The Risk of Financial Hardship in Retirement: A Cohort Analysis

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KEY QUESTION: What can we say about the likelihood of financial hardship in old age for today's near retirees?

Obviously, we can look at the incidence of hardship for those currently in old age

But those nearing retirement now are **likely to have different outcomes**:

- **Some factors will enhance their economic security** relative to today's retirees—e.g. higher female labor force participation
- **Some factors will challenge them** relative to today's retirees—e.g. more debt, fewer accumulated assets, longer life spans to finance (for some)

With longitudinal data, we can use the experience of an earlier cohort to inform us

We tie the observable traits of households nearing retirement (ages 57-62) in 1994 to *actual realizations of economic insecurity in retirement for the same households 20 years later*

> What factors drive economic insecurity in later years (ages 77-82) when major risks like widowhood, dementia, and physical disability are most likely to manifest themselves?

We apply the findings to the current cohort of households nearing retirement (ages 57-62 in 2014) to project the likelihood that they'll experience economic insecurity in retirement

Common alternative approach

Do a calculation that uses financial and income information about near-retirees to *assess whether they can meet expected spending needs in retirement*

Papers that project replacement rates in retirement [e.g. Munnell, Hou, and Sanzenbacher, 2018]

Papers that model optimal wealth accumulation and compare with actual wealth [e.g. Engen, Gale, and Uccello, 2000; Scholz, Seshadri, and Khitatrakun, 2006; Pang and Warshawsky, 2014]

Our method complements this literature

Looking at actual realizations of insecurity means we capture **not only lack of preparation for expected needs** but **also lack of insurance** against downsides risks

Linking a wide set of observable traits to future economic insecurity **may pick up a richer set of channels that drive hardship** than papers that use a model or actuarial calculation

Examining a range of *specific* poor outcomes, some with direct connections to future government spending, **may better focus policymakers on the risks**

Summary of methodology

Estimation sample: 1932-37 birth cohort in 1994 wave of Health and Retirement Study (respondents are 57-62)

Estimation: First model the probability of surviving until 2014, then the probability of being economically insecure between ages 77-82 conditional on surviving

- Separate equations for married individuals, single men, single women
- Probit, with a Heckman correction for the second stage

Projection: Apply estimation results to the 1952-57 birth cohort, with their different traits, to project incidence of that cohort being economically insecure in 2034 when individuals are 77-82

Measures of economic insecurity [dependent variables]

Household income below the **poverty** line

Participation in **Medicaid**

Participation in **SNAP** (food stamps)

"In the last two years, have you always had enough **money to buy the food** you need?"

"At any time in the last two years, have you ended up taking **less medication than was prescribed** for you because of the cost?"

Low annuitized wealth–below 1.5 x poverty line

Large **drop in annuitized wealth**—30 percent or more

[To calculate annuitized wealth: (1) estimate the annuity payout from (net wealth + Social Security wealth + expected remaining labor income) (2) add to transfers expected to continue indefinitely (Social Security, veteran's benefits, food stamps, etc.)]

Pre-retirement traits used to predict economic insecurity in old age [independent variables]

Household composition and **demographics:** marital status, number of children (nearby, at home), race, education

Projected **Social Security wealth**, projected wealth in **DB accounts** and actual wealth in **DC accounts**

