**Friends, family and framing: An international comparison of longevity expectations formation**

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**Giving people information about the longevity of peers does not induce them to revise their subjective survival expectations, and neither does information about the relative longevity of their same-sex parent or grandparent. 'Live to' and 'die by' framing has a much larger effect on subjective expectations than personalized information about cohort or family longevity. Regulators trying to educate the public about longevity and the consequent need for delayed retirement or pension ages need alternative strategies.**

According to life-cycle theory, to manage retirement wealth efficiently, individuals should hold accurate (or at least unbiased) survival expectations. Research into subjective survival expectations from a range of countries, including the Netherlands and Australia, shows that, on average, individuals underestimate their survival prospects; younger cohorts and women underestimate more than older male cohorts (Bucher-Koenen and Kluth 2013, Kutlu-Koc and Kalwij 2013; Teppa and Lafourcade 2014; Wu et al. 2014); the survival experience of (especially same sex) parents and grandparents significantly influences individuals' expectations of their own survival (Khan et al. 2014); and that framing effects are important (Payne et al. 2013).

Pessimism about survival is related to earlier retirement, lower retirement savings and lower rates of annuitization (van Solinge and Henkens 2009; Bucher-Koenen and Kluth 2013; Bateman et al 2014; Rutledge et al 2014; Teppa and Lafourcade 2014), all of which increase demands on publicly provided safety nets. Increases in pension eligibility ages are likely to be resisted more strongly by individuals with pessimistic survival expectations. This raises the question of how individuals form subjective survival expectations, and the related normative question of how policymakers can help people adjust subjective survival expectations as longevity rises.

Here we implement a two-country online choice experiment of around 2000 subjects per country to, first, investigate the formulation of subjective survival expectations; and second, to evaluate the relation between subjective survival expectations and individuals' attitudes to regulatory changes to pension plans. Each subject provides subjective survival probabilities to a range of target ages in either a "live to" or "die by" framing, then subsets of subjects are sorted to conditions where information about current cohort survival, personalised information on same sex parent or grandparent survival, or both, are provided and the subject updates their subjective survival expectations. Finally, subjects are asked their views on changes to pension eligibility ages.

**Hypotheses:**

- on average, the "live to", "die by" framing is irrelevant to subjective survival expectations;
- on average, respondents who receive no additional information hold unbiased subjective survival expectations;
- respondents who receive information about the survival of their same-sex parent or grandparent hold subjective survival expectations that are correlated with their family history, relative to the respondent's age/gender cohort; and
- on average, respondents who receive information about the average survival of their birth/gender cohort and information about the survival of their same-sex parent and grandparents hold unbiased subjective survival expectations that are also correlated with family history.

These hypotheses are rejected by the Dutch data. The irrelevance of framing is strongly rejected, and survival expectations overall are very persistent and do not respond to the cohort and family survival information provided. The exceptions are more numerate subjects, who update their expectations after reading longevity information in the "die by" framing; and less numerate, older subjects who begin to express confusion about their expectations after receiving information. Numeracy appears to be pivotal to information processing.

By comparing survey outcomes from the Netherlands and Australia, we can exploit key differences between retirement systems in both countries: the Netherlands has compulsory annuitization; Australia has no compulsory decumulation structure and virtually no voluntary annuitization. (The survey has been fielded in the Netherlands via the CentER panel with preliminary analysis completed, and will go to field in Australia in early 2015.)

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