

Long-Term Care Insurance, Housing Demand and Decumulation

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General Overview

Empirical Evidences and Results

The LTCI puzzle

- ▶ LTCI coverage is small in the US while LTC expenses can be very large
- ▶ It results in substantial out-of-pocket expenses linked to LTC (De Nardi, French and Jones, 2010)
- ▶ And it is particularly true among the richest individuals
- ▶ On top of this evidence of public care aversion (Ameriks et al., 2011)
- ▶ Implies a “LTCI puzzle”

What can explain this LTCI puzzle?

- ▶ For individuals with low wealth: crowding-out effect from public programs (Medicaid, Brown Finkelstein (2008))
- ▶ For the richest individuals the LTCI puzzle is still much of a puzzle:
 - ▶ One possible explanation brought out by Davidoff (2009, 2010) is that housing could crowd-out LTCI
 - ▶ Bequest motives (Lockwood, 2013)

Why housing as a substitute for LTCI?

- ▶ Retirees do not want to leave their homes
- ▶ And do so mainly when constrained to move in LTC
- ▶ Absent a reverse mortgage market, LTCI might be undesirable because housing is already an insurance
- ▶ Conclusion: A LTCI market cannot grow absent an active reverse-mortgage market

Why housing as a substitute for LTCI?

“Home equity is a particularly plausible substitute for LTCI among wealthier households, who typically have home equity holdings which are large relative to most of the distribution of long-term care costs (Davidoff, 2010)”

- ▶ Is it the case that housing can explain the low demand for LTCI among wealthy retirees?
- ▶ If not what are the consequences for the link between LTCI and reverse mortgage markets?

Intuition

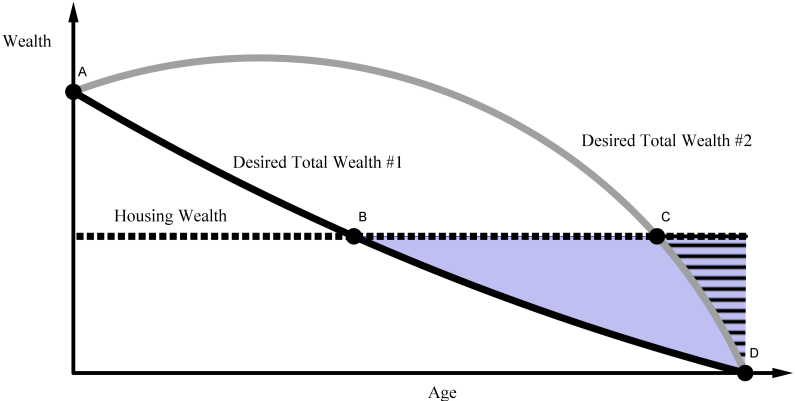


Figure : Wealth Decumulation during Retirement and Housing

Empirical Strategy

- ▶ HRS data
- ▶ Take single individuals in a given cohort
- ▶ Classify them in 4 quartiles according to their total wealth in 1998
- ▶ Consider only homeowners split in two groups
 - ▶ movers
 - ▶ continued homeowners
- ▶ Observe their wealth profile (financial + housing) as they age

