Grandma and Grandpa take risks.

A study of the investment risks and longevity risks taken by Account Based pensioners in Australia.

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Abstract

At 65, the average Australian can look forward to around another 18 years of life. For the 10 years to 2007, the average 'Default Fund' produced a return of over 9% p.a. Averages however belie a dispersion of outcomes, and individuals' experiences vary significantly. In Australia, retirees who received their savings as a lump sum are encouraged to invest these in an Account Based pension – essentially a reverse Defined Contribution arrangement where the returns are entirely based on the investments chosen by these pensioners. Moreover, while in a Defined Benefit arrangement, both longevity risks and investment risks are pooled, in Australia's Defined Contribution world, pensioners with the Account Based pension products are required to accept both longevity and investment risks individually.

The natural response would be for pensioners to choose between investments on the basis of their individual situation and risk profile. However, as this paper shows, even when similar 'risk' strategies are chosen, the natural dispersion of investment returns can leave grandma living the high life, while grandpa down the road may need to supplement his income.

Conventional wisdom paints a picture that over time an investment strategy will achieve its risk-return outcome. Of course more serious students will appreciate Samuelson's (1952, 1971) repartee on the 'fallacy' of large numbers taking to task simplistic views of investment returns.

The paper applies Monte Carlo simulation based on the level and dispersion of historical 5-year returns to present scenarios that show the effects of natural investment variations on

individual pensioners. The paper further develops a four-quadrant model to highlight the risks on retirees, and uses this to highlight possible behavioural responses. The paper proposes that individuals faced with a combination of their perceived risk in running out of money, or living too long, will progressively reduce their risk profile based on immediate history of performance, or survivorship. Because of the well documented asymmetric responses by investors to losses and gains, the paper argues that the aggregate of investor individual responses will be to reduce risk, and that this explains the industry response that provides lifecycle products that reduce risk with age. The paper comments that this response is likely to eventuate in lower overall risk taken in aggregate than would be feasible in a pooled arrangement.

The paper ends by commenting that the failure of the market to provide an effective pooled risk alternative may imply that the levels of risks taken by pensioners in Account Based pensions is too high even for the market to bear, and perhaps a community solution may be required.