

Why Do Households Save and Work? Aging, Risks, and Family Structure over the Life Cycle

Mariacristina De Nardi

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 - Health risk and out-of-pocket medical expenses
- Question:
 - To what extent do these forces affect saving and labor supply, and when?
- Today: what have we learned so far in a series of papers with my coauthors

Roadmap

In the dynamic programming tradition, we work backward

- **Part I: Retired singles**

DFJ = De Nardi, French, and Jones

- “Why Do the Elderly Save? The Role of Medical Expenses,” DFJ, *JPE* 2010
- “Life Expectancy and Old Age Savings,” DFJ, *AER P&P* 2009
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- “Why Do Couples and Singles Save during Retirement?” DFJM, *JPE* 2025

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- **Part III: Singles and couples over the working and retirement period**

BDYT = Borella, De Nardi, Yang, and Torres-Chain

- “Why Do Households Save and Work?” BDYT, working paper 2026

Part I: Why do retired singles save?

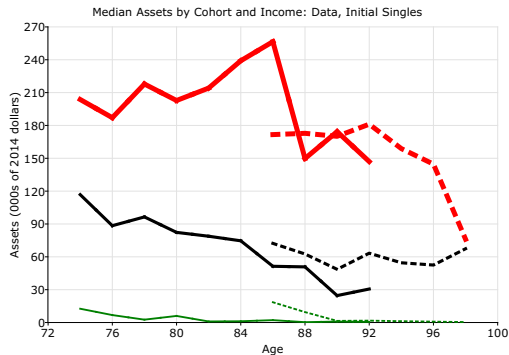
DFJ: JPE 2010, AER P&P 2009, and AER 2016

Why do elderly singles save?

Establish key saving patterns for retired single households

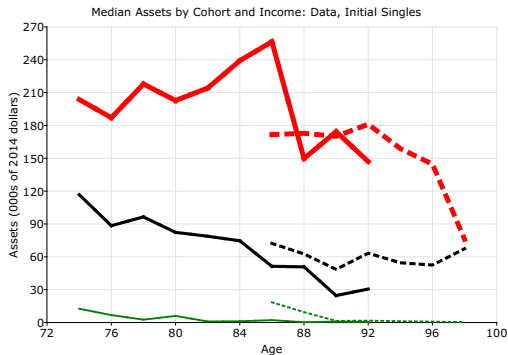
- Wealth profiles differ sharply by permanent income (PI) during retirement

Elderly singles' wealth profiles



- Decumulation is slow and inconsistent with the standard life cycle model
- Particularly for higher permanent income singles

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- Need to account for mortality bias

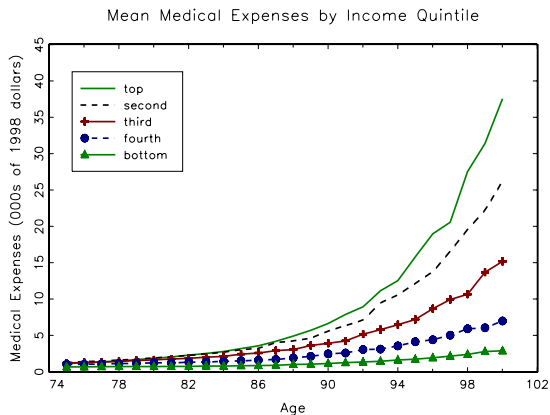
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 - **Out-of-pocket medical expenses rise with age and permanent income**

Elderly singles' out-of-pocket medical expenses



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 - Survival differs by income, gender, and health

Elderly Singles' life expectancy

Income quintile	Healthy men	Unhealthy men	Healthy woman	Unhealthy woman	All
bottom	7.6	5.9	12.8	10.9	11.1
second	8.4	6.6	13.8	12.0	12.4
third	9.3	7.4	14.7	13.2	13.1
fourth	10.5	8.4	15.7	14.2	14.4
top	11.3	9.3	16.7	15.1	14.7

Men: 9.7 Women: 14.3 Healthy: 14.4 Unhealthy: 11.6

- At age 70, life expectancy differs by permanent income, gender, and health
- Survivorship bias

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- **Medical expenses rise with age and permanent income**
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Ask:

- **Can these risks, together with public insurance and bequests, account for saving during retirement?**

Why do elderly singles save? DFJ, 2010 and 2009

- **Model**

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- **Estimation:**

- Use MSM to **match wealth** profiles by age, cohort, and permanent-income group

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- Lifespan risk has large effects on savings
- Bequest motives hard to identify given population and targets

What about bequest motives? DFJ 2016 AER

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 - **Bequest motives also play an important role in retirement saving but medical expenses remain important**
 - Medicaid provides valuable insurance against late-life medical needs, especially for high PI retirees. However, they would pay more than their share for a Medicaid expansion, hence they would not support it