Accumulated **assets**: financial and non-financial components

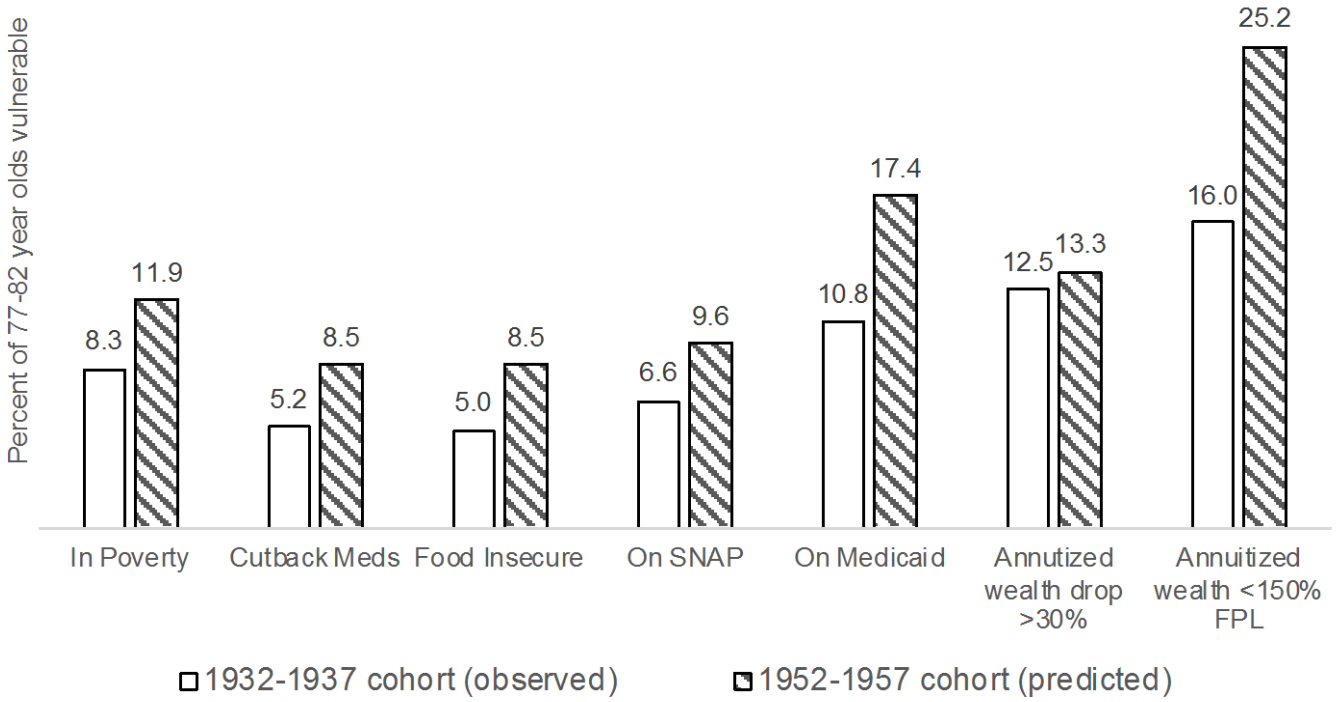
Debt: Mortgage debt; all other debt combined.

Income: Labor and non-labor

Health metrics: self-reported health, history of smoking, history of chronic or acute illness.

