Estimating the Reservation Prices of Life Insurance and Annuity Under Cumulative Prospect Theory

This study estimates and analyzes the reservation prices of life insurance and annuity products by applying the method suggested in cumulative prospect theory. Behavioral economics may increase the explanatory power of insurance economics by providing it with more realistic psychological foundations. Cumulative prospect theory also has many applications in a wide variety of disciplines.

We find that individual characteristics such as loss aversion, age, and sex play an important role in the reservation prices of life insurance and annuity products. For most of the cases, reservation prices increase as interest rates increase. For life insurance the reservation prices of term life products (10 or 20-year terms) are higher than those of whole life and endowment products. For annuities the life with 20-year certain annuity has the highest reservation price.

The information implied by the reservation prices measured in this study may be useful for insurers’ decision making in pricing, product development and marketing strategies,