

# THE RUARK MORTALITY TABLE

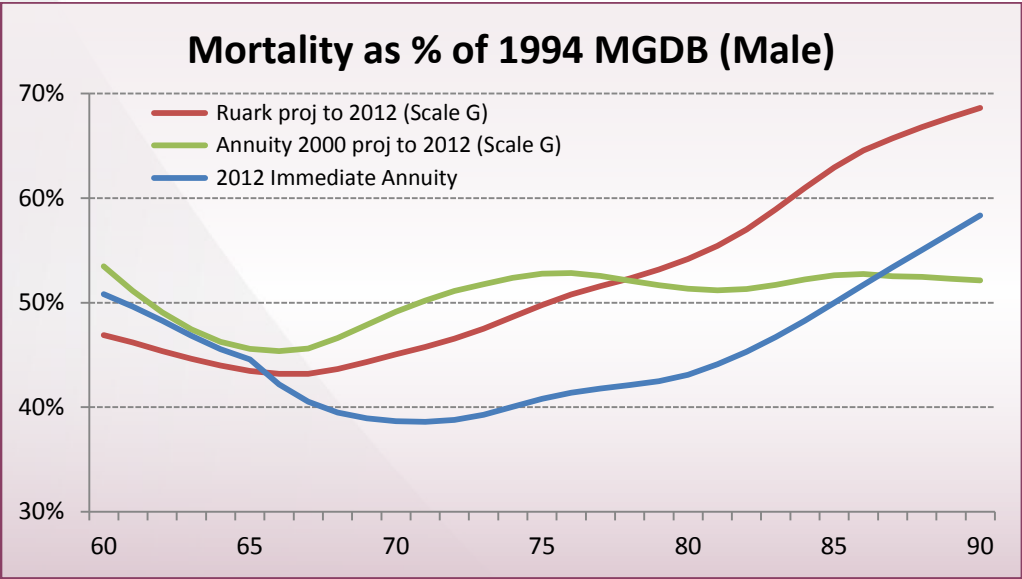
**Ruark Consulting**

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Accurate understanding of the level, shape, and variations of variable annuity mortality is vital for product pricing, effective management of hedging programs that operate based on specific assumptions for mortality and policyholder behavior, and as an efficient basis for pure mortality reinsurance programs. However, based on our experience over the last decade, standard annuity mortality tables fail to capture the dynamics of variable annuity mortality.

To fill this void, we developed a new standard – the Ruark Mortality Table, based on an industry experience study of thirteen variable annuity companies with 2.5 million exposure years and 49,000 reported deaths. The following graph illustrates how the Ruark Mortality Table differs from some standard annuity mortality tables for selected male ages.



Even with the Ruark Mortality Table as a baseline, we have found that modifiers are necessary to reflect important variations such as product type and policy size. For example, mortality can vary as much as 20% depending on the type of guarantee features on the policy; rich death benefits tend to invite higher mortality, and rich living benefits tend to invite lower mortality, both of which suggest a selection effect on the part of the variable annuity buyer and their financial advisor. Moreover, these effects are magnified as much as 20% for larger policies.

The Ruark Mortality Table, when employed with the appropriate modifiers, captures the dynamics of variable annuity mortality and thereby improves product pricing and the effectiveness of hedging programs, and serves as a more efficient basis for pure mortality reinsurance programs. If you would like to learn more, please contact:

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