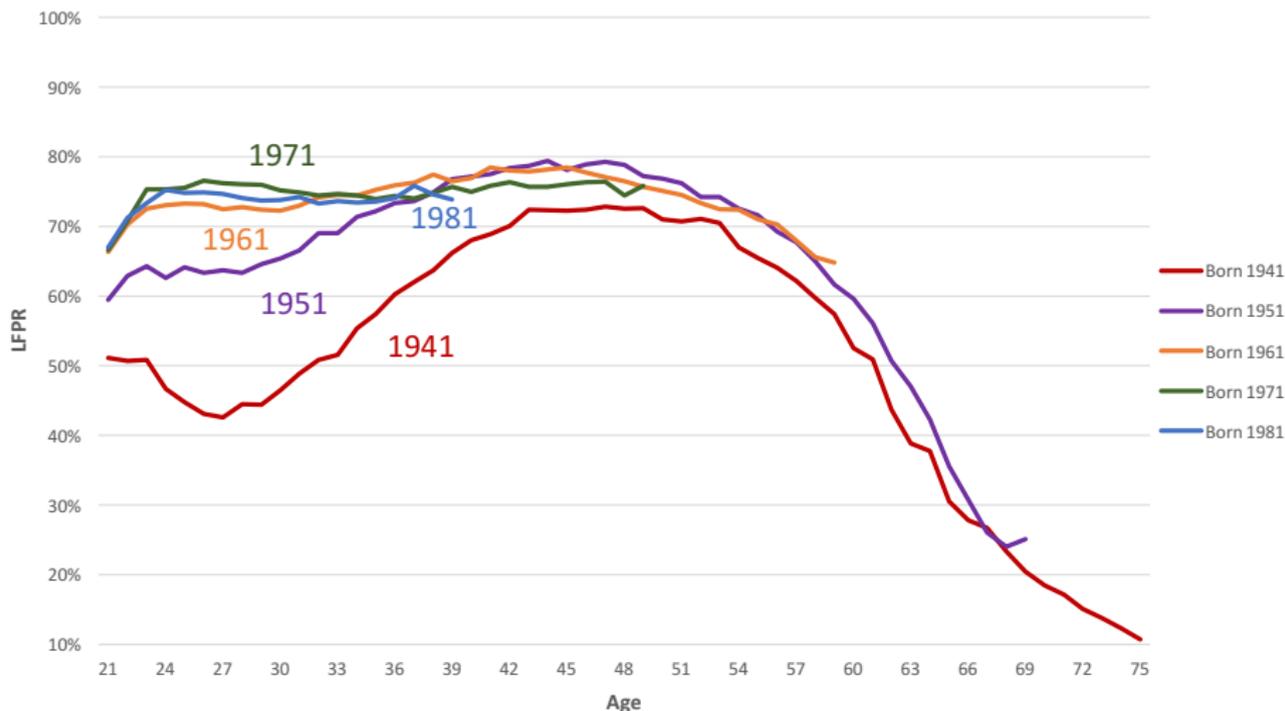
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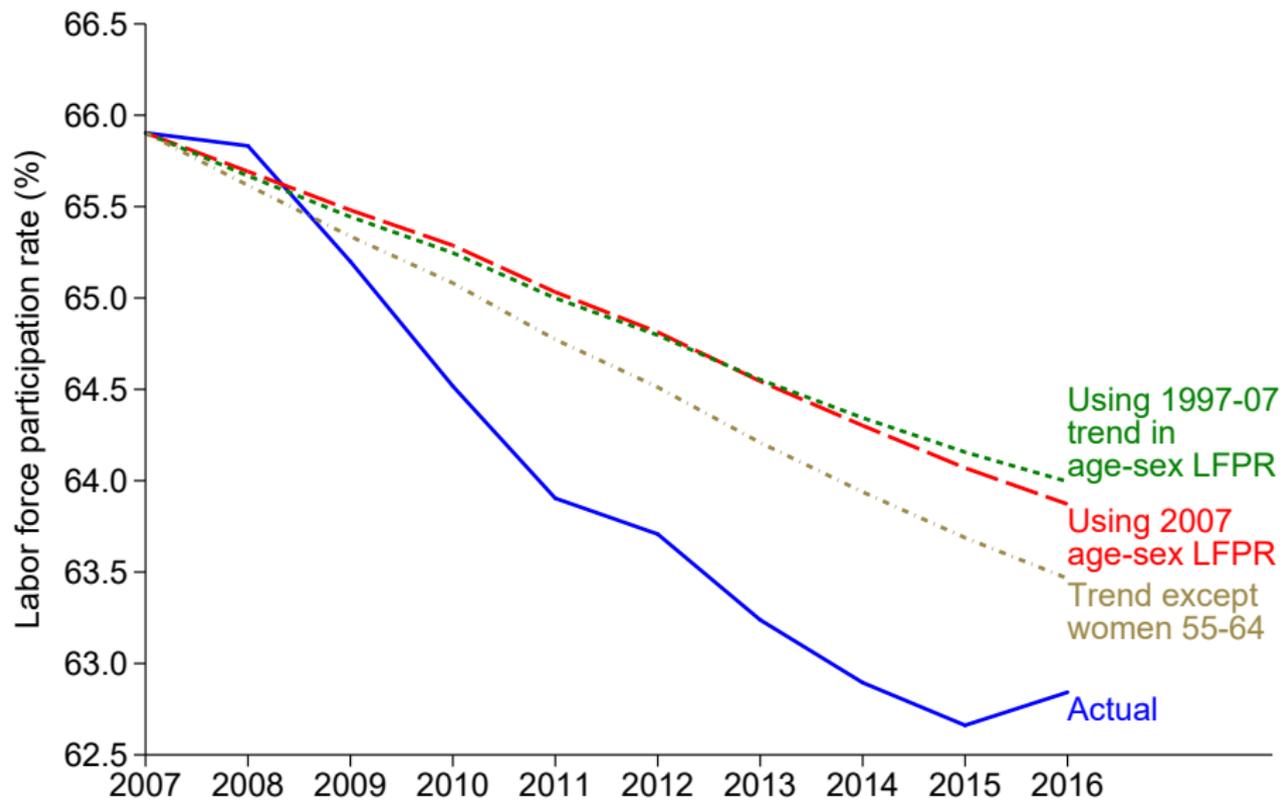


# FEMALE COHORT EFFECTS

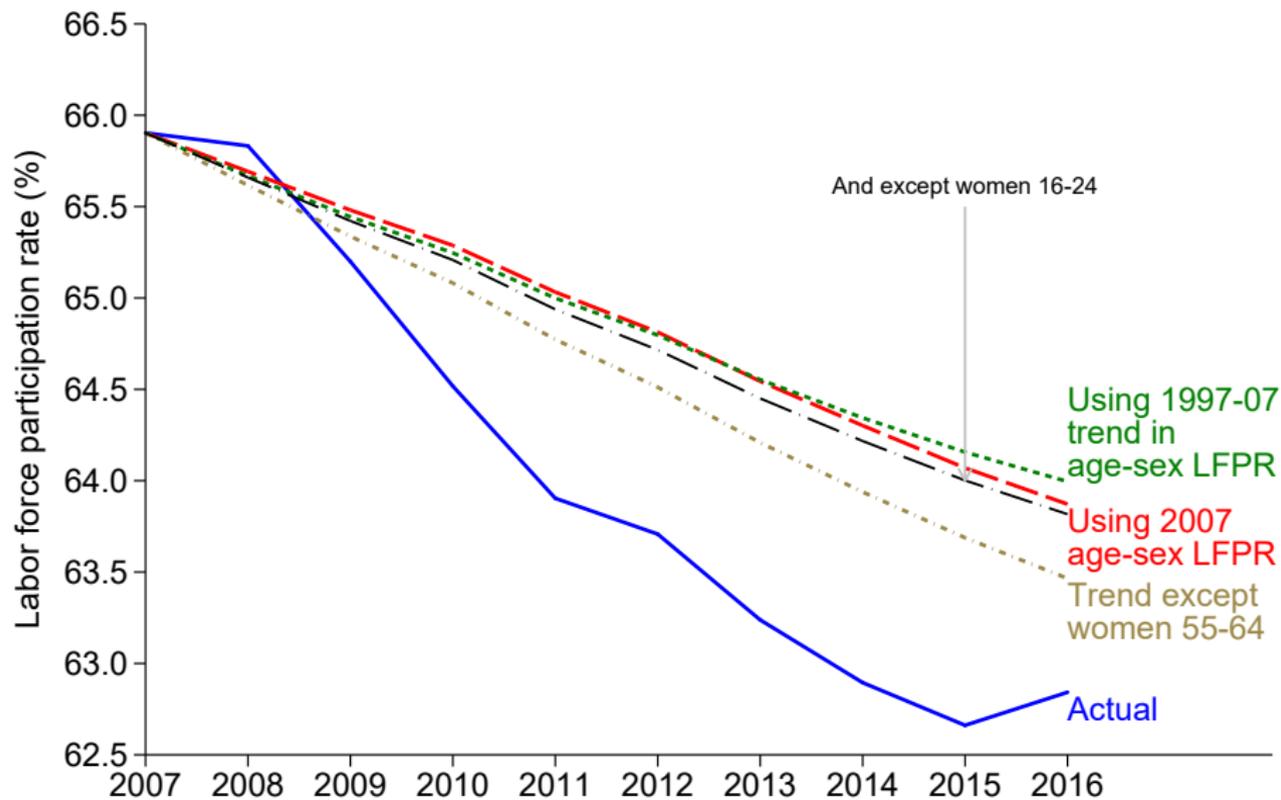


- 55-64 year old trend from 1997 to 2007 is 1941 versus 1951 cohort. Should not extrapolate to 1961 cohort.

# AGE-SEX DEMOGRAPHIC COMPOSITION



# AGE-SEX DEMOGRAPHIC COMPOSITION



## ECONOMICS: STATIC FOC FOR PARTICIPATION

With no search costs, indivisible labor  $\ell \in \{0, 1\}$ , separable period utility  $u(c) - \phi \mathbb{I}\{\ell = 1\}$ , no skill or asset accumulation, work if:

$$\frac{\phi}{u'(c)} + b \leq (1 - \tau)w,$$
$$w = \mathcal{M}^{-1}MPL.$$

- LFPR defined by individual who satisfies with equality.
- $\phi$ : Work painful (disability?) or leisure valuable (video games?).
- $u'(c)$ : Wealth effect (benign?).
- $b$ : Transfers (SSDI?).
- $(1 - \tau)$ : Labor income taxes.
- $\mathcal{M}$ : Firm markup (lower labor bargaining power or minimum wage?).
- $MPL$ : Marginal product of labor (SBTC? disability?).

## WHAT ARE THEY DOING AND WILL THEY RETURN?

	Male 35-54 pop. share (%)			NE hazard (%)	
	2007	2016	Difference	2015	2000
Want Job	1.2	1.4	+0.25	19.9	22.2
School	0.4	0.6	+0.17	19.6	24.6
Other	0.9	1.1	+0.21	17.8	19.1
House	0.8	1.2	+0.44	12.3	17.9
Retired	1.2	1.5	+0.30	5.1	4.1
Disabled	5.3	5.8	+0.52	2.3	2.8
Total NILF	9.8	11.7	+1.89		

- Modest scope for tighter labor market to raise reemployment rates.
- Retired and disabled 44% of increase. Mostly permanent.

## WHAT ARE THEY DOING AND WILL THEY RETURN?

	Male 25-34 pop. share (%)			NE hazard (%)	
	2007	2016	Difference	2015	2000
Want Job	1.6	2.1	+0.47	19.4	30.9
Other	1.0	1.4	+0.33	16.9	25.8
House	0.9	1.1	+0.21	16.8	21.7
School	1.8	3.0	+1.15	11.1	15.9
Retired	0.3	0.5	+0.23	6.9	24.3
Disabled	2.1	3.0	+0.90	3.0	4.8
Total NILF	7.8	11.1	+3.30		

- Modest scope for tighter labor market to raise reemployment rates.
- School 35% of increase.

## ROLE OF DISABILITY

$$\frac{\phi_{age=a,health=h,time=t}}{u'(c_{a,h,t})} + b_{h,t} \leq (1 - \tau_{h,t}) \mathcal{M}_t^{-1} MPL_{a,h,t}.$$

- Distribution of  $h|a$ : higher participation among 60+ suggests improving health.
- $\phi_{a,h,t}$ : Harder to work with disability? Seems unlikely: ADA, etc.
- $MPL_{a,h,t}$ : Productivity of disabled? Shift to services, non-manual work should have facilitated participation of moderately disabled.
- $b_{h,t}$ : DI benefits more generous (Autor and Duggan).
- Maestas, Mullen, Strand (2013), French, Song (2014), Autor, Maestas, Mullen, Strand (2013) quasi experimental evidence using administrator/judge assignment: at most about 1/4 to 1/2 of SSDI recipients would otherwise work.

## KRUEGER EVIDENCE ON HEALTH STATUS

- 43% of prime-age men NILF report health as fair or poor.
- 34% say yes to at least one of six disabilities asked by CPS.
- Probability NILF|disabled  $\uparrow$  from 2008 to 2014,  $\downarrow$  from 2014 to 2016.
  - ▶ Useful to further restrict age – different for 45 year old than 30 year old.
- Prime-age male NILF (disabled) spend 1/2 (71%) of day in some pain. Pain rating higher for NILF.
- 44% of prime-age male NILF take some pain medication.
- Self-reporting: 93% of disabled NILF receiving income support say they would not otherwise work.

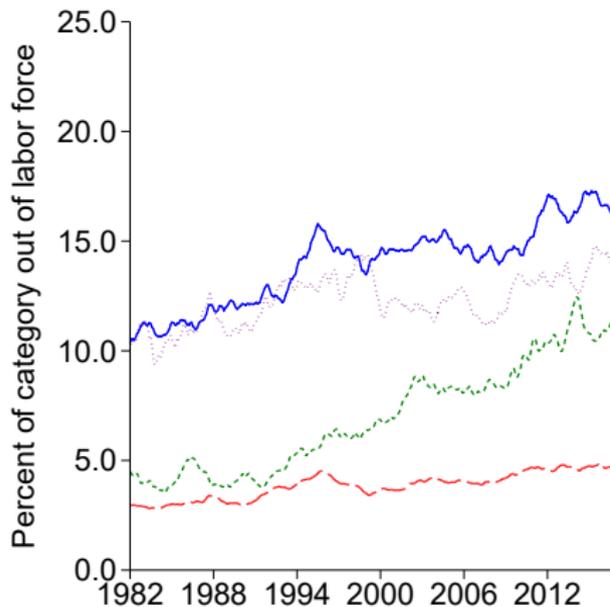
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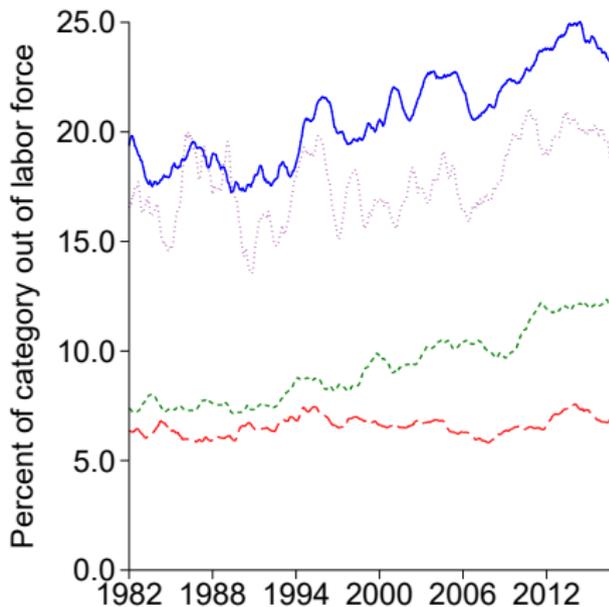
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# NOT IN LABOR FORCE BY FAMILY STRUCTURE

## Men 35-44



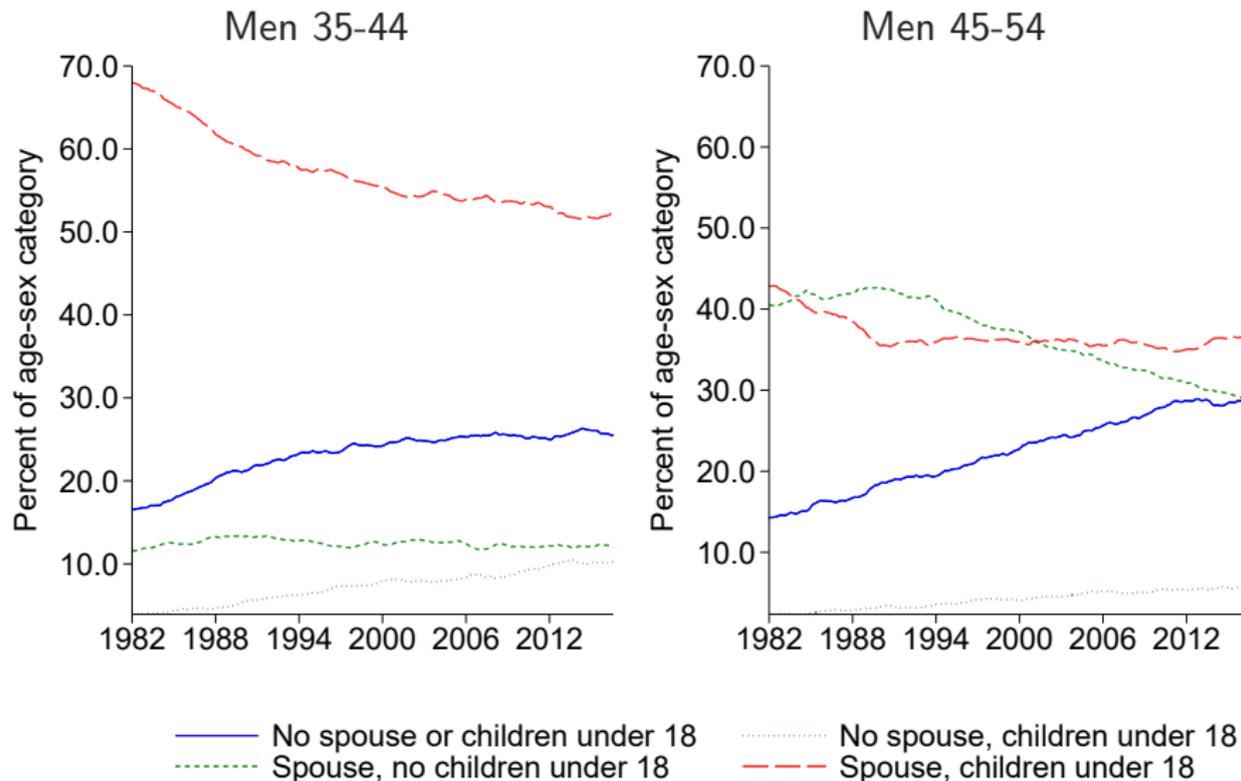
## Men 45-54



- No spouse or children under 18
- - Spouse, no children under 18
- ..... No spouse, children under 18
- - Spouse, children under 18

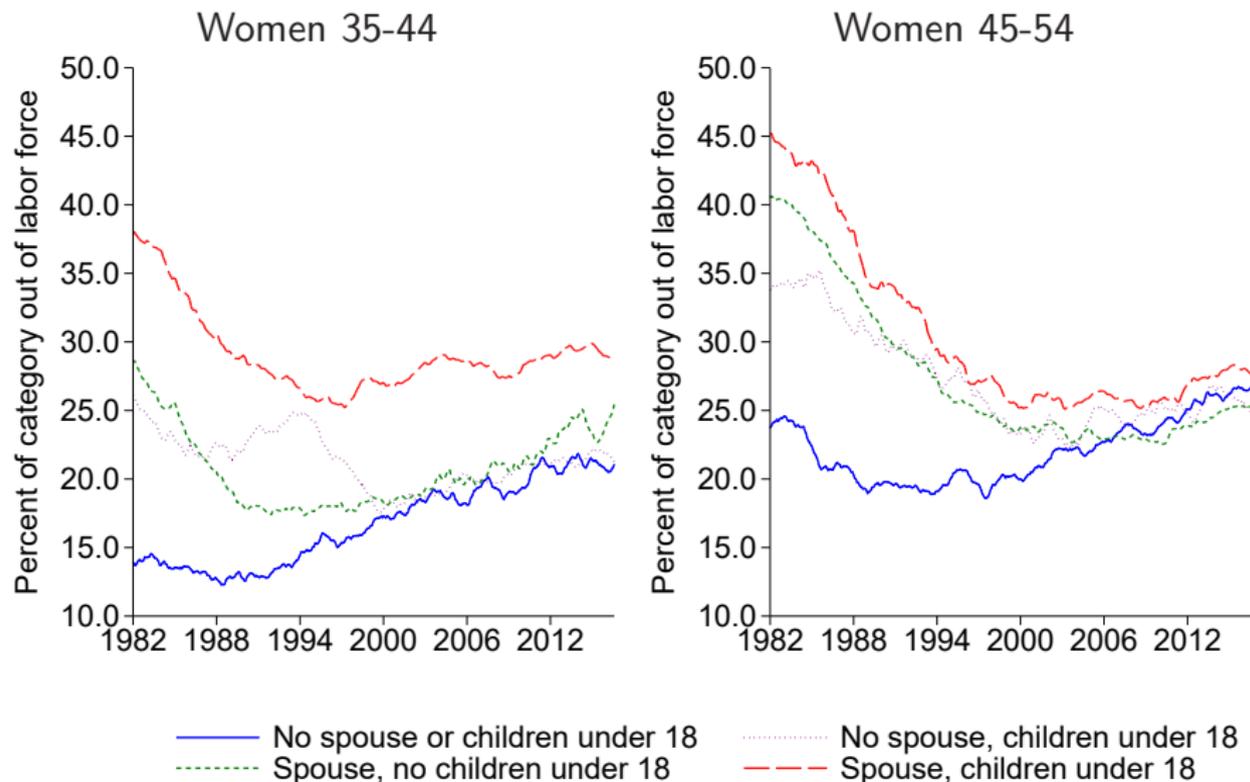
- Married with children have highest LF attachment and smallest decrease.
- Unmarried men have lowest LF attachment.

# FAMILY STRUCTURE BY AGE-SEX CATEGORY



- Shift toward family structures with lower male labor force attachment.

# NOT IN LABOR FORCE BY FAMILY STRUCTURE



- Increase in out of labor force in past 20 years not concentrated among women with children.

## WELL-BEING ( “HOW DOES IT FEEL?” )

### Cantril ladder by spousal employment

Spouse:	Men 25-54				Women 25-54			
	No spouse	Emp.	Not emp.	Total	No spouse	Emp.	Not emp.	Total
Respondent:								
Employed	6.55	7.25	7.21	7.03	6.77	7.56	6.93	7.24
Not in LF	5.73	6.68	6.22	6.08	6.17	7.50	6.51	7.03

Cantril ladder 0-10 with 10 the best possible life and 0 the worst.

- Without spouse less satisfied with life.
- Conditional on spouse present, decline in well-being among NILF smaller if spouse working than not. Income effects?

# CONCLUSIONS

- 1 Age-sex explains a lot.
- 2 Disability important, but may matter along many dimensions.
- 3 Family structure important.
- 4 Presence of children, spouse suggestive of income effects.



# Appendix slides

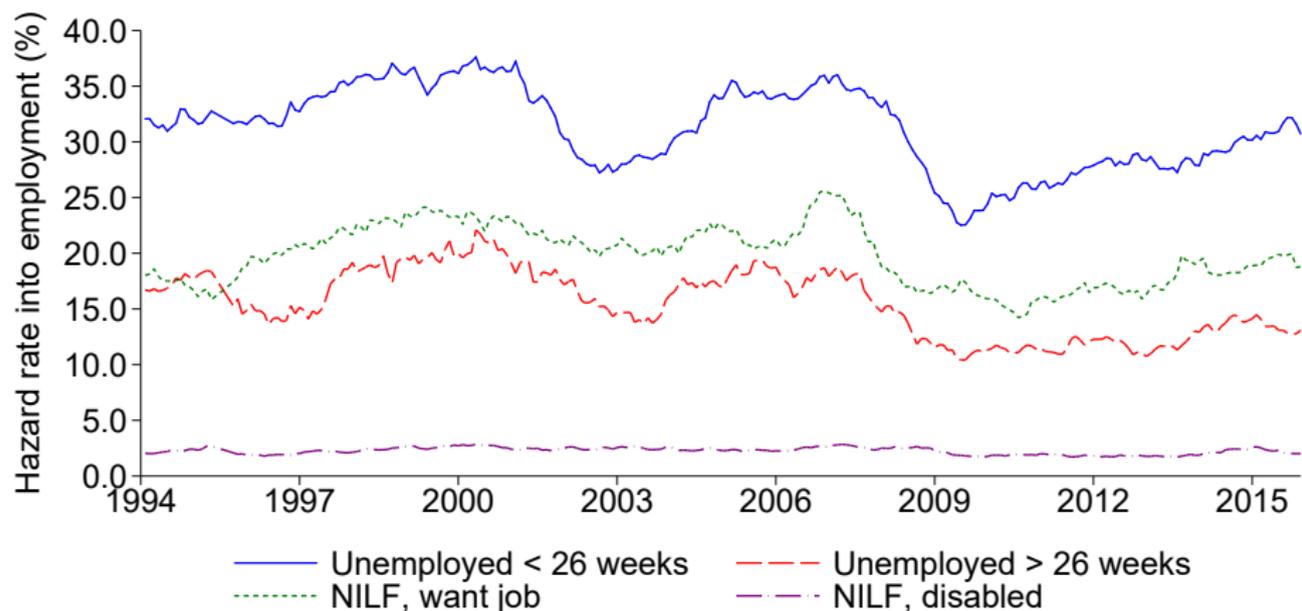
## WHAT ARE THEY DOING AND WILL THEY RETURN?

	Female 35-54 pop. share (%)			NE hazard (%)	
	2007	2016	Difference	2015	2000
Want Job	1.8	2.1	+0.30	13.8	14.9
Other	1.1	1.1	+0.05	13.7	17.2
School	0.7	0.8	+0.07	10.4	8.5
House	13.2	13.7	+0.58	5.8	6.3
Retired	1.6	1.7	+0.14	5.2	4.5
Disabled	5.9	6.5	+0.59	2.1	2.0
Total NILF	24.2	26.0	+1.73		

## WHAT ARE THEY DOING AND WILL THEY RETURN?

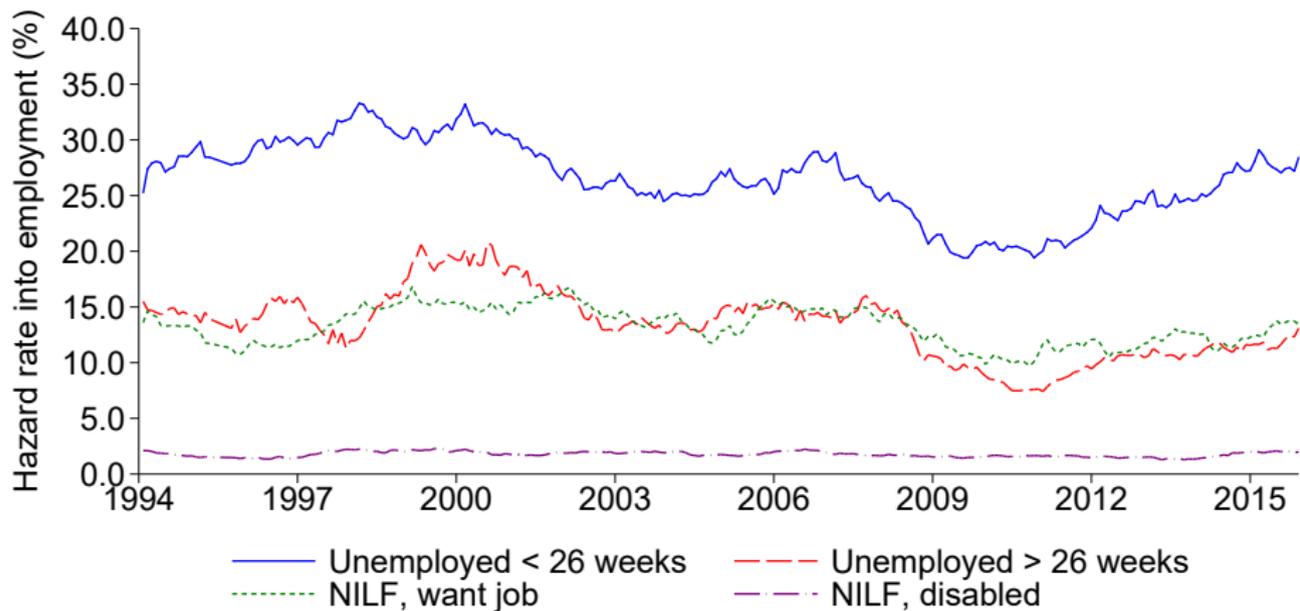
	Female 25-34 pop. share (%)			NE hazard (%)	
	2007	2016	Difference	2015	2000
Other	1.0	1.2	+0.17	14.7	17.1
Want Job	2.5	2.8	+0.29	14.5	17.4
School	2.7	3.4	+0.67	8.5	10.5
Retired	0.4	0.7	+0.30	6.1	18.9
House	16.6	15.4	-1.27	5.1	6.1
Disabled	2.3	2.5	+0.23	3.4	4.2
Total NILF	25.5	25.9	+0.40		

## HAZARD INTO EMPLOYMENT, 35-54 YEAR-OLD MEN



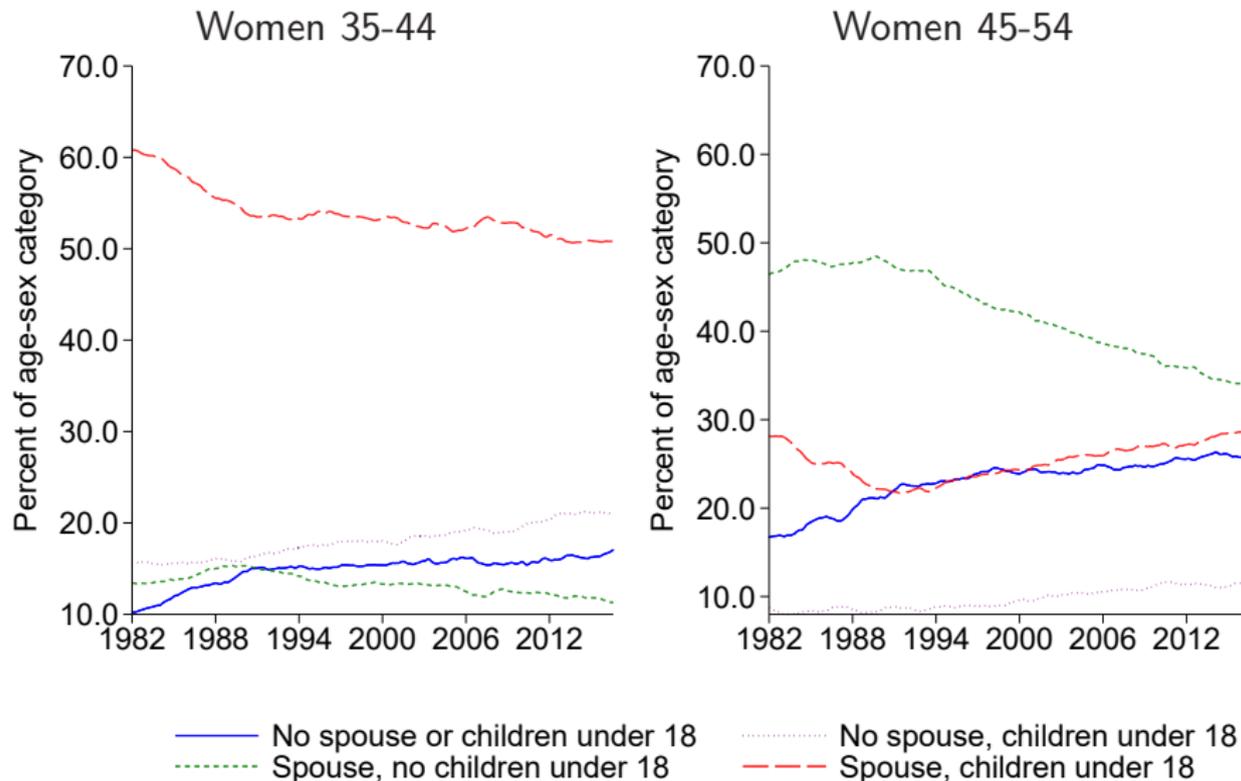
- NILF, want job similar to long-term unemployed.
- NILF, disabled rarely reenter employment.

## HAZARD INTO EMPLOYMENT, 35-54 YEAR-OLD WOMEN

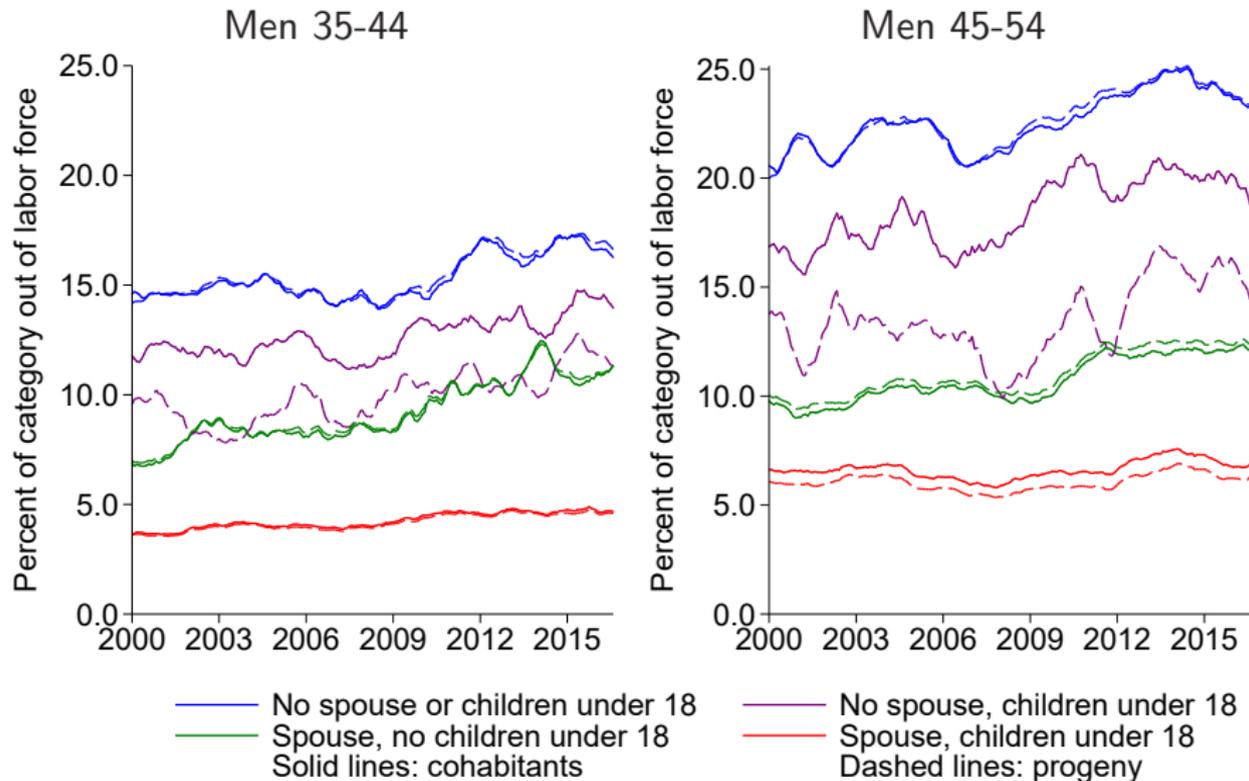


- NILF, want job similar to long-term unemployed.
- NILF, disabled rarely reenter employment.

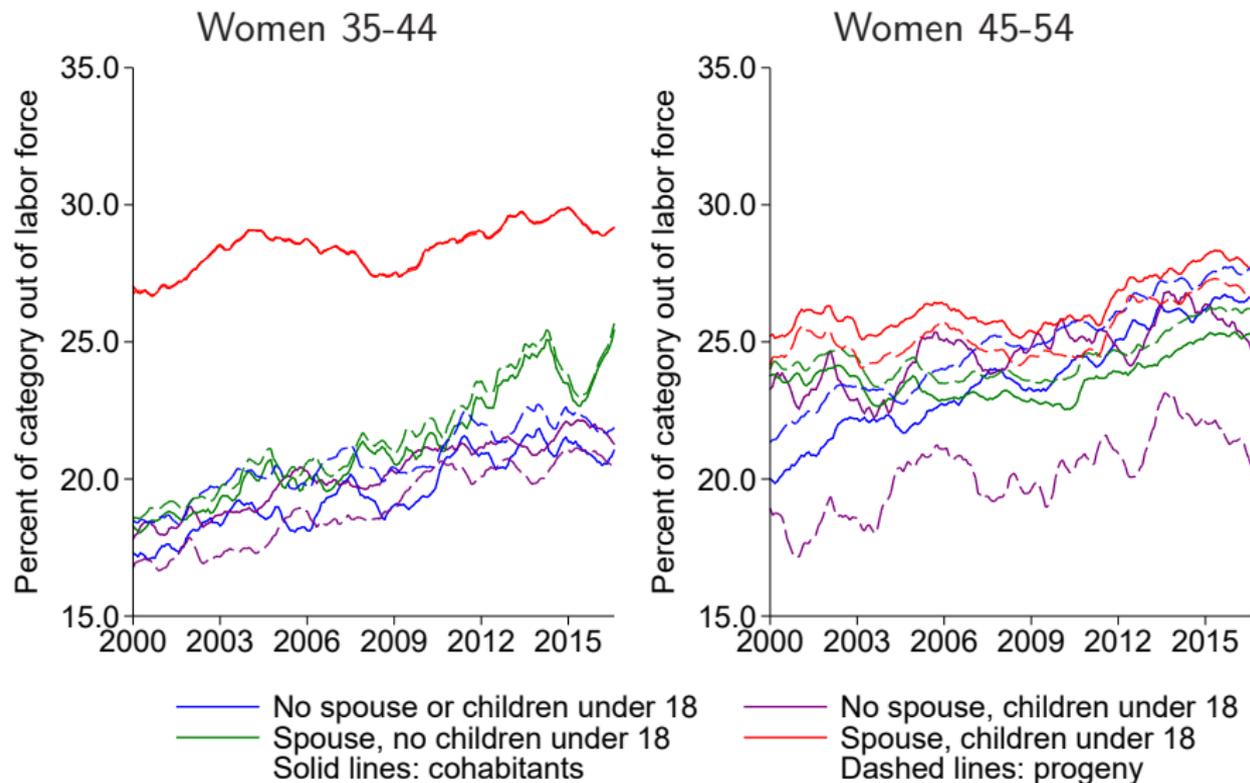
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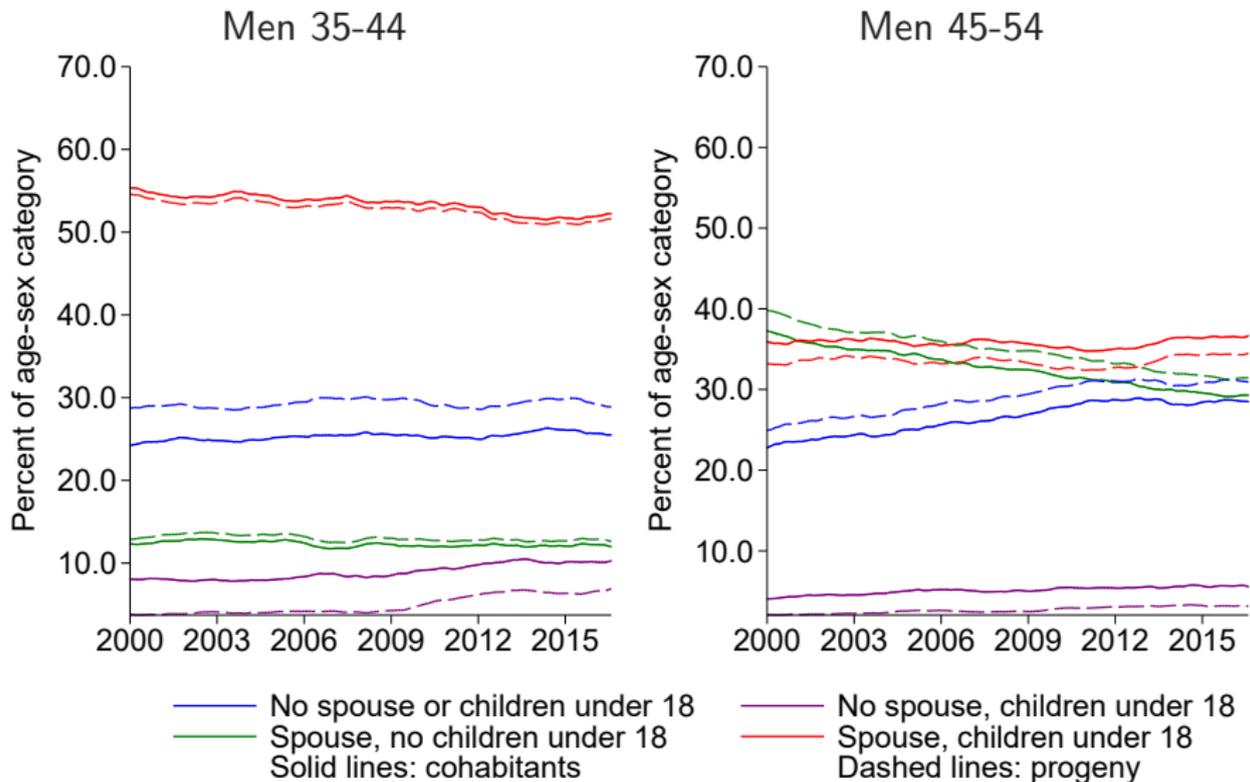
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