

# LTC Insurance and Housing

## Professor Stijn Van Nieuwerburgh

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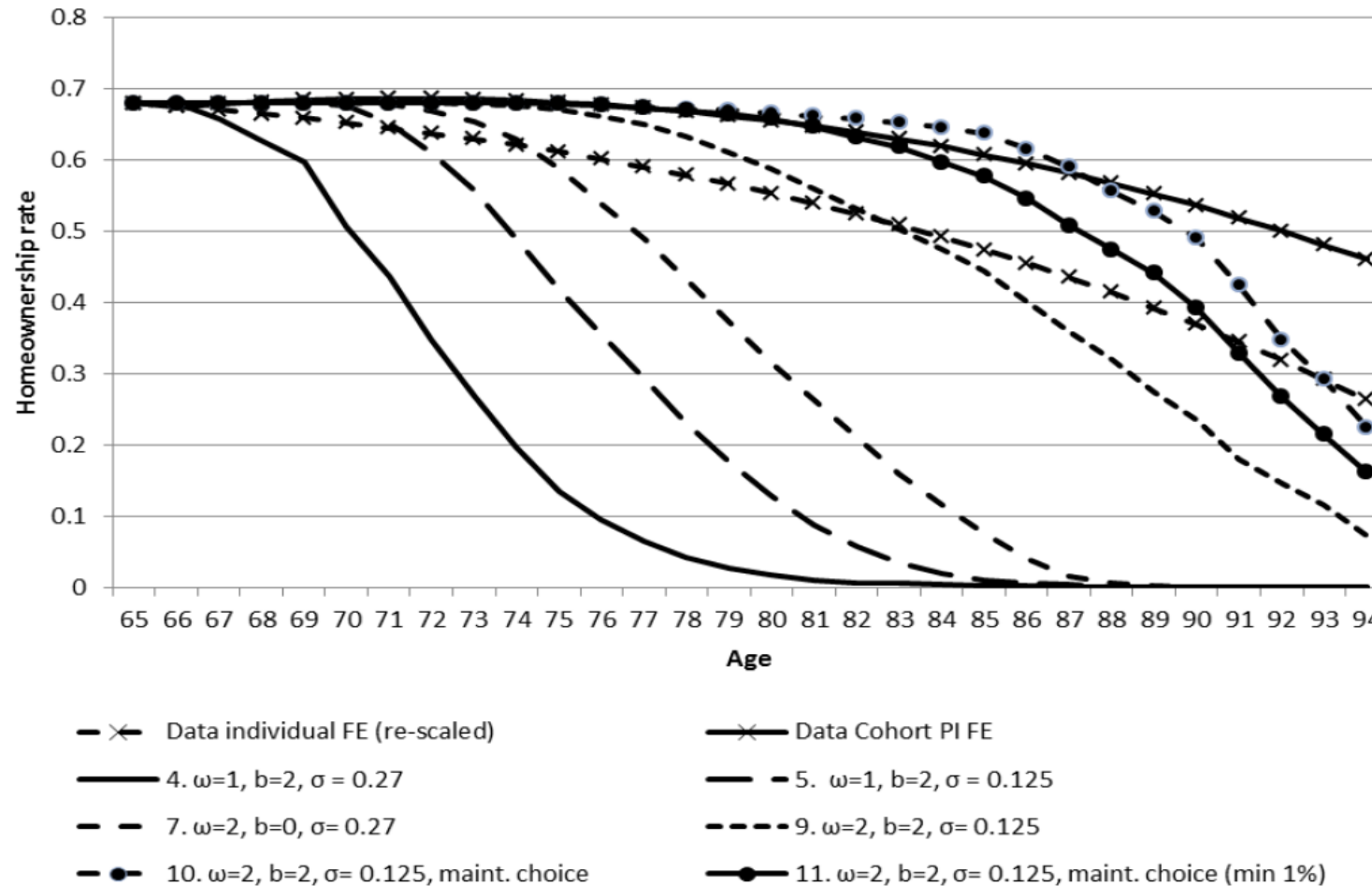


