Comments on Jim Conner's actuarial note on "A Multiple Decrement Theorem"

The note makes good sense. John Mereu has made a similar observation but perhaps not as completely. In particular, John Mereu has, I believe, the corollary in mind.

I suggest the paper be submitted to ARCH. It seems unnecessary to publish the supporting notes as they can be worked out easily by anyone familiar with the topic.

The Author's Note raises an interesting but not easily answered question. It may be noted that for a particular j , formula (2) holds if

(a) For that j , $\frac{\mu^{(j)}_{x+t}}{\mu^{(\tau)}_{x+t}} = k_j \quad 0 < t < 1$

or

(b) For that j , and for total decrement, there is uniform distribution of decrement.

Thus, in (a), no assumption is required regarding the forces $\mu^{(k)}$, $k \neq j$ (explicitly).

In (b), no assumption is required about uniform distribution of decrement for causes other than j , except that total decrement must be uniformly distributed. Case (b) is a special case of (a)

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10/5/84