

# *Are Retirees Falling Short?*

## *Reconciling the Conflicting Evidence*

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# Will people have enough in retirement? Research offers conflicting answers.

*Retirement preparedness is either:*

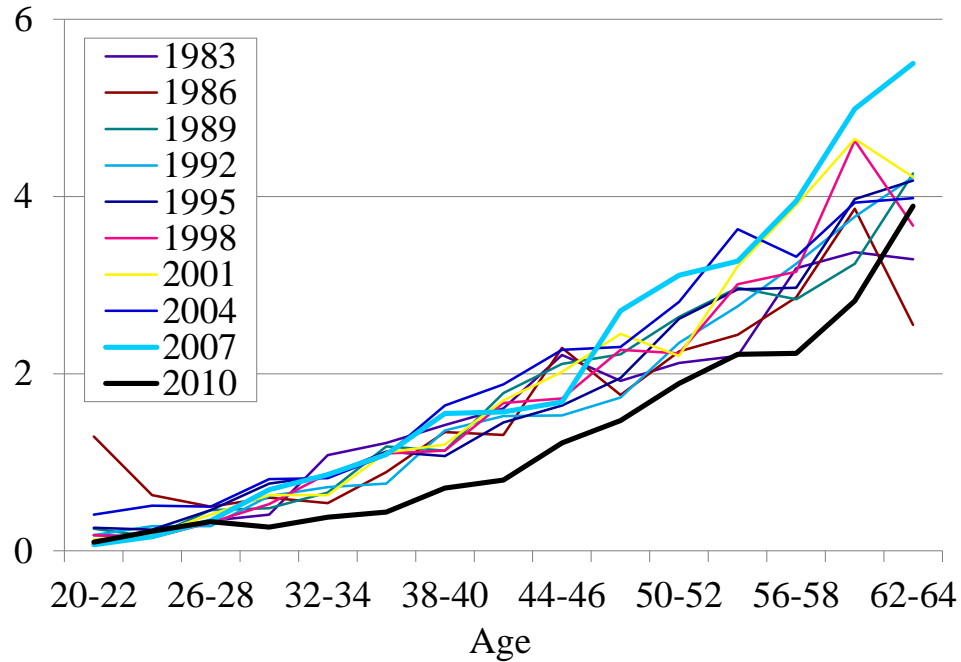
- A big problem
  - Target replacement rate study using SCF
  - Target replacement rate study using HRS

*or*

- A small problem
  - Optimal savings model
  - Initial retirement consumption

# While preparedness is controversial, trends in wealth accumulation over time are not.

Ratio of Wealth to Income by Age from the *Survey of Consumer Finances*, 1983-2010