## Home ownership remains high late in life

- Much of the wealth households have in retirement is housing wealth
- Surprisingly little wealth decumulation during retirement
- Home ownership remains very high until late in life (Poterba, Venti, and Wise 11); moving is rare, and often associated with move to nursing home
- Puzzling from perspective of standard life-cycle consumption-savings models
- Potential explanations:
  - Bequest motive (Abel 85, Bernheim 91)
  - Precautionary saving for private long-term care expenses [public care aversion] (Denardi, French, Jones 10, Ameriks, Caplin, Laufer, and Van Nieuwerburgh 11)
  - House as hedge against future rent or house price fluctuations (Sinai and Souleles 05)
- Ultimately fall short: housing is lumpy and risky and not particularly well suited for hedging mortality and medical expense risk

# Model still far from data

**Figure 6. Model results: homeownership rates.** This figure plots the age profiles for homeownership rates predicted by the model. For comparison the figure also plots the estimated age profiles in the HRS data, using either cohort and permanent fixed-effects or individual fixed-effects.

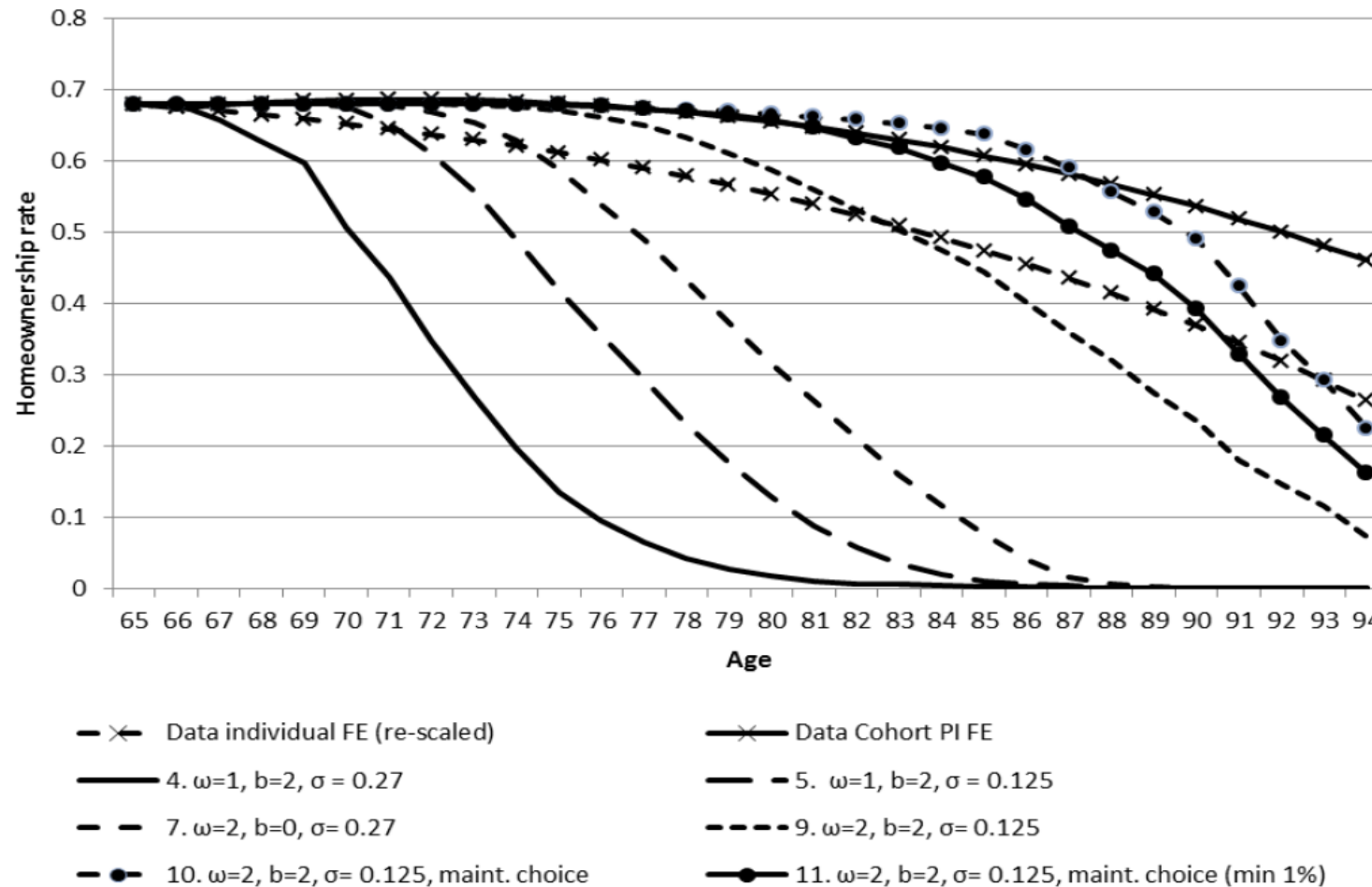


## Two important ingredients (Cocco and Lopes 17)

- Preference for aging in place
  - “Place attachment” high for older people (Rubinstein and Parmelee, 92)
  - The longer one has been in one’s house, the lower probability of moving
  - Supported by data from the Health and Retirement Survey
- Home maintenance is endogenous
  - Older people can and do choose to spend less on repairs, remodeling, etc. (Davidoff 05)
  - Maintenance expenses decline from 2.1% of house value at age 55-64 to 1.5% at age 65-74, to 0.6% at age 90-94 (HRS supplement data)
- Combination of bequest motive, precautionary savings motive, aging in place, and choice over maintenance can account for slow decline in home ownership late in life

# Model much closer to data

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# Implications for Reverse Mortgages

- Given plethora of risks late in life, and high fraction of wealth tied up in house, providing households with ways of extracting home equity would seem to be greatly welfare enhancing
  - Reverse mortgages (RM) give access to home equity without having to sell
  - RM borrowing is a substitute to an early house sale
  - RM give borrowers valuable option to default (when house prices go down)
- Yet, we see very low take-up rates for reverse mortgages
- Cocco-Lopes model replicates **low take-up** of RMs
  - Drawdown reverse mortgages come with *requirement of home maintenance*