Wealth Profiles

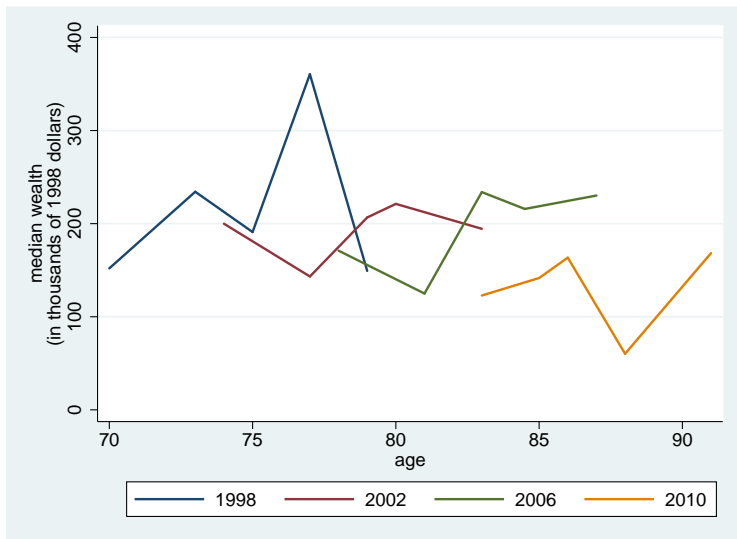


Figure : Financial Wealth - 4th Wealth Quartile - Continued Homeowners

Wealth Profiles

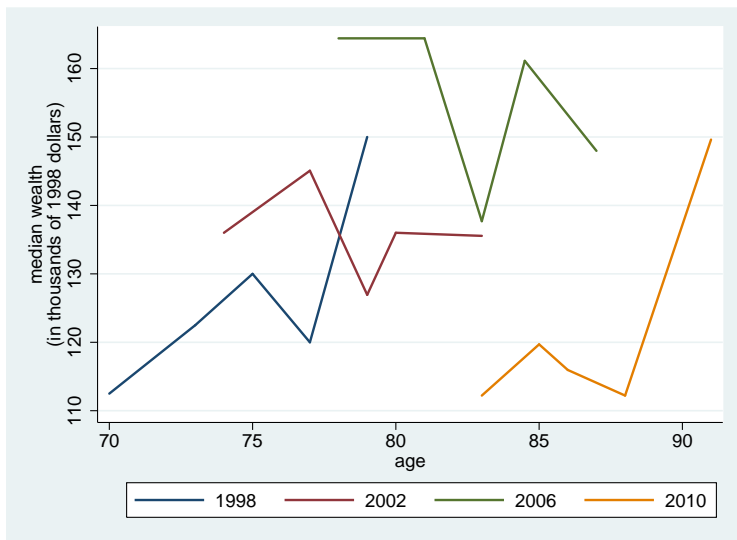


Figure : Housing Wealth - 4th Wealth Quartile - Continued Homeowners

Wealth Profiles

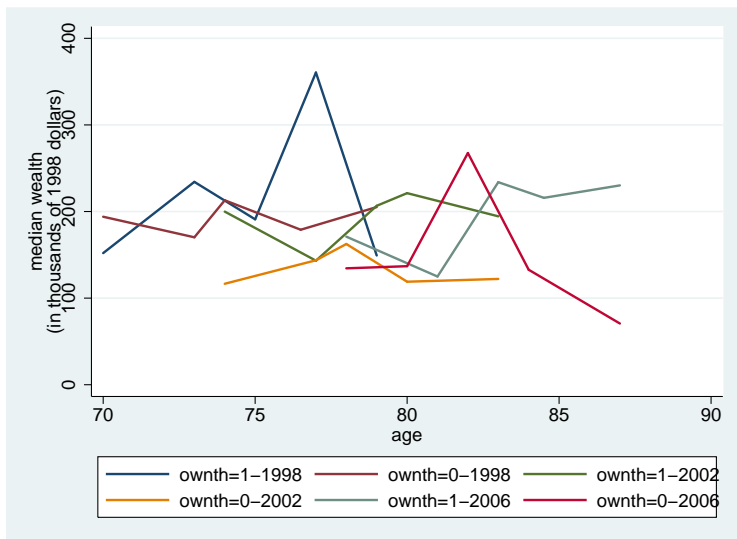


Figure : Financial Wealth - 4th Wealth Quartile - All

Wealth Profiles

$$\sum_{t=62}^T \sum_{s=0}^2 p(s, t) \beta^t \frac{c_t^{1-\gamma}}{1-\gamma}$$

$Rb_{t-1} + y - x(s) = c_t + b_t$ if $(s = 0 \text{ or } 1)$ or $(h = 0 \text{ and } s = 2)$

$Rb_{t-1} + y + h - x(s) = c_t + b_t$ if $(h > 0 \text{ and } s = 2)$

$s = 0$: good health; $s = 1$: moderately-ill (medical expenditures = \$10,000); $s = 2$: LTC (\$50,000)

Wealth Profiles

Table : Optimal LTCI, “Davidoff-Type” Model

Parameters	Version 1	Version 2	Version 3	Version 4	Version 5	Version 6
β	0.97	0.97	0.97	0.97	0.97	0.96
γ	5	5	3	2	3	3
R	1.03	1.03	1.03	1.03	1.03	1.03
y	\$20,000	\$15,000	\$20,000	\$20,000	\$20,000	\$20,000
h	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
b_{61}	\$150,000	\$150,000	\$200,000	\$230,000	\$150,000	\$150,000
y_{min}	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
φ	0	0	0	0	0.9	0.983
ζ					7,000	20,416
Optimal LTCI Coverage	70%	60%	50%	0%	70%	0%
Welfare Gains	\$56,165	\$23,682	\$5,830	\$0	35,655\$	\$0