From single retirees to retired couples

- **Part I: understanding old-age saving for singles requires modeling**
 - Medical expenses
 - Longevity risk and its heterogeneity
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- **Many retirees are in couples, and couples can become singles after the death of one spouse**

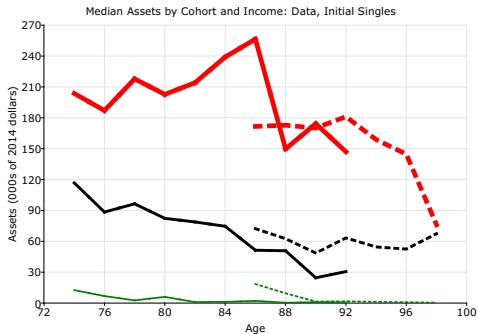
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- Many retirees are in couples, and couples can become singles after the death of one spouse
- Household structure changes risk exposure, resources of the survivor, and bequests

Part II: Retired couples and singles

DFJM JPE 2025

Couples and singles save very differently

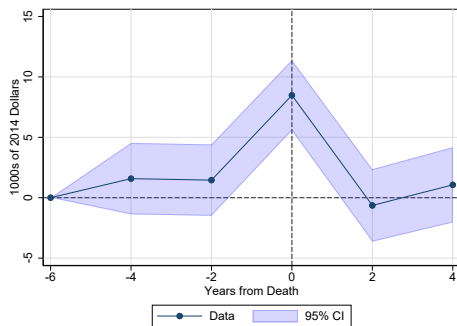
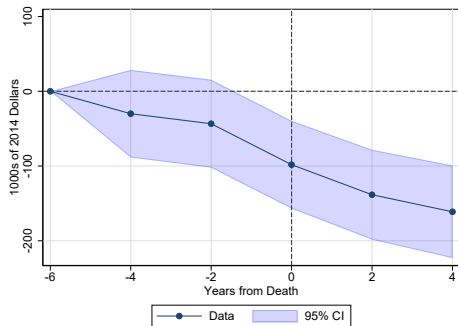


- Singles dissave



- Most couples keep saving

Spousal death has large economic consequences



- Wealth ↓ \$160K

- Transfers to non-spousal heirs average \$79K

- OOP medical spending ↑ \$27K

A model of couples, widowhood, and late-life risks

- **Model:**
 - Retired couples and singles, with transitions to widowhood
 - Health, survival, medical-expense, and end-of-life expense risk
 - Warm-glow bequest motives at first (if in a couple) and last death

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- **Estimation:**

- Use MSM to match wealth profiles of couples and singles and Medicaid reciprocity
- Validate against wealth and medical spending around spousal death

Why do retired couples and singles save? Findings

- Most households save more for medical expenses than for bequests

Why do retired couples and singles save? Findings

- Most households save more for medical expenses than for bequests
- But, aggregate retirement wealth driven mainly by bequest motives of couples and richer households

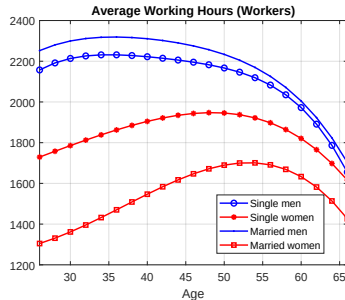
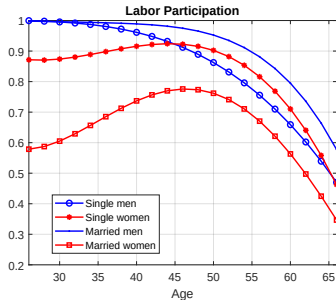
Part III: Saving and working over the life cycle

BDYT 2026 working paper

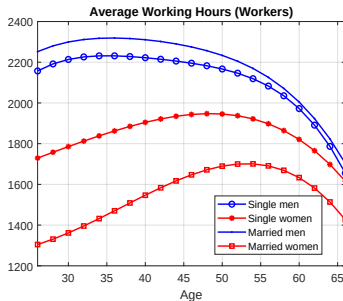
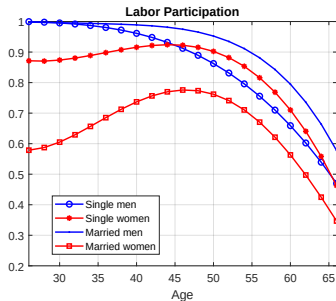
Modeling saving, working, and family transitions over the life cycle

- Why? To study
 - Which forces drive wealth and earnings once we allow for
 - Saving, working, and family transitions
 - Health, medical expenses, and mortality
 - To what extent do late-life risks shape
 - Working
 - Saving before retirement?
 - Focus on one cohort, born between 1941 and 1945

How heterogeneous is working behavior?