  - This requirement together with *high loan costs* eliminates the benefits
  - Depends on levels of initial wealth in retirement, pre-existing mortgage debt, house price appreciation, interest rates, etc.



## Improving products

- Reducing the maintenance requirement makes RMs more appealing
  - Comes at expense of government, which guarantees the RMs
  - Raising insurance premium does not work because loans become larger
  - RM loan limits do work to improve fiscal position, but lower benefit to HHs
- Giving households access to insurance which pays out upon a forced move to a LTC facility increases appeal of a RM, all else equal.
  - Forced move triggers early home sale, limiting benefit of living in under-water RM without having to pay interest
  - RM lender pays \$5,000 in event of forced house sale for LTC purposes, free of charge
  - Greatly increases benefits from RM from this product bundling: complementarities between the two products
  - Retirees who want to age in place are adversely impacted by LTC move, and more so at a time where they already dissaved through a RM. Insurance against forced house sale increases benefit of borrowing against house earlier on.



## Other products

- Home equity products
  - Retirees who own house free and clear may be in no mood to take on new debt (RM)
  - Instead, they can exchange share of capital gain upon house sale in return for cash today, e.g. to pay for medical expenses
  - = Writing of a call option on house value, or ZIP code house value to deal with moral hazard/low maintenance
  - Already available: FirstRex, Equity Key
  - Exposure to single-family house price risk useful source of diversification for insurance companies, not easy to get any other way
- Annuities with LTC rider
  - Ameriks, Caplin, Laufer, and Van Nieuwerburgh (11) show that in presence of bequest motive and public care aversion (PCA), annuity demand is low
  - But bundling with increased payment in LTC state increases appeal of annuities
  - Find WTP above zero-load cost for wide range of bequest and PCA parameters





## Conclusions

- Housing is single most important asset households arrive in retirement with.
- Can it be used to finance retirement consumption and LTC expenses?
- First signs are not encouraging
  - Old households do not want to discontinue home ownership
  - Demand for RM has been limited
- But RM products can be redesigned to increase appeal
  - Lower maintenance requirements,
  - Lower costs
  - Lower loan limits,
  - LTC rider
- Focus on improving elderly care provided in the primary residence, maybe paid for by annuity with LTC rider. Technology should help.