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Forecasting life expectancy: Evidence from a new survival function

Chi Heem Wong^a and Albert K. Tsui^{b,}

Abstract

We propose a new survival function to forecast life expectancies at various ages. The proposed model comprises the youth-to-adulthood component and the old-to-oldest-old component. It is able to closely fit adult survivorship of the US men and women in the period from 1950 to 2010. We find evidence that the forecasting performance of life expectancies by the proposed model compares favorably with those obtained from the popular Lee-Carter model (1992) and the shifting logistic model proposed by Bongaarts (2005).

Keywords: Lee-Carter model, Life expectancy, Mortality, Survival probability

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