Title

Longevity Risk and Pension System Design

© Olivia S. Mitchell
mitchelo@wharton.upenn.edu

Wharton
UNIVERSITY of PENNSYLVANIA

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Motivation:

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- Population aging, longevity rising.
- Financing *longer* old age crucially important.
- Yet financial decision-making & financial literacy often decline in later life.
- And financial products can be complex!
- Helping people protect against outliving their assets can reduce regret & economic insecurity in old age.

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Overview:

- Pension Payout Risk in Later Life
- Crucial Role for Lifetime Income
- Lifetime Income Streams in Defined Contribution Plans
- Additional Thoughts & Recommendations

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Pension Payout Risk in Later Life

- Financial literacy is low & falls with age.
- People don’t understand longevity risk.
- Leads to undersaving, retiring too soon, withdrawing too much, and regret!

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The "Big Three" FinLit questions

Interest Rate: Let's say you have $100 in a saving account paying 2% interest/year. How much would you have in the account at the end of 5 years? *<$102; =$102, >$102; DK; refuse*

Inflation: Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, with the money in this account, would you be able to buy*: > today, = today; < today*

Risk Diversification: True or false? Buying a single company stock usually provides a safer return than a stock mutual fund.

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How much do people age 50+ know?

	Responses			
	Correct	*Incorrect*	*DK*	*Refuse*
Interest rate	67.1	22.2	9.4	1.3
Inflation	75.2	13.4	9.9	1.5
Risk diversif.	52.3	13.2	33.7	0.9

➔ Only **ONE THIRD (34%)** answered all 3 questions right; only ~**HALF (56%)** answered interest rate and inflation questions right.

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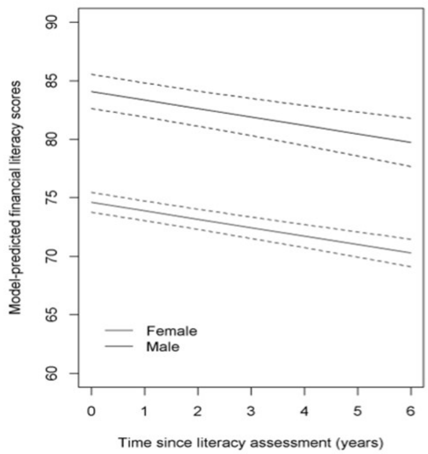
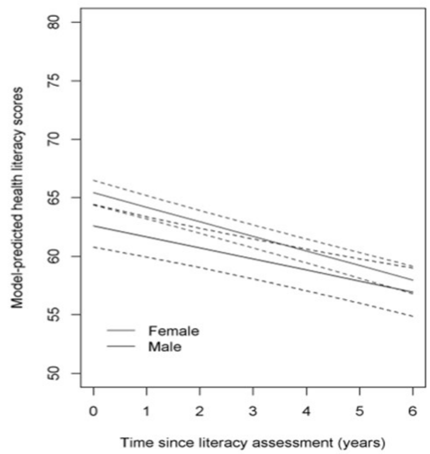
And literacy falls 1% p.a. in later life

Financial Literacy *Health Literacy*





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Also, longevity awareness is low:

- People have *some idea* of how long they will live.
- This shapes their saving, investment, annuitization, social security claiming, retirement, drawdowns, etc.
- But there are *systemic biases* in predicting own longevity (many underestimate how long they will live).
- This can undermine retirement security.

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Subjective Survival Probabilities in the HRS

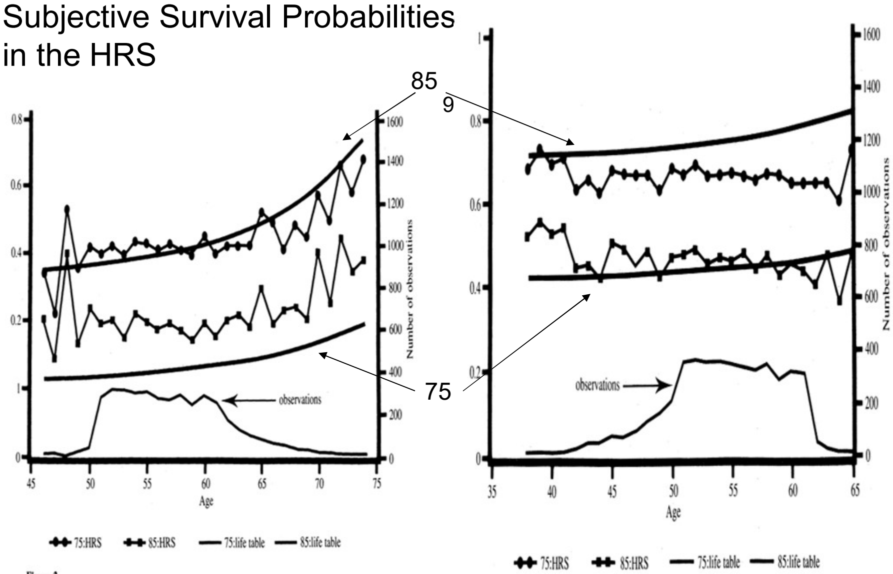

Figure 2
Probability of surviving: men

Figure 3
Probability of surviving: women

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Longevity Risk *Widely* Misunderstood