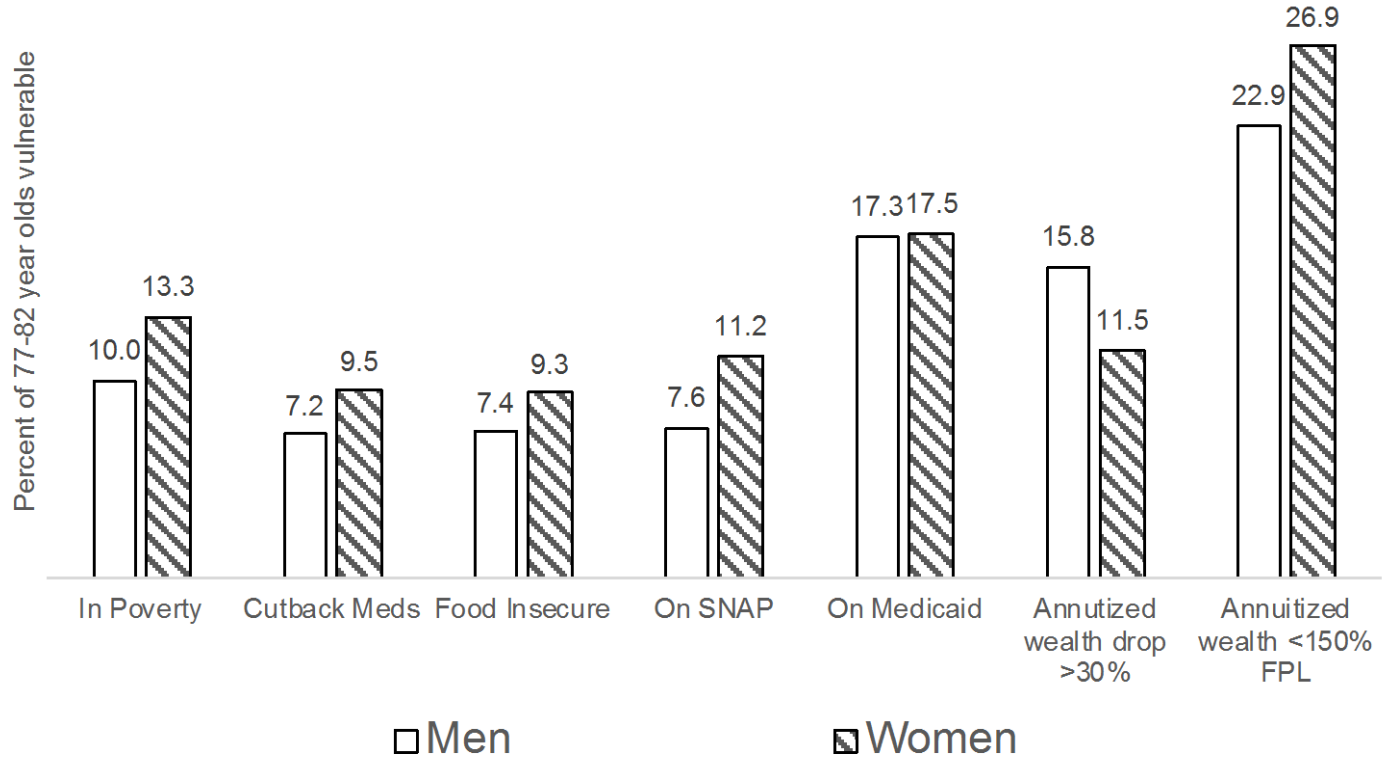
Punchline

High levels of some types of economic insecurity predicted for households now nearing retirement; hardship looks like it will be **considerably worse than the 1994 cohort** experienced in old age