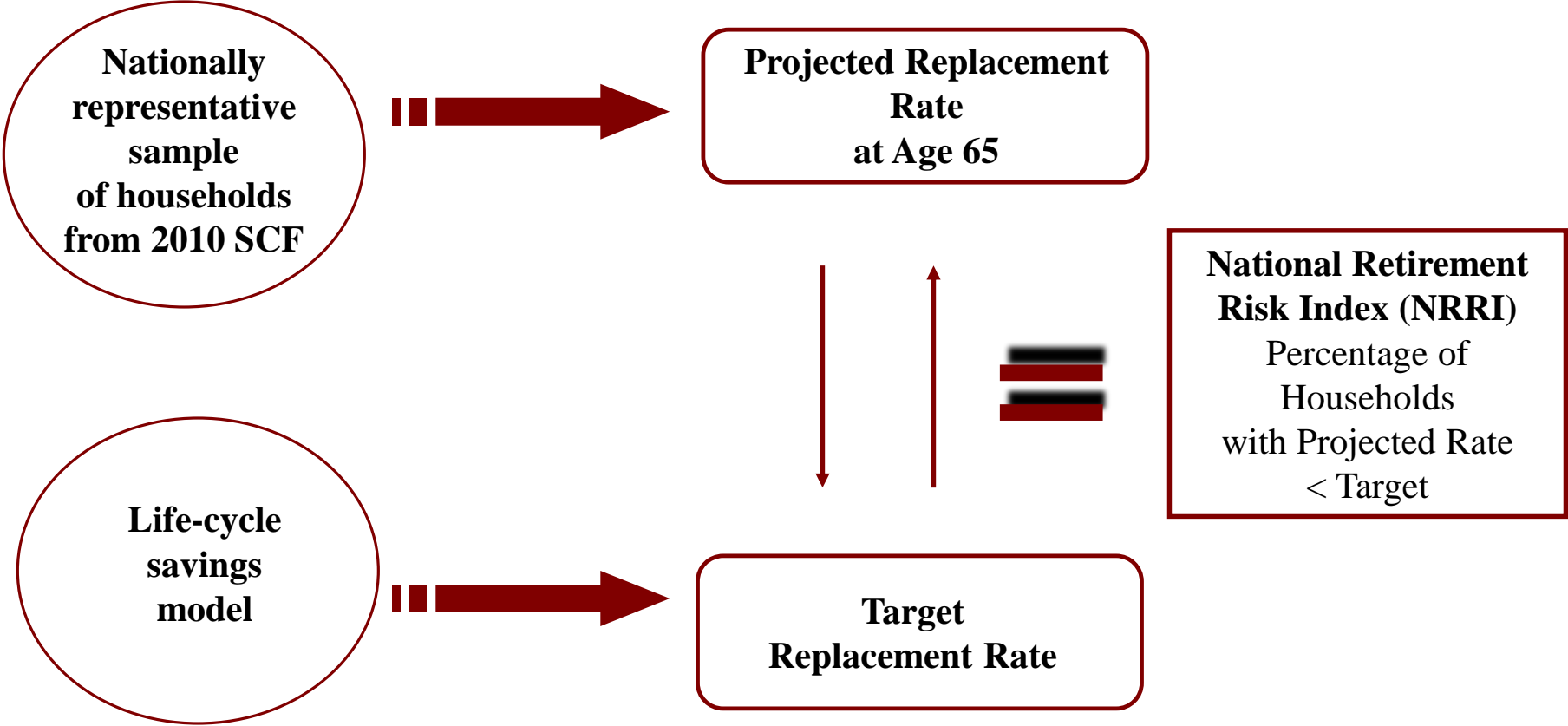


Source: Authors' calculations based on U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances*, 1983-2010.

# Stable wealth-to-income ratios show declining preparedness because:

- Life expectancy has increased;
- Social Security replacement rates are declining;
- Plans have shifted from defined benefit (not in SCF) to defined contribution plans (included in SCF);
- Out-of-pocket health care costs are increasing; and
- Real interest rates are at record lows.

# Let's look first at the “big problem” studies, which rely on target replacement rates.



# NRRI finds half of working-age households are “at risk” of falling short in retirement.

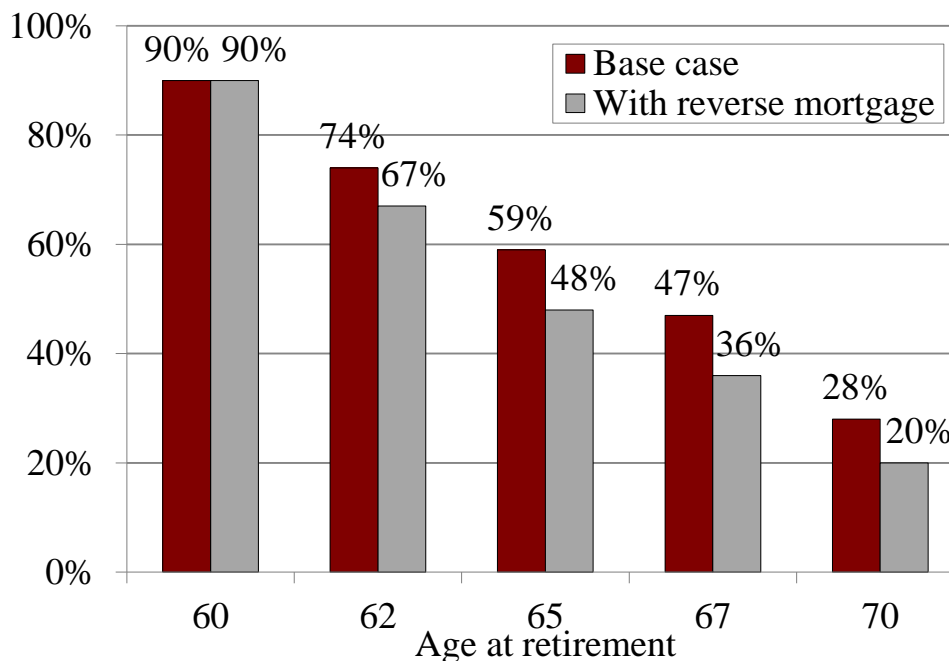
Percent of Households “At Risk” at Age 65 by Age Group, 2007, 2010, and 2013

Age group	2007	2010	2013
All	44 %	53 %	52 %
30-39	53	62	59
40-49	47	55	54
50-59	32	44	44

Source: Authors' calculations.

