Public Pension Design and Household Retirement Decisions: Cross-national Comparisons

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Study Objective

- Analyze responsiveness to retirement incentives from social security benefit structure for the primary earner using newly harmonized cross-country data
- Extend the approach to estimate additional retirement incentives from auxiliary benefits and benefit taxation

It is a work in progress

- Motivation
- Approach
- Key methodological challenges

In the Past 35 Years, There Has Been Limited Policy Variation

- Old Age and Survivors Insurance (OASI) benefits in the United States have not substantially changed since 1983
- Examining household work and savings behavior under alternative institutional structures will enable policymakers and researchers to learn from other countries' pension reforms and designs

People Respond to Incentives

- Economic theory suggests, and past research validates, that household choices respond to key elements of the benefit structure
 - Benefit eligibility age
 - Delayed retirement credits
- Gruber and Wise (1999) and coauthors demonstrated this consistently internationally
 - Existing work has not focused on auxiliary benefits, a significant components of US social security

People Respond to Incentives...Sometimes

- Carman and Hung (2018) find "that while many are aware of spousal and survivor's benefits, knowledge about eligibility and benefit amounts is relatively low."
- Learning about benefits may occur near retirement
 - May be too late to respond
- Learning may never happen

Auxiliary Benefits Can Provide Incentives and Disincentives to Work

- Spouse benefits
 - At full retirement age (FRA), a married beneficiary is entitled to 50% of spouse's benefit or 100% of her own benefit
 - If claiming spouse benefit:
 - Penalty for claiming before FRA
 - No benefit of delaying after FRA
- In households with a dominant earner:
 - Incentive for the primary earner to work
 - Disincentive for the secondary earner to work

Auxiliary Benefits Can Provide Incentives and Disincentives to Work

- Survivor Benefits
 - At full retirement age (FRA), a survivor is entitled to 100% of deceased's benefit or 100% of her own benefit
 - If claiming survivor benefit:
 - Penalty if beneficiary or the deceased claim before FRA
 - Benefit to delayed claiming
- In households with a dominant earner:
 - Incentive for the primary earner to work
 - Disincentive for the secondary earner to work



Primary-earner own entitlement: \$2000 Secondary-earner own entitlement: \$0

Spouse benefit: \$1000 Total benefit: \$3000

Spouse Benefits



Single income

Primary-earner: \$2000 Secondary-earner: \$0

Spouse benefit: \$1000
Total benefit: \$3000

Same own entitlement

50% greater entitlement



Dual income

Primary-earner: \$1000 Secondary-earner: \$1000

Spouse benefit: \$0 Total benefit: \$2000

Spouse Benefits



Single income

Primary-earner: \$2000 Secondary-earner: \$0

Spouse benefit: \$1000
Total benefit: \$3000

Only in the single income household does the work decision of the other spouse influence the incentive to work via spouse benefits

Survivor Benefits



Single income

me **67**%

Primary-earner: \$2000 Secondary-earner: \$0

Total benefit: \$2000



50%

Primary-earner: \$1000 Secondary-earner: \$1000

Dual income

Total benefit: \$1000

Survivor Benefits

The dual income household, if it is forward looking, would be incentivized to work longer to insure against lost income in widowhood



50%

Dual income

Primary-earner: \$1000 Secondary-earner: \$1000

Total benefit: \$1000

The U.S. Spouse Benefit Is Rare

- The cost of divorce is assumed by the Social Security system
 - Divorced spouse and survivor benefits
- Auxiliary benefits are more limited in other countries
 - Fixed spouse benefits if spouse is not otherwise entitled (e.g., Korea)
 - Split entitlements in the case of divorce (e.g., Germany)

Survivor Benefits Vary Internationally

- Most countries offer survivor benefits
- Design can differ significantly
 - Dependent on the primary earner's work history (e.g., Italy),
 - Fixed amount (e.g., Netherlands)

Approach

- Own and auxiliary benefit incentive measures can be computed separately
- Evaluate whether an additional dollar from auxiliary benefits is the same as an additional dollar in a recipient's own benefits
- Compare responsiveness to auxiliary benefit structures across countries
 - Goal: understand if certain benefit designs exhibit stronger behavioral responses

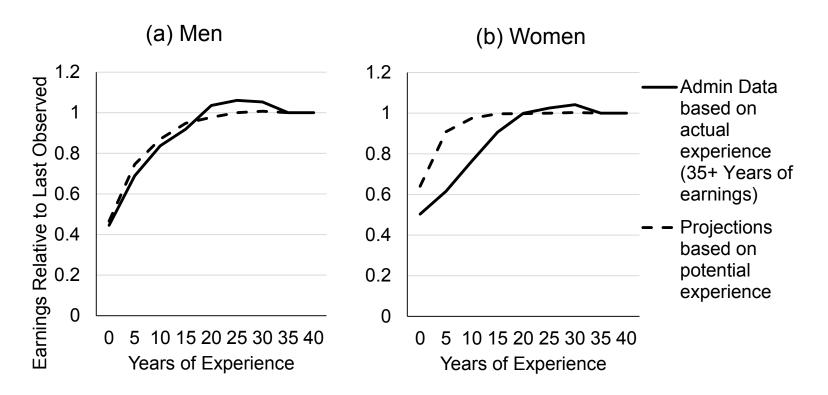
Challenge: Developing Harmonized Cross-country Public Pension Measures

- As part of the Gateway to Global Aging, we are developing harmonized public pension measures for the international HRS family of surveys
 - Documented pension design and history reflecting the policies in place at the time of the surveys
 - Policy and institutional detail explorer will be available this next year
- Pension incentives are intended to reflect forward looking measures of public pension wealth

Harmonized Data Requires Common Questions and Methods

- Not all surveys ask the same questions
- Pensions depend on lifetime work and earnings
- Lifetime earnings must be estimated
 - Use cross-sectional data to estimate age-earnings trajectories
 - Without administrative earnings history, level of pension entitlement exhibits substantial measurement error (Knapp et al., 2019)
 - In U.S., pension incentives for men are relatively robust to measurement error
 - Driven primarily by incentives to delay claiming

Cross-sectional Estimates Lead to Bias Earnings Trajectories for Women



Next Steps

- Develop a method for estimating female lifecycle earnings that can be consistently implemented across the global HRS surveys
- Compute forward-looking pension incentive measures
- Evaluate whether an additional dollar from auxiliary benefits is the same as an additional dollar in a recipient's own benefits in the U.S.
- Evaluate household responsiveness to auxiliary benefit design across countries