We studied US respondents age 35-83:

- Measured *subjective* life expectancy & longevity risk assessment, & compare to life tables.
- Asked respondents to advise a “vignette” person facing decisions about health, saving, and other economic decisions.
- Then we explained the risk of living a very long time.
- Assessed impact of *enhancing longevity awareness.*

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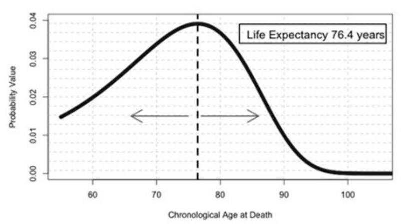
What we find:

- Giving people life expectancy information had *no effect* on subjective survival probabilities, nor on advice given regarding saving and annuitization (longevity insurance).
- Providing information about peoples' likely longevity *changed* subjective survival probabilities & boosts annuitization advice, especially if initially underestimated survival chances.
- SO: people know mean survival chances but are poorly informed about the tails of the survival distribution.



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Later Life Regret

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- 60% of older US survey respondents regret not having **saved more** during their working years.
- Few older Americans **buy**:
  - Long-term care insurance
  - Longevity insurance (annuities)

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We asked:

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- Which financial decisions do most older people regret?
- Who regrets?
- Does providing information on longevity chances shape financial regret in later life?

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We found:

- Half of older Americans regretted saving too little, quitting work too soon.
  - ✓Providing longevity information boosted lifetime income regret by 42%.
  - ✓Also it increased regret re early social security claiming, and undersaving.
- Women more likely to regret no LTC, no annuities, and being financially dependent.
- Blacks more likely to regret all financial decisions (except depending on others).

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A Crucial Role for Lifetime Income

Annuity: Retirement benefits paid as lifetime income stream.

Many DB plans include annuities:
- ✓ Corporate DB pensions: EU pensions.
- ✓ Public-sector DB pensions: US S&L plans
- ✓ Gov't old-age programs: mandated in US Social Security

But in the past, few DC plans offered annuities:
- ✓ Singapore CPF; Chile & Mexico.
- ✓ A handful of US DC plans (e.g., UTC)

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SECURE Acts of 2021 and 2022:

- Boosted age when must begin taking withdrawals (RMDs) from tax-qualified accounts from 70→72, rising to 75.
- Created "New Safe Harbor" for prudent selection of a "guaranteed deferred income contract" – QDIA.
  - ✓ If plan fiduciary satisfies conditions, sponsor bears no liability for losses due to insurer inability to pay.

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Our work shows:

- Setting aside ~10% of plan balances @65 (>$65K) in a QDIA paying from age 80 or 85 very attractive!
- From age 66, wellbeing rises ~ 6-14%.
- When mortality differs by education, welfare gains smaller for less-educated but still positive.
- Variable DIAs even more attractive.

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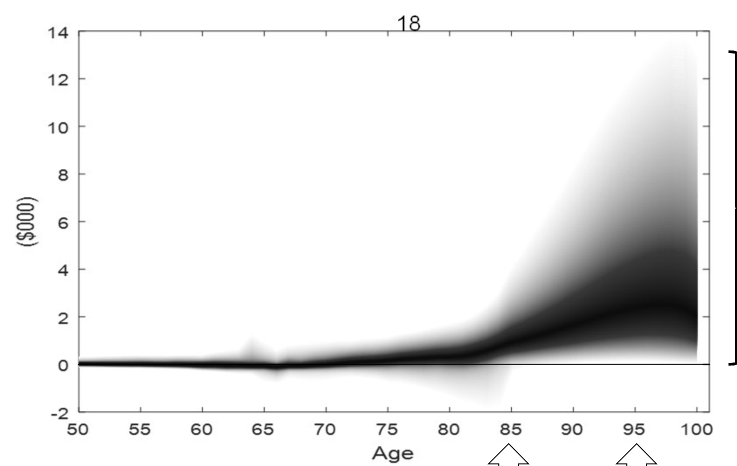
Consumption Differences: With minus w/o QDIA



Most consume more in later life

At 85: retiree with deferred annuity consumes ~$1K/yr more & $4K more by age 95.

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In sum:

- Financial literacy falls in later years.
- Few understand chances of living a very long time.
- In retrospect, many regret the financial decisions made when younger.
- Deferred income annuities can help with many of these problems.

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Additional Thoughts & Recommendations:

- Good idea to include Default Income Annuities as QDIA for 10% of DC plan balance (<$65K).
  - Use employer contributions for this?
- Pre-retirement: offer pooled annuity: e.g. age 55-65, converted to QDIA at retirement.
- Retirees will value keeping assets in plan.
- Participating annuities and variable annuities would be more valuable to retirees.
- Need to study insurer capacity.

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Thank you!

For more information: Books, working papers, blogs

Wharton's Pension Research Council:

http://www.pensionresearchcouncil.org/

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Selected References

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