# A similar analysis, using the HRS, arrived at the same conclusion.

Percent of All Households Falling Short of Target by Age at Retirement, Base Case and with a Reverse Mortgage



Source: Alicia H. Munnell, Natalia Orlova, and Anthony Webb. 2013. "How Important Is Asset Allocation to Financial Security in Retirement?" In *The Market for Retirement Financial Advice*, edited by Olivia S. Mitchell and Kent Smetters, 89-106. Oxford University Press.

# Research on optimal savings tells a similar story for those age 51-61 in 1992...

Percent 'At Risk': NRRI versus 'Optimal Saving,' 1992

Age group	1992	
	NRRI	Optimal savings
All groups	36	--
51-61	19	16

Note: The NRRI result for 2004 is for households age 50-58.

Source: Authors' calculations; and Scholz, Seshadri, and Khitatrakun (2006).



...but a much different story for those age 51-61 in 2004.

Percent 'At Risk': NRRI versus 'Optimal Saving,' 1992 and 2004

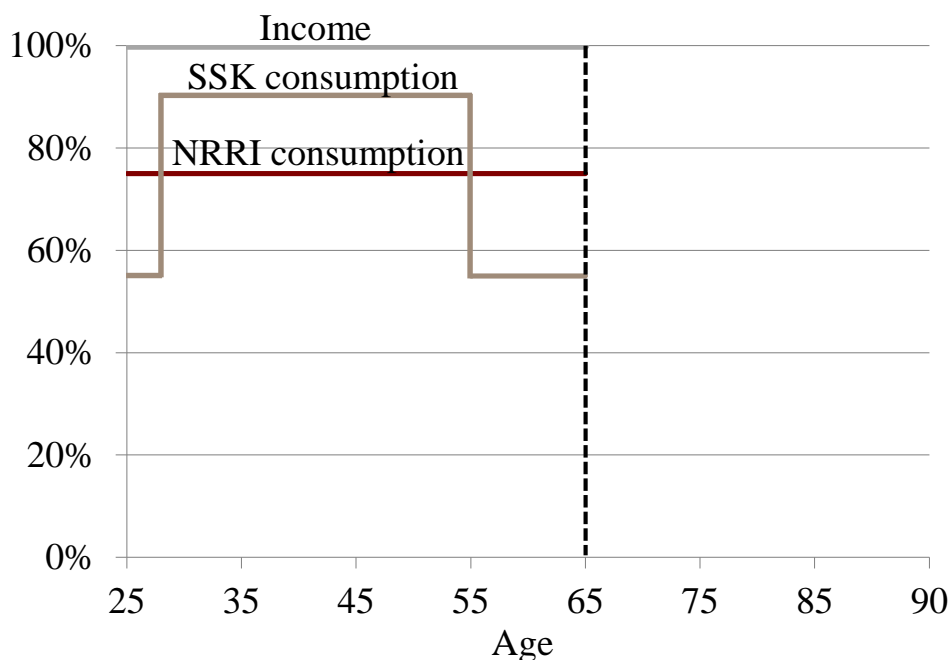
Age group	1992		2004	
	NRRI	Optimal savings	NRRI	Optimal savings
All groups	36	--	43	--
51-61	19	16	35	5

Note: The NRRI result for 2004 is for households age 50-58.

Source: Authors' calculations; Scholz, Seshadri, and Khitatrakun (2006); and Scholz and Seshadri (2007).

# Differences are driven by two assumptions: (1) consumption when children leave...

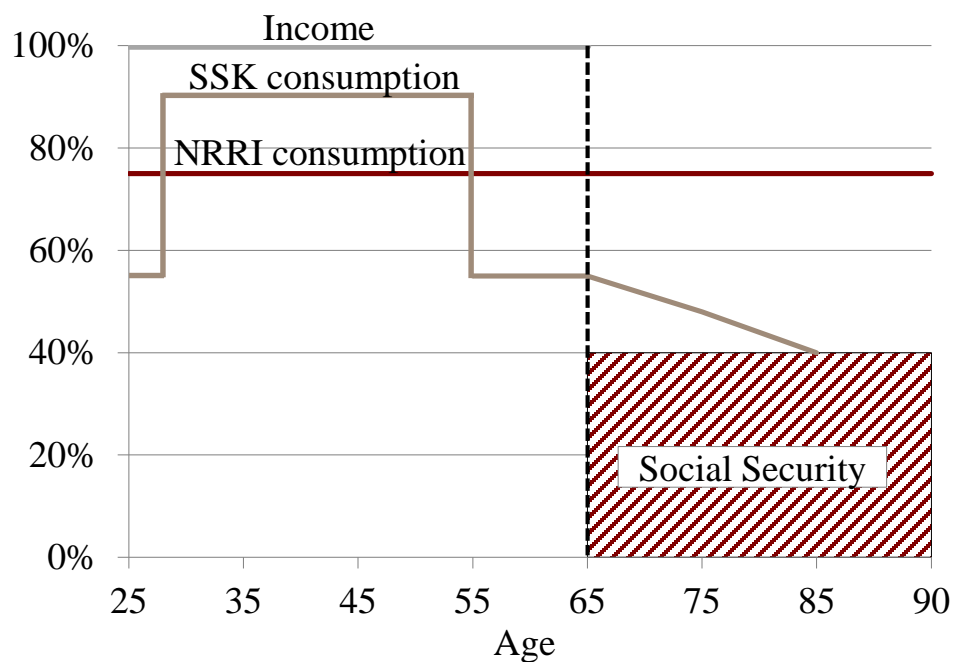
Illustrative Consumption by Age, SSK and NRRI as Percent of Income



