Bivariate Exponentated Generalized Weibull-Gompertz Distribution

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SUMMARY
In this paper, we introduce a bivariate exponentaited generalized Weibull-Gompertz distribution based on Marshall-Olkin method. We study its statistical properties including moments, maximum likelihood estimators, the joint reversed (hazard) function and the joint mean waiting time. A real data set is analyzed, which show that the bivariate exponentiated generalized Weibull-Gompertz distribution can be used quite effectively in fitting and analyzing real lifetime data.

Keywords and phrases: Exponentaited generalized Weibull-Gompertz distribution, Marshall-Olkin, Maximum Likelihood, Generalized Distribution, Bivariate Distributions, Reliability Analysis.

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