

Lifecycle Portfolio Choice with Stochastic Longevity and Variable Investment-Linked Deferred Annuities

Vasily Kartashov, Raimond Maurer, Olivia S. Mitchell, and Ralph Rogalla

August 22, 2011

Abstract

We assess the role of variable investment-linked deferred annuities (VILDAs) in lifecycle portfolio and consumption choice under stochastic mortality, analyzing two approaches insurers have to manage systematic mortality risks – self-insurance and transfer to annuitants. We show that self-insurance leads to high loadings, and provided the choice households would prefer the transfer scheme. Reservation loadings for non-participation lie between 0.5%-8%. As long as insurers cannot hedge within this price range, insurers should transfer systematic longevity risks to the annuitants.