Source: Authors' illustration.

# ...and (2) consumption in retirement.

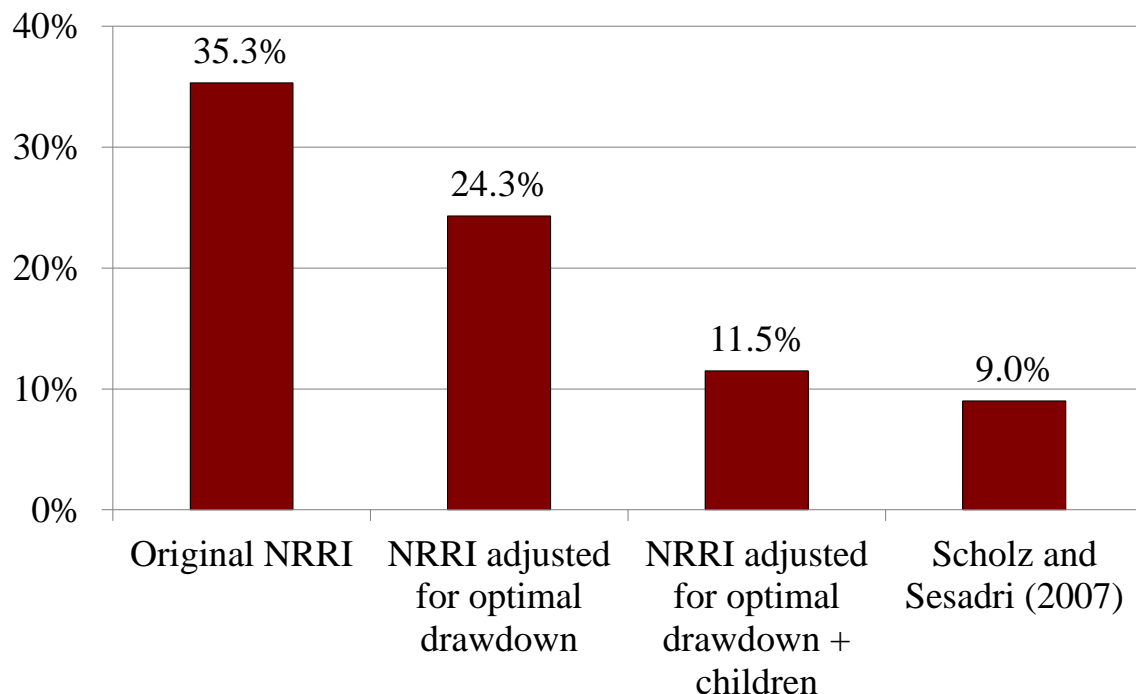
Illustrative Consumption by Age, SSK and NRRI as Percent of Income



Source: Authors' illustration.

# When the NRRI is adjusted to match these two assumptions, the results are very similar.

Percentage of Households Age 51-61 At Risk, 2004



Source: Authors' calculations.

# What does existing evidence tell us about the assumptions in the optimal savings model?

- Retirement consumption
  - Scholz, Seshadri, and Khitatrakun assume an intertemporal elasticity of substitution of 0.33. Financial planners generally assume 0, at least until advanced ages.
  - Under SSK model, households run out of money by around age 88. But mortality data indicate at least one member of an older married couple has a 40-percent chance of reaching age 90.
- Children
  - Coe and Webb find evidence that married households increase their per capita consumption when their kids leave home.
  - And many parents of adult children say that they find the expenses associated with children don't ever actually stop.

# Another way to see if retirees have enough is to look at household consumption.

Hurd and Rohwedder find that, right after retirement, household consumption declines by only 1-6 percent.