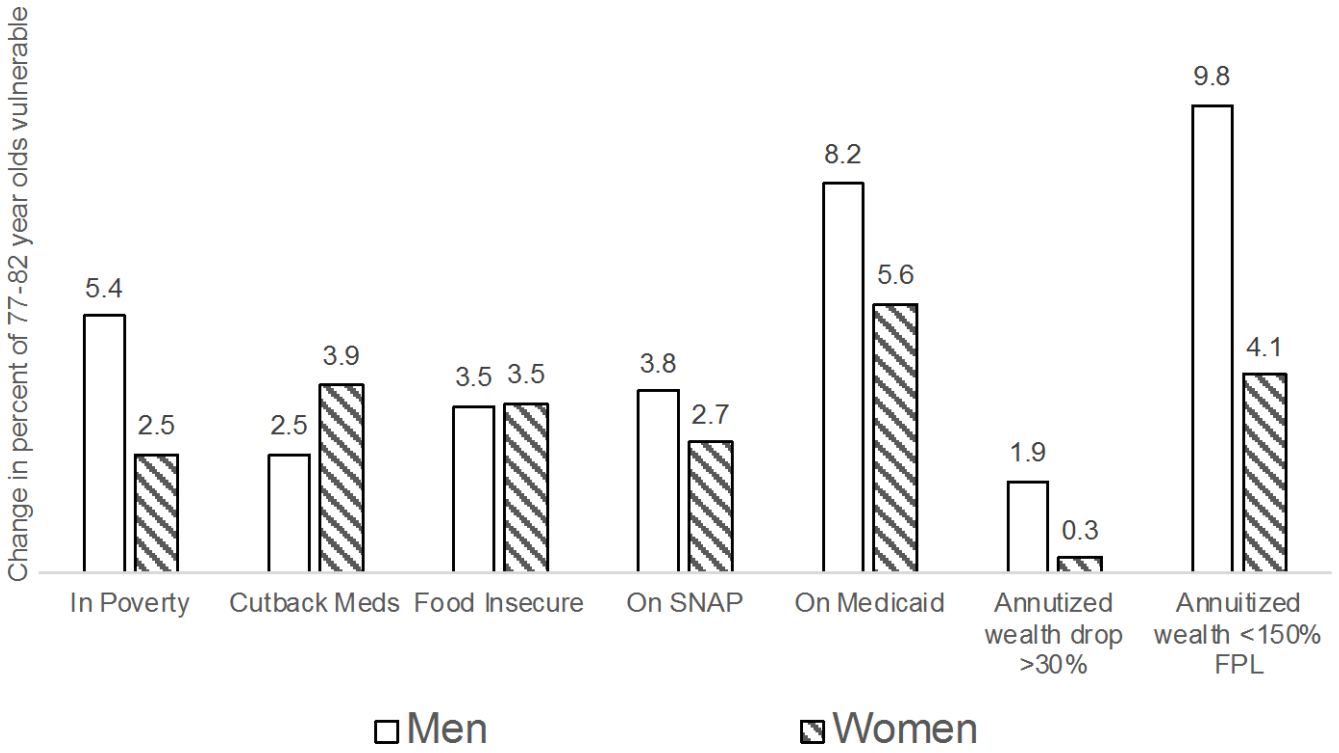
By gender: predicted economic insecurity in old age for those nearing retirement

Women predicted to experience more economic insecurity in old age than men



By gender: predicted economic insecurity in old age for those nearing retirement

But the **worsening of outcomes** for the later cohort relative to the earlier cohort is **generally smaller for women than for men**



Comparing the observable traits of the 1994 and 2014 cohorts of near retirees

Characteristics in Late Middle Age of Different Birth Cohorts

	All		Men		Women	
	1932-37	1952-57	1932-37	1952-57	1932-37	1952-57
MEDIANS:						
Social Security wealth	288,206	274,356	324,634	301,067	238,562	252,251
Other wealth	329,209	176,953	394,345	197,437	271,093	163,899
Value primary residence	118,603	106,084	127,075	116,692	110,132	100,779
HH earned income	34,780	32,330	48,656	40,952	24,328	28,020
HH unearned income	12,637	10,182	12,164	9,751	12,793	10,346
SHARES:						
With mortgage debt on primary residence	0.37	0.38	0.41	0.40	0.34	0.36
With non-mortgage debt	0.36	0.42	0.37	0.42	0.35	0.41