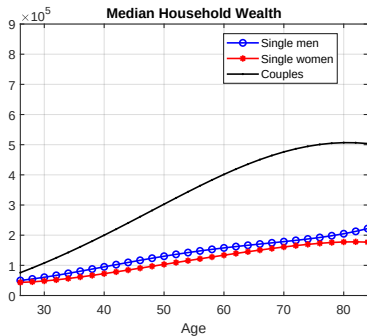


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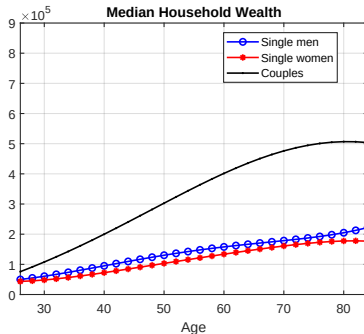


- **Profiles by groups reflect**
 - Labor supply differs by gender and marital status
 - Selection into marriage and divorce (people with lower wages are less likely to marry and stay married)

How heterogenous is wealth?



How heterogenous is wealth?



- Profiles by groups reflect

- Heterogeneity in behavior
- Selection into being married or single and being alive
- Loss of wealth at death of a spouse

► No widows or widowers

A unified model of saving, working, and family structure

- **Model:**
 - Working stage: wage shocks, marriage and divorce shocks, children, and labor supply of both spouses, endogenous retirement

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- **Estimation:**

- Use MSM to match participation, hours, and median and average wealth
- Target profiles by age, gender, and marital status over the full life cycle

A unified model of saving, working, and family structure

Counterfactual	Average wealth	Average labor earnings
No bequest motives	-19.0%	-1.0%
No wage shocks	-14.1%	+1.5%
No medical expenses	-13.1%	-0.6%
No marriage and divorce	-0.1%	-2.1%

- Bequests important but less than previously thought (about 50%), but more than in DFJM
- Wage risk matters, but less than previously thought (50-60%)
- Medical expenses of the same order of wage risk
- Wage risk and marital dynamics matter relatively more for labor earnings
- Forces that move wealth more are not the forces that move work more

What changes relative to previous literature?

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- **New synthesis:**
 - Marital transitions have large effects on couples and singles, but mostly offset in aggregate wealth
 - Marital transitions reduce the importance of precautionary savings against wage risk
 - They matter more for aggregate labor supply than wealth

What have we learned so far?

- **Part I: old-age risks for singles**
 - Medical expenses, longevity, public insurance, and bequests explain saving by retired singles

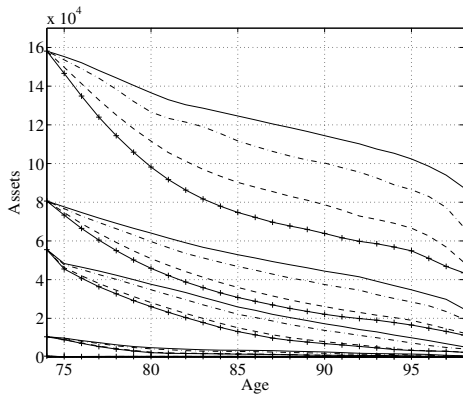
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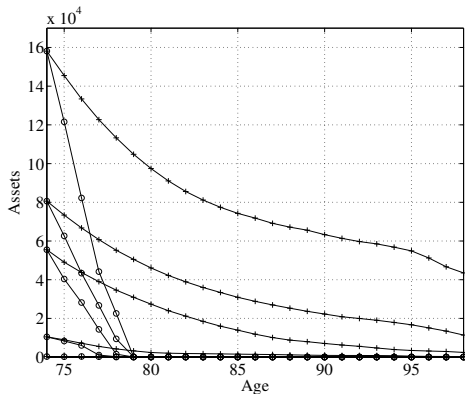
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- **Part III: timing and margins**
 - Late-life risks affect working-age labor supply and saving
 - Marital transitions, work and family insurance change the decomposition of saving and the size of saving motives

Median net worth, various mortalities



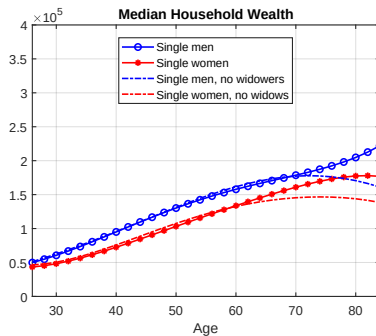
- From top to bottom lines: baseline, always bad health, always bad health + men, always bad health + men + low-PI

Median net worth: eliminating lifespan risk



- From top to bottom lines: always bad health + men + low-PI, everyone has the same, certain, life expectancy

Couples and singles. Excluding newly singles



► Back