- Data source: HRS's *Consumption and Activities Mail Survey*
- Sample: panel data for 439 households in 2001, 2003, 2005, and 2007.

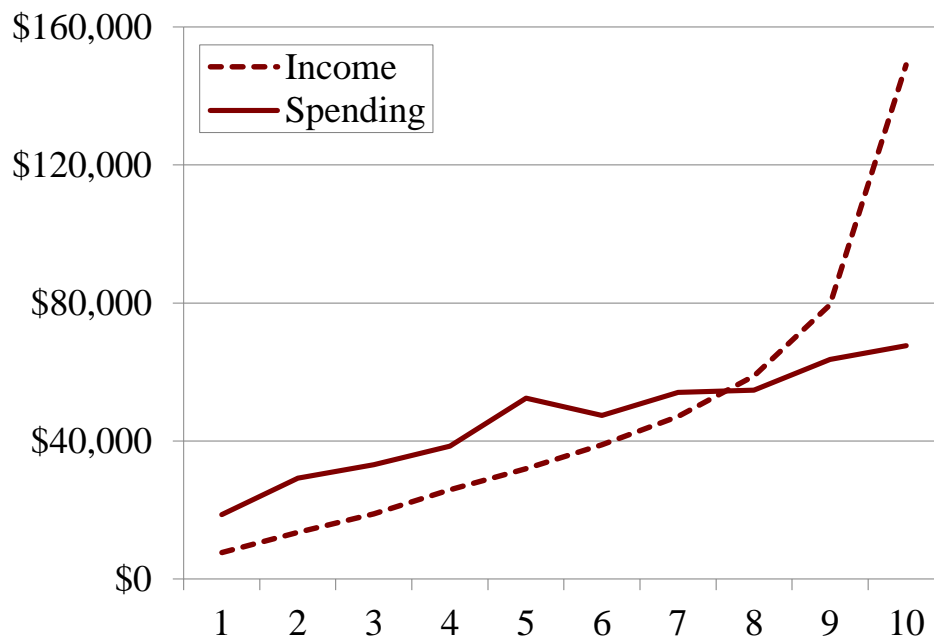
A key question is whether households can sustain these initial levels of consumption.

Three tests:

1. Do the sample households have enough to maintain their spending in the first year of retirement throughout their lives?
2. What happens to their actual spending as they age?
3. Do the households with insufficient resources reduce their consumption more than those with sufficient resources?

# Only 30 percent can maintain consumption, even if they tap home equity.

Mean Income and Spending by Income Decile at Time of Retirement  
for Hurd-Rohwedder Sample of CAMS Households



Source: Authors' calculations.



# As they age, retirees cut their consumption a lot, unlike older households not yet retired.

Median Respondent Spending by CAMS Retirement Status for Respondents Age 50 to 70

Observation period	Not retired at time $t$ , retired at time $t+1$ , and thereafter		Not retired throughout	
	Consumption	Sample size	Consumption	Sample size
$t$	24,600	279	28,300	1,442
$t+1$	25,300	279	27,400	1,442
$t+2$	21,000	208	26,500	902
$t+3$	21,000	194	26,700	682
$t+4$	19,500	123	26,700	291
$t+5$	18,000	71	27,900	148
Percent change				
From $t$ to $t+1$		2.8		-3.2
From $t$ to $t+5$		-26.8		-1.4

Source: Authors' calculations.

# Over time, those with a saving shortfall cut their consumption more than those without.

Median Respondent Spending by CAMS Retirement Status for Respondents Age 50 to 70

Observation period	Not retired at time $t$ , retired at $t+1$ and thereafter			
	Insufficient Sample size	Sufficient Sample size	Insufficient Sample size	Sufficient Sample size
$t$	25,600	147	23,500	128
$t+1$	28,500	147	21,000	128
$t+2$	21,000	115	20,800	93
$t+3$	20,900	95	21,300	98
$t+4$	18,700	60	19,700	63
$t+5$	18,000	33	19,200	38
Percent change				
From $t$ to $t+1$	11.3			-10.6
From $t$ to $t+5$	-29.7			-18.3

Source: Authors' calculations.

# Conclusion

- The National Retirement Risk Index shows that half of households are “at risk” of falling short in retirement.
- In contrast, the optimal savings research finds no problem due to assumed consumption in retirement and when kids leave.
- Other research shows that retirees initially can keep their consumption up. But, they appear unable to maintain it.
- In the end, perhaps the most convincing evidence involves no modelling at all: a simple comparison of wealth-to-income ratios suggests we should be worried.