Optimal Purchase of Life and Longevity Risk Insurance Products for Retired Couples

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Abstract

This paper derives the optimal consumption and asset allocation policy for a retired couple with uncertain lifetime, pre-existing annuity income, and a potential bequest motive. The joint life-time utility maximizing household can dynamically adjust liquid retirement assets and can purchase term life insurance, individual and joint annuities any time and incrementally. We show that the demand for life insurance is mostly driven to protect against the loss of annuity income for the surviving spouse. Especially if pre-existing annuity income is distributed unequal among the partners, the access to life insurance contracts is highly welfare enhancing. In contrast to bonds and risky stocks, term life insurance contracts are not appealing to finance a bequest motive. Further, our results indicate that the optimal survivor benefit-ratio is closely related to the consumption scaling factor.