Medians in 2018 dollars

Counterfactual simulations

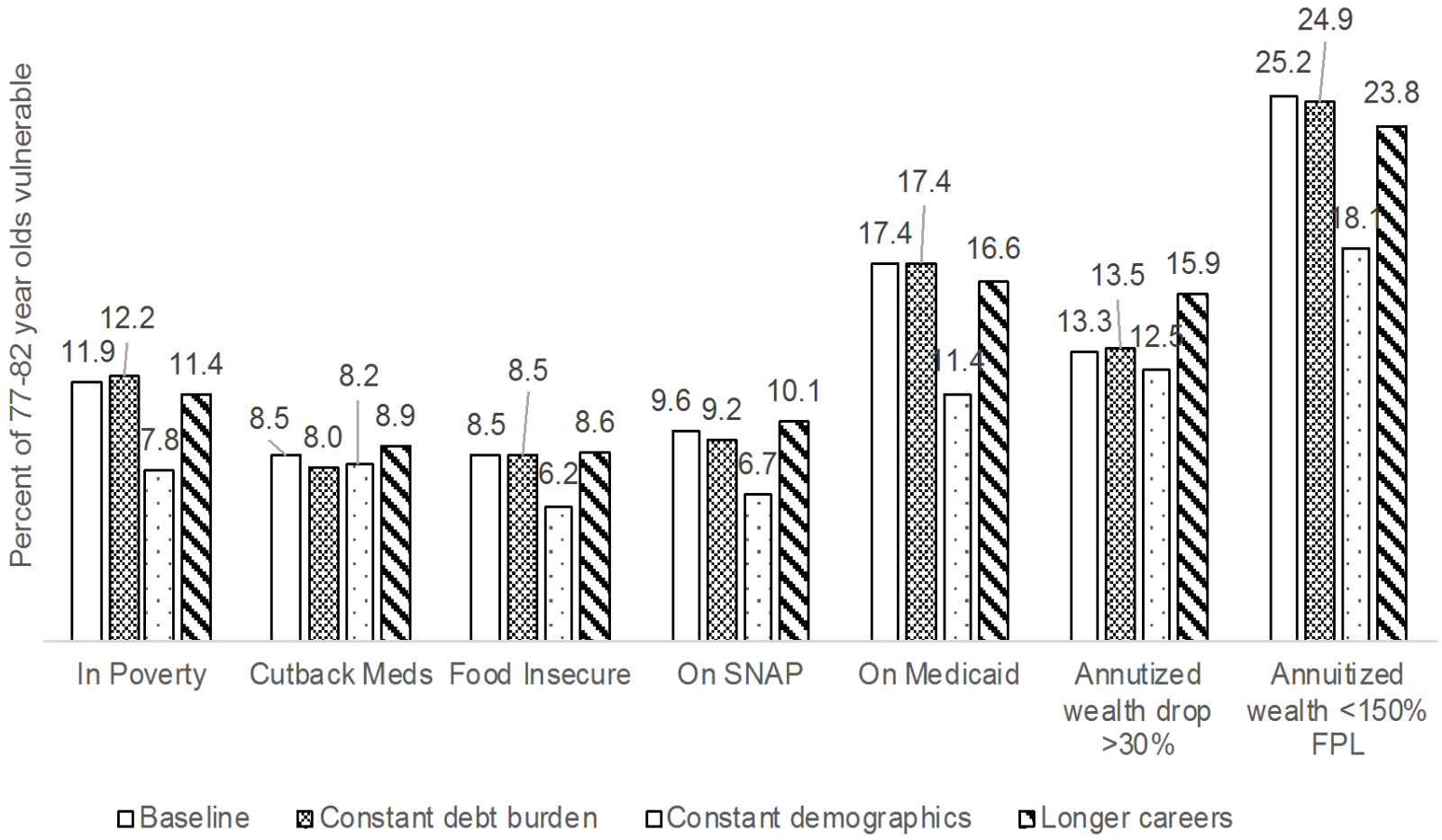
Questions of interest:

What if the 2014 cohort had debt that looked more like the 1994 cohort (they **had less debt**)?

What if the 2014 cohort had the demographics of the 1994 cohort (**smaller nonwhite non-Hispanic population**)?

What if the 2014 cohort had plans to retire that looked more like the 1994 cohort (they **expect to retire soon**)?

Results of counterfactual simulations



Interpreting the counterfactuals

Only the demographic simulation seems to make difference (keeping the share white non-Hispanic constant materially reduces predicted economic insecurity)

> We speculate this has to do with the higher wealth of the white non-Hispanic population

Lack of importance of higher debt may be a measurement problem (we are only capturing increase on intensive margin) or the fact that households indebted in late middle age tend to be more economically secure than those without debt

Results (at face value) suggest we shouldn't count on much help from longer working lives of later cohort

Summary and next steps

A material share of individuals approaching retirement in the mid-2010s are predicted to face one or more types of hardship in old age

If realized, this incidence of hardship will be noticeably higher than for the cohort born 20 years earlier

Still trying to understand why the higher incidence of hardship—might be related to growing share of population that historically has had less wealth (one puzzle is that the predictions of simulations directly reducing wealth, not discussed, are not that different from baseline)