

YOLO: Mortality Beliefs and Household Finance Puzzles

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Empirical Results

Using new survey data, authors find that:

- Subjective survival probabilities differ from actuarial survival rates
 - individuals underestimate survival probabilities when young but overestimate when old
 - confident respondents report correct survival probabilities when young but overestimate when old
- Age profiles in these differences appear to be due to overweighting unnatural causes early in life
- The magnitude of the errors in beliefs correlate with:
 - savings horizon
 - propensity to save
 - investment experience
 - risk aversion
 - financial literacy

Model Results

- Incorporate the subjective survival beliefs in a life cycle model and compare with baseline model with actuarial survival rates:
 - young individuals under-save
 - retirees under-consume
- Rationalize a higher equity premium with the introduction of subjective life-expectancies by matching the wealth accumulation of baseline model

Survey Results

- Construct an error measure based on the difference between:
 - the subjective life expectancies (SLE) reported by survey participants aged 28, 38, 48, 58 and 68 over different horizons 1,2,5 and 10 years
 - the actuarial life expectancies (SSA) for matching ages and horizons
- The age profile of these errors shows that younger respondents underestimate their survival probabilities at all horizons and that older respondents overestimate their survival probability at longer horizons, namely 5 and 10 years

Survey Results

- The authors explore this pattern over several dimensions, namely gender, numerical literacy, confidence, information treatment and sequence of survival horizon
- Significant heterogeneity to this pattern is only detected for over-confident respondents: correct predictions when young but still overestimate survival when old

Comments:

- Age profiles for different level of numerical literacy look quite apart for young individuals suggesting that profiles could be statistically different?
- It would be interesting to see whether there is any heterogeneity in the profiles for different education and income groups
- If there is, this would be particularly useful when calibrating the model

Survey Results

- Comparing the expectations errors histogram at different horizons we find that
 - At short horizons small errors are much more frequent suggesting that the median error is significantly lower than the average error
 - If this is the case maybe using median error would be more appropriate for the model calibration
- Since SSA probabilities are for male individuals, shouldn't the errors be constructed for male respondents only?

Effect of SLE on Financial Decisions

Investigate the effect of the expected error on financial decisions by estimating a multinomial logit controlling for age, gender, horizon, sequence and numerical literacy.

- Reasons for saving:
 - Young individuals who underestimate their SP are most likely to save for short term consumption smoothing
 - However, those who correctly estimate their SP are most likely to save for retirement
 - Old individuals are most likely to save for the medium term
- Investment experience
 - Young individuals who correctly estimate their SP are most likely to report themselves experienced investors
 - Old individuals are most likely to report as inexperienced

Effect of SLE on Financial Decisions

- Are the results robust to error clustering over other dimensions?
- There seems to be a group of individuals that get it right (small errors), they know that they get it right (confident), take the right decision (save for retirement) and are experienced investors (probably choose the predicted portfolio allocation)
- It would be interesting to explore their characteristics further

Model Results

- The novel aspect of the model is the calibration of the SLE
 - However, it is not clear how the conditional subjective survival probabilities are calibrated
 - How is the interpolation over all ages done?
- SLE Calibration could be matched to same education group as income profile
- Calibration of the overconfident shows that they over consume when young, but while young their errors are trivial, what makes them under save?
- In order to rationalize a higher equity premium with a partial equilibrium model, maybe try to match wealth accumulation and portfolio allocations from the data instead of the baseline model