Wealth Profiles

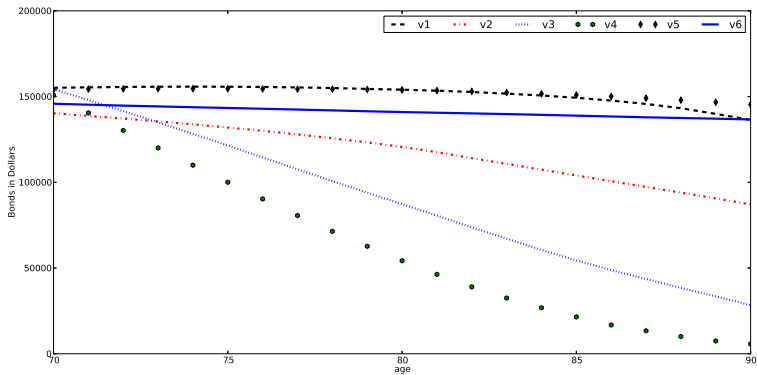


Figure : Financial Wealth - No LTCI

Conclusions

- ▶ Housing unlikely to explain the low demand for LTCI among wealthy retirees
- ▶ Potential explanations for LTCI puzzle:
 - ▶ i) Bequest motives (large preference for it + low risk aversion)
 - ▶ ii) Lack of trust in the product
- ▶ If ii) then enhancing confidence:
 - ▶ will accelerate financial wealth decumulation
 - ▶ might allow the development of a reverse mortgage market

Wealth Profiles

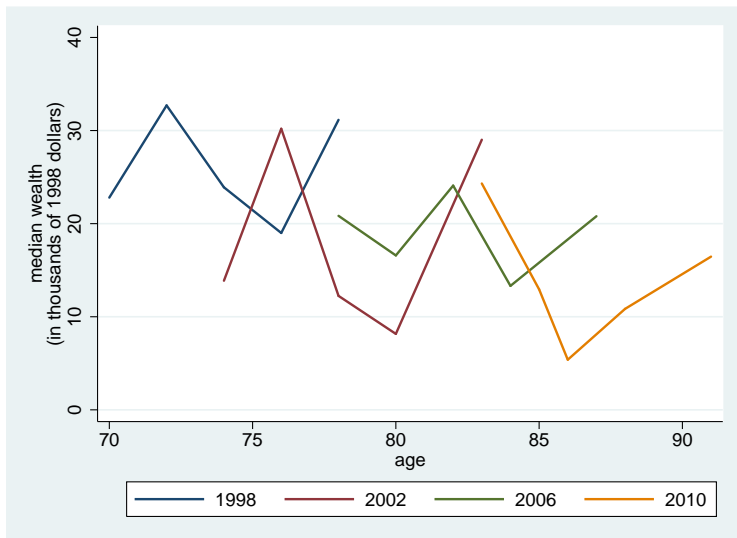


Figure : Financial Wealth - 3rd Wealth Quartile - Continued Homeowners

Wealth Profiles

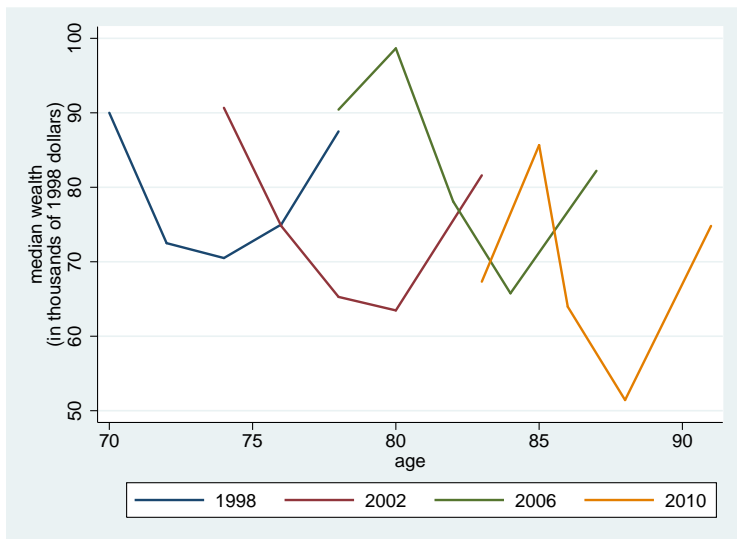


Figure : Housing Wealth - 3rd Wealth Quartile - Continued Homeowners