We consider an 'n-period long' annuity paying its owner the amount $Y_k = e^{rk}$ at the end of the $k$th time period, $k = 1, \ldots, n$, where $r$ is a fixed number. Random (continuously compounding) interest rates $R_j$ for periods $j = 1, \ldots, n$ are modelled by a stochastic difference equation with a hidden Markov chain. The risk (which is due to the random interest rates) is shared by $m \geq 2$ (re)insurers as follows: at time $k$, the due amount $Y_k$ is payed to the annuity owner by the $q$th (re)insurer iff the ratio of the annuity payment $Y_k$ to the 'real yield' $\exp\{\sum_{j \leq k} R_j\}$ belongs to a given fixed 'window' $(w_{q-1}, w_q]$, $0 = w_0 < w_1 < \cdots < w_m = \infty$. Our main aim is to find distributional approximations to the discounted values of the annuity for the (re)insurers. It turns out that, under some mild moment conditions on the model for the interest rates, for all (re)insurers but the last one, the distributions of the normalized values of the annuity will converge to limiting laws as $n \to \infty$. The limiting distribution can be either the normal one or the law of the maximum of the standard Wiener process on a finite interval (depending on whether the interest rates are modelled by a subcritical or critical stochastic recursive sequence).

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