Presentation and Discussion for:

Do You Need Less Money in Retirement?

by Martina Celidoni and Guglielmo Weber

John Sabelhaus
Federal Reserve Board

These comments were prepared for the IARIW General Conference, Copenhagen, Denmark, August 20-25, 2018.

The Question

- Why does household consumption seem to take a one-time drop at retirement?
  - Data for many countries shows clear drop
  - Battistin, Brugiavini, Rettore, Weber (2009) find 9.8% for Italy using regression discontinuity
- Finding seems inconsistent with lifecycle intertemporal consumption smoothing
  - No reason for consumption to respond to predictable changes in income

Potential Answers

- Behavioral mistakes, myopia
  - Berheim, Skinner, Weinberg (2001)
- Retirement is associated (on average) with negative shocks to lifetime income
  - Banks, Blundell, Tanner (1998)
  - Plausible, but social insurance/replacement key
- Spending and consumption are not the same
  - Aguiar and Hurst (2013)
  - Work expenses fall, home production rises

This Paper

- Sort out potential explanations by ASKING SHIW respondents how much they "need to live comfortably but not in luxury"
  - If actual drop ≈ "needed" drop => consumption smoothing operative, not behavioral bias/shocks
- Problem is of course endogeneity (as with spending drop at retirement itself)
- Innovation: Use same regression discontinuity as in Battistin et al (2009), which is based on exogenous variation in pension eligibility

Steps

- Show “money needed” ≈ actual spending
- Show fraction retired jumps discontinuously at retirement eligibility threshold
- Reproduce Battistin et al (2009) consumption drop results for this sample
- Show same results hold for “money needed”

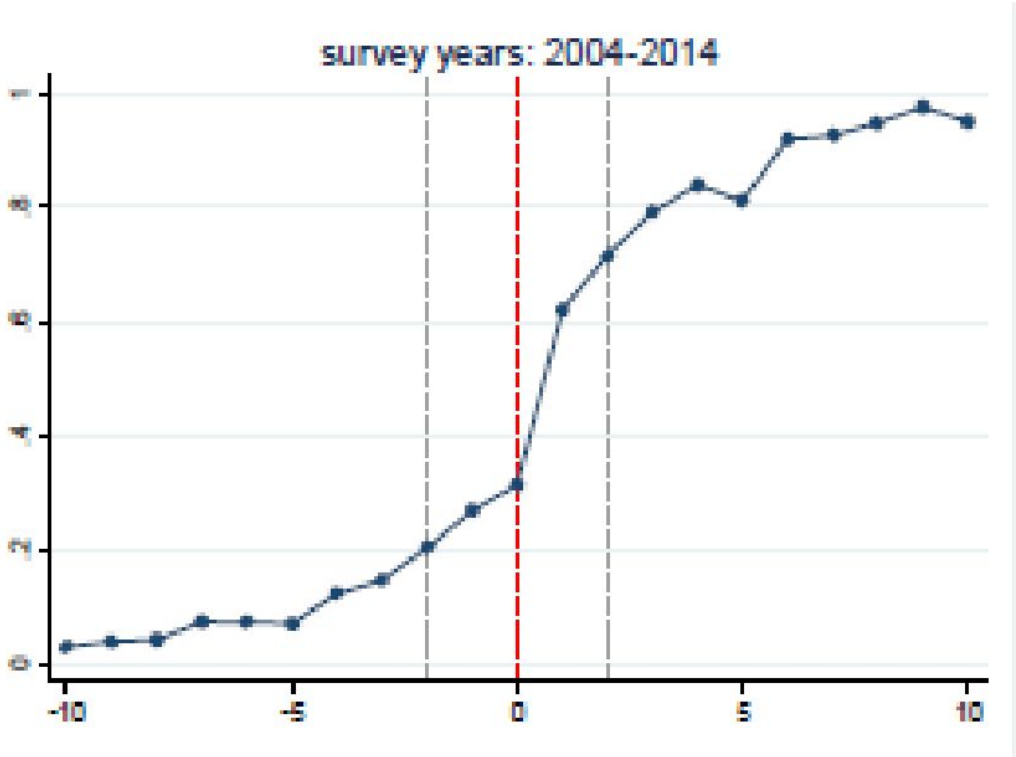
“Money Needed” ≈ Actual Spending

Table 1. ISTAT relative poverty lines and money needed (euros, current prices).

	2004	2006	2008	2010	2012	2014
Average total expenditure (ISTAT) for a two-member households	1839.96	1940.68	1999.34	1984.92	1981.76	2083.82
Money needed among two-member households (SD)	Mean (SD)					
	1903,24 (759,28)	1935,22 (729,26)	1946,89 (732,98)	2057,67 (782,55)	2154,88 (748,73)	2281,47 (789,15)
	Median					
	1800	2000	1850	2000	2000	2000

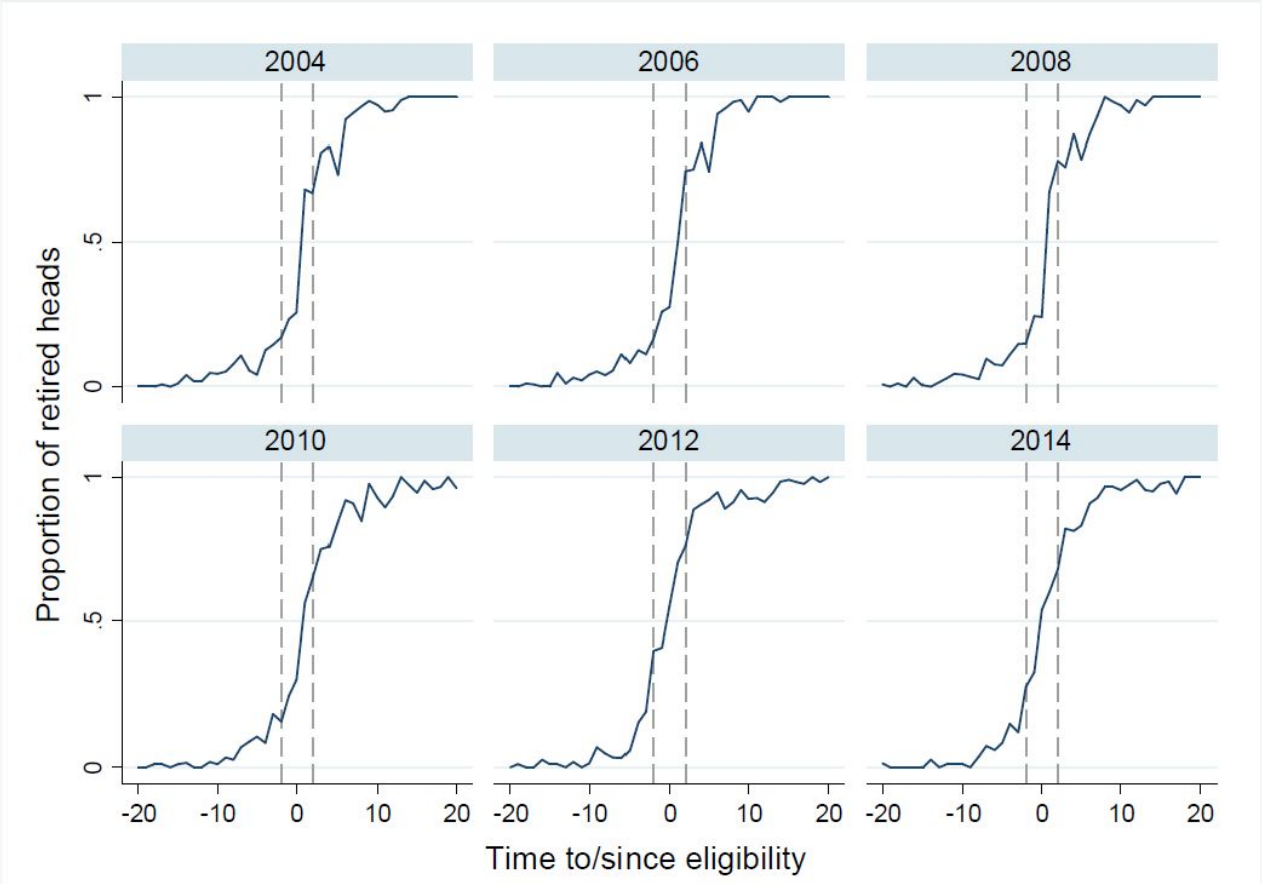
Fraction Retired Jumps at Eligibility

Figure 1. Proportion of retired male heads by time to/since eligibility, 2004-2014



Fraction Retired Jumps at Eligibility (by Year)

Figure 2. Proportion of retired male heads by time to/since eligibility and survey year



Consumption Falls at Retirement

Table 4 - The effect of retirement on non-durable consumption (2004-2010). ***Grouped data***

	(3) OLS	(4) IV	(3) OLS	(4) IV
Dep. Var.	log_cons	log_cons	log_eqcons	log_eqcons
job_pensioncr	-0.116**	-0.098*	-0.050	-0.047
	(0.050)	(0.052)	(0.050)	(0.050)
S	-0.002	-0.003	0.003	0.003
	(0.003)	(0.003)	(0.003)	(0.003)
$S^2/10$	-0.001***	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)
First stage				
Eligible		0.415***		0.415***
		(0.023)		(0.023)
F-statistic		217.02		217.02

Notes: Instrumental variables estimates based on 80 cell means. The estimated equation relates expenditure to a dummy for retirement, controlling from time to/from eligibility and survey year dummies. Retirement is instrumented by eligibility status. Standard errors are robust to heteroskedasticity. S ϵ [-10;10], S=0 is excluded. *** p<0.01, ** p<0.05, * p<0.1

Money Needed Falls at Retirement

Table 6. The effect of retirement on money needed (2004-2014). ***Grouped data***

	(1)	(2)	(3)	(4)
	OLS		IV	
Dep. Var.	log_povlin	log_eqpovlin	log_povlin	log_eqpovlin
job_pensioner	-0.094**	-0.052	-0.099**	-0.069*
	(0.036)	(0.035)	(0.042)	(0.039)
S	-0.005**	0.002	-0.005*	0.003
	(0.002)	(0.002)	(0.003)	(0.002)
$S^2/10$	-0.002*	-0.002**	-0.002*	-0.002*
	(0.001)	(0.001)	(0.001)	(0.001)
First stage				
Eligible			0.400***	0.400***
			(0.022)	(0.022)
F-statistic			212.45	212.45

Notes: Instrumental variables estimates based on 120 cell means. The estimated equation relates subjective poverty line to a dummy for retirement, controlling from time to/from eligibility and survey year dummies. Retirement is instrumented by eligibility status. The equivalence scale used is the square root of household size. Standard errors are robust to heteroskedasticity. S ϵ [-10;10], S=0 is excluded. *** p<0.01, ** p<0.05, * p<0.1.

Results Seem Very Robust

- Instrument makes a lot of sense, and identification strategy test => households just above S=0 look like those just below
- Lots of sensivity tests and alternative specifications come to same basic conclusion
  - Narrower and wider band around S=0
  - Grouped vs household-level (with controls)

Concerns? Maybe one…

- As in earlier paper, the equivalence-adjusted consumption drop smaller and not significant
  - Suggests household composition matters
- Interestingly, equivalence-adjusted "money needed" decline is closer to unadjusted decline and statistically significant
- The fact that coefficient magnitude changes seems more important than precision per se

Making Use of the Panel?

- SHIW is a panel, this paper (and Battistin et al 2009) use the data as a series of cross-sections because of specific identification strategy
- Might be interesting to look at within-person consumption and "money needed" patterns around retirement eligibility
  - Does "money needed" answer *lead* consumption?
  - Are any other variables (household composition, health) correlated with changes in either?

More Background on Italian System?

- Pension eligibility used to identify whether there is a discontinuous jump in MU(c) at retirement
  - What is replacement rate in Italy?
  - Is retirement at eligibility age PV(benefit) maximum?
- How has eligibility evolved? Just the eligibility age that changed, or a shift in age-benefit profile?
- What do trends in consumption and labor supply around retirement eligibility tell us about how people adjust to pension benefit changes?

Policy Takeaways?

- Key issue (to me) is public pension design
  - Most macro models consider tax and transfer effects on labor supply, measure welfare losses
  - Agents in model would not *choose* public pension
  - Welfare gains of pensions maybe through market incompleteness, not captured in macro models
- Showing that consumption (and labor supply) adjust smoothly shifts focus to *fairness* of public pensions across and within generations

Thanks!

john.sabelhaus@